Fiscal Review Committee
Contract # 47402
Tracking # 33111-00116

1. Summary letter
2. Supplemental documentation form
3. Edison query
4. Original contract
5. Proposed amendment 1
    a. Amendment request

STATE OF TENNESSEE
**DEPARTMENT OF EDUCATION**

**BILL HASLAM**
GOVERNOR

9th FLOOR, ANDREW JOHNSON TOWER
710 JAMES ROBERTSON PARKWAY
NASHVILLE, TN 37243-0375

**CANDICE MCQUEEN**
COMMISSIONER

**SUBMITTED VIA ELECTRONIC MAIL**

TO: Fiscal Review Committee

FROM: Candice McQueen, Commissioner

DATE: May 16, 2018

RE: Request to appear before the fiscal review committee regarding non-competitive contract amendment for agency tracking # 33111-00116

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Please consider the enclosed request for non-competitive contract amendment with Educational Testing Service (ETS). The components of an effective assessment program are: test design, delivery, and scoring and reporting. Currently, ETS provides test design for science and social studies, while Questar Assessment, Inc. (QAI) provides test design for English Language Arts (ELA) and math in addition to all delivery and reporting.

This amendment is needed to add test design for ELA and math assessments for grades 3-11 to the ETS contract and increase the maximum liability to account for these additions. Aligning all of the test design work under a single contract will improve the efficiency of the state assessment program and reduce the possibility for error by streamlining project management of this component. Additionally, moving this component of work to the ETS contract will allow Questar to focus project management on the administration, scoring, and reporting of assessments.

ETS is currently performing test design work for the department, and the amendment will just add subject areas to what they are already doing. They are able to flexibly and effectively add these subject areas and meet fall administration timelines without any delay; the structures and processes they already have in place to support test design can be utilized for math and ELA assessments without requiring new ones to be developed. This includes effective coordination with both the department and the vendor responsible for administration, scoring, and reporting. Adding this work will increase the maximum liability of the contract by $12,500,000.00. We expect that much if not all of this additional expenditure will be offset by reductions in the items billed under the existing Questar contract.

Thank you for your consideration.

# Supplemental Documentation Required for Fiscal Review Committee

| | | | |
|---|---|---|---|
| *Contact Name: | Mary Batiwalla | *Contact Phone: | (615) 532-2809 |
| *Presenter's name(s): | Commissioner Candice McQueen, Mary Batiwalla, Elizabeth Fiveash | | |
| Edison Contract Number: (*if applicable*) | 47402 | RFS Number: (*if applicable*) | 33111-00116 |
| *Original or Proposed Contract Begin Date: | September 14, 2015 | *Current or Proposed End Date: | September 13, 2020 |

| | |
|---|---|
| Current Request Amendment Number: (*if applicable*) | 1 |
| Proposed Amendment Effective Date: (*if applicable*) | July 1, 2018 |
| *Department Submitting: | Department of Education |
| *Division: | Accountability, Assessment & Data Governance |
| *Date Submitted: | 5/16/18 |
| *Submitted Within Sixty (60) days: | No |
| *If not, explain*: | This effective date is needed to allow the department to develop the needed assessment items to meet the deadlines for the administration of the remaining 2018-19 state assessments. |
| *Contract Vendor Name: | Educational Testing Service |
| *Current or Proposed Maximum Liability: | $25,000,000.00 |
| *Estimated Total Spend for Commodities: | N/A |

*Current or Proposed Contract Allocation by Fiscal Year:
(***as Shown on Most Current Fully Executed Contract Summary Sheet)***

| FY:2016 | FY:2017 | FY:2018 | FY:2019 | FY:2020 | FY:2021 |
|---|---|---|---|---|---|
| $5,000,000 | $5,000,000 | $5,000,000 | $4,000,000 | $4,000,000 | $2,000,000 |

*Current Total Expenditures by Fiscal Year of Contract:
(***attach backup documentation from Edison***)

| FY:2016 | FY:2017 | FY:2018 | FY: | FY | FY |
|---|---|---|---|---|---|
| $2,262,583 | $7,604,897 | $3,078,233 | $ | $ | $ |

| | |
|---|---|
| **IF** Contract Allocation has been greater than Contract Expenditures, please give the reasons and explain where surplus funds were spent: | Although there are currently remaining FY 2018 funds, we anticipate that we will reach the maximum liability through FY 2018 on this contract by the end of the fiscal year. |
| **IF** surplus funds have been carried forward, please give the reasons and provide the authority for the carry forward provision: | NA |
| **IF** Contract Expenditures exceeded | NA |

# Supplemental Documentation Required for Fiscal Review Committee

| | | | |
|---|---|---|---|
| Contract Allocation, please give the reasons and explain how funding was acquired to pay the overage: | | | |
| *Contract Funding Source/Amount: | | | |
| State: | $18,513,762 | Federal: | $6,486,238 |
| *Interdepartmental:* | $0.00 | *Other:* | $0.00 |
| If "*other*" please define: | | N/A | |
| If "*interdepartmental*" please define: | | NA | |

| Dates of All Previous Amendments or Revisions: (*if applicable*) | Brief Description of Actions in Previous Amendments or Revisions: (*if applicable*) |
|---|---|
| NA | |
| | |
| | |

| | |
|---|---|
| Method of Original Award: (*if applicable*) | RFP |
| *What were the projected costs of the service for the entire term of the contract prior to contract award? How was this cost determined? | There were no projected costs. The department budgeted $25 million for five years. |
| *List number of other potential vendors who could provide this good or service; efforts to identify other competitive procurement alternatives; and the reason(s) a sole-source contract is in the best interest of the State. | ETS is currently performing test design work for the department, and the amendment will add subject areas to what they are already doing. They are able to flexibly and effectively add these subject areas and meet fall administration timelines without any delay; the structures and processes they already have in place to support test design can be utilized for math and ELA assessments without requiring new ones to be developed. This includes effective coordination with both the department and the vendor responsible for administration, scoring, and reporting. Aligning all of the test design work under a single contract will improve the efficiency of the state assessment program and reduce the possibility for error by streamlining project management of this component. Additionally, moving this component of work to the ETS contract will allow Questar to focus project management on the administration, scoring, and reporting of assessments. |

| Payments against a Contract | 3 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Unit | Sum Merchandise Amt | Edison Contract ID | Vendor ID | Vendor Name | Type | PO ID | Voucher ID | Invoice | Date | Fiscal Year |
| 33101 | 58794.000 | 00000000000000000000047402 | 0000012160 | Educational Testing Service | DFA | 0000074863 | 00348890 | 140009783 | 4/27/2016 | 2016 |
| 33101 | 950182.000 | 00000000000000000000047402 | 0000012160 | Educational Testing Service | DFA | 0000076222 | 00355298 | 140009865 | 7/8/2016 | 2016 |
| 33101 | 1253607.000 | 00000000000000000000047402 | 0000012160 | Educational Testing Service | DFA | 0000074865 | 00348891 | 140009782 | 4/27/2016 | 2016 |
| | 2,262,583.000 | | | | | | | | | |

| Payments against a Contract | 13 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Unit | Sum Merchandise Amt | Edison Contract ID | Vendor ID | Vendor Name | Type | PO ID | Voucher ID | Invoice | Date | Fiscal Year |
| 33101 | 18289.000 | 00000000000000000000047402 | 0000012160 | Educational Testing Service | DFA | 0000086563 | 00402742 | 140010295 | 7/18/2017 | 2017 |
| 33101 | 225128.000 | 00000000000000000000047402 | 0000012160 | Educational Testing Service | DFA | 0000083259 | 00390539 | 140010181 | 4/25/2017 | 2017 |
| 33101 | 346015.000 | 00000000000000000000047402 | 0000012160 | Educational Testing Service | DFA | 0000081504 | 00382581 | 140010104 | 2/14/2017 | 2017 |
| 33101 | 369425.000 | 00000000000000000000047402 | 0000012160 | Educational Testing Service | DFA | 0000078378 | 00367742 | 140009961 | 11/2/2016 | 2017 |
| 33101 | 397779.000 | 00000000000000000000047402 | 0000012160 | Educational Testing Service | DFA | 0000081502 | 00382579 | 140010103 | 2/14/2017 | 2017 |
| 33101 | 435121.000 | 00000000000000000000047402 | 0000012160 | Educational Testing Service | DFA | 0000081501 | 00382577 | 140010105 | 2/14/2017 | 2017 |
| 33101 | 446436.000 | 00000000000000000000047402 | 0000012160 | Educational Testing Service | DFA | 0000079780 | 00376905 | 140010032 | 12/30/2016 | 2017 |
| 33101 | 463162.000 | 00000000000000000000047402 | 0000012160 | Educational Testing Service | DFA | 0000086561 | 00402744 | 140010294 | 7/18/2017 | 2017 |
| 33101 | 809864.000 | 00000000000000000000047402 | 0000012160 | Educational Testing Service | DFA | 0000079783 | 00377085 | 140010033 | 1/11/2017 | 2017 |
| 33101 | 859536.000 | 00000000000000000000047402 | 0000012160 | Educational Testing Service | DFA | 0000077846 | 00361258 | 140009922 | 9/12/2016 | 2017 |
| 33101 | 979192.000 | 00000000000000000000047402 | 0000012160 | Educational Testing Service | DFA | 0000086560 | 00402745 | 140010296 | 7/18/2017 | 2017 |
| 33101 | 1116931.000 | 00000000000000000000047402 | 0000012160 | Educational Testing Service | DFA | 0000083260 | 00390536 | 140010180 | 4/25/2017 | 2017 |
| 33101 | 1138019.000 | 00000000000000000000047402 | 0000012160 | Educational Testing Service | DFA | 0000083265 | 00390537 | 140010182 | 4/25/2017 | 2017 |
| | 7,604,897.000 | | | | | | | | | |

| Payments against a Contract | 9 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Unit | Sum Merchandise Amt | Edison Contract ID | Vendor ID | Vendor Name | Type | PO ID | Voucher ID | Invoice | Date | Fiscal Year |
| 33101 | 38071.000 | 0000000000000000 | 0000012160 | Educational Testing Service | DFA | 0000089782 | 00416481 | 140010432 | 11/1/2017 | 2018 |
| 33101 | 122061.000 | 0000000000000000 | 0000012160 | Educational Testing Service | DFA | 0000089783 | 00416483 | 140010431 | 11/1/2017 | 2018 |
| 33101 | 233064.000 | 0000000000000000 | 0000012160 | Educational Testing Service | DFA | 0000094903 | 00438539 | 140010615 | 4/23/2018 | 2018 |
| 33101 | 253916.000 | 0000000000000000 | 0000012160 | Educational Testing Service | DFA | 0000092240 | 00427109 | 140010521 | 1/24/2018 | 2018 |
| 33101 | 264155.000 | 0000000000000000 | 0000012160 | Educational Testing Service | DFA | 0000089781 | 00416482 | 140010433 | 11/1/2017 | 2018 |
| 33101 | 352384.000 | 0000000000000000 | 0000012160 | Educational Testing Service | DFA | 0000092242 | 00427107 | 140010519 | 1/24/2018 | 2018 |
| 33101 | 430493.000 | 0000000000000000 | 0000012160 | Educational Testing Service | DFA | 0000094902 | 00438538 | 140010614 | 4/23/2018 | 2018 |
| 33101 | 639791.000 | 0000000000000000 | 0000012160 | Educational Testing Service | DFA | 0000092244 | 00427104 | 140010520 | 1/24/2018 | 2018 |
| 33101 | 744298.000 | 0000000000000000 | 0000012160 | Educational Testing Service | DFA | 0000095667 | 00441735 | 140010616 | 5/2/2018 | 2018 |
| | 3,078,233.000 | | | | | | | | | |

# CONTRACT

(fee-for-goods or services contract with an individual, business, non-profit, or governmental entity of another state)

| Begin Date | End Date | Agency Tracking # | Edison Record ID |
|---|---|---|---|
| September 14, 2015 | September 13, 2020 | 33111-00116 | 47402 |

| Contractor Legal Entity Name | Edison Vendor ID |
|---|---|
| Educational Testing Service | 0000012160 |

**Goods or Services Caption** (one line only)

State Summative Assessments for Science and Social Studies

| Contractor | CFDA # |
|---|---|
| ☒ Contractor | |

**Funding —**

| FY | State | Federal | Interdepartmental | Other | TOTAL Contract Amount |
|---|---|---|---|---|---|
| 2016 | 4,000,000.00 | 1,000,000.00 | | | 5,000,000.00 |
| 2017 | 4,000,000.00 | 1,000,000.00 | | | 5,000,000.00 |
| 2018 | 4,000,000.00 | 1,000,000.00 | | | 5,000,000.00 |
| 2019 | 3,000,000.00 | 1,000,000.00 | | | 4,000,000.00 |
| 2020 | 3,000,000.00 | 1,000,000.00 | | | 4,000,000.00 |
| 2021 | 1,000,000.00 | 1,000,000.00 | | | 2,000,000.00 |
| **TOTAL:** | **19,000,000.00** | **6,000,000.00** | | | **$25,000,000.00** |

**Contractor Ownership Characteristics:**

☐ Minority Business Enterprise (MBE): African American, Asian American, Hispanic American, Native American

☐ Woman Business Enterprise (WBE)

☐ Tennessee Service Disabled Veteran Enterprise (SDVBE)

☐ Tennessee Small Business Enterprise (SBE): $10,000,000.00 averaged over a three (3) year period or employs no more than ninety-nine (99) employees.

☐ Other:

**Selection Method & Process Summary** (mark the correct response to confirm the associated summary)

| | |
|---|---|
| ☒ Competitive Selection | RFP Process |
| ☐ Other | Describe the selection process used and submit a Special Contract Request |

**Budget Officer Confirmation:** There is a balance in the appropriation from which obligations hereunder are required to be paid that is not already encumbered to pay other obligations.

Elin Foley 8-26-15

| Speed Chart (optional) | Account Code (optional) |
|---|---|
| various | various |

# S U P P L E M E N T A L  S U M M A R Y  S H E E T

| | |
|---|---|
| [illegible] | 33111-00116 |
| **Edison ID** | 447402 |

| Fiscal Year | Department ID | Speedchart Number | Program Code | Account Code | Fund | Project/ Grant Code | CFDA # | Amount |
|---|---|---|---|---|---|---|---|---|
| 2016 | 3313601000 | ED00000177 | 644400 | 70899000 | 25000 | ED00000LL16ACX16 | 84.027 | 975,000.00 |
| 2016 | 3313601000 | ED00000177 | 644400 | 70803000 | 25000 | ED00000LL16ACX16 | 84.027 | 25,000.00 |
| 2016 | 3311101000 | ED00000450 | 873300 | 70803000 | 25000 | N/A | N/A | 2,500,000.00 |
| 2016 | 3311101000 | ED00000452 | 873800 | 70803000 | 25000 | N/A | N/A | 1,500,000.00 |
| 2017 | 3313601000 | ED00000177 | 644400 | 70899000 | 25000 | ED00000LL17ACX17 | 84.027 | 975,000.00 |
| 2017 | 3313601000 | ED00000177 | 644400 | 70803000 | 25000 | ED00000LL17ACX17 | 84.027 | 25,000.00 |
| 2017 | 3311101000 | ED00000450 | 873300 | 70803000 | 25000 | N/A | N/A | 2,500,000.00 |
| 2017 | 3311101000 | ED00000452 | 873800 | 70803000 | 25000 | N/A | N/A | 1,500,000.00 |
| 2018 | 3313601000 | ED00000177 | 644400 | 70899000 | 25000 | ED00000LL18ACX18 | 84.027 | 975,000.00 |
| 2018 | 3313601000 | ED00000177 | 644400 | 70803000 | 25000 | ED00000LL18ACX18 | 84.027 | 25,000.00 |
| 2018 | 3311101000 | ED00000450 | 873300 | 70803000 | 25000 | N/A | N/A | 2,500,000.00 |
| 2018 | 3311101000 | ED00000452 | 873800 | 70803000 | 25000 | N/A | N/A | 1,500,000.00 |
| 2019 | 3313601000 | ED00000177 | 644400 | 70899000 | 25000 | ED00000LL19ACX19 | 84.027 | 975,000.00 |
| 2019 | 3313601000 | ED00000177 | 644400 | 70803000 | 25000 | ED00000LL19ACX19 | 84.027 | 25,000.00 |
| 2019 | 3311101000 | ED00000450 | 8733000 | 70803000 | 25000 | N/A | N/A | 2,250,000.00 |
| 2019 | 3311101000 | ED00000452 | 873800 | 70803000 | 25000 | N/A | N/A | 750,000.00 |
| 2020 | 3313601000 | ED00000177 | 644400 | 70899000 | 25000 | ED00000LL20ACX20 | 84.027 | 975,000.00 |
| 2020 | 3313601000 | ED00000177 | 644400 | 70803000 | 25000 | ED00000LL20ACX20 | 84.027 | 25,000.00 |
| 2020 | 3311101000 | ED00000450 | 873300 | 70803000 | 25000 | N/A | N/A | 2,250,000.00 |
| 2020 | 3311101000 | ED00000452 | 873800 | 70803000 | 25000 | N/A | N/A | 750,000.00 |
| 2021 | 3313601000 | ED00000177 | 644400 | 70899000 | 25000 | ED00000LL21ACX21 | 84.027 | 975,000.00 |
| 2021 | 3313601000 | ED00000177 | 644400 | 70803000 | 25000 | ED00000LL21ACX21 | 84.027 | 25,000.00 |
| 2021 | 3311101000 | ED00000450 | 873300 | 70803000 | 25000 | N/A | N/A | 750,000.00 |
| 2021 | 3311101000 | ED00000452 | 873800 | 70803000 | 25000 | N/A | N/A | 250,000.00 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| **TOTAL** | | | | | | | | **$25,000,000.00** |

**CONTRACT**
**BETWEEN THE STATE OF TENNESSEE,**
**DEPARTMENT OF EDUCATION**
**AND**
**EDUCATIONAL TESTING SERVICE**

This Contract, by and between the State of Tennessee, Department of Education ("State") and Educational Testing Service ("Contractor"), is for the provision of Item and Test Form Development of the State Summative Assessments for Science and Social Studies, as further defined in the "SCOPE." State and Contractor may be referred to individually as a "Party" or collectively as the "Parties" to this Contract.

The Contractor is a Non-Profit Corporation.
Contractor Place of Incorporation or Organization: State of New York
Contractor Edison Registration ID # 0000012160

**A. SCOPE:**

A.1. The Contractor shall provide all goods or services and deliverables as required, described, and detailed below and shall meet all service and delivery timelines as specified by this Contract.

A.2. The Contractor shall work with the State to provide item and test form development services for the State's assessment program in order to provide assessments that are valid, reliable and fair measurements for all students. The State's assessment program shall be designed to be accessible for use by the widest possible range of students, including but not limited to students with disabilities and students with limited English proficiency. The Contractor shall implement and maintain assessments required under the Title I requirements of the Elementary and Secondary Education Act of 1965 (ESEA), the Individuals with Disabilities Education Act (IDEA), the No Child Left Behind Act of 2001 (NCLB); and Tennessee law and administrative regulations. The assessments to be included are described in A.5.a. The State has contracted separately with Measurement, Incorporated ("administration vendor") for the provision of services related to administration, scoring and reporting of the assessments developed through this Contract; the Contractor shall work in collaboration with the administration vendor in all phases of materials development and printing, psychometrics, administration, scoring, and reporting to ensure valid and reliable results. The Contractor shall work with the State in an effort to ensure results of these assessments shall provide comparability information to assessments given in other states aligned to similar academic standards. Unless otherwise indicated, all requirements of this Contract shall apply to all assessments. The quantity of deliverables for each assessment shall be determined and approved in collaboration with the State and shall be finalized with the Contractor in the Annual Work Plan defined in A.6.a.

A.3 **Definitions:**

a. Accessibility Features– Test administration modifications allowable for use with any student. Modifications may include but not be limited to: flexible setting or scheduling; visual, tactile, or auditory aids; scribe; marking in test books; adjustments to background or contrast colors for online testing; and enlarged print online. Individualized Education Plan (IEP) and/or 504 plan documentation is not necessary.

b. Accessible Portable Item Profile (APIP) Standard – The APIP Standard provides assessment programs and question item developers a data model for standardizing the interchange file format for digital test items. The standard builds on the IMS GLC Question and Test Interoperability (QTI) v2.1 specification.

c. Accommodations – Changes in the assessment materials or procedures that do not change the construct being measured. Testing accommodations are specified by IEP and/or 504 service plan documentation. These may include but are not limited to Braille, ability for the student to dictate responses, an administrator providing prompting upon request and additional time.

d. Administration–Window in which an assessment is given, the End of Course exams are given in fall, spring, and summer; Achievement is given in the spring.

e. Alternative Task – A task consists of four items, each written to four different levels to address the CCC as defined in A.3.u. Level 4 is the most complex and is written to fully align with the focal KSA (A.3.kk). Level 1 is the least complex and is linked to the focal KSA based on essential understandings, so that students in beginning interaction with the grade-level curriculum will be able to access it.

f. Alternative Task Template – Derived from the ECD (A.3.cc) process, a task template is developed for a focal KSA, listing the KSAs to be addressed and detailing variable features that should be turned on or off for an item. A task template includes a sample task with item directives, manipulatives, correct answer keys, and scoring rubrics.

g. Analytic Writing – Writing that explores a central idea based on a text(s) and a student's engagement with that text. Analytic Writing will explore the text, provide evidence to support the student's opinion and present a logical integration and framing of concepts to advance an argument or convey and idea.

h. Analytical Services – Services provided by the Contractor to ensure the technical soundness of assessments. Such services may include, but are not limited to, the selection of representative samples of Tennessee students, conducting pilot studies, scaling of items and test forms, scale/item parameter drift studies, item bias/differential item functioning (DIF) analysis, setting of performance standards, and demonstration of test reliability and validity.

i. Anchor Papers – Sample essays which clearly exhibit the criteria for each score point.

j. Anchor Text- The primary text used in constructed response items that may have more than one text. This text provides the overall theme of the item.

k. Assessment – An evaluation of student achievement related to knowledge and skills in a specific content area and/or a specific grade level. Term used throughout this Contract to denote any test given under this Contract to include both paper and online versions of both selected and constructed response types of assessments at all grade levels and content areas.

l. Azure (Windows Azure) - Windows Azure is Microsoft's operating system for cloud computing. Azure was designed to facilitate the management of scalable Web applications over the Internet. The hosting and management environment is maintained at Microsoft data centers. Azure uses "Automated Service Management" to facilitate application upgrading without compromising performance. Automated Service Management provides features such as load balancing, caching, fault tolerance and redundancy that are included to ensure high availability. Windows Azure supports a wide variety of Microsoft and third-party standards, protocols, programming languages and platforms. Examples include XML (Extensible Markup Language), REST (representational state transfer), SOAP (Simple Object Access Protocol), Eclipse, Ruby, PHP and Python.

m. Blind Responses – A method of preparing student responses in which student demographic data and scores are separated in order to render the responses unidentifiable by any student demographic characteristic, prior to scoring.

n. Blind Scoring – A method of scoring that allows each student response to be scored independently, without the reader having knowledge of any previous scores.

o. Calibration – Placing items on a common scale so that items measuring the same underlying content represent a position on the scale that is also represented by other items of comparable difficulty.

p. Cloud - The "cloud" is comprised of the following essential characteristics:

(1) On-demand self-service. A consumer can independently and unilaterally provision computing capabilities, such as compute time, network connectivity and storage, as needed automatically without requiring human interaction with each service's provider.

(2) Broad network access. Capabilities are available over the network and accessed through standard mechanisms that promote use by heterogeneous thin or thick client platforms.

(3) Resource pooling. The provider's computing resources are pooled to serve multiple consumers using a multi-tenant model, with different physical and virtual resources dynamically assigned and reassigned according to consumer demand. There is a sense of location independence in that the customer generally has no control or knowledge over the exact location of the provided resources, but may be able to specify location at a higher level of abstraction (e.g., country, state, region or datacenter). Examples of computing resources include storage, processing (computing), memory, network bandwidth, and virtual machines.

(4) Rapid elasticity. Capabilities can be rapidly and elastically provisioned, in some cases automatically, to quickly scale out and rapidly released to quickly scale in. To the consumer, the capabilities available for provisioning often appear to be unlimited and can be purchased in any quantity at any time.

(5) Measured Service. Cloud systems automatically control and optimize resource use by leveraging a metering capability at some level of abstraction appropriate to the type of service (e.g., storage, compute, bandwidth, active user accounts, etc.). Resource usage can be monitored, controlled, and reported, providing transparency for both the provider and consumer of the utilized service.
Consult the NIST (National Institute of Science and Technology) Special Publication 800-146 for further definition and details.

q. Common Education Data Standards (CEDS) – A specified set of the most commonly used education data elements to support the effective exchange of data within and across states, as students transition between educational sectors and levels, and for federal reporting. This common vocabulary will enable more consistent and comparable data to be used throughout all education levels and sectors necessary to support improved student achievement. The standards are being developed by National Center for Education Statistics (NCES) http://nces.ed.gov with the assistance of a CEDS Stakeholder Group that includes representatives from states, LEAs, institutions of higher education, state higher education agencies, early childhood organizations, federal program offices, interoperability standards organizations, and key education associations and non-profit organizations. More information on CEDS can be found at https://ceds.ed.gov/.

r. Comparability and Equating – Statistical evidence that the assessment is similar in content and psychometric characteristics to the current assessment.

s. Constructed Response (CR) – Assessment items that require a student to produce a response without options provided. These items may include but not be limited to items in which a student provides a brief response to a posed question; completes a computation; creates a graphic representation; provides justification/explanation of his/her thoughts or work on an equation or formula; a response to a text-based prompt that can vary in length and text complexity based on grade level; or activities that are related and require students to construct a response, create a product, or perform a demonstration which are evaluated by a set of criteria.

t. Content Areas – Science and Social Studies.

u. Core Content Connectors (CCC) – Prioritized academic content designed to frame the instruction and assessment of students with significant cognitive disabilities.

v. Criterion-Referenced Test (CRT) – An assessment aligned to pre-defined content standards and designed to measure student achievement relative to those standards.

w. Cut Scores – The minimum test score necessary to demonstrate that a test taker has the knowledge and/or skills to perform at a certain level of proficiency.

x. Design Pattern – The first step in the ECD process is to develop a design pattern that lays out all focal and additional knowledge, skills, and abilities (KSA) needed to fully address the content standard in the assessment of students with significant cognitive disabilities. Additional cognitive, affective, receptive, expressive, and executive variables are also specified.

y. Developmental Appropriateness –Policies and procedures adopted by the American Psychological Association used to ensure that the assessment development process gives careful consideration to the age and academic progress of students.

z. Ed-Fi Data Standard – The Ed-Fi data standard consists of the Ed-Fi Unifying Data Model and a data exchange framework:

(1) Ed-Fi Unifying Data Model – The Ed-Fi Unifying Data Model (UDM) http://www.ed-fi.org/assets/2013/11/Public-Ed-Fi-Unifying-Data-Model-1.2.pdf is an enterprise data model of K–12 education data. It is designed to capture the meaning and inherent structure in the most important information in the K–12 education enterprise, in order to facilitate information sharing of education data. The UDM is expressed using Unified Modeling Language (UML) class diagrams and is independent of any interchange mechanism, database storage structure or application interface. The UDM is aligned to the CEDS.

(2) Data exchange framework – The data exchange framework defines mechanisms for securely exchanging and storing data contained in the UDM, based on industry standard and vendor neutral approaches. The data exchange framework includes:

i. Ed-Fi XML Core Schema http://www.ed-fi.org/assets/2013/11/Public-Ed-Fi-Core-1.2.xsd_.zip and Standard Interchange Schemas http://www.ed-fi.org/assets/2013/11/Public-Ed-Fi-Standard-Interchange-Schema-Overview-1.2.pdf built upon the core schema.

ii. Ed-Fi Logical Database Model (LDM) http://www.ed-fi.org/assets/2013/11/Public-Ed-Fi-Logical-Database-Model-1.2.pdf for implementing an Operational Data Store (ODS)

iii. Ed-Fi REST API Design Guidelines http://www.ed-fi.org/assets/2013/11/Public-Ed-Fi-REST-API-Design-Guidelines-1.2.pdf.

aa. English Learner Accommodations – Testing accommodations allowable for English Learner or non-English language background (NELB) students based on individual needs and abilities.

bb. English Learner (EL) – A student whose first language is not English and who is limited English proficient as determined by State criteria.

cc. Evidence Centered Design (ECD) – A framework for assessment design that takes into account:

(1) the knowledge, skills, abilities to be assessed,

(2) the behaviors or performances that should reveal the target construct, and

(3) the tasks that should elicit these behaviors.

dd. Fiscal Year (FY) - The State accounting period of July 1 through June 30.

ee. Hand Scoring – The process of determining the rating of a student's work using holistic or trait based scoring rubrics.

ff. Holistic Scoring – A method of scoring that examines the combination of content, use of details and examples, organization, and general grammatical conventions.

gg. IaaS - Cloud Infrastructure as a Service. The capability provided to the consumer is to provision processing, storage, networks, and other fundamental computing resources where the consumer is able to deploy and run arbitrary software, which can include operating systems and applications. The consumer does not manage or control the underlying cloud physical infrastructure but has control over operating systems, storage, deployed applications, and possibly limited control of select networking components. Consult the NIST (National Institute of Science and Technology) Special Publication 800-146 for further definition and details.

hh. Interoperability – A principle of using standardized data formats and data transport protocols to promote the effective exchange and utilization of data between two or more systems or system components. Interoperability is a core design principle for Tennessee Department of Education technology development and operations.

ii. Item(s) – Test questions, may include constructed response, performance tasks and/or selected response.

jj. Item Bank – Test question repository and/or archive.

kk. Knowledge, Skills and Abilities (KSA) – An element of ECD used to determine the assessment framework. Each alternative item task template is built to a focal KSA.

ll. Limited English Proficient (LEP) Student – A student whose first language is not English and who is limited in English proficiency as determined by State criteria (also referred to as English Learners).

mm. Linking Items - Items that have known psychometric properties and are common across forms for the purpose of equating assessments.

nn. Local Education Agency (LEA) – A school district or school system that is the financial and administrative agency for school(s) in a certain region of the State.

oo. Longitudinal Assessment – Provides measures of student performance over time utilizing a common scale.

pp. N-Count – Total number of students, items, materials or other deliverables.

qq. Online Applications – Web-based products as defined in section A.10.e.(1), A.10.h.(1), A.12.d-f, and A.15.h-i.

rr. PaaS - Cloud Platform as a Service. The capability provided to the consumer is to deploy onto the cloud infrastructure consumer-created or acquired applications created using programming languages and tools supported by the provider. The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, or storage, but has control over the deployed applications and possibly application hosting environment configurations. Consult the NIST (National Institute of Science and Technology) Special Publication 800-146 for further definition and details.

ss. Performance Standards - Indicates student performance and are reported at multiple levels. The performance standards are established by educators at standards setting.

tt. Prompt – Text that defines the topic for a student's writing. The different modes of writing assessed may include but not be limited to: narrative, expository, informational, explanatory, analytic, opinion, and/or argument.

uu. Question and Test Interoperability (QTI) – Defines a standard format for the representation of assessment content and results, supporting the exchange of this material between authoring and delivery systems, repositories and other learning management systems. It allows assessment materials to be authored and delivered on multiple systems interchangeably. It is designed to facilitate interoperability between systems.

vv. Reporting Categories - Divisions of the academic standards used in reporting student performance on the assessments (the State will work with the Contractor in defining these categories).

ww. Scale Score - A numerical score, based upon the number of items a student correctly answers, which summarizes the overall level of performance attained by the student.

xx. Scientific validity and empirical standards –The assessments shall meet the criteria for test development, administration, and use described in the *Standards for Educational and Psychological Testing* (1999) adopted by the American Educational Research Association (AERA), the American Psychological Association (APA), and the National Council on Measurement in Education (NCME).

(1) www.apa.org/science/standards.html

(2) www.apa.org/science/testing.html

yy. Selected Response (SR) – A test question that requires the student to choose the correct/best answer(s) from possible responses (i.e., multiple choice, multiple select, technology enhanced, drag and drop, hot text, etc.).

zz. Secure Browser – A Secure Browser is a program specifically created to allow the delivery of a "locked-down" testing environment for web delivered online tests. A Secure Browser will prevent students from accessing other computers, Internet applications or copying test information, creating a safe test environment.

aaa. Standards Alignment – The degree to which the assessment is aligned with Tennessee's Academic Standards. Alignment shall be defined as the quality of the relationship between learning expectations and the assessment used to measure student comprehension of the concepts taught.

bbb. Standards and Assessment Peer Review by the Office of Student Achievement and School Accountability of the U.S. Department of Education – Specific federal compliance requirements for the appropriateness of assessments used by states. http://www.ed.gov/admins/lead/account/saa.html#peerreview

ccc. State Assigned Student ID Number – Student identification number randomly generated from the statewide student management system.

ddd. State Special Schools – A school that is managed by the State. Summary data for State Special Schools is included with public schools. Current schools include: Achievement School District, Alvin C. York Institute, Tennessee Governor's Academy, Tennessee School for the Blind, Tennessee School for the Deaf, West Tennessee School for the Deaf, and Department of Children's Services.

eee. TCA – Tennessee Code Annotated, the compilation of State statutes.

fff. TCAP – Tennessee Comprehensive Assessment Program, the comprehensive set of standardized assessments mandated in Tennessee.

ggg. TCAP Assessments – Used to identify all State assessments as a group.

hhh. TCAP/ACH - Achievement Assessment mandatory for grades 3-8.

iii. TCAP/Alt – Alternative Assessment for most significantly disabled students (1%).

jjj. TCAP/EOC – End of Course Assessments provided in specified secondary content areas.

kkk. TN Constructed Response Rubrics – Scales to be established by the Contractor with State assistance for use in scoring constructed response items in a fair, reliable and valid manner.

lll. Technical Report – Comprehensive summary report as defined in A.9.z.

mmm. Technology Enhanced Item (TEI) – Computer delivered items that include specialized interactions for collecting response data. A TEI template describes a single interaction, response data collected as a result of that interaction, and the logic applied to score the response data.

nnn. Tennessee Academic Standards - A set of expectations for what students will know and be able to do at the end of a grade. Tennessee Academic Standards as adopted by the State Board of Education. The current standards are available at http://tn.gov/education/topic/academic-standards.

ooo. Tennessee Value-Added Assessment System (TVAAS) - One component of the State accountability program that utilizes a statistical methodology to measure student achievement gains.

ppp. Test Year (TY) - The test administration period from July 1 through June 30. Final reporting for the test year may extend into the following test year.

qqq. Universal Design – A set of principles for curriculum development that give all individuals equal opportunities to learn. Universal Design for Learning (UDL) provides a blueprint for creating instructional goals, methods, materials, and assessments that work for everyone – not a single, one-size-fits-all solution but rather flexible approaches that can be customized and adjusted for individual needs. http://www.udlcenter.org/ All items must be written and will be reviewed under these principles.

rrr. Validity and Reliability Requirements – Statistical and psychometrical evidence that the assessments consistently measure the standards and determine level of proficiency.

sss. Vertical Scaling – Development of a single scale appropriate for use across grade levels to determine growth in each domain.

ttt. Web-Based – Delivered via the Internet World Wide Web.

A.4. **Schedule**

The State shall review and approve all materials and/or deliverables purchased under this Contract. The State reserves the right to determine specific details of work tasks and products. Changes to any agreed upon procedures or product specifications shall be made in collaboration with the State. The Contractor shall not disseminate any written information, materials, or deliverables associated with this Contract to the field, public, or any other third party without the State's written approval. The Contractor will allow the State a minimum of five (5) state work days to review materials and/or deliverables unless noted otherwise in this scope of services. If necessary, the Contractor will make modifications as directed by the State and provide additional time of not less than three (3) State work days for the State to review and sign-off on the revised submission. The Contractor is responsible for any expenses associated with making modifications to materials and deliverables necessary to obtain the State's approval. The Contractor shall provide the deliverables under this Contract in accordance with the delivery schedule stated below:

a. Annual Deliverables - These deliverables shall be delivered on the dates specified below for the first administration of the assessments. The due dates for subsequent administrations will be established in the Annual Work Plan in collaboration with the State.

(1) Annual Work Plan – The Annual Work Plan as defined in A.6.a shall include all activities related to each test administration. The initial Work Plan shall be due 30 calendar days after the Contract is executed. The initial Annual Work Plan shall cover the period from the execution of the Contract through the completion of testing, including delivery of the technical report, for the 2015-2016 test year. The annual work plan will sequence events to follow best practices in ECD. Each subsequent Annual Work Plan shall be due to the State by May 1 each year and shall cover the full test cycle including reporting for that year. The final Annual Work Plan (due May 1, 2019) shall cover the period from July 1, 2019 through the end of the Contract.

(2) Progress Reports – Quarterly progress reports as detailed in section A.7.d (2) shall be provided to the State beginning October 1, 2015.

(3) Content/Bias Passage Reviews – As detailed in section A.8.e are conducted on an annual basis with participation of the State on a schedule to be determined by the Contractor in collaboration with the State.

(4) Content/Bias Item Reviews – As detailed in section A.8.e are conducted on an annual basis with participation of the State on a schedule to be determined by the Contractor in collaboration with the State.

(5) Test Specifications – Receipt of Test Specifications as detailed in section A.8.c, including Item Specifications as detailed in section A.8.d with Scoring Keys shall be delivered on an annual basis on approximately August 1 each year as determined by the Contractor in collaboration with the state and detailed in the Annual Work Plan. Test Specifications for 2015-2016 shall be completed prior to the beginning of this contract and given to the Contractor by September 15, 2015.

(6) Processing, Scoring and Reporting Activities – Specific dates for component deliverables of processing, scoring and reporting as detailed in sections A.13, A.14 and A.15 shall be detailed in the Annual Work Plan.

(7) Comprehensive Data Files (CDF) – Delivery of CDF by the administration vendor to the State by May 30, 2016 and no later than May 30 for each subsequent year of the Contract.

(8) Sight Reviews – Conducted on an annual basis with participation of the State on a schedule to be determined in collaboration with the State and the State's administration vendor.

(9) Braille Reviews – Conducted on an annual basis with participation of the State on a schedule to be determined in collaboration with the State and the State's administration vendor.

(10) Technical Report – Receipt of Technical Report by the State by October 1, 2016 and no later than October 1 for each subsequent year of the Contract.

b. The State shall provide the Contractor with the following by September 15, 2015:

(1) The State's current item bank.

(2) Sample test books and other ancillary materials in PDF format.

(3) Test Specifications –Test Specifications, including Item Specifications and Scoring Keys for Fall EOC.

(4) Schedule for weekly meetings with the State's administration vendor.

A.5. **General Scope of Assessment Services**

a. Test Structure – The Contractor shall work with the State to provide assessments as follows:

(1) Achievement Assessment required for grades 3-8, using Tennessee Academic Standards in Science and Social Studies.

(2) End of Course assessments required for specified secondary content areas. Current plans include Biology, Chemistry and U.S. History. Additional content areas may be added at the discretion of the State, possible additions include Physics, World History, and Government.

(3) Alternative Assessment (TCAP/Alt) to be given to students in grades 3-11. The TCAP/Alt shall be an alternate assessment based on alternate achievement standards for students with significant cognitive disabilities in the areas of science for grades 3-8 and 10 and social studies in grades 3-8 and 11. The TCAP/Alt shall be developed in collaboration with the state using the principles of ECD. The goal of the alternative assessment is to ensure that students with significant cognitive disabilities achieve increasingly higher academic outcomes and leave high school ready for post-secondary options.

(4) The Contractor shall work in collaboration with the State to ensure all assessments adhere to current and future standards for Science and Social Studies. The State has begun a process for review and revision of the Science standards and expects to field test in the 2016-2017 test year.

(5) The Contractor shall work in collaboration with the State to ensure all assessments adhere to existing and future changes to federal and state legislation, rules and policies. Such work shall include but not be limited to any documents, papers, or records by the State or the United States Department of Education for review and audit purposes.

(6) All activities related to this Contract will be the responsibility of the Contractor and will require the State's approval. All components of the assessment program shall maintain compliance with State Board of Education Policies located at http://tn.gov/sbe/section/rules-policies-and-guidance and the laws of Tennessee, located at http://www.lexisnexis.com/hottopics/tncode/, including but not limited to: TCA § 49-1-226, 49-1-302, 49-1-602, 49-1-603, 49-1-604, 49-1-605, 49-1-606, 49-1-607, 49-1-608, 49-1-609, 49-1-610, 49-1-612, 49-1-617, 49-6-3050, 49-6-5101, 49-6-5105, 49-6-5106, 49-6-6001, and 49-6-6003. The Contractor shall provide documentation of the components of the assessment program as requested by the State.

b. The State will work with the Contractor in development of annual testing schedules, currently the TCAP schedule is as follows:

(1) TCAP/ACH is administered in late April – early May.

(2) TCAP/EOC are administered three times a year as follows:

i. Fall: generally the first three weeks of December, available for schools on block schedules and make-up testing.

ii. Spring: generally the first two weeks of May.

iii. Summer: generally three weeks in July, available for make-up testing and summer schools.

(3) TCAP/Alt is currently administered in a portfolio format from August through February.

The State will work with the Contractor to establish a spring testing window for an online administration of the TCAP/Alt.

(4) The current plan for the 2015-2016 test year schedule is:

| Assessment Name | Administration | | 2015-16 Administration Window | |
|---|---|---|---|---|
| Traditional Schedules TNReady RLA & Math Grades 3-8 and Secondary | Winter – Part I | | February 8 – March 4 | |
| | Spring – Part II | | April 18 – May 13 | |
| | | | **PAPER** | April 25 – May 6 |
| | | | | |
| Block Schedules TNReady RLA & Math Secondary | Fall | Part I | November 2 – November 20 | |
| | | Part II | November 30 – December 18 | |
| | | | **PAPER** | November 30 – December 18 |
| | Spring | Part I | April 11 – April 29 | |
| | | Part II | April 25 – May 13 | |
| | | | **PAPER** | April 25 – May 6 |
| | | | | |
| Social Studies grades 3-8 and U.S. History | Fall Block | Part I | November 2 – November 20 | |
| | | Part II | November 30 – December 18 | |
| | Spring Block | Part I | April 11 – April 29 | |
| | | Part II | April 25 – May 13 | |
| | Spring Traditional | Part I | February 8 – March 4 | |
| | | Part II | April 18 – May 13 | |
| | | | **PAPER** | April 25 – May 6 |
| | | | | |
| Science Grades 3-8 and Secondary | Fall | | November 30 – December 18 | |
| | Spring / Traditional | | April 25 – May 10 (TUE) | |
| | | | | |

c. In spring 2015 the State worked with the current assessment vendor to develop and field test assessments in 3-8 Social Studies and U.S. History. These tests were developed and field tested using an online platform. The items from the field test and all related data will be given to the Contractor for fall 2015 and spring 2016 assessments in U.S. History and for spring 2016 3-8 Social Studies. Enough items were developed and field tested to provide at least two forms of these assessments. The State intends to reuse a form from a previous administration for the 2015-2016 3-8 Science and EOC Biology assessments. The State has enough items in the item bank to generate fresh forms for EOC Chemistry. The current vendor has taken initial steps in the development of test forms for 2015-2016 for science and social studies and all items, test specifications, blueprints and other relevant materials shall be given to the Contractor. The Contractor shall be responsible for review of test items and specifications beginning with the Fall 2015 EOC administration. In addition, the Contractor shall collaborate with the State's administration vendor to ensure accuracy in printing, shipping, administration activities, psychometric, scoring and reporting for all assessments.

d. Maintaining test validity, reliability, and equivalent assessments across years is a fundamental priority of the program. The Contractor shall work in partnership with the State and the State's administration vendor on all aspects of this assessment program. Changes in the assessments during the Contract period will be made in collaboration with the State.

e. The primary purpose of these assessments is to improve teaching and learning. The Contractor shall work in collaboration with the State to ensure that high quality items and test forms are provided to meet this purpose. Additionally, these assessment results are used for student grades, school accountability, and teacher evaluations. Because of the high stakes

nature of TCAP all aspects of test administration, scoring, and reporting will be undertaken with diligence for test security and score validity.

f. Assessments provided under this Contract shall provide reporting that includes performance levels established to provide a measure of student work on eleventh grade assessments, i.e. U.S. History, and that is aligned with the expectation that a student could succeed in credit bearing, entry level coursework in college.

g. Items provided under this Contract shall include both constructed and selected response, as defined in A.3.s and A.3.yy, shall be aligned with the Tennessee Academic Standards available at http://tn.gov/education/topic/academic-standards, and meet federal assessment criteria available at http://www.ed.gov/admins/lead/account/saa.html. The Contractor shall collaborate with the State for final approval of each test form, and other materials used under this Contract.

h. The Contractor shall support the provision of testing materials and online administrations based upon the number of students tested in each LEA. Tennessee has approximately 142 LEAs, seven state special schools including the state Achievement School District, and approximately 1200 public and private schools. Historical usage figures are provided in the following table:

| Assessment | 2013 | 2014 |
|---|---|---|
| Achievement grades 3-8 | 534,590 | 506,528 |
| Large Print grades 3-8 | 860 | 729 |
| Braille grades 3-8 | 22 | 26 |
| End of Course – average 60k/content area for spring. | 470,697 | 458,311 |
| End of Course – fall 2012 (7) and 2013 (8) | 116,837 | 134,963 |
| End of Course – summer* 2013 (7) and 2014 (8) | 18,639 | 16,604 |
| End of Course – spring LP | 396 | 366 |
| End of Course – Braille | 28 | 24 |
| TCAP Alt/Portfolio | 8,192 for 2014-2015 | |

* Quantities for summer show materials ordered by LEAs, actual scan counts are approximately less than one-third of the materials ordered. The decrease in materials ordered from 2013 to 2014 is correct, fewer LEAs offered summer school in 2014.

A.6. **Administration Activities:**

The Contractor shall provide test items, specifications and forms for all public, state special, approved private schools, and home schooled students beginning in 2015-2016 (TY16).

The Contractor shall produce and deliver test forms and other materials necessary to facilitate State testing schedules as outlined in A.5.b. All administrative materials shall be provided to the State in Microsoft Word and/or Excel for use on the State internet or in training.

a. **Annual Work Plan -** The Contractor shall work in collaboration with the State's administration vendor to prepare, for State review and approval, a detailed Work Plan for each assessment that incorporates the schedules for the activities of this Contract. Separate work plans shall be provided for Achievement selected and constructed response, End of Course selected and constructed response, and the Alternative Assessment. The initial Work Plan for each assessment will indicate the essential steps leading to the transition between the Contractor and the existing contractor and shall be submitted within thirty (30) calendar

days after executing the Contract. The Work Plan shall include the steps for all project work tasks and deliverables including initiation and completion dates, task responsibilities and transitional activities with the State designated contractor for administration, scoring and reporting to avoid any disruption of services, requirements or deliverables to the students, teachers, schools, LEAs, and State.

The Annual Work Plan for End Of Course shall provide an overview of tasks for all three administrations within the year; for ease of management it may be divided and worked with specific to each administration. The Annual Work Plan will outline by task and due date each activity to be performed under this Contract following the deliverable timelines established in A.4. The Annual Work Plan must describe all activities related to the development of test forms, training materials, administration materials, vendor support processes, assessment support processes, reports, interpretation materials and logistics, including each stage of production. It shall provide due dates for each activity and indicate areas of responsibility for the Contractor and the State. The Annual Work Plan will serve as a monitoring document to be used by the State to assure timely completion of tasks as scheduled. Each Annual Work Plan shall be comprised of all activities related to the administrations of each assessment and may encompass more than an actual 12 month time frame.

The final Annual Work Plan for this Contract will indicate the essential steps leading to the transition between the Contractor and any vendor awarded any subsequent contract for the provision of these services. The final Annual Work Plan shall include the steps for all project work tasks and deliverables including initiation and completion dates, and task responsibilities to avoid any disruption of services, requirements or deliverables to the students, teachers, schools, LEAs, and State.

The Contractor shall establish a secure sharepoint or file transfer protocol (SFTP) website for use in maintaining the Annual Work Plan and other communications, including but not limited to posting test items, test booklets, scoring materials and reporting information for review, with the State and the State's administration vendor for contract management. Materials shall be considered delivered and final after written notification is given to the Contractor via email or other electronic methods by the State contact in D.2 or their official designee. The Annual Work Plan shall be delivered in a format supported by the State, shall include a key dates file in Microsoft Excel and shall be maintained as a fluid, ongoing project document for each test administration. Both the State and the Contractor shall have access to and the ability to edit and update the Annual Work Plan as needed. All changes shall be made in collaboration with the State.

The Contractor shall provide each year the facility, transportation, food, and lodging for an Annual Work Plan review between the representatives of the State, the State's administration vendor and the Contractor for planning, materials development, scoring methodology, and report approval, as needed. State representatives in consultation with the Contractor shall make selection of the meeting site and dates. Meeting participants shall include the key project staff including project coordinators and their supervisors from all organizations. The Contractor shall pay for all costs, described in A.8.e. (3).xiii, related to the Annual Work Plan review

b. **Security Procedures –** The Contractor shall provide detailed, standardized security procedures for review by the State. Approved security procedures shall be included in the annual technical report for each assessment. The Contractor shall provide and pay for any experts needed should any security matters be litigated. The Contractor must not make contact with the press or LEAs in regard to test development or testing reports, results, or procedures. Any contact with the press and LEAs shall be handled through the State. The procedures include but not be limited to the following:

(1) Comply with State of Tennessee Test Security Law, T.C.A. 49-1-607.

(2) Include test security procedures and safeguards such as serial numbered booklets and confidentiality agreements as necessary.

(3) Procedures such as forms with the items presented in alternate item order displays (somewhat rearranged) within each administration shall be explored and instituted in order to decrease cheating without jeopardizing form comparability.

(4) Provide security procedures and safeguards to ensure that electronic files and data are developed, used, and maintained in a secure manner to protect the confidentiality of all students tested, including all materials, records, reports, and files.

(5) Include test security procedures for all student demographic data.

(6) Provide security procedures and safeguards to ensure the security of the items, test forms and all ancillary materials during development, production, field testing, and calibration. The procedures shall ensure day-to-day security to prohibit unauthorized personnel access to testing materials through deliberate or unintentional actions.

(7) Utilize encryption to ensure security of the assessments and all student/teacher/school/LEA information entered through all online programs.

(8) Provide confidentiality agreements for participants in all review meetings. All participants must express understanding of the expectation that they are not to discuss or reveal the contents of the items, results of the assessment, student responses, student demographic information or any other information pertinent to the development, processing, scoring or reporting of the assessments.

(9) Include a description of procedures for the collection and secure destruction of secure materials (including unused tests, unused answer documents, test administration manuals, and scoring guides) conducted by the Contractor each year following the test administration.

c. **Quality Control –** The Contractor shall provide detailed, standardized, quality control procedures for review by the State. Approved quality control procedures shall be included in the Annual Work Plan for each assessment. The Contractor shall provide quality control measures including but not limited by the following: test form development, item field testing, forms calibration, materials printing, administration, scoring, and reporting.

d. **Error Correction** - The Contractor shall correct any errors in work products at the Contractor's expense, arising from activities that are the responsibility of the Contractor including but not limited to print errors and program functions. Such corrections may involve activities that include but are not limited to the following:

(1) Conducting analyses to identify the cause and extent of errors.

(2) Editing, revising, and/or reprograming online applications.

(3) Reprinting and/or reproducing products or other materials.

(4) Providing additional training to Contractor support staff, State staff, LEA personnel and staff for necessary State vendor(s) as needed via training materials, webinars, and or regional meetings.

(5) Replacing and/or correcting data files.

(6) Reproducing reports.

(7) Shipping replacement products or reports to the State or LEAs using expedited shipping services.

(8) Purchasing of additional equipment (i.e., servers and/or dedicated data circuits).

A.7. **Operations Management**

a. Project Team – The Contractor shall assign a single point of contact for this assessment program to manage all inquiries related to item and test form development as well as materials, training, and technical assistance. The point of contact program manager shall have Project Management Professional (PMP) certification.

(1) Team members must have at a minimum technical experience, knowledge, and operational experience including but not limited to the following areas:

i. Managing or coordinating the development and implementation of large scale assessments,

ii. Communicating effectively orally and in writing,

iii. Technical experience in the implementation of a large scale testing program and working knowledge of professional testing standards and practices,

iv. Academic and technical experience in working with statewide assessments for students with disabilities and

v. Academic and technical experience in working with statewide assessments for LEP students.

(2) The Contractor shall provide a personnel roster and resumes of key people who shall be assigned to perform duties or services under this Contract no later than the initial planning meeting.

(3) The Contractor shall not remove or reassign key personnel (including but not limited to: Program Manager, Project Manager, Project Coordinator, Chief Psychometrician, Software Project Manager, Lead Software Developer, Director of Test Development, and other personnel in Lead or Director level positions) without prior written notification to the State. Written notification must be submitted to the State at least 30 calendar days prior to the reassignment.

(4) The Contractor shall provide qualified replacements in the event that key personnel become unavailable to provide services due to resignation, illness or other factors. The Contractor shall provide the State with written notice immediately upon determination of the need for replacement personnel. The Contractor shall provide the State with written notification and the resume or vitae of all personnel proposed for the project team. Written notification must be submitted to the State at least 30 calendar days prior to the replacement. The State reserves the right to refuse, at its sole discretion and notwithstanding any prior approval, any personnel of the prime contractor or a subcontractor providing service in the performance of a contract resulting from this RFP. The State will document in writing the reason(s) for any rejection of personnel.

b. Administrative Tasks – The Contractor shall provide administrative tasks including, but not limited to, test form development. The Contractor shall collaborate with the State's administration vendor to provide administrative tasks as needed to support the administration scoring and reporting of annual assessments.

c. Continuity of Contracts – The Contractor shall:

(1) Participate in joint meetings with other State appointed contractors, the Technical Advisory Committee (TAC), and LEA Testing Coordinators as needed.

(2) Cooperate fully with the State in providing a transition between the Contractor and the existing contractors to avoid any disruption of services, requirements or deliverables to students, teachers, schools, LEAs or the State.

(3) Cooperate fully with the State and the State's administration vendor.

(4) Cooperate fully with the State and any future contractor designated by the State to transition to a potential new contract for the TCAP Assessments.

(5) Work with any State appointed contractor in the handling of all student data to support TVAAS and all reporting or other activities as requested by the State.

(6) Work with any State appointed contractor in the development of web-based applications to ensure a smooth transition within existing services.

(7) The State has a contract for the development of an online platform to manage all logistical aspects of assessments including communications, calendars, materials management, student demographic data verification, reports of irregularity, teacher-student connection (for TVAAS) and quick score reporting for student grades. The Contractor shall work with the State and the State's technology vendor as needed in the continued development and maintenance of web-based applications to ensure a smooth transition within existing services.

(8) Provide test development services and deliver to the State camera-ready copies of all

tests (in .pdf format), and any ancillary materials developed by the Contractor necessary for test administration (including, but not limited to: test administrator's manuals, scoring guides, interpretation guides, and training materials) no less than 45 calendar days prior to the end of the Contract.

d. Management Meetings – The Contractor shall:

(1) Provide for a minimum of one weekly management meeting between the Contractor and State staff. These management meetings shall include review of the key dates and provide an opportunity to discuss task implementation and status.

(2) Produce quarterly and annual progress reports with relevant tasks and activities from the schedule and progress noted for each. Progress reports shall include a report of activities completed during the prior quarter (or year, for the annual report). The reports shall provide a list of significant operational problems needing corrective action and shall address the following elements for each problem:

i. Identify the problem,

ii. Assign responsibility for taking corrective action,

iii. Evaluate the importance of the problem,

iv. Investigate possible causes of the problem,

v. Analyze the problem,

vi. Recommend actions to prevent recurrence of this or similar problems,

vii. Implement new process controls as necessary,

viii. Determine what to do with the failed items, and

ix. Record permanent changes in process documentation.

Each quarterly progress report shall also contain:

i. Section that addresses issues or problems raised by the State,

ii. Section that addresses ongoing problems,

iii. Section that details the invoices submitted and paid, and

iv. Executive summary that provides an informative and substantive description of the major problems and recommendations.

Unanticipated issues or problems shall be reported and addressed as they occur. All progress reports shall be submitted in Microsoft Word via email.

e. Records and Minutes – The Contractor shall take minutes and record lists of participants, including institutional affiliation and contact information, for all meetings including, but not limited to, item reviews, standard settings, management meetings, and technical advisory groups. All minutes, records and lists of participants shall be provided by the Contractor to the State for review within two State work days after each meeting. All records and minutes should be provided in an agreed upon style and format in Microsoft Word via email or other electronic media. The Contractor shall review contact information for each meeting and update contact information if changed.

A.8. **Development Activities**

a. Test development activities shall be the responsibility of the Contractor and shall be completed in collaboration with the State. All components of the assessments provided through this Contract shall maintain compliance with State Board of Education policies, state and federal laws. The Contractor shall work with the State to build a comprehensive assessment system based on the Tennessee State Academic Standards that includes tools and processes to support educators as they plan and provide appropriate instruction for all Tennessee students including English Learners and students with significant cognitive disabilities. The comprehensive system will coherently address curriculum, instruction and assessment needs by producing technically defensible online item tools, practice tests and summative assessments; and, incorporating

evidence-based instruction and curriculum models.

b. Previously developed items, test forms and associated materials shall remain the property of the Contractor. Items, test forms, ancillary materials and other associated materials prepared under this Contract that are created for the State and/or State's using comparable assessments, shall become the property of the State. This includes completed work as well as unedited items, rejected items, items under revision, test forms, all psychometric characteristics, including item parameters, all data generated and any other materials which may be prepared under this Contract. All items and test forms provided through or developed under this Contract shall be aligned with Tennessee Academic Standards. Changes in the design made during the Contract period will be made in collaboration with the State and the State's administration vendor. The Contractor shall collaborate with the State and the State's administration vendor in the development of all assessment materials, scoring procedures and methodologies, and quality-control procedures as defined in this Contract.

c. Test Specifications - The Contractor shall provide Test Specifications for each operational and field test form to the State and the State's administration vendor. Test Specifications (Blue Print) shall contain the following information in a Microsoft Word and/or Excel document according to the delivery schedule in section A.4. Test Specifications shall also be provided in xml format. Test Specifications shall be included in each assessment's annual Technical Report:

(1) Assessment name

(2) Content area

(3) Target grade

(4) Desired psychometric properties and measurement characteristics (A.9.)

(5) Proposed number of field test items

(6) Proposed number of operational items

(7) Proposed number of linking items

(8) Test Key information, including rubrics for CR items (A.14.e)

(9) Item arrangement (within the assessment)

(10) Item position comparison table indicating item placement as field test or linking item in previous form

(11) The amount of time required for testing

(12) All Item Specifications (A.8.d)

d. Item Specifications – The Contractor shall provide Item Specifications containing the following information in a Microsoft Word and/or Excel document. Item Specifications shall also be provided in xml format.

(1) Item reference number

(2) Item type (SR, CR, Task)

(3) Specific item type: SR (single or multiple), CR (short answer, extended response etc.) TEI (drag-n-drop, hot text, etc.)

(4) Item development status (new, existing un-modified, modified, and significantly modified)

i. new items – items written by the Contractor and delivered to the State via item writing committee

ii. existing un-modified items – items written by previous and/or current contractors located in the State's item bank and reused without edits of any kind

iii. modified items – items written by any contractor that have been changed slightly, examples include the removal of a distracter, minor word revisions, minor changes for linguistic simplification and style changes

iv. significantly modified items – items written by any contractor that require comprehensive rewriting to include translations, replacement and/or revision of multiple distracters, and extensive overall revisions

(5) Content area

(6) Target grade

(7) Test Key information, including rubrics for CR items (A.14.e) and Alt tasks, and point values if appropriate

(8) Reporting category

(9) Tennessee Academic Standards alignment, includes depth of knowledge/taxonomy information

(10) Item difficulty (p-value)

(11) Psychometric measurement characteristics (A.9.)

(12) Field test administration, location and item placement

(13) Origination of item (contractor, author, date written)

(14) Item location (within the assessment and name of assessment)

(15) Test item, any related passage, graphic, or illustration and all copyright information (A.8.e.(2)-(3)).

(16) Content and bias review results and sight review.

e. Test Construction – Test Construction activities will be the responsibility of the Contractor and will be completed in collaboration with the State. The Contractor shall provide documentation of the components of test construction including but not limited to those listed below:

(1) Alignment - The Contractor shall provide documentation to ensure that assessments provided are aligned to Tennessee Academic Standards as defined in A.3.nnn. The Contractor will complete additional alignment studies, as requested by the State, for future revisions to the curriculum standards that cause a significant change in the content being assessed. A significant change shall be defined as greater than 25% of the academic standards being revised. Such alignment studies shall be conducted using a State approved methodology. Alignment documentation shall be included in the Technical Report defined in A.9.z. Reports for additional alignment studies shall be provided to the State in both hard and digital copies upon request.

(2) Item Development –

i. The Contractor shall provide test items to assess student performance of the Tennessee's Academic Standards.

ii. The Contractor shall ensure that the assessments in Social Studies assesses the standards with attention to the following:

1) A majority of questions will be text-dependent and require close analysis of authentic passages.

2) Tasks should focus on the central ideas and important particulars of the text, rather than on peripheral concepts.

3) Tasks should assess the depth and specific requirements delineated in the standards at each grade level.

4) Multiple choice items should include not only recall and comprehension questions but also a large proportion of questions that require higher level thinking skills. CR items should concentrate on measuring students' depth of learning. All items should require students to marshal a body of facts and organize and express their thoughts.

5) In both the multiple-choice and constructed response items, the stimulus

materials should include copies of primary documents, graphs, political cartoons, charts, photographs, pictures, maps, and timelines. The types and complexity of materials should be appropriate for students at each grade level, but a variety of types should be used in varying grades.

6) There shall be a variety of item types including but not limited to multiple select, drag-and-drop, and technology enhanced.

iii. The Contractor shall ensure that the assessment in Science assesses the standards with attention to the following:

1) The assessment shall reflect the focus of the standards and provide a mechanism for accessing information on students' understandings of science content and process knowledge and skills.

2) The assessment shall demonstrate students' abilities to think critically, solve simple to complex problems, and ability to design scientific experiments, analyze data and draw conclusions.

3) The assessment shall provide a mechanism for accessing information on students' capacities to see and articulate relationships between science topics and real-world issues and concerns, as well as their skills using mathematics as a tool for science learning.

4) No items shall directly or indirectly assess students on topics prior to the introduction of that topic in the standards.

5) The assessment shall include multiple-choice and CR items (which include short and extended CR items as well as tasks). Some items may require more than one response; they include item clusters, performance tasks, and interactive computer tasks. The responses requested may be all multiple-choice, all CR, or a mixture.

6) Item clusters and item sets may use SR items, CR items, or both. For example, a set of items might include a SR item in which students select a prediction and a short CR item in which students are asked to write a justification for their prediction.

7) Performance tasks and interactive computer tasks also may use SR items, CR items, or both. In recording their answers, students may be asked to respond to both types of items. For examples, students might be asked to manipulate a computer simulation of a chemical reaction, a SR question could ask students to choose the correct mass of a reaction product, and a short CR question could ask students to describe how mass is conserved in chemical reactions

8) There shall be a variety of item types including but not limited to multiple select, drag-and-drop, and technology enhanced.

iv. The State may conduct an annual review of standards. Minor changes to the Tennessee Academic Standards shall be made and reported to the Contractor no later than three (3) months prior to item reviews. Any significant revisions, modifications, additions, or deletions to the Tennessee Academic Standards shall be made and reported to the Contractor no later than six (6) months prior to anticipated item content and bias reviews.

v. The Contractor shall select appropriate stimulus materials, abridge, adapt, and format passages as necessary, and obtain copyright permission for use of text and illustrations in this assessment program.

vi. Stimulus materials for future item development submitted to the State for review shall be provided in an original, searchable format. Passages to be reviewed by the State shall be edited as necessary and formatted with illustrations as they would appear on the assessments if selected for development. Selection and preparation of these materials will be completed by dates provided in the Annual Work Plan, which shall be developed in collaboration with the State.

vii. Using the specifications listed below, the Contractor will select authentic reading passages and other stimulus materials in each content area. The Contractor shall submit as many reading passages and other stimulus materials as necessary for item development.

1) The material shall be predominantly authentic passages written for an audience as opposed to commissioned passages, written strictly for the purpose of the test. Passages shall be representative of high quality narrative, expository, analytic, scientific, or historical text, realistic content applications, and shall allow for the development of high quality items. All texts are to be original from the public domain, open sources, or permissionable. Commissioned texts will not be used. The State places the highest priority on the use of public domain and/or open source texts so permissionable texts are acceptable only when public domain and open source texts are not available. Items should be developed consistent with the quantitative and qualitative text complexity expectations of students for each grade level and/or content area written in the Tennessee Academic Standards and detailed in Appendix A of the standards. The Contractor shall use the following criteria in selecting reading passages and other stimulus materials:

1. Reading passages and items developed for Social Studies and Science will adhere to specifications as outlined in the Tennessee Academic Standards located at the web address in A.3.nnn.
2. Text shall reflect the ability to expand and use higher order thinking skills and to perform functions in real-world situations. Primary sources, practical applications, and other materials related to life, work, and school should be used.
3. The Contractor shall work with the State to select stimulus materials and write test items that ensure rigorous assessments.
4. Passages that include focus on religious themes, violence, or are culturally bound so as to disadvantage large segments of the population may not be used. The Contractor will execute a process that ensures educators view passages prior to selection for the assessment to ensure sensitivity.
5. Reading passages and other stimulus material shall be reviewed using at least one quantitative and one qualitative measure prior to selection to ensure complexity appropriate to the expectation of the Tennessee Academic Standards.
6. All passages shall be in English; any non-English words, technical terms or words used above grade level comprehension shall be defined in the passage, in a footnote with the passage, and/or in a glossary. Words critical to understanding the passage which are likely to be unknown to students may be defined or cued by contextual clues. Scientific formulas and mathematics equations critical to successful problem completion which are likely to be unknown to students will be provided as a footnote with the item and/or on an ancillary reference sheet for the appropriate content area.
7. The Contractor shall write items in a way as to not cause any student, particularly English Learners, vision or hearing impaired students, an unfair disadvantage.
8. The Contractor shall utilize principles of Universal Design in item development. The item development process shall pay attention to removing potential challenges to make the assessment clear and comprehensive for all students.
9. The Contractor shall provide reading passages and other stimulus material that are bias free in the areas of gender, religion, ethnicity, nationality, culture, age, visual or hearing impairments, physical differences, socioeconomic status, and rural/urban environments. Test items shall meet the standards of the American Educational Research Association (AERA) and the American Psychological Association (APA) for Differential Item

Functioning (DIF).

10. Illustrations or photographs that accompany passages and other text shall be used to the extent possible. One to five illustrations or photographs per passage shall be considered. Illustrations selected shall be able to be reproduced clearly using only one color of ink. The Contractor shall give consideration to the ability to scale illustrations for Large Print and interpret into text for Braille translation whenever the illustration contributes to an item's correct response. All graphics, illustrations, and/or photographs, along with complete copyright and item reference information, shall be provided to the State in an electronic format as part of the TCAP Assessments item bank.

2) Abridging Passages:

The following are some types of abridging that meet the passage length criteria:

1. replacing and/or modifying words, phrases, paragraphs, or sections
2. deletion of words, phrases, paragraphs or sections,
3. deletion of one or more minor characters and references to the character(s) throughout the selection,
4. condensing a book or very long passage,
5. editing content as necessary to accommodate deletions made,
6. deletion or changing the size of illustrations.

Passages that are abridged by the Contractor require the approval of the State and permission of the copyright holder(s).

3) Adapting Passages:

1. Guidelines for Braille tactile graphic materials include but are not limited to the following:
   a. Graphics in scientific tests must follow provisions of the Nemeth Code and Guidelines for Mathematical Diagrams, BANA (1983).
   b. Graphic material should be simplified without omitting needed information or creating an unfair advantage by supplying and/or alluding to the answer.
   c. Descriptions of graphics or illustrations should be presented concisely within the student's test booklet if information in the picture is vital to answering any test item. Such descriptions will appear as transcriber's notes throughout the test and must be included in the Teacher's notes to Braille edition.
   d. An ink print copy of the Braille edition of the test is provided which corresponds to the Braille format and arrangement on the page and will include the description of items where appropriate.
   e. Braille readers should only be required to accurately measure to the ¼ inch or one-centimeter. Graphics depicting measurements must maintain accurate and true proportions to match the answer choices.
   f. Keys or legends that supplement reading graphics should be located at the top left of the tactile graphic or on the left-hand facing page.
   g. Braille labeling on graphics will be presented horizontally. Labels should be placed outside the area of the graphic/figure.
   h. Charts and graphs should be maintained on one page, when possible, or on facing pages.
2. Reading passages, graphics, illustrations, and all copyrighted stimulus materials that are adapted by the Contractor shall be provided to the State

for review prior to use. Written permission of the copyright holder(s) is required before submission to the State.

4) Obtaining Copyright Permission:

1. The Contractor shall obtain written copyright permission for all stimulus materials used in the execution of this Contract on behalf of the State.
2. The Contractor shall obtain written copyright permission for field testing any copyrighted passages and if the passage/stimulus materials survive field testing, permission for use on the TCAP Assessments (a secure educational use) shall be obtained. Written permission shall be obtained for the passages/stimulus materials and any changes made in the passages, illustrations, and format. Copyright permission shall allow for the production of a limited number of enlarged print and Braille copies. A commitment from the copyright holders for granting copyright permission is necessary before an item is used on any form of the assessment materials.
3. Written permission is required before field test items can be printed or posted. It is possible that further revisions may be necessary at other points in the test development process, such as when field test data are analyzed. If revisions are required, the Contractor shall secure copyright permission for such revisions. Certain selected passages or stimulus materials to be used for public release shall presume a maximum of 750,000 impressions and 750,000 Internet hits per month.
4. The Contractor is responsible for payment of all copyright fees. Copyrights shall be held, at a minimum, for the length of the Contract on all passages or stimulus materials. For passages and stimulus materials (including art) used in products developed during the final year of the Contract and those that are used for multi-years, i.e. practice tests, item samplers, Braille tests, etc. copyright shall be obtained to the end of the test year following the end of the Contract (June 30, 2021).
5. The Contractor shall provide the State with a table of items with copyright holder approval, copyright extent dates, and copyright fees. The Contractor shall provide copies of all correspondence, copyright agreements and/or contracts and other related information to the State prior to the printing of material. All copyright information shall be provided with the item in the item bank.

(3) Writing and Revising Test Items –

i. The Contractor shall write new items each year. New items shall be field tested to replenish the item bank and maintain fresh items for future test administrations for all grade level and/or content areas for each assessment. TCA 49-1-610 requires 70% fresh and non-redundant items for operational forms of each assessment. The State reserves the right to include previously developed and/or implemented items in the item bank. Items which have been used may be reused after three (3) test years for secondary content areas and four (4) test years for 3-8 content areas with State approval.

ii. The Contractor shall work with the State and the State's administration vendor to develop field-test administrations for new assessments according to timelines established in the Annual Work Plan and outlined in section A.4.

iii. The Contractor shall provide details in the Annual Work plan for future item development and field testing. The plan shall include the intent to draft a sufficient number of items of the appropriate types and content distribution to create an item bank with sufficient depth and coverage to produce equated, unique test forms plus linking items for field testing each year.

iv. Field test items shall not be included in the 70% fresh items and may be scattered throughout each version of the assessments (random placement not required) and/or placed at the end of a subtest for each grade level/content area. There may be

between two and ten items per grade level/ content area per version with a maximum of 30 versions as needed to populate future test administrations during the spring administration. The fall and summer administrations of secondary content areas may include a minimum of five (5) field test items per content area tested on only one (1) version of the test form. The Contractor shall work in collaboration with the State and the State's administration vendor to provide field testing for each content area for each assessment such that:

1) Twice as many field test items as needed for final operational forms are developed. An annual maximum of 600 items per assessment per content area may be required.
2) New items are field tested on operational forms.
3) A minimum of 3000 student responses is used in the calibration of all new items.
4) The spring administration will include field test items to provide sufficient items to maintain item banks annually.
5) The field test design must address context impact of operational item placement. State approval of the field test design is required.

v. The Contractor shall submit for State review and approval an item development schedule in the Annual Work Plan. The schedule shall include the number of high-quality items to be reviewed and field tested on each assessment.

vi. The Contractor shall provide test items written in accordance with Item Specifications drafted by the Contractor's content and assessment specialists. All items shall be approved by the State. Any passages, items or illustrations not meeting the approval of the State shall be revised and/or additional items developed until the required number of approved items has been met. Any illustrations not meeting with the approval of the State shall be revised or replaced until the necessary number of illustrations has been met.

vii. The Contractor shall format and make revisions electronically in passages/stimulus material, items, illustrations, and documents. Paste-ups are not acceptable as revised items. All materials needing revision shall be revised by the Contractor under timelines defined in section A.4 and the Annual Work Plan. Several revisions to items, illustrations, and instructions may be necessary. Any work involving revision or replacement shall be submitted to the State for review, final approval and sign-off.

viii. The Contractor shall conduct item review meetings. A small meeting shall be defined as a group of 8-12 participants with State and Contractor personnel in one location regardless of the number of content areas or assessments. A large meeting shall be defined as a group of 13-20 participants with State and Contractor personnel in one location regardless of the number of content areas or assessments. For each meeting, the Contractor shall provide stimulus materials, draft items, and final formatted items (including graphics and/or illustrations). The Contractor shall provide supplemental materials as needed, including but not limited to: style guides, dictionaries, academic standards and reporting categories. All stimulus materials shall be supplied in hard copy format for participant review. The Contractor may provide all stimulus materials in an electronic format and present to participants using a laptop and LCD projector. Revisions shall be made in a hard copy master and the electronic version as much as possible for immediate review and approval by participants.

ix. The Contractor shall obtain written copyright permission for all stimulus materials, including passages, graphics, and illustrations presented for review. Graphics and/or illustrations shall be provided in draft format for items requiring art. Pencil replications, sketches, drawings, and comments (i.e. "include picture of beaker with liquid" or "map of Tennessee") shall not be acceptable.

x. The Contractor shall provide a proposed meeting agenda and all review materials in an electronic format (Microsoft Word, Microsoft Excel, .pdf) to the State at least five State working days prior to review meetings. During review meetings, the Contractor

shall keep detailed notes of any edits, revisions, comments or concerns made during the meetings and shall share these notes with State representatives for sign off. The Contractor shall maintain the originals for use in test form development.

xi. The Contractor is required to ensure the security of all meeting materials. Participants shall be required to sign confidentiality agreements.

xii. The State shall provide employees, educators, administrators, college/university personnel and/or other civic stakeholders from across the state to participate in item reviews. The Contractor shall provide a demographic survey for completion by each participant; the survey shall include but not be limited to: gender, ethnicity, region, locale (i.e. urban/rural), title, years of service, and content area specialty/(ies). The Contractor shall provide a summative report of participant demographic information to the State at the conclusion of the meeting. The participants will be identified according to timelines established mutually by the Contractor and the State to facilitate meeting planning.

xiii. The Contractor shall make arrangements for review meetings to take place for the completion of annual item development requirements. The Contractor in collaboration with the State shall determine the format of item review meetings. Item reviews may be conducted in person, virtually through a webinar or via a secure online portal that provides reviewers the opportunity to accept, reject, or provide feedback for each item. These meetings will be at the Contractor's expense. The meetings shall be secure and the Contractor shall pay expenses of all attendees. These expenses shall include mileage, transportation, lodging, meals required during travel and overnight stays, and parking, which shall all be based on federal reimbursement guidelines. The Contractor shall provide and pay for the facility, including room rental, breaks, and meals, and any necessary equipment, and materials. The Contractor shall be responsible for professional fees, consultant and teacher honorariums or substitute pay on a daily basis. The State's administration vendor may participate in review meetings, the Contractor shall not be responsible for expenses related to participation in item review meetings for the State's administration vendor personnel, with the exception of materials, snacks and meals provided during meetings to all attendees.

xiv. Content and bias review shall be provided for passages/stimulus materials for all assessments as necessary. Reviews for item content and bias shall be provided for all content areas for all assessments. Representatives from the State of Tennessee shall have the opportunity to participate in all reviews.

xv. During the Content Review process, items, passages and graphics/illustrations shall be reviewed for their appropriateness, matched with the academic standards, level of difficulty, and form. Illustrations shall also be reviewed for clarity and match to the suggested passage. The Contractor shall present an adequate number of passages and items to maintain the item bank for future form development. At the end of review meetings, some items and/or passages may need more work or additional items/passages may still need to be written and/or acquired. Illustrations may need revision or replacement. This work is undertaken by the Contractor under timelines developed in the Annual Work Plan.

xvi. During the Bias Review, items, passages and graphics/illustrations shall be reviewed for bias. The Contractor shall present an adequate number of passages to provide enough items and passages to maintain the item bank for future form development. At the end of these meetings, some items and/or passages may need more work or additional items/passages may still need to be written and/or acquired. Illustrations may need revision or replacement. This work is undertaken by the Contractor under timelines developed in the Annual Work.

xvii. The State's administration vendor shall be responsible for convening Sight Review Committees for the development of Braille forms. The Contractor shall collaborate with the State's administration vendor in the provision of test items for ink print sight reviews. The Sight Review Committee shall have time and opportunity to review test forms for the ability to adapt for Large Print or translate into Braille. For the purpose

of sight review, two types of meetings are herein described; these meetings should be conducted in a mutually agreed upon location prior to the completion of a Braille form of the assessments. Meeting sizes are defined in A.8.e.(3).viii. The State may provide attendees for the sight reviews, a minimum of three participants shall be expected for each content area. At least one certified Braille reader shall be included for Braille reviews. Meetings shall take a maximum of three days for review of Braille materials. In general, new Braille materials are developed bi-annually. A minimum of two reusable Braille versions of the test shall be created for each assessment during this Contract upon request by the State. Copyrights for passages and other stimulus used in the Braille versions shall be the responsibility of the Contractor. The Contractor shall collaborate with the State's administration vendor to provide test forms and other materials for review at these meetings. The Contractor may provide a representative to participate in the sight review. The State's administration vendor is responsible for all expenses related to these meetings with the exception of Contractor personnel.

1) The Contractor shall work with the State's administration vendor to create a process to review, critique, and revise items from proposed items or test forms. Items will be examined for ease of translation into Braille and recommendations will be given for Braille and audio tape transcription. Items shall be supplied in First Pages format as defined in section A.8.e.(4).viii.1). A minimum of two forms shall be provided for item selection. A minimum of 15 ink print versions will be made available.

2) There shall be a Braille Review. The Braille version, teacher's transcription notes, and audio tape script will be reviewed for correctness of transcription. A minimum of 10 Braille copies with corresponding ink print versions of test forms, and 10 ink print copies of notes and scripts will be made available.

xviii. The Contractor shall be responsible for all expenses related to additional content and/or bias review meetings that result from an insufficient number of passages, items, and/or graphics/illustrations prepared for initial review.

xix. The Contractor shall collaborate with the State and the State's administration vendor to develop design patterns and task templates for the Alternative Assessment. A minimum of four sample items, one at each of four levels of complexity per grade and/or content area shall be developed.

1) A Design Pattern (DP) is a narrative description of the assessment argument structure that helps to guide task development. They are reusable and improve efficiency of task development and can improve content validity. They detail the KSA a student should demonstrate and the types of observations that should produce the target behavior. They also define variable features that support the integration of Universal Design into the assessment task.

2) A Task Template (TT) is developed for a single focal KSA. It operationalizes the constructs to be measured, details the types of scoring to be used (including task-specific rubrics), and establishes the logic and presentation of the tasks. Each TT contains a set of four items that vary systematically in complexity-from focal KSA to the essential understanding of the content standard.

3) The Contractor shall build an initial item bank populated with four (4) items at each of four (4) levels for ten (10) tasks, across seven (7) grade levels and two (2) content areas.

xx. The Contractor shall create items to develop practice tests for each grade and content area. Items used for the practice tests shall go through the full item review process including field testing. Practice tests shall mirror the operational tests in style, item quantity, and layout. Practice tests shall contain items from all reporting categories. Practice tests shall be updated at least twice during the Contract. Provision of the Practice tests shall disclose sample test format and content to the public. Items used in the practice tests shall not be used in operational test forms. Practice tests reflecting the design of the 2015-2016 operational assessment shall be available for all subjects and grades as defined in A.5. The provision of practice tests

in .pdf, print and online shall be the responsibility of the State's administration vendor.

xxi. The Contractor shall provide items to be made available via the internet to teachers for use in classroom instruction for each grade level and content area. Items used for this online instructional item tool shall go through the full item review process unless otherwise agreed to by the State. Items shall portray a variety of question styles for every reporting category. Provision of the items shall disclose sample test format and content to the public. Items used in the online instructional item tool shall not be used in practice tests or operational test forms. The provision of the online item tool is the responsibility of the State's administration vendor.

(4) Test Form Development –

i. The Contractor shall prepare formatted test forms for each grade level and content area for each assessment. Separate forms may be provided for online and paper testing. Forms shall include linking items and field test items. Form layout and page design shall be completed in collaboration with the State and the State's administration vendor. At least one version of each form shall be modified in large print for visually impaired students.

1) The identification and design for use of the linking items for equating purposes shall be finalized with the Contractor in collaboration with the State's administration vendor in the spring each year for the following test year.

2) Test items directly related to reading passages or stimulus shall be on the same or facing pages whenever possible. For online testing, passages shall be presented on a vertical split screen with related items and students shall be able to move up and down within the passage. Passage excerpts shall be included with related test items when the items are placed more than one page from the passage.

3) During forms development for paper test forms, single page passages shall be placed on left sided pages with items on opposite and subsequent pages. Two page passages shall begin on right sided pages.

4) Blank or filler pages shall not be used in printed test books.

5) Braille versions shall consist of enough items common to the regular assessment necessary for equating purposes.

6) Test design for all forms and versions shall be created in collaboration with the State prior to test form layout for paper and online formats.

ii. The Contractor shall provide Quality Control as follows:

1) A comprehensive set of quality control procedures shall be included with the Annual Work Plan. The procedures shall include, but not be limited to: test development, field testing, materials printing and packaging, administration, scoring, and score reporting.

2) Scoring analysis or other mechanisms that are incorporated for detection of cheating.

3) Redundant (linking) items in any test form are not used on more than four operational forms and are spaced out in administration time so that they are not reused for at least four years. (Field test items are not considered part of the operational form).

iii. The Contractor shall collaborate with the State's administration vendor to provide test forms for each assessment for delivery via an online platform. Programming for the online version shall allow for adaptation as needed for student success; e.g., ability to limit one item on the screen at a time, highlighting specific text or portions of a passage, color contrasts, masking, enlarged print, speech to text, voice activation, reading programming, etc.

iv. The Contractor shall work with the State to develop a Learning Progressions Framework (LPF) for the TCAP/ALT using Tennessee Academic Standards to

present a broad description of the essential content and general sequencing for student learning and skill development in a pathway that typical peers may take grade by grade. Using ECD the Contractor shall assist with the development of CCC to identify prioritized academic content to assist teachers in framing the instruction of students with the most significant cognitive disabilities. The CCC's shall be used to sequence learning outlined in the LPF while identifying the basic parts of the progress indicators into teachable and assessable segments of content.

v. The Contractor shall collaborate with the State's administration vendor to prepare and produce final, formatted support documents including but not limited to teacher directions, administration manuals, a parent/teacher brochure and miscellaneous ancillary testing materials as described in section A.10. Separate support documents and ancillary testing materials shall be provided for each assessment as needed. If needed, separate support documents may be provided for online and paper administrations. Separate support documents and ancillary materials shall also be provided for operational test administrations or any stand-alone field test administrations for each content area for each assessment.

vi. The Contractor shall collaborate with the State's administration vendor in creating scripts for audio versions of each Braille form. Audio versions shall be provided on CD and packaged separately in jewel cases. Braille and Large Print versions shall be packaged separately. Ink print and audio tape versions of the test form, Braille teacher's notes, and test instructions shall be supplied on a 1:1 ratio for Braille.

vii. The Contractor shall provide test items, test forms and all related support documents (including manuals, guides, reports, etc.) in electronic formats for use by the State and the State's administration vendor. Formats for support documents shall be appropriate for revision and development of presentation slides, publications, and Internet web site use (including but not limited to: HTML, Publisher, PowerPoint, PDF, MS Word and/or Illustrator files).

viii. The Contractor is responsible for production stages of all materials and products developed for each assessment up to print proofs. The Contractor shall provide print ready proofs to the State's administration vendor for printing and packaging. The State shall review and approve all products provided or developed through this Contract. All items for review shall be delivered to the State via the Contractor's secure FTP site. Hard copies, including but not limited to: Large Print, Braille, Second Pages, Final Pages, Printer's proof and Printed Samples shall be delivered via overnight carrier. Receipt of hard copies by the State shall initiate the review window. All test items and test forms shall be reviewed by State personnel. Items and item forms for each assessment will also be reviewed by the appropriate State personnel for the assessment, e.g. Special Education, Curriculum, and Federal Programs (EL). Timelines for these reviews and each stage of production shall be included in the Annual Work Plan for each assessment. A minimum of ten State working days shall be allotted for State staff to review materials at each stage of production. The State reserves the right to make changes in materials at any stage of the project prior to final printing. The Contractor shall create a tracking log using Microsoft Excel or other approved software to provide clear lines of communication between the different State departments and Contractor staff. The log shall include the item summary as defined in section A.8.e.(4)viii.1). The tracking log shall be maintained on a unique and secure FTP site established specifically for item review and accessible by Contractor staff as well as multiple State departments. Production stages at which the State will be involved for all printed products are defined below.

1) First pages: The Contractor shall provide items for review by content specialists via secure web portal or electronically in Microsoft Word or .pdf. First pages shall be provided to the Contractor for review with the State. First pages provides each item individually and includes the item stem, all responses, all art/graphics, the correct response, alignment with Tennessee Academic Standards to include the standard, cluster and reporting category, and all item statistics to include p-value for items that have been field tested. An item summary of items for review shall be supplied to the State in an Excel

Spreadsheet and shall include but not be limited to:

1. Item reference number,
2. Item type (SR, CR, TEI, etc)
3. Reporting category,
4. Depth of knowledge/taxonomy info
5. Correct response or proposed scoring rubric (including point value),
6. Content area,
7. Target grade,
8. Item difficulty (p-value and other psychometric characteristics) (for items that have been field tested),
9. Origination of item (author, contractor, date written),
10. Item placement in previous forms, and
11. Copyright information.

During this review stage, the State shall have the right to request revisions to items that have not been field tested and/or replacement of items, such changes shall be made unless obstructed by copyright. The State shall be notified of any changes that would result in invalidation of item statistics; the State reserves the right to make such changes and send an item back for field testing.

2) Second Pages: Provided in hard copy and electronically in Microsoft Word or .pdf, second pages provide the test form in draft layout. Second pages will be provided by the Contractor for review by the State and the State's administration vendor. Test forms developed for online testing shall be reviewed through a demonstration site for the online test platform. The State shall be given an opportunity to review second pages to ensure items are included as approved at first pages and make corrections to item layout, placement and typographical errors. Second pages must include art/illustrations/graphics. The State reserves the right to make changes to field test items, art/illustrations/graphics and test form layout at this stage. Each version of the form shall be submitted for review of field test items and their layout. Large Print versions shall be provided in hard copy for review of scaling. Modified versions shall not be submitted until the regular assessment has been reviewed and approved.

3) Final Pages: Provided in hard copy and electronically in Microsoft Word or .pdf, final pages provide the test form in final layout. All edits and corrections should be complete. The State shall review final pages to ensure all corrections and edits have been made as requested. Test forms developed for both paper and online shall be reviewed at this stage by the State's administration vendor. Test forms that are delivered via online testing platform and ancillary materials provided via websites shall be considered final and ready for posting after approval at this stage. The State reserves the right to make changes at this stage of production; such changes shall be kept to a minimum and shall be made with student success in mind.

4) Digital (Printer's Proof/blue lines): Provided in hard copy and/ electronically in Microsoft Word or PDF, the digital pages provide products in final print format. For online testing this stage provides a final review of test forms as uploaded into the testing platform prior to operational testing. The Contractor and printer will make final corrections and submit additional print proofs to the State and the State's administration vendor as required.

5) Printed Sample: Provided in hard copy by the State's administration vendor, printed samples will be delivered to the State after the product has been

printed but before the products are shipped to LEAs. Printed products will be shipped after receiving final State approval in writing via email or electronic transmission.

6) Braille review consists of the following stages:

1. First pages – ink print items presented at the sight review committee as defined in section A.8.e.(3).xvii.1)
2. Second pages – Braille copies presented at the sight review committee as defined in section A.8.e.(3).xvii.2)
3. Digital – Braille copies provided to the State for review to ensure that all changes are made as requested. The State's administration vendor and the State's administration vendor's subcontractor will make any corrections as required.
4. Braille sample.

ix. The Contractor shall support and collaborate with the State's administration vendor to conduct all test administrations according, but not limited to, the following guidelines for schools, LEAs and the State:

1) Produce a number correct score and provide raw score to scale score and uniform grading system conversion tables for SR assessments.
2) Produce scoring for CR assessments based on approved scoring rubrics (A.14.e) that may be scored holistically or trait based as agreed upon by the State's administration vendor in collaboration with the Contractor and the State.
3) Produce a scale score for TVAAS use for all grade level/content areas for all assessments.
4) Measure each academic standard with sufficient items to provide reliable results for the reporting categories.
5) Produce indicators of Performance Standards as defined in A.3.ss by Reporting Category for all content areas for all assessments.
6) Produce indicators of college and career performance levels for 11th grade students.
7) Produce an n-count and percentage of students performing within each Performance Standard as defined in A.3.ss for each school and LEA for all grade level/content areas for all assessments.
8) Produce an n-count and percentage of students absent from test administration.
9) Produce an n-count and percentage of students tested in each membership category.
10) Produce an n-count and percentage of students tested and their performance level for each subgroup as defined by the State.

x. The Contractor shall provide tests that meet the following criteria:

1) Test Difficulty and Design

1. The difficulty level of the test, and the passing standard set shall represent expectations of all students eligible for testing.
2. The passing score for each TCAP Assessment shall be the same for all students regardless of disability or language proficiency.
3. Passing scores are targeted to a score range which offers the expectation of proficient performance, and allow for descriptive analysis of performance in terms of content.
4. The test design may allow for comparability of students with other states

using aligned curriculum standards.

5. The test difficulty shall reflect the expected rigor to ensure student success in post-secondary endeavors.

2) Test Length

1. Tests are standardized.
2. Each assessment may be divided into subtests as needed to ensure coverage of the Tennessee Academic Standards, allow enough items for field testing and remain within appropriate time limits.
3. CR assessments shall be timed in a way that is sensitive to the need for student breaks and limit of student's ability to focus. The Contractor will develop a plan to make informed decisions about test length based on research. For text-based prompts that require comparison between two or more stimuli, multiple sessions may be necessary.
4. Students should be able to finish the test in the time allotted. The Contractor shall provide documentation of validity and age appropriateness of test time limits for each grade level/content area per assessment.
5. Correct answer distribution shall not exceed 20%-25% per each alpha response for SR items.

3) Needs of Special Populations (Special Education, LEP, Section 504 and visually or hearing impaired students)

1. Tests, including operational items, field test items, and test bank items are developed and administered in a manner that represents universal design principles and which maximizes participation of students with disabilities and allows for accommodations to the extent reasonable, in accordance with the Individuals with Disabilities Education Act, 20 U.S.C §1400 et seq. (IDEA) and State requirements and guidelines. This includes the provision of Online, Audio, Large Print, and Braille test versions, and all ancillary materials, including Practice Tests and reference sheets. Ink Print versions of the Braille test version will be provided in equal numbers to the Braille version, for test administration needs. One version of each test form and all ancillary materials will be scaled for Large Print for each assessment administration (3x/year for secondary content areas). A Braille version with audio tape of each grade level/content area and all ancillary materials shall be developed at least twice during this Contract. The test will enable all students to meet the same passing score for each assessment regardless of disability or language proficiency.
2. The Contractor shall collaborate with the State's administration vendor to ensure that an appropriate Braille transcription service is used. The Contractor shall work in collaboration with the State for the transition of Braille materials to Unified English Braille (UEB). Such service must specify the use of Braillists who are certified in UEB and Nemeth Code translations for scientific and mathematics transcriptions and literary Braillists who are certified by the National Library Service in literary Braille for English language arts translations. The State prefers the use of the American Printing House for Braille transcription and will have final approval of the Braille transcription service to be used.
3. The Contractor shall be given contact with the Braille transcription service and the sight review committee to ensure that State guidelines are met.
4. Transcriber's notes must be included in the Braille, Audio and ink print versions of the assessments. (The number of transcriber's notes should be kept to a minimum.)
5. Current guidelines for special accommodations used are determined appropriate by the IEP team, documented in the student IEP or Section 504

Plan, and consistently used in the classroom. Accommodations that may be allowed and documented on the student response document may include but are not limited to: extended time, read aloud/sign internal test instructions/items, cue, multiplication chart, assistive technology, use of auditory recorder, and other unique accommodations as needed/requested.

6. Current Accommodations are on the State website at http://tn.gov/education/topic/tools-and-resources

7. The Contractor shall provide a determination, based upon psychometric standards (A.9) and State policies, as to whether particular test administration modifications required/requested for students with IEP or Section 504 plans would alter the validity, reliability, and equity of the standards being measured.

4) Fairness

1. The Contractor, in collaboration with the State's administration vendor, shall provide documentation in the Technical Report to verify that item development, test form construction, program implementation, assessment administration, and report information are monitored to ensure that no impediments are created which systematically limit opportunities for success by members of various student populations including: gender, race, ethnicity, nationality, culture, age, physical, visual, or hearing impairments, socioeconomic status, or rural/urban environments, as well as special populations including but not limited to: Special Education, LEP, and Section 504.

2. Assessment materials should reflect diversity in demographics. Items and/or passages (reading passages, other textual material, names, and visual material) containing references to people, should depict equal gender balance and a minimum of 15% should portray minority groups.

A.9. **Psychometric Activities**

a. The State's administration vendor shall have primary responsibility for all Psychometric Activities outlined in section A.9. The Contractor shall collaborate and provide information related to alignment, test development and forms construction as needed to complete all activities. The Psychometric Activities as defined for the State's administration vendor are provided below for the information of the Contractor. .

b. The Contractor in collaboration with the State's administration vendor shall conduct and provide results of annual equating studies to ensure the continuity of psychometric weight and rigor in new test form development. Data related to scale/item parameter drift studies shall be included as required by the State. Additionally, more in-depth research studies related to equating or scaling of the assessments may be required for significant changes to State curriculum, (A.8.e.(1). Forms for the TCAP Assessments shall be equated annually for future development. Modified format assessments including but not limited to the large print, and Braille shall be equated to the TCAP assessments. The State's administration vendor in collaboration with the Contractor shall provide detailed reporting information for the equating procedures/studies (year to year and form to form) for inclusion in the Technical Report. (Test Equating, Scaling and Linking Methods and Practices, 3 Rev Ed., Michael J. Kolen & Robert L. Brennan, 2014).

c. The Contractor in collaboration with the Contractor shall conduct and provide results of annual alignment studies to ensure the continuity of curriculum alignment in new test form development. More in-depth studies may be required when significant changes are made to State curriculum, (A.8.e. (1). The State's administration vendor in collaboration with the Contractor shall provide these additional studies as requested by the State. The Contractor shall provide detailed reporting information for the alignment studies to the State's administration vendor for inclusion in the Technical Report.

d. The State's administration vendor in collaboration with the Contractor shall conduct and provide results of annual alignment studies to finalize content specifications, test design, performance level descriptors and blueprints for each assessment per schedule in section A.4

with review after each administration for possible revisions. Materials are to be reviewed and approved in collaboration with the State at each step of development; timelines and procedures for these reviews will be established in the Annual Work Plan.

e. The State's administration vendor in collaboration with the Contractor shall conduct and provide results of annual alignment studies to develop and implement an equating design that may include a linking item test design, which provides equated forms of each TCAP Assessment for each content area, including paper, online, Braille and Large Print versions.

f. The State's administration vendor shall analyze related field test and research data and provide results to the Contractor.

g. The Contractor shall develop test forms that use item response theory (IRT) for the calibration, scaling and equating of the Assessments. The scale shall be continuous across all levels of student attainment to enable the measurement of both high and low performance levels.

h. The Contractor shall apply both classical test theory and IRT models in scaling the assessments. The State has used the guidelines below when using the classical test theory model. The Contractor shall include these guidelines or the rationale for using other values in the test specifications for each administration.

   (1) 15% - 25% of test items with a P-Value (item difficulty) between .10 - .30

   (2) 20% - 30% of test items with a P-Value between .31 - .50

   (3) 20% - 30% of test items with a P-Value between .51 - .70

   (4) 10% - 20% of test items with a P-Value between .71 - .90

   (5) Each assessment should have a minimum Cronbach's coefficient Alpha >= .85

i. The State's administration vendor in collaboration with the Contractor shall conduct internal item bias, reliability, validity, and other technical studies as necessary to support the TCAP Assessments and provide study results to the State.

j. The Contractor shall utilize Samejima's Graded Response Model (GRM) for the calibration of the CR items. The generalized partial credit model (GPCM) may be used as an alternative. Information related to the calibration of the CR items shall be provided to the State's administration vendor with other psychometric data.

k. The Contractor shall provide reliability assurances (i.e. test-retest correlation or Cronbach's Alpha), documentation on the content validity of the tests, and construct validity (with confirmatory factor analysis), and validity of accommodations of the TCAP Assessments. Information related to the reliability and validity of the tests shall be provided to the State's administration vendor with other psychometric data.

l. The State's administration vendor in collaboration with the Contractor shall conduct studies examining criterion-related validity in relation to other test instruments (e.g., TCAP Achievement tests, comparability to other state assessments) and provide study results to the State in the annual Technical Report.

m. Modified versions of the TCAP Assessments including but not limited to large print and Braille shall contain enough of the same or similar items as the ink print and/or online versions to be scaled and equated to the regular assessment. Test design for modified versions shall adhere to standards for operational assessments as defined in A.8.e.(4)i.

n. The Contractor in collaboration with the State's administration vendor shall utilize a statistically sound methodology to establish a baseline scale for use in equating subsequent forms. A common form (or linking item) equating design or other psychometrically sound method as approved by the State shall be used. The equating of test form difficulty will utilize reporting categories. The test forms shall be developed using pre-equating to the established test scale scores and confirmed through post-equating analysis unless otherwise proposed by the Contractor in collaboration with the State and the State's administration vendor. All test forms must be developed to maintain equated performance levels within each grade level and content area and statistical evidence of the equality shall be approved in collaboration with the State and provided in the annual Technical Report.

o. The Contractor in collaboration with the State's administration vendor shall provide evidence of statistically sound methodology utilized to maintain equivalency of performance standards across all forms for each grade level and/or content area of each assessment. Evidence should include scale/item parameter drift analysis. This method will produce statistically and psychometrically sound results and will be reported to and approved in collaboration with the State.

p. The State's administration vendor in collaboration with the Contractor shall use Item Response Theory (IRT) and Classical Test Theory (CTT) including Generalizability Theory (GT) analyses for each administration of CR Assessments to ensure parallel and equivalent item stimuli, validity, and inter-rater reliability in new development. The State's administration vendor in collaboration with the Contractor shall provide detailed reporting information with statistical and psychometric evidence of the procedures in the Technical Report.

q. The State's administration vendor shall use commercially available software for item calibration and test scoring in order to allow the State or its designee the opportunity to perform independent quality assurance. If the State's administration vendor uses proprietary software for these functions then the State and its designee(s) shall be granted license free use of the software for the duration of this Contract.

r. The State's administration vendor shall conduct inter-rater reliability, validity, and other technical studies as necessary for all administrations to support the TCAP Assessments and provide study results to the State.

s. The State's administration vendor will provide validity and inter-rater reliability assurances (i.e. Kappa and Generalizability Theory) documentation for all administrations on the validity of accommodations used with the TCAP Assessments.

t. The State's administration vendor in collaboration with the Contractor shall provide a plan for conducting Standard Settings for the TCAP assessments as needed. Standard Settings should include but not be limited to the following:

(1) A panel of educators, who are knowledgeable in the grade level/content areas, familiar with Tennessee Academic Standards and graduation requirements, and are drawn from various stakeholder groups (including representatives for special education, EL, visually and hearing impaired populations, colleges, universities and other civic stakeholders), shall be recruited in collaboration with the State to review the performance levels on all TCAP Assessments.

(2) The State's administration vendor shall be responsible for training the selected panelists in standard setting procedures and shall oversee the standard setting process.

(3) Using an empirical standard setting process the panelists shall review, reset and/or establish passing scores using items representing two or more forms of the assessments.

(4) A TAC shall be assembled to observe the workshop and analyze the results of the standard setting procedure. The committee shall be approved in collaboration with the State and should include at least one nationally recognized standard setting professional.

(5) The State's administration vendor shall cover expenses for the standard setting and TAC review, including attendees' expenses as described in section A.8.e. (3).xiii.

u. The State's administration vendor shall conduct research review meetings in a mutually agreed upon location for the TCAP assessments.

(1) A TAC may be assembled to observe planning meetings, item reviews, review curriculum and performance standards, observe anchor setting and/or range-finding meetings, review scoring rubrics and/or anchor papers, analyze the results of review meetings, provide consultation on decisions related to assessment design or administration policies, test design, curriculum changes, and other decisions which may impact the validity or reliability of the assessments. The TAC shall meet no more than four (4) times annually. The TAC shall be selected in collaboration with the State and will include a minimum of one and not more than ten nationally recognized psychometric, security, special education and/or assessment design professionals.

(2) The State's administration vendor shall cover expenses for the TAC review, including

attendees' expenses and honorariums as described in section A.8.e. (3).xiii. The Contractor may be included in TAC meetings at the Contractor's expense.

(3) The State's administration vendor shall collaborate with the Contractor to develop and implement a plan to conduct item tryouts and cognitive labs for the TCAP/Alt. The item tryouts and labs will use a relatively small but representative number of items and respondents in order to gauge the extent to which the items are eliciting the target KSAs and are otherwise functioning as intended. Information from these research activities will inform revisions to items and test design plans for TCAP/Alt.

v. All test items and forms shall be developed to maintain equated performance levels within each content area for each assessment administration and statistical evidence of the equality shall be approved by and provided to the State annually.

w. Additional research studies may be required to address special issues such as adverse impact, and/or performance of demographic subgroups including appropriate contrasting group studies, as requested by the State

x. The State's administration vendor shall collaborate with the Contractor to provide assessments which meet the following Psychometric measurement characteristics:

(1) Each test item and form shall be demonstrably related to the skills and competencies in the Tennessee Academic Standards required for the determination of established performance levels for State accountability.

(2) Overall reliability for each assessment shall be .85 (Cronbach's Alpha or KR20) or higher given the proposed uses of the test.

(3) Overall reliability for each CR assessment shall be ≥.750 (75.0%) inter-rater exact score agreement given the proposed uses of the test.

(4) Overall validity for each assessment shall address content, one factor/construct, consequential impact, and accommodations; the State's administration vendor in collaboration with the Contractor shall provide evidence of validity in each of these areas.

(5) The Contractor shall incorporate DIF analyses in test development and eliminate items with DIF that is statistically significant based upon the psychometric calculations conducted by the Contractor in collaboration with the State's administration vendor. The State's administration vendor in collaboration with the Contractor shall examine DIF for subgroups including but not limited to gender, race/ethnicity and socio-economic status.

(6) Assessments shall have a high degree of precision (conditional standard error of measurement) around the Proficient Cut-score.

(7) The assessments shall have the capability of producing linear scales continuous across all levels of student attainment.

y. The State's administration vendor in collaboration with the Contractor shall develop and publish a Preliminary Technical Report as defined in A.9.z for State review. Upon receipt of State approval the State's administration vendor shall provide a Final Technical Report for each assessment. Technical Reports shall be provided in hard copy, on a permanent storage device, and uploaded to a secure FTP site.

z. The State's administration vendor shall collaborate with the Contractor to provide a State Technical Report for each assessment for State review and approval. The State's administration vendor is responsible for making corrections to the Technical Report after review by the State. The Contractor is responsible for providing any corrected psychometric analysis as required to make edits requested by the State. The Technical Report shall include, but not be limited to, documentation of procedures, analyses, and results related to:

(1) Test blue print and item specifications as defined in sections A.8.c and A.8.d.

(2) Raw score to scale score and uniform grading system conversion tables.

(3) Item Analysis Results (Psychometric item parameters) to include:

i. Classical item statistics, including mean standard deviation, item difficulty (p-value and logit of p-value), item discrimination (point biserial correlation), and frequency distribution of options of each item,

ii. Item Response Theory (IRT) statistics, including relevant item information such as discrimination, location, guessing, standard error of measurement, item information, and item fit statistics (A.9.h),

iii. Item omission rate,

iv. DIF analyses using Mentel-Haenszel, logistic regression, multiple indicators multiple causes (MIMIC) or IRT based procedures for interested subgroups including but not limited to gender and ethnicity and proficiency level.

(4) Content and equity reviews.

(5) Item and test-form development.

(6) CR item development including but not limited to:

i. Statistical and psychometric evidence of procedures used to ensure parallel and equivalent items (evidence should contain IRT information including but not limited to b and a parameters from graded response model)

ii. Statistical and psychometric evidence of procedures used to ensure parallel and equivalent CR forms,

iii. Inter-rater reliability and validity assurances,

iv. Validity of accommodations, and

v. Sampling procedures for selecting students for item development/pilot administrations.

(7) Evidence of validity and reliability to include documentation on the content validity of the assessments and construct validity (with confirmatory factor analysis) of the assessments, consequential validity, validity of accommodations, and accuracy of classification for performance level.

(8) Performance Level setting.

(9) Sampling procedures for selecting anchor papers.

(10) Scaling items and forms and equating forms to include year-to-year equating procedures. .

(11) Stability of scale scores.

(12) Cut-score Standard Setting and decision consistency indicators.

(13) Total number of examinees responding.

(14) Total number of examinees responding by subgroup and proficiency level (include all subgroups identified in section A.10.h.(3).vii.

(15) Number and proportion of examinees selecting each response option by subgroup and proficiency level.

(16) Number and proportion of examinees answering each item correctly by subgroup and proficiency level.

(17) Familiarity and interest level of each test item or form utilizing a questionnaire developed in collaboration with the State.

(18) Data forensics information to include erasure analysis of paper forms and indicators of possible cheating, including but not limited to key stroke analysis and verbatim responses for extended response items for online testers.

(19) Standards alignment information providing evidence of alignment with Tennessee's Academic Standards for each grade level/content area per assessment. The Contractor in collaboration with the State's administration vendor shall complete alignment studies

to demonstrate such alignment between the TCAP Assessments and Tennessee's Academic Standards. The Contractor shall include depth of knowledge/taxonomy information with standards alignment.

(20) The TCAP Assessments shall provide a valid and reliable measure of student's academic ability on a common scale over the applicable grade levels and content areas.

(21) The State's administration vendor in collaboration with the Contractor shall provide detailed technical information on the process and results of horizontal and/or vertical scaling across grade levels and/or content areas for each assessment as requested by the State.

(22) The State's administration vendor in collaboration with the Contractor shall demonstrate the validity and reliability of all parts of the assessments and test measures and shall provide detailed information to this effect. The assessments shall meet the criteria for test development, administration, and use described in the Standards for Educational and Psychological Testing (2014) adopted by the American Educational Research Association (AERA), the American Psychological Association (APA), and the National Council on Measurement in Education (NCME).

(23) The State's administration vendor in collaboration with the Contractor shall ensure that all parts of the assessments adhere to professional research and best practice for developmental appropriateness of tests, testing methods and procedures.

(24) The State's administration vendor in collaboration with the Contractor shall meet compliance requirements for the Title I assessments as required by NCLB. Both the Contractor and the State's administration vendor shall assist the State in the preparation of documents required for reviews by the United States Department of Education (USDOE) related to NCLB or other federal legislation and/or mandates.

(25) The Contractor shall take corrective action to remediate any deficiencies determined by the peer assessment review conducted by USDOE related to test items, test forms, or psychometric data as defined throughout section A.9.

(26) Separate analyses for each section of the TCAP Assessments must be conducted, including, but not limited to, the following statistics in tabular or graphical forms:

i. indices of item completion rates for all test takers and by subgroups and proficiency levels,

ii. descriptive statistics including the mean, standard deviation, minimum, maximum, and quartiles for the total score, and by sub-score if appropriate, for all test takers, and by subgroups and proficiency levels,

iii. inter-correlations among sub-scores for all test takers and by subgroups and proficiency levels,

iv. mean proportion correct for all test takers and by subgroups and proficiency levels,

v. measures of accuracy including internal consistency measures (reliability coefficients), standard errors of measurement, and misclassification probabilities for all test takers and by subgroups and proficiency levels,

vi. mean point-biserial correlation for all test takers and by subgroups and proficiency levels,

vii. other analyses to evaluate the quality of items, item drift, test forms and reports.

(27) Security procedures as defined in A.6.b.

(28) All narrative reports submitted by the State's administration vendor shall include an Executive Summary, the full text, and appendixes containing all relevant data tables. The Executive Summary shall be written to stand alone as a document suitable for public distribution. All final narrative reports and all electronic deliverables shall be provided in Microsoft Word, PDF, and HTML for distribution and posting on the State's web site. The State's administration vendor shall also submit Microsoft Excel

spreadsheet versions of all tables and technical appendixes.

aa. The State's administration vendor shall conduct comparability studies which examine results of students using on-line versus paper-pencil assessments. Students may be tested both on-line and on paper to provide comparative analysis for the studies. Studies shall examine student scores on field tests and/or operational administrations. The State's administration vendor may provide students with handheld wireless input devices for use in testing. The State's administration vendor shall provide a user's guide and training materials for the online application for review and approval in collaboration with the State. Scoring of CR items shall include a minimum of two human readers. The State's administration vendor may include the use of computer generated scores for comparison. CR items must have an inter-rater exact score agreement of .80 with human and computer scores for reliability and validity. The State's administration vendor shall provide a report of results for the comparability study to include but not be limited to security between paper and pencil versus computer based testing.

A.10. **Assessment Material**

The State's administration vendor shall have primary responsibility for final development and printing of all assessment materials outlined in section A.10. The Contractor shall collaborate and provide information related to test forms construction and any ancillary materials as needed to complete all activities. The requirements for assessment materials as defined for the State's administration vendor are provided below for the information of the Contractor.

a. The State's administration vendor shall provide all required test materials including but not limited to: test books, response documents, teacher headers, test directions, test administration manuals (separate directions and manuals should be available for online and paper administrations for each assessment as well as operational or field test administrations) and the equivalent for online testing. All materials shall be provided to the State for review and possible revision prior to each test administration. The State's administration vendor shall allow the State a minimum of five State work days for initial review. Upon completion of any necessary revisions or modifications the State's administration vendor shall return materials to the State and provide not less than three State work days for final review and sign-off. The State shall have the opportunity to review and modify the design of test materials prior to any printing for any test administration.

b. The following are critical tasks, which provide specifications for the expected materials to be developed by the State's administration vendor and sent to the State. The State's administration vendor shall ship materials directly to State, public or private school systems as indicated by the State. Some additional materials may be added as needed. All descriptions of materials shall apply to each assessment unless otherwise noted. All electronic files shall be compatible with Windows and Macintosh applications with a variety of web browsers including but not limited to Google Chrome (x), Microsoft Internet Explorer (x), Firefox (x), and Safari (x) (as defined in A.12.c(8). The State's administration vendor shall provide the State with technical specifications required for any online applications including testing platforms.

c. Technical Specifications for all materials - The State's administration vendor shall use the following guidelines for all materials developed for this program.

(1) Test books and manuals shall be 8 ½" x 11", saddle-stitched or perfect bound.

(2) The State shall review any colors used for printing test books, student response documents, ancillary materials and reports.

(3) Large Print versions should be in 18 point font size. Grey-scale and shading should be avoided. The highest possible contrast should be used for text, art, illustrations, and graphics. Paper with a dull finish in ivory, cream, or white with black print shall be used. All unnecessary graphics, boxes or framing of material shall be omitted. Booklets should be 9" x 12" or other size as agreed upon by the State. Binding should allow each page to lie completely flat for whole page viewing and ease of handling.

(4) Compact Disks (CDs) shall be provided with jewel cases.

(5) Materials defined in sections A.10.d-h shall be used for operational and pilot administrations.

(6) All materials shall be available in an electronic format for use on the State's internet. The State shall have the ability to cut and paste information from all products for the production of training materials.

(7) Test products should be packaged as agreed between the State's administration vendor and the State and shipped per the following criteria:

i. Consistent package sizes to be determined by the number of versions per assessment and approved by the State,

ii. Standard and agreed upon packaging order within packs,

iii. Provide a 10% overage of orders of all materials to allow for damage and/or shortages from the printer and/or during shipping, and

iv. All Braille with ink print and Audio, Large Print, and online versions of the test will be delivered to the State at the same time as the regular test materials.

d. Introductory Materials and Meetings - The State's administration vendor shall develop and produce the following introductory materials according to timelines established in the Annual Work Plan. The State's administration vendor shall participate in up to twelve (12) introductory meetings in the following regional locations: Memphis (2), Martin, Jackson, Nashville (2), Columbia, Cookeville, Knoxville (2), Johnson City, and Cleveland/ Chattanooga for each assessment. Additional trainings may be required to introduce the online testing platform. The Contractor shall provide any materials requested by the State for training related to item and test form development. The Contractor may attend training and regional meetings at the Contractor's expense. In addition, The State's administration vendor may participate in regional meetings which shall be held at not less than four of the above mentioned locations twice each year. A registration process shall determine the number of participants attending each meeting; an overage of 10% of meeting materials shall be provided to ensure enough for walk-in participants. Meetings are expected to be no more than one day. All expenses, as defined in A.8.e.(3)xiii with the exception of lodging and transportation associated with these meetings will be the responsibility of the State's administration vendor. The State shall work with the State's administration vendor to find venues that do not have rental costs so that the Regional meeting expenses are primarily limited to breaks and lunch. Expenses for any meetings lasting two or more days shall be the responsibility of the State's administration vendor as defined in A.8.e.(3)xiii for multiple day item reviews.

(1) <u>Instructions for Training LEA Coordinators</u>

The instructions shall consist of an outline of key issues to be covered during LEA testing coordinator training with explanations accompanied by 30-50 full-color graphics depicting relevant items including, but not limited to, all online applications, administration protocols, and shipping instructions. The instructions will be provided electronically in a PowerPoint presentation format, and in an 8 ½" x 11" binder that includes the script for use in training school personnel offset printed or photocopied on one side only, 30-50 full color transparencies, black and white transparency masters of the color transparencies, and a CD containing the PowerPoint presentation. Training shall be conducted onsite and provided via webinar. The webinar shall be recorded and made available to be posted on the State website. The Contractor may provide a training video in addition to the PowerPoint presentation.

(2) <u>Instructions for Training School Coordinators</u>

Training materials provided for LEA testing coordinators to use in training school coordinators. The materials shall include a script with explanations and page number references to the test administration manual(s). A PowerPoint presentation will be included. The materials shall be provided in an 8 ½" x 11" binder that includes the script offset printed or photocopied on one side only, 30-50 full color transparencies, black and white transparency masters of the color transparencies, and a CD containing the PowerPoint presentation. Training shall be conducted onsite and provided via webinar.

The webinar shall be recorded and made available to be posted on the State website. The State's administration vendor may provide a training video in addition to the PowerPoint presentation.

(3) Materials for Regional Meetings

Training materials for LEA testing coordinators to use in training school level personnel on administration activities for the upcoming assessment administrations. Regional meetings are generally conducted twice yearly prior to the fall and spring administrations. A PowerPoint presentation is required and should include art/graphics related to all steps of test administration and processing to include but not be limited to order entry, shipping, test security, test administration, and post-test processing requirements. Handouts of the presentation will be provided for attendees. Meetings shall be held onsite and provided via webinar. The webinar shall be recorded and made available to be posted on the State website.

e. Preparation Materials - The State's administration vendor shall develop and produce the following materials according to timelines established in the Annual Work Plan for each assessment. The State's administration vendor shall collaborate with the Contractor to refresh the materials with new items at a minimum of every other year for the duration of the Contract. On-line item tools and practice tests will be provided using applications that mimic the operational test platform, including the ability to bulk upload student and teacher roster information at the state or LEA level.

(1) On-line Item Tools – available for each grade level and/or content area

The State's administration vendor shall provide an online item tool with sample items developed by the Contractor for instructional use. The tools should meet all technical requirements defined in A.12.b & c. The tools should include:

i. information for students, parents, and teachers about the TCAP Assessments including sample items developed by the Contractor and explanations of all possible item types for every academic standard,

ii. items will be identified by academic standard and reporting category by content area for each grade,

iii. includes both selected and constructed response item types,

iv. teachers will have access to item keys,

v. designed to allow teachers to set-up customized online practice tests for students,

vi. provides reporting at the class, school and LEA levels and

vii. excludes all items used for linking items, practice tests, field tests, and operational forms.

(2) Practice Tests – 1 per grade level/content area per assessment

The State's administration vendor shall develop and produce a practice test form identical in format and content to the operational test form for each grade level/content area per assessment. The practice tests shall include:

i. information related to understanding the test and offer suggestions on ways to prepare for the test,

ii. items developed by the Contractor will be organized to mirror an operational test form in style, item quantity, and format,

iii. available in Large Print, Braille, Audio (for Braille), and online,

iv. designed to resemble the tests by grade level/content area,

v. includes the test key and a sample response grid,

vi. excludes all items used for linking items, online item tool, field tests, and operational forms.

f. Modified Materials – The State's administration vendor shall develop and produce the

following modified format materials to assist in the administration of the TCAP Assessments. The State's administration vendor is responsible for proofreading the modified format assessments. Braille shall be reviewed by an independent party and the form must be approved by the State's committee prior to final printing.

(1) Braille Test – Per grade level/content area per assessment

The Contractor in collaboration with the State's administration vendor shall develop and produce a form of the TCAP Assessments in Braille. Braille materials shall be delivered with assessment materials defined in section A.10.h. The specifications for Braille kits provided by the State's administration vendor include:

i. ink print copy, audio cd, scannable answer document shall be provided on a 1:1 ratio,

ii. teacher's notes for the Braille version shall be developed to assist teachers with transcriber's notes in the Braille edition, use of special symbols, changes in wording, ink print to Brailled page references, and any other administration information exclusively related to the Braille test,

iii. Braille test books shall be of appropriate weight and type of paper as determined in collaboration with the State,

iv. Braille tests and directions shall be marked with ink print on the front cover to indicate the corresponding grade level and/or content area,

v. pages shall be Brailled on one side of the paper,

vi. items with graphics will be Brailled on facing pages whenever possible,

vii. audio script shall match the Braille text verbatim,

viii. use of thermoform will be kept to a minimum,

ix. litho codes and inventory bar codes shall be included on all materials, and

x. packaged individually with teacher's notes, ink print copy, audio cd's (in jewel cases), rulers or other required manipulatives, and a separate scannable answer document for transference of student responses.

(2) Large Print Version -- Per content area per assessment per administration

The Contractor in collaboration with the State's administration vendor shall develop one version of the TCAP Assessments per administration in Large Print. Large Print materials shall be delivered with assessment materials defined in section A.10.h. The online testing platform shall provide zoom capabilities for enlarged text onscreen. The specifications for printed large print versions provided by the State's administration vendor shall include:

i. large print version shall be in 18 point font size,

ii. reformatting of documents may be necessary; however, the form layout should match the regular print test booklet page to page,

iii. items requiring measurement should be scaled for use with regular rulers, or appropriately scaled rulers shall be supplied by the State's administration vendor,

iv. grey-scale and shading should be avoided,

v. highest possible contrast for text, art, illustrations, and graphics shall be used,

vi. paper with a dull finish in ivory, cream, or white with black print shall be used,

vii. all unnecessary graphics, boxes, or framing of material shall be omitted,

viii. booklets shall be 9" x 12" or other size as agreed upon by the State,

ix. binding shall allow each page to lie completely flat for whole page viewing and ease of handling

(3) Pre-coded response documents shall be provided for students requiring a modified format test version whenever possible.

(4) Student responses recorded in the Braille and large print books may be transcribed onto regular response documents or entered into an online test platform by the test administrator.

g. Administration Materials - The State's administration vendor shall develop and produce all materials to assist in the administration of the TCAP Assessments. The Contractor shall collaborate on materials as needed to ensure valid and reliable results. Separate materials may be required for online or paper pilot and operational administrations. All materials shall be reviewed for revision in collaboration with the State and the Contractor prior to each administration.

(1) Online User's Guide: The State's administration vendor shall develop and produce an Online User's Guide in collaboration with the State for each administration. The guide shall provide technical specifications for use of the online platform used for testing. Information shall include but not be limited to: hardware specifications, proctor caching requirements if needed, student data upload process, data editing information, detailed information on the use of the assessment tools, and other technical guidelines as necessary. Thumbnail art shall be included as much as possible. Separate guides may be provided with focuses for technical and assessment staff. The guide shall be provided in PDF format for posting to State and State's administration vendor websites and in Word for use by the State in creating training or other materials.

(2) Test Administration Manual (TAM): The State's administration vendor shall develop and produce a TAM in collaboration with the State for each assessment per administration. This document is provided to assist the test administrator during the testing session. Administration requirements for all grade levels and/or content areas assessed for each assessment shall be included in the TAM. Separate TAMs may be developed for field test administrations, online assessments, and paper assessments. TAMs shall be provided at a ratio based on number of students testing to be determined by the State.

The TAM shall contain general instructions for administering the assessment including, but not limited to, information about checking materials, planning testing schedules, organizing classrooms, preparation of students, use of standardized testing procedures, administering practice activities, security of materials, completing the student demographic portion of the response documents, accessibility instructions, test directions, administration of the test, assembly of materials for scanning and processing, checklists for class, school and LEA level procedures and information for returning materials. Thumbnail to full scale images of documents, forms, and other ancillary materials as needed with illustrations and explanatory diagrams shall be used extensively. The TAM shall be reviewed prior to each administration and revisions shall be made to reflect changes related to the program, State and/or federal guidelines. The State's administration vendor shall make these documents available in printed form and for downloading from the Internet on a secure site.

(3) Teacher's Directions: The State's administration vendor shall develop and produce Teacher's Directions in collaboration with the State for each assessment per administration. The Teacher's Directions shall contain specific instructions for the administration of each grade level and/or content area per assessment. The Teacher's Directions shall include information related to test administration including but not limited to, test security, the timing of tests and/or subtests, the number of items and page numbers where subtests begin and end if appropriate, and verification and/or completion of student demographic data on response documents. A script for the administration of each content area shall be included to ensure consistent and appropriate directions are given to students to begin the test. The Teacher's Directions shall be reviewed prior to each administration and revisions shall be made to reflect changes related to the program. Directions shall be provided electronically for posting on the internet on a secure site and in print at a ratio based on number of students testing to be determined by the State.

(4) Teacher Header: The State's administration vendor shall produce teacher header documents for processing and returning response documents. The Teacher Header is used to group answer documents for processing and reporting. This scannable form shall be pre-coded with LEA and school names and numbers. Additional information that may

be pre-coded or manually coded includes but is not limited to teacher first and last name, number of students tested, number of students absent, and total number of documents. Non-coded documents shall be provided to accommodate late orders. The Teacher Header may be packaged with pre-coded response documents and/or bulk packaged in ratios and quantities to be determined by the State. Class roster/header information that can be edited at the school level shall be provided in the online testing platform.

(5) Guide to Test Interpretation (GTI)/Parent Brochure: The State's administration vendor shall develop and produce a comprehensive GTI to describe report forms used for each assessment. The GTI will describe and provide examples of the various report forms distributed to students, schools, and LEAs. It will contain supportive information related to interpreting the test results, including but not limited to: reporting categories assessed and definitions for technical assessment terms. The comprehensive guide shall be developed for use by schools and LEAs and shall be posted on the State website. The Contractor shall collaborate in the development of the GTI to ensure accurate information related to the assessment design is clearly provided. From the comprehensive guide, a smaller Parent Brochure shall be developed containing information pertinent to student level reports. The Parent Brochure shall be translated into one or more languages for distribution to non-English background parents as requested by the State. The Parent Brochure shall be distributed with the printed test scores and posted on the internet. The specifications for the GTI and Parent Brochure include but are not limited to:

i. GTI and Parent Brochure: available in electronic format that is accessible via the Internet.

ii. GTI and Parent Brochure: include thumbnails and larger images of selected reports.

iii. GTI: developed for the purpose of providing schools and LEAs with an understanding of the reports that are available, shall include training information for use of online reporting tools.

iv. Parent Brochure: developed for the purpose of providing test awareness for parents and students, shall include training information for use of online reporting tools.

v. Parent Brochure: provided in print format on a 1:1 ratio to student reports per content area per assessment.

h. Assessment Materials – The State's administration vendor shall prepare and produce all test materials required for the administration of the TCAP Assessments. The State and the Contractor shall have the opportunity to review all materials for revision prior to each administration.

(1) Online Testing Platform – The State's administration vendor shall provide a computer-based testing platform that meets the technical specifications outlined in A.12. b.-c. The following considerations shall apply to the platform unless otherwise indicated:

i. The State shall review and approve the platform. Additional review to ensure that the development of computer presentation of information and materials parallels similar work for printed tests and products.

ii. The State's administration vendor shall ensure that the functionality (e.g. tools, reference sheets, accessibility features, navigation etc.) of the platform is checked carefully to ensure errors have not been introduced during test item/form uploads and that the functionality remains consistent across forms and administrations. The State and the Contractor shall participate in this review process prior to each assessment administration; any revisions needed shall be made by the State's administration vendor.

iii. The State is interested in leveraging item formats which take advantage of the capabilities of computer technology. The Contractor shall ensure that such items have research validation as suitable for summative assessments. The Contractor shall work with the State's administration vendor in developing items that can be integrated into the online assessment platform. Examples of technology enhanced item types may include but not be limited to:

1) Drag-and-drop – in which students select from multiple possible responses to select one, via mouse-click or key-stroke combination and then "drag" it to "drop" it in an indicated blank to correctly complete a scientific formula, text-editing task, etc. Items may require this process multiple times so that multiple answers are provided to multiple blanks.

2) Multiple select, hot text, and short response items.

3) Rotate and other image transformation items.

4) Other formats as requested by the State or developed by the Contractor.

iv. The State's administration vendor shall work with the State to establish a plan for functionality review of the platform features (e.g. tools, reference sheets, navigation). The plan shall ensure that errors have not been introduced and that the functionality remains consistent across forms and administrations.

v. The State's administration vendor shall provide a platform that can be "locked-down" on all devices to ensure students do not have access to resources on either the Internet, the school/LEA network, or the device in order to maintain test security. Features that will need to be controlled during test administration include, but are not limited to, unrestricted Internet access, cameras (still and video), screen capture (live and recorded), email, instant messaging, Bluetooth connections, application switching, and printing.

vi. The State's administration vendor shall provide a platform that is web-based and can be bulk uploaded to school level machines such that technology specialists are not required to touch every device in a school to upload the platform and/or any updates to the platform.

vii. The State's administration vendor must work with existing technology infrastructures at the school, LEA and state level. Hardware, software, and system requirements defined in A.12.b and c indicate current expected infrastructure.

viii. The State's administration vendor shall provide documentation and training to LEAs to set-up secure test environments utilizing the online platform. The training shall include system checks which monitor computer software and connectivity readiness for testing and which can be run from individual devices. The State maintains an online readiness platform and will provide school and LEA level hardware and connectivity information. LEAs will not be expected to enter infrastructure information in a separate platform.

ix. The State's administration vendor shall provide a root-cause analysis of any technical or other errors during production and/or operational administrations.

x. A final review round for each administration will include an "end-to-end" check of the platform, including checks to ensure user access to the product and accurate navigation and functionality.

xi. The State's administration vendor shall propose a solution, including paper based testing at no additional cost, that allows for students to participate in assessments and provision of data should errors with the system arise. Such errors include, but are not limited to:

1) Inadequate performance such as response time (A.12.b.(13), pagination, non-compatibility with required web-browsers, etc.

2) Exhibiting malfunctions that may significantly affect the student testing experience such as accessibility features not working, items not loading properly, text boxes that do not allow for unlimited characters, etc.

3) The inability to meet the requirements of the administration contract related to data collection, management, technology specifications, etc.

(2) <u>Student Test Booklets</u> – The following specifications apply to all student test booklets unless otherwise indicated:

i. Test booklets shall be color coded by grade level and/or content area for each assessment.

ii. One test booklet may contain both Science and Social Studies in grades 3-8, one test booklet per content area shall be developed for secondary assessments. It is expected that Social Studies will be offered primarily online in the first year of the Contract. Science will be administered on paper only in the first year of the Contract which may require test booklets that are 3-8 Science only and a combined Science and Social Studies book for paper only LEAs. The State will work with the State's administration vendor to determine the most cost efficient design for administration. Third grade students do not require a consumable book in TN and may be tested using a non-scannable book and student response document.

iii. Each grade level and/or content area shall consist of customized forms with a separate scannable answer document to be provided.

iv. A unique litho code per document shall be printed on the front and back covers of the booklet. An inventory listing of litho codes shall be provided to schools and LEAs.

v. Test booklets shall be bar coded for inventory management and test security. Bar code information shall be included on inventory sheets provided to schools and LEAs.

vi. Modified format tests:

1) Braille test booklets for each assessment shall be provided as defined in section A.10.f.(1),

2) Large Print test booklets for each assessment shall be provided as defined in section A.10.f.(2),

3) Audio CDs shall be provided for Braille versions. Descriptions of art/illustrations/graphics should not provide an unfair advantage to students utilizing the audio version for Braille or online testers. For the Braille audio version, users should not hear a description of a print item while reading a Braille transcription that is different.

vii. Test booklets shall be shrink-wrapped in units to be determined by the number of versions. Standard packaging will be 5 and 20 books or other quantities as agreed upon with the State.

viii. Versions may be spiraled for random distribution. Some versions may be selected for non-spiraled packing in units of 5 or 10 for use in read aloud accommodations.

ix. Approximately 10% may be packaged in uncollated groups for use with students with special accommodations to have the test read aloud in small groups.

x. Assessments are accessible to students in public, state special, private and home schools. Test booklets shall be provided in sufficient number for each student to be assessed.

xi. The State shall submit and approve requests for assessment materials based on orders and current enrollments. Historical usage figures are provided in the table in A.5.h.

(3) Student Response Documents – The following specifications apply to all student accountability demographic information and response documents unless otherwise indicated:

i. For grades 3-8 a machine scannable single or multi-page answer document may be provided dependent upon number of sub-tests, test form design, and content areas. If a multi-page document is used the student accountability demographic information page as detailed in A.10.h.(3).vii. shall be the outside cover. Teacher licensure information shall be captured on the back page. A unique litho code shall be printed on each page of the document. The litho code shall be provided to the State and any State appointed contractor in the CDF and all post-test data files.

ii. For secondary content areas a machine scannable single page document for

recording student responses on one side and student accountability demographic data as detailed in A.10.h.(3).vii. on the other. A unique litho code shall be printed on both sides of the document. The litho code shall be provided to the State and any State appointed contractor in the CDF and all post-test data files.

iii. Separate and unique documents may be required for pilot and operational administrations for each assessment.

iv. The Student accountability demographic information layout shall be customized to fit the needs of the State, meet state and federal reporting requirements and maintain consistency with the layout of other assessment demographic information sheets. Space for a laser printed bar code containing student demographic information as defined in A.12.e shall be included in the document design. Programming shall be provided to pre-slug information in the demographic grids on the student response documents.

v. Response documents shall be designed to match test booklets in each grade level and/or content area for each assessment.

vi. Assessments are accessible to students in public, state special, private and home schools. Response documents shall be provided in sufficient number for each student to be assessed on paper versions as needed.

vii. Provide the ability to code demographic data on student response documents or in an online testing platform based on state and federal reporting requirements, including but not limited to:

1) First, Last Name and Middle Initial
2) Student ID Number (State assigned)
3) Birth Date
4) Grade (3-12)
5) Class Period
6) Gender
7) Ethnic Origin (including but not limited to: American Indian/Alaska Native, Asian, Black/African American, Native Hawaiian/other Pacific Islander, or White)
8) Race: Hispanic or Latino, Non-Hispanic or Latino
9) Membership Data (enrollment)
10) Status (i.e. first time, repeating)
11) Class Attendance
12) Modified Format (i.e. Braille, Large Print)
13) Special Programs (including but not limited to: Title I, Special Education, 504 Service Plan, Gifted, Economically Disadvantaged, LEP Transitional 1/Transitional 2, Migrant, Home School, Homeless, Pre-K participation, Career and Technical Education (CTE))
14) Accommodations as defined by the State
15) Teacher license number for teacher of record in the content area(s)
16) Not tested (absent, EL exclusion or medical exemption)
17) School schedule (i.e., traditional, modified block, block)
18) Test Date
19) Test Version and/or Form
20) Optional Codes for State use (minimum 10 fields)

(4) Formula reference information – The State's administration vendor shall collaborate with the Contractor to develop and produce formula reference information for scientific equations critical to successful problem completion which are likely to be unknown to students. Reference information shall be designed that are appropriate for the content area. Reference sheets shall be included in paper test booklets and/or as an individual document for the content area, provided electronically via PDF for posting on the State website and provided for access via an online testing platform. Reference sheets shall be provided in Braille and Large Print.

(5) Miscellaneous manipulatives – The State's administration vendor shall provide all necessary materials appropriate to the assessment, including rulers and other consumable items, during each administration. All manipulatives shall be provided in accessible formats for all students including through an online platform and in Braille and Large Print if needed/appropriate.

A.11. **Assessment Materials Packaging and Distribution**

The State's administration vendor shall have primary responsibility for packaging and distribution of all assessment materials as outlined in section A.11. The requirements for packaging and distribution as defined for the State's administration vendor are provided below for the information of the Contractor.

a. The State's administration vendor shall prepare packaging specifications in collaboration with the State and include them in the Annual Work Plan. The specifications will include at a minimum the following:

(1) Procedures for packing materials for shipment to LEAs, including but not limited to:

i. Description of how materials are packed,

ii. Examples of packing and inventory lists,

iii. Examples of bar coding, and

iv. Description of inventory procedures.

(2) Procedures for packing materials for return shipment to the State's administration vendor, including but not limited to:

i. Detailed instructions for packing materials,

ii. Inventory procedures, and

iii. Shipping information, including pre-paid labels.

b. The State's administration vendor shall adhere to the following guidelines for the packaging of all assessment materials:

(1) A barcode with a unique machine-scannable and visually readable sequential identification number will be applied to student test booklet covers and response documents. The State's administration vendor shall provide a master file containing a record of the sequential identification numbers sent to each school and LEA.

(2) In addition to quantities requested by the State necessary for enrollments, the State's administration vendor shall provide a ten percent (10%) overage of all materials to allow for printing errors, shipment and site shortages.

(3) Packages of books must be sequential within each package.

(4) Test booklets are shrink-wrapped in units to be determined by the number of versions of each assessment per administration.

(5) Pre-coded administrative materials, Teacher Headers shall be shrink-wrapped at a minimum by school and LEA. Additional levels may be required, i.e. by teacher. Each package shall have a label on the outside identifying the school and LEA. An overage of blank documents shall be included with all pre-coded documents at a percentage to be determined in collaboration with the State.

(6) State approval must be received before shipping printed products. The State will

provide approval for shipping of the forms after receiving and examining the printed samples as defined in A.8.e.(4)viii.5).

(7) Braille and large-print materials are to be packaged and labeled separately and included in the shipment of test materials to LEAs.

(8) The State's administration vendor shall be responsible for mailing or shipping any miscellaneous materials to the State and LEAs as situations arise. The State's administration vendor is required to secure the services of shippers who will provide inside delivery, trucks with lift-gates and unload large shipments onto loading docks.

(9) The State's administration vendor shall provide test administration materials and test materials on site in each LEA according to the schedule established in A.4 and the Annual Work plan, but no later than 15 calendar days prior to the first day of the assessment window.

(10) The State's administration vendor shall provide shipping and distribution information for each administration with samples of packaging labels, tags, and procedures to be included in materials for regional meetings defined in A.10.d.(3).

(11) Provide proper packaging by school of all test materials for shipment to LEAs.

(12) Provide the State's technology vendor, with shipment information for inclusion in the EdTools processing platform.

(13) Maintain detailed records of the number of tests ordered, shipped, retrieved and scored for each school and LEA.

(14) Utilize transport companies who provide inside delivery, and unload large shipments onto loading docks.

(15) Utilize transport companies who provide inside pick-up, palletizing (if necessary) and load large shipments from loading docks.

(16) Utilize a shipping method that provides traceable delivery information. If boxes that were used to initially ship materials are to be used again to return materials, this shall be made explicitly clear in all directions to LEA and school personnel and the boxes must be of sufficient strength and construction to withstand reuse.

(17) Design, print, and distribute detailed bill of lading/packing lists for each school and LEA. The LEA and school packing lists shall itemize the materials that are being shipped to the school/LEA including but not limited to: contents of each box, quantities of items shipped, inventory information and the destination.

(18) Provide check-in procedures for LEAs to ensure materials are handled securely.

(19) Provide check-in procedures for the State's administration vendor with a method of checking for and retrieving response documents erroneously packaged with used and unused test materials, inactive materials, or modified format materials. Separate procedures may be required for each assessment.

(20) Provide a description of procedures to be used by LEAs for the inventory of all materials and the collection and shipping procedures for all completed answer documents and media including a reconciliation/recovery procedure to proactively retrieve all test material from the LEAs.

(21) Provide procedures for providing appropriate materials for students with IEP and Section 504 plans that call for modified test formats such as Braille and Large Print. These materials will be packaged separately and labeled, but will be included in the same shipment with other testing materials, if possible.

(22) Provide inventory measures that verify by number, all test booklets, response documents and other secure test materials shipped to LEAs and returned after testing or used in an online assessment system. Measures shall include a control process wherein all test products being shipped to and from the State's administration vendor's facilities are counted and tracked. Missing shipments shall be traced, located, and redirected to the proper location, and/or replaced as needed.

(23) Provide pre-paid shipping labels and materials for the return of all materials to the State's administration vendor for scoring at the vendor's expense.

(24) Track return shipments to ensure that LEAs return all test materials to the State's administration vendor for scoring no later than ten (10) calendar days after the close of the testing window for the assessment.

(25) Notify the State of LEAs who do not return materials within the appropriate time frame

(26) Prior to testing, the State's administration vendor shall prepare a missing materials report for test documents based on the material verification process that is completed during materials check-in. The State's administration vendor will ensure that shortages are shipped to LEAs immediately.

(27) After testing, the State's administration vendor shall prepare a missing materials report for test documents based on the material verification process that is completed during materials check-in. Reports will be prepared for each school with missing materials listed. School reports will be delivered to LEA coordinators with an LEA-level summary and a state level summary to be delivered to the State. Any missing materials returned by LEAs will be recorded in the missing materials inventory maintained by the State's administration vendor. The missing materials reports must be delivered to the State and LEAs daily as the check-in of secure materials is processed. For each administration, check-in and verification of secure materials must be completed and discrepancies resolved prior to the first shipment of results to Tennessee LEAs.

(28) The State's administration vendor will provide written reports to the State documenting the check-in of all secure materials.

(29) Catalog, store and archive completed student test response documents in a secure facility for twelve (12) months from the reporting date.

(30) Destroy archived hard copy student test response materials in a secure manner (i.e., shredding or incineration) at the completion of twelve (12) months with written approval from the State. At the end of the administration contract, remaining archived materials shall be shipped to the State, or a location designated by the State for storage.

(31) Utilize electronic imaging and duplication technologies to archive all student responses on CD or other electronic media. All archived materials shall be clearly labeled to include at least content area, teacher name, school name, and LEA name. Archived materials shall be maintained by the State's administration vendor for the duration of the administration contract. Copies of archived materials shall be provided to the State annually.

A.12. **Assessment Data Management Activities**

The State's administration vendor shall have primary responsibility for data management activities outlined in section A.12. The requirements for data management as defined for the State's administration vendor are provided below for the information of the Contractor.

a. The State's administration vendor shall provide web-based applications as defined in A.12.d-f for the TCAP/ACH, EOC and TCAP/Alt, practice tools, item reviews, and student demographic data for use in A.10.h. (1) assessment online administration, A.13 processing and A.15 reporting. The State's administration vendor shall provide three environments for use in the development of all web-based applications. These environments shall be defined as development, demonstration, and production. Access to the development site shall be secure and provided to State level users only. LEA and school level users shall be given access to the demonstration site for training purposes. Access to the production site shall be secure and provided based on the security level of the user as established in the hierarchy defined in A.12.b.(4).

b. Specifications – Each of the web-based applications shall include but not be limited to the following:

(1) User friendly and efficient as defined in collaboration with the State,

(2) Application modification/revision/customization which allows for stakeholder input and buy-in will be provided as requested to meet State criteria shall include but not be limited to the following:

i. Application/project specifications which include detailed milestone units and timeline for the project shall be determined in collaboration with the State,

ii. Screen shots and/or application demos shall be provided in the development environment at each specified milestone unit,

iii. Comprehensive demo of the application/project shall be provided in the development environment for review and alpha, beta, etc., testing by State users (may include LEA level users),

iv. Training demo of the application/project shall be provided in the demonstration environment for review and alpha, beta, etc., testing by State and LEA users, training shall include online webinars,

v. Operational application/project shall be provided in the production environment (Changes may be made to the application/project at any stage prior to the operational load of the application to the production environment for the current assessment. Revisions to the application/project may be made prior to the next assessment as needed.), and

vi. Reporting functions that include but are not limited to summary data for State review of user logins, IP address of logins, tracking of user load times, applications used, activities completed in the application, data edits, number of students, data uploads, data downloads, reports created, time spent in each activity, etc.

(3) Accessible via link from the State's online applications web site.

(4) Security measures to include a secure user hierarchy for use with all applications including, but not limited to: state administrators, state users, state vendors (to include but not limited to R&A Solutions, SAS Institute, and the Contractor) State CORE office users, LEA level administrators, LEA level users, school level administrators, school level users (including students). The State's administration vendor shall work with the State in the potential development to provide secure access for parents and students to retrieve student level reports, including student responses and items for release. Access shall be provided to each level based upon guidelines provided by the State. Different rules may be applied to each application.

(5) Integration capability and provision of user authentication/authorization/audit services from the State Identity platform. This is an identity brokerage, federation, and claims enrichment platform (using SAML 2.0) that the State operates to provide SSO (Single Sign On) and many other capabilities to end users, LEAs, and our partners.

(6) User management section will allow State, LEA, and school administrators to manage all user accounts within their authoritative domain.

(7) Online access to procedural guides and other user instructions, training videos, as well as live online training delivered via webinar, for each application as needed.

(8) Development site accessible by State personnel for review of applications during customization.

(9) Demonstration site containing simulated live data and test items for practice and training at the school level shall be available to State, LEA and school personnel not less than three weeks prior to operational administration.

(10) Trained customer service as defined in section A.7.f. of the contract for the administration scoring and reporting of the science and social studies assessments.

(11) Training materials and software programming shall be customized to meet State reporting requirements and approved by the State.

(12) Ensure adequate space on servers, band-width and response time in the system to allow for a minimum of 250,000 concurrent users accessing, entering, uploading, and/or downloading information.

(13) Ensure response time of not less than industry average of 0.8 seconds and provide technical support at the cost of the contractor to take steps if wait time is longer than 1-2 seconds.

(14) Real-time user reporting for active management of end-to-end lifecycle of application processes.

(15) All equipment must be located in a secured, controlled environment, with a redundant backup system in place.

(16) All electronic files and web-based programming must be compatible with Tennessee's K-12 public school technology infrastructure and environment. The State uses Windows and Macintosh applications with a variety of web browsers including but not limited to Google Chrome (x), Microsoft Internet Explorer (x), Firefox (x) and Safari (x) as defined in A.12.c.(8). The State's administration vendor shall provide the State and the Contractor with technical specifications required for all online applications.

c. Support requirements – The State's administration vendor shall provide all required services for each assessment and test administration. The Contractor shall provide test items and forms that are compliant with the online requirements. Support for services shall include but not be limited to the following:

(1) The State's administration vendor shall have measures in place that ensure that all data records are transported, stored and accessed in a secure manner. All components shall adhere to State policies for information systems. All data and metadata must be encrypted both in transport and at rest. All data and metadata are the property of the State of Tennessee. The system must be compliant with best practices for secure application development as defined in ISO/IEC 27000 series as well as relevant State information security policies. These policies can be found at http://www.tn.gov/finance/oir/security/secpolicy.html.

(2) For the duration of the administration contract, all component products of the State's administration vendor's systems shall be fully supported (primary/mainstream support) by the respective manufacturers.

(3) The State's administration vendor shall provide systems/solutions that meet and maintain compliance with CEDS http://ceds.ed.gov/ data interoperability standards.

(4) The State's administration vendor shall provide systems/solutions that will perform at a minimum on devices including but not limited to desktop, laptop, netbook, thin client/VDI with 1 GB RAM or greater; devices shall be able to connect to the internet via wired and wireless networks.

(5) The State's administration vendor shall provide systems/solutions that meet and maintain compliance with the following assessment and web platform interoperability standards:
   i. HTML 5 or newer
   ii. XML 1.0 (Fifth edition) or newer
   iii. Question and Test Interoperability™ (QTI) – Current version is 2.1 – relevant documentation can be found at http://www.imsglobal.org/question/index.html#version2.1
   iv. Accessible Portable Item Protocol™ (APIP) – Current version is 1.0 – relevant documentation can be found at http://www.imsglobal.org/apip/index.html#spec.

(6) The State's administration vendor's assessment delivery platform must support at a minimum the following device operating systems and platform types:
   i. Windows 7 or newer
   ii. Mac OS X 10.6 or newer
   iii. Google Chrome OS (rolling release model)
   iv. Apple iOS 6 or newer (iPad 2's or later)
   v. Android 4.0 or newer

(7) The State's administration vendor's assessment delivery platform must support the following form factors:
   i. Desktop
   ii. Laptop 9.5" screen or larger (traditional or touch screen)
   iii. Tablet 9.5" or larger
   iv. Desktop Virtualization

(8) The State's administration vendor's solution must at a minimum support the following Internet browsers:
   i. Microsoft Internet Explorer 9 and newer
   ii. Google Chrome version 31 or newer
   iii. Firefox version 25 or newer
   iv. Safari version 5.1 or newer

(9) The State's administration vendor's assessment delivery platform must allow for input via keyboard, mouse, touchpad or touch screen. The input device must allow students to select/deselect, drag, and highlight text, objects and areas. The input device must allow students to enter letters, numbers, and symbols and shift, tab, return, delete, and backspace. To meet security guidelines, each Bluetooth/wireless keyboard must be configured to pair with only a single computer during assessment administration.

(10) The State's administration vendor's assessment delivery platform must provide for assistive technologies for students requiring accommodations including, but not limited to, headphones, earphones, microphone, screen/text reader, increased font size, capability for students to "zoom" in on sections of text, and color contrast. The State's administration vendor shall work with the State to ensure the platform meets the needs of students using assistive/adaptive devices.

(11) The State's administration vendor's assessment delivery platform must provide the necessary tools and features for students to successfully complete testing. Such features may include, but not be limited to, calculator, ruler, straight edge, formula or vocabulary reference sheets, option eliminator, bookmark, highlighter, pop-up footnotes, and note taking. The State's administration vendor shall work in collaboration with the Contractor and the State in reviewing all accessibility features to ensure the best test environment possible.

(12) The State's administration vendor shall work with the State and/or other State vendors in the transfer of student demographic and assessment data for review and use for pre-id of paper response documents, student data upload into assessment delivery platform, student demographic data verification, teacher-student linkages for teacher-effect data, student raw scores for grade calculations and other processing or reporting requirements as needed by the State.

(13) If the State's administration vendor's assessment delivery platform employs the use of a Secure Browser as defined in A.3.zz., this browser must not interfere with the normal operation of the most common commercial browsers. The State's administration vendor must also specify the use and version requirements of supporting delivery software, such as Java, as the use of such software may have an effect on the operation of existing end-user software packages.

(14) If the State's administration vendor's solution requires State or customer hosting, the system shall provide the ability to run in Azure IaaS. The system shall further have the ability to be migrated to Azure PaaS prior to the first testing cycle. The system shall meet the technical requirements to run on the Azure platform as defined by the Azure service provider.

(15) The State's administration vendor's systems shall meet and/or commit to maintaining compliance with current and future Ed-Fi standards (current version is 1.2) where appropriate as determined by State technology leadership, including but not limited to the following (relevant technical documentation can be found at http://www.ed-fi.org/tech-docs/ ) :
   i. Ed-Fi Core XML Schema
   ii. Ed-Fi REST API
   iii. Ed-Fi Standard Interchange Schemas

iv. Ed-Fi Extension Schema standard
v. Ed-Fi Data Dictionary
vi. Ed-Fi Logical Database Model
vii. Ed-Fi Operational Data Store model

d. Enrollment – The State's administration vendor shall provide a user friendly system to upload student demographic information from schools, LEAs, the state student management system and/or State vendors. Data may be used to pre-id student response documents and/or upload into the State's administration vendor's online assessment platform. The State's administration vendor shall ensure that the system maintains compliance with the State's student management system to enable the acquisition of student information from schools and/or LEAs. The system shall be able to provide student scoring information to the schools and/or LEAs for integration in the student management system. The State's administration vendor agrees to collaborate with the State for the modification/revision/customization of the enrollment program as needed to meet State criteria.

e. Pre-Coded Demographics – The State's administration vendor shall produce pre-coded student accountability demographic data information via laser-print bar code on response documents. The State's administration vendor shall provide a system that accepts uploaded student demographic information from the student management system at the school, LEA or State level and/or a State vendor for use on pre-id documents and online testing. The system shall include but not be limited to all demographic data as detailed in A.10.h.(3)vii. The State's administration vendor shall ensure that the system maintains compliance with the State's student management system to enable the acquisition of student information. Uploaded data may also be used to pre-code teacher license information on response documents and teacher headers. Bar codes shall include all available demographic information for each student as well as school and LEA identification information. Student response documents shall be pre-gridded with all available demographic information. The State's administration vendor agrees to collaborate with the State for the modification/revision/customization of the enrollment program as needed to meet State criteria.

f. Inventory management – The State's administration vendor shall provide a system that allows the State and LEAs the ability to track assessment materials. The State's administration vendor agrees to collaborate with the State and/or the State's technology vendor for the modification/revision/customization of the enrollment program as needed to meet State criteria. The system shall include but not be limited to the following:

(1) Secure assessment materials (including but not limited to, test booklets and response documents) shall have a barcode with a unique machine-scannable and visually readable sequential identification number.
(2) The system shall generate shipping labels to be placed on boxes for tracking that include bar coded information regarding the contents of each box. Return labels shall also be provided.
(3) Schools and/or LEAs shall be able to confirm counts of materials received prior to testing and notify the State and/or State administration vendor of any discrepancies.
(4) Schools and /or LEAs shall be able to report counts of materials being returned for processing and scoring, including used, unused, and inactive materials.
(5) Bar-code information shall be supplied to the State's technology vendor for inclusion in the Materials Management function of EdTools in order for LEAs to track materials for delivery and return.

## A.13. Assessment Processing Activities

The State's administration vendor shall have primary responsibility for all Assessment Processing Activities as outlined in section A.13. The requirements for processing as defined for the State's administration vendor are provided below for the information of the Contractor.

a. The State's administration vendor shall provide the State with processing activities for scanning, editing, scoring and reporting of the TCAP Assessments. The accurate and consistent processing of assessments is the key component in maintaining the reliability and integrity of the TCAP Assessments. The State's administration vendor shall assist the State in processing activities for the TCAP Assessments according to timelines established in section A.4 and the Annual Work Plan.

b. The State's administration vendor will implement processing procedures that are reliable and valid as well as efficient in terms of time and expenditures. The State's administration vendor shall provide procedures and support for all assessments.

c. The State's administration vendor shall provide systems to facilitate processing, scoring, and reporting student results from each administration. The system shall include a plan to verify the accuracy of data produced during each processing step for each administration including the ability to disaggregate and aggregate the results.

d. The State's administration vendor shall collaborate with the State to evaluate test processing and develop programs and services to improve test processing functions. The State's administration vendor shall assist the State to create and redefine test processing procedures to improve productivity, efficiency, data turnaround times, reporting and accountability.

e. The State's administration vendor shall provide, at the request of the State, all contracted publications in agreed upon electronic formats to the State.

f. The State's administration vendor shall work with the State or any State appointed contractor to facilitate and support scanning, editing, and scoring (including hand scoring) of assessments at alternate sites as designated by the State.

g. For quality assurance and score verification purposes, mock testing data must be generated and utilized in all aspects of processing, scanning, editing, scoring, reporting, and printing and must be completed and evaluated by the State's administration vendor and the State before the beginning of each test administration. The State's administration vendor shall supply a test deck that has been through quality assurance and score verification for the State to use for comparison purposes. The State's administration vendor shall provide programming to ensure that all test deck information, including data from State created test decks, is not included in operational data for reporting. The State's administration vendor shall work with the State and the State's technology vendor in the development of a test integration plan for both paper and online testing that includes transmission of test data to the EdTools platform for processing. Processing on EdTools includes, but will not be limited to, rostering, reports of irregularity, student demographic data verification, teacher-student linkages and delivery of quick scores. A minimum of 150 mock response documents and/or online test records per content area per assessment will be coded to verify the following:

(1) Each grid area is properly scanned and recorded,

(2) Each response area is being scanned and mock response documents for each version will be gridded to show each of the response choices is being scanned correctly,

(3) Student demographic information including some from pre-identification files,

(4) All cases involving missing and incorrect information will be checked,

(5) All cases requiring editing are properly relayed to the State,

(6) Any other procedures to assure accuracy of data processing,

(7) Inclusion of virtual student records generated by the State's student management system,

(8) Verification of absent, medical exempt, EL exempt or nullified scores for processing,

(9) Scoring keys and scoring programs, and

(10) Records for students who were not tested are handled appropriately.

h. The State's administration vendor shall develop a plan to provide a description of editing data uploaded into the online testing platform and/or printed on response/demographic documents and headers to verify the following:

(1) Double marks or inaccurate precoding of printed information,

(2) Coded incorrectly with respect to student, school, or LEA identification,

(3) Documents deemed unscoreable for some reason,

(4) Rules for editing each field on the student response documents, noting which will be flagged, hand-checked, and connected where necessary, and which fields will rely on scanner discrimination rules and not be hand-edited,

(5) Materials used for training editors will be included in the plan, and,

(6) A description of the edit reports that will be produced to show what documents need editing, all changes made, the outcome of edits, and the procedures for monitoring the edit changes.

i. The State's administration vendor shall work with the State or any State appointed contractor to facilitate and support the use of online applications from the State's website in editing, including but not limited to: reports of irregularity (RIs), breach of security, and medical exemptions.

j. The State's administration vendor will provide a data file for each administration to the State for production and quality control purposes. The data file shall meet the following criteria:

(1) Verify that student response documents have been correctly scored, and that all final score values have been properly calculated (e.g., scale scores and proficiency level),

(2) Monitor (in conjunction with State staff) all aspects of scanning, editing, and scoring throughout the time that the actual response documents are being scanned, edited, scored and processed until completion, and

(3) Develop a data verification plan for each administration that describes in detail all steps to be implemented to ensure that the final reports of results are accurate.

(4) Develop a data verification plan for transferring all required data from the online testing platform.

k. The State's administration vendor shall submit scanned/edited data and data generated through the online testing platform to the State or a State contractor in a mutually agreed upon file format that facilitates the generation of State required reports.

l. The State's administration vendor shall arrange to support the State and its designees in preliminary verification of scoring and test equating using a calibration sample of approximately the first 5,000-10,000 (not less than 20%) student records processed per content area per assessment. The LEAs and number of students used in the calibration sample shall be approved by the State. This sampling must represent the approximate demographics of the State. The student response documents and/or online test records from these LEAs will be scored and all of the files and reports identified will be generated by the State and the State's administration vendor. These files and reports will then be verified independently by the State's administration vendor and the State for comparison data and equating of form confirmation.

m. The State's administration vendor shall provide to the State for review and written approval a processing plan that includes the return of the assessments to the State's administration vendor for scanning, editing, scoring, and reporting. At a minimum the plan shall provide details for online and paper testing and shall include:

(1) Scoring methodology,

(2) Score reporting,

(3) Generation and maintenance of scoring data files,

(4) Transfer of response data to EdTools for the delivery of Quick Scores,

(5) Quality assurance procedures for each part of the scoring process,

(6) Specifies the process for scoring all student responses for multiple-choice,

(7) Details the process of handling online responses for both CR and SR items,

(8) Specifies the process for handling paper CR responses,

(9) Identify the qualifications and training of key personnel involved in this process,

(10) Use Optical Mark Reading (OMR) equipment to scan student response documents,

(11) Provide verification of quality control procedures for each scanner,

(12) Provide documentation of editing procedures for response documents and teacher headers, for State review and approval. The documentation shall include rules for editing each field on the student demographic sheet. Materials used for training editors shall be provided to the State for review and approval,

(13) Provide edit reports that include all edits needed, changes made, and procedures used for monitoring edit changes, including edits for RIs, Breach of Security, and Medical Exemptions,

(14) Work with the State to establish State monitored quality reviews and provide logs/reports regarding the quality control procedures to the State for review and approval, and

(15) Submit to the State for review and approval quality control procedures for all scoring processes and products. The procedures shall include, but not be limited to:

i. Steps to ensure that all assessment materials are correctly and reliably scored,

ii. Quality control review of all phases of production related to scanning student response documents,

iii. Verification of the scoring program, editing, and resolution procedures for questionable response documents (for example, with multiple marks, poor erasures, poorly recorded oral responses or incomplete data),

iv. Quality control review of all phases of production related to reporting and generating data files from the results.

A.14. **Scoring Activities:**

The State's administration vendor shall have primary responsibility for all Scoring Activities as outlined in section A.14. The requirements for scoring as defined for the State's administration vendor are provided below for the information of the Contractor.

a. The State's administration vendor shall provide scoring services for the TCAP Assessments. Accurate and consistent scoring of responses is a key component in maintaining the reliability and integrity of the TCAP Assessments. The State's administration vendor is required to maintain high levels of scoring accuracy while meeting scoring deadlines. The State's administration vendor shall score the TCAP Assessments according to timelines established in section A.4 and the Annual Work Plan.

b. The State's administration vendor will implement scoring processes that are reliable and valid as well as efficient in terms of time and expenditures. The State's administration vendor shall provide scoring procedures and support for all assessments.

c. The State's administration vendor shall provide programming and support for scoring of all test versions including paper, online, Large Print and Braille.

d. The State's administration vendor shall maintain sufficient capacity to facilitate re-scoring of responses. Procedures for re-scoring student responses shall be developed in collaboration with the State.

e. The Contractor shall validate test scoring keys delivered as part of the test specifications as listed in section A.8.c. The Contractor shall collaborate with the State administration vendor in validating and finalizing all scoring keys. Scoring keys shall be provided to the State separately for use in verifying the test deck used for scanning and processing. Scoring keys will be validated through test deck and psychometric review, any errors shall be corrected and scoring tables updated. Scoring keys will be finalized and approved in collaboration with State staff, the Contractor and/or State vendors. The test scoring keys shall include but not be limited to:

(1) Item reference number,

(2) Item type,

(3) Item location,

(4) Correct response(s) for SR items including but not limited to: multiple choice, multiple select, drag and drop, hot text, or other TEI items and

(5) Scoring rubrics and tools for CR items requiring gridded response, short answer, extended response (including essays and calculations) or other response types that meet scoring rules established during item and test form design and approved in collaboration with the State administration vendor and the State.

f. The State administration vendor shall provide quality assured, production and operational programs for scoring and reporting services including operational test decks and response keys. The State administration vendor shall also provide quality assured technical information required to provide and facilitate onsite and off-site test processing and reporting. These services shall include, but not be limited to, the following:

(1) Scoring

i. Use a methodology technically appropriate and approved by the State to produce a single scale score for each grade level and/or content area tested.

ii. Provide assessment data in various formats which will be used to determine various scores, data distributions and summaries to support the State approved reports.

iii. The State administration vendor is responsible for verifying that student response documents are correctly scored. A test deck as defined in section A.13.g shall be provided prior to each administration for each assessment that has been through quality assurance for the State to use for comparison purposes.

iv. The State's administration vendor shall provide files for test integration testing between both scanned and online test data to the State's technology vendor to ensure that all phases of processing have been through quality assurance. The State's administration vendor shall collaborate with the State's technology vendor to resolve any errors or data issues that arise during integration testing.

v. The State's administration vendor shall work with the State to develop mutually agreed upon guidelines and provisions for tracking student scores at the local level. Delineate the State's administration vendor/State/LEA responsibilities including record retention, following mobile students, and monitoring students who are below proficient in content area tests.

(2) Data Gathered

i. Collect all individual data through student data uploads into online testing platform and/or from the response document to include but not be limited to: item responses and scores, including commodity and or litho codes, demographic data, number of attempts, login information, length of time tested online, and all other fields.

ii. Gather information regarding test security procedures and safeguards including but not limited to; serial numbered booklets, confidentiality agreement forms, erasure data, key/re-key information, etc.

iii. A CDF per assessment and administration will be provided to the State on a secure sharepoint or FTP website and on CD. The CDF will include all data from the most recent administration and will include all student demographic and response data and the statewide frequency distribution of student performance. A final CDF for each administration will be provided to the State according to the schedule in section A.4. This information will also be provided to facilitate TVAAS information. Format must be approved by the State and must meet State needs, including the facilitation of required data disaggregation.

(3) Document Retention

i. Test Review Procedures shall include confirmation of a below proficient score and re-

scoring under certain conditions.

ii. Test documents, scoring keys and student data shall be retained in a secure electronic format on secure severs for the duration of this Contract and the administration contract.

g. The State's administration vendor shall work in collaboration with the Contractor and the State to establish scoring tools and rubrics that reflect the expectations of the standards at each grade level. The State's administration vendor shall work with the State to establish an efficient and accurate scoring methodology for constructed response items for prompt based texts, writing, scientific tasks requiring explanation or modeling, or other activities that require students to give written work. The methodology may include scanned materials scored via computer using programmable scoring technology, hand scores as detailed in this section below or a hybrid model combining hand scores with technology. The State's administration vendor will implement scoring processes that are reliable and valid as well as efficient in terms of time and expenditures. The State's administration vendor shall provide scoring procedures for any selected response items as needed and all CR assessments including but not limited to the following:

(1) Scoring shall include a minimum of two human readers. The State's administration vendor may include the use of computer generated scores for comparison. Hand scored items must have an inter-rater exact score agreement of .80 with human and computer scores for reliability and validity. The State's administration vendor shall provide a report of results for the comparability study to include but not be limited to security between paper and pencil versus computer based testing.

(2) Establish rubrics and scoring tools that clearly define what students will be expected to produce in order to receive full or partial credit.

i. The State's administration vendor shall provide the State final scoring tools at least six months prior to the administration of the operational assessment.

ii. Rubrics will be shared in a form that can be shared with educators, parents and students without compromising the security of the assessment.

(3) Establish anchor, qualifying, and training sets as follows:

i. The State's administration vendor shall provide the State with sample papers for each assessment.

ii. The State's administration vendor shall consult with the Contractor in the creation of all anchor, qualifying and training sets. The State's administration vendor shall include the Contractor in range finding as necessary to ensure the scoring process reflects the test design.

iii. The State's administration vendor shall conduct range finding meetings for the purpose of establishing anchor and qualifying sets to be used in scoring the TCAP Assessments. The State may provide TN educators and expert consultants to participate in the meetings.

iv. The range finding meetings shall take place in a location mutually agreed to by the State and the State's administration vendor according to guidelines established in A.8.e.(3).viii-xiii. The State may provide Tennessee educators per grade level and/or content area as participants in the meetings. Dates for the meetings shall be established in the Annual Work Plan.

v. The State administration vendor shall be responsible for all meeting expenses according to guidelines established in A.8.e.(3)xiii. Expenses for employees of the Contractor, with the exception of materials, breaks and meals provided to all participants, shall be at the expense of the Contractor.

vi. The State's administration vendor's project manager or designee will be present at meetings for overall consultation purposes. The State's administration vendor will provide the appropriate content, statistical, psychometric, and other professional staff to participate in each of the meetings.

vii. The State's administration vendor staff shall assist State staff and expert consultants in reviewing the recommendations of the range finding committee for the assessments. These reviews shall finalize the student responses to be used for the anchor and qualifying sets for each grade level/cluster.

viii. The range finding meetings shall establish the anchor, qualifying and trainings sets to be used in scoring the TCAP Assessments. These sets are defined as:

1) Anchor set – Minimum of four student responses for each score point at each grade level/cluster. The anchor set shall consist of the best examples available for each score point. There shall be one anchor set per assessment. The anchor set shall be scanned to an electronic file and posted on the State website.

2) Qualifying set – Minimum 12 student responses that cover the full range of score points for each grade level/cluster.

3) Training set – Minimum of 12 student responses that cover the full range of score points for each grade level/cluster. Training sets shall be developed by the State's administration vendor in collaboration with the Contractor and State staff as needed during live scoring. Training sets shall be used for validity, calibration, and recalibration in working with readers during the scoring process.

ix. The State's administration vendor shall provide sufficient numbers of copies of the anchor, qualifying and trainings sets to be used in training and scoring the TCAP Assessments.

(4) Requirements for key personnel include but are not limited to the following:

i. The individual assigned to oversee the project must have at a minimum a four-year college degree and experience with writing assessment scoring and with large-scale (more than 150,000) statewide public school performance assessments of students (K-12). The Project Director must be able to establish and maintain appropriate standards throughout the scoring phase of the project. Additionally, he/she must be able to explain the subtleties of scoring, and to be firm in their application. The Project Director is responsible for ensuring that all questionable papers/responses (including off-topic, illegible, refusal, another language, and alert papers) are immediately faxed to the State on the day that the readers identify them. The Project Director will be ultimately responsible for TCAP Assessment scoring.

ii. All staff assigned to oversee scoring processes must have a four-year college degree and prior experience with the different methods of evaluating large-scale performance assessments. The State prefers individuals who have led reader groups for similar assessment projects of this size and have experience teaching similar grade/subject levels to that which are assessed. All involved with scoring will be required to adhere to scoring standards, to resolve problems created by prompts, scoring guides, individual differences in interpretation, and to be sure that the readers score papers according to scoring standards. They must administer reader training that minimizes the need for retraining by maximizing reader agreement.

iii. The State's administration vendor shall use a screening process for hiring readers that includes an interview and an evaluation of the applicant's written response to sample prompts. Readers will be expected to maintain a 95% inter-rater reliability rate both with the scoring personnel and with the State. The State's administration vendor shall adhere to the following guidelines in hiring and maintaining readers:

1) Minimum of a four-year college degree

2) Cross section of readers in terms of age, ethnicity, and gender

3) As part of the screening process all potential readers must sign a statement indicating that they agree to the following conditions:

1. Applicants who do not successfully complete the training and qualifying requirements, will not be hired as readers,

2. Readers may be retrained or dismissed if, after being trained to score, their scoring performance does not meet the requirements of the State and the State's administration vendor,
3. Readers must commit to score for the duration of the scoring session,
4. Readers who are absent from scoring for two or more consecutive scoring days, must repeat the training and qualifying procedures, and,
5. All readers must sign a confidentiality agreement approved by the State.

(5) In collaboration with the State, the State's administration vendor shall establish a method for managing and monitoring the effectiveness of scoring. This will be stipulated in the Annual Work Plan.

(6) Conduct reader training using the established anchor, qualifying and training sets as defined in A.14.g.(3)viii. Training procedures may include but not be limited to the following:

i. The State's administration vendor shall conduct training according to timelines established in A.4 and the Annual Work Plan. All costs associated with training shall be at the State's administration vendor's expense.

ii. State staff and expert consultants will have the opportunity to be present during team leader/reader training and the beginning of scoring the TCAP Assessments using guidelines established collaboratively between the State and the State's administration vendor.

iii. Anchor, qualifying, and training sets may not be changed or substituted without notification to the State.

iv. Training of key personnel shall be conducted over a minimum of two days followed by Reader training also over a minimum of two days. Training for each grade level/cluster and each assessment shall be conducted independently.

v. Training may be conducted either in person at a location mutually agreed upon by the State and the State's administration vendor or online. If training is conducted in person, the State's administration vendor is responsible for all expenses as outlined in A.8.e.(3)xiii.

vi. All key personnel as outlined in A.14.g.(4).i and ii must qualify using the criteria for readers as established in A.14.g.(4)iii and shall become familiar with the anchor, qualifying, and training sets. Team Leaders shall conduct reader training using only State standards under the direction of the Project and Room Directors with State administration vendor staff in consultation with State staff and expert consultants as requested by the State. State administration vendor staff must agree to cooperate fully with State personnel who will monitor the training and scoring operations.

vii. State administration vendor and State staff shall establish criteria for qualifying readers that shall include, but not be limited to the following:

1. Training will include scoring of both paper-based and electronic student responses for all assessments,
2. Each reader shall receive copies of anchor, qualifying, and training sets that are easily readable, materials must remain in assigned scoring rooms,
3. Readers shall read and score at least three and no more than six qualifying sets unless otherwise agreed to by the State,
4. Readers must pass at least two qualifying sets, one with no less than seventy percent (70%) perfect agreement with thirty percent (30%) adjacent scores and a second with no less than eighty percent (80%) perfect agreement with twenty percent (20%) adjacent scores,
5. Score sheets for each reader reflecting scores for all qualifying sets shall be inspected by State staff, and,

6. Training methods shall ensure that all State standards are met during scoring. Using any other scoring rubrics, scoring philosophies, or altering scores on the State scored anchor, qualifying, or training sets shall be considered a breach of the contract.

viii. The State's administration vendor must anticipate some loss of readers during training and qualification and increase counts of readers to a level sufficient for completing scoring tasks on schedule.

(7) Score student response documents according to the following criteria:

i. The State's administration vendor shall work with the State to establish an efficient and accurate scoring methodology. The finally agreed upon scoring method may include scanning student response documents and using computer based scoring techniques only with the express written approval of the State. The method may include hand scoring as detailed in this section or a hybrid model which combines computer based scoring with hand scoring. Computer based scores shall be considered a reader for monitoring and reporting purposes.

ii. TCAP item responses may be holistically scored independently by two readers using blind scoring methods. In collaboration with the State, the State's administration vendor shall develop a specific set of scoring rules for resolving disagreement between first and second readings with third and, infrequently, fourth readings and for calculating final scores.

iii. The State's administration vendor must ensure that the Project Director and other management personnel maintain effective communication and cooperation with the State throughout each stage of scoring.

iv. The State's administration vendor shall develop and implement an efficient process to group the student essays for scoring. This organizational process shall be approved by the State.

v. The State's administration vendor shall be responsible for scoring all student writing samples using the students' actual responses and the specific scoring criteria and methods approved by the State.

vi. In collaboration with the State, the State's administration vendor will develop a specific plan for scoring procedures including but not limited to the following basic elements:

1. Definition of roles and responsibilities of personnel,
2. Flow of student essay papers/portfolios through the scoring process,
3. Scoring methodology, use of computer based and/or hand scorers,
4. Assignment of scores to papers/portfolios,
5. Resolution of scoring problems,
6. Retraining of readers, and,
7. Monitoring and maintaining reliability of scoring and quality control throughout the process.

vii. Quality-control reader statistical reports must be provided to the State by the State's administration vendor daily and, at a minimum, include the number of readings, the number of papers read per reader/portfolios scored per reader per day, the total number of papers read/portfolios scored each day, the distribution of scores, the number of third readings/scorings, and the number of non-scoreable papers / portfolios.

viii. During TCAP scoring, the State's administration vendor must produce daily and cumulative reader scoring reports. The State's administration vendor shall have the capability to reproduce any of these reports on request. Readers' identification numbers, student scores, and number of readings for various reports are required. These reports will be made available to team leaders and the scoring director. The

State's administration vendor and State will work together annually to determine the format of these reports. These reports will provide the following information:

1. Daily Summary - Indicating prompt, number of readings, percent agreement, resolutions, point distribution, and breakdown of valid and invalid scores. These reports include inter-rater agreement, reader production rate statistics, score-point distribution by reader, reliability statistics by reader, and score distribution by grade.
2. Cumulative Summary - A summary of the number of readings, percent agreement, resolutions, point distribution, and breakdown of valid and invalid scores sent daily to the State.
3. Cumulative Breakdown of Average Scores - Indicates the average scores for the readers. Checked daily by the team leaders and room leaders, and sent weekly to the State.
4. End of Scoring Report - Indicates by grade the n-count and percent for each score point.
5. End-of-Scoring Cumulative Summary - A total summary of the number of readings, percent agreement, resolutions, and breakdown of valid and invalid scores.

ix. Read behinds will be conducted to assure validity of scoring. Calibration and retraining of affected readers will take place as needed and rescoring will take place as necessary.

x. The State's administration vendor must demonstrate the attainment of the minimum reliability and validity standards as established in sections A.9.h.-l., A.9.p.-s, and A.9.x.(2) and (3). State staff shall review calibration reports on a regular basis.

xi. The State's administration vendor must provide at least ninety-five percent (95%) inter-rater reliability both with scoring personnel and with the State on a daily basis.

xii. If inter-rater reliability criteria are not met, the State may require the State's administration vendor to rescore the essays/portfolios or may at any time require essays/portfolios scored by a particular reader to be rescored if the reader's statistics show greater than the five percent resolutions required. Readers may require retraining or dismissal if the scoring process is not followed.

xiii. The State's administration vendor must provide the State a copy of all student papers about which questions have been raised. This includes papers with anomalous scores, papers which are non-scoreable as defined by the Condition Codes (see section A.14.g.(8)), compositions which are considered an "Alert," (see section A.14.g.(8).) and compositions which might indicate administrator interference. Additional pages of student written work that accompany the answer document will not be scored.

(8) In collaboration with the State, the State's administration vendor shall develop Condition Codes for identifying non-scorable responses and a system of coding these responses. Condition Codes may be Alpha or Numeric and should be defined in the scoring rubrics. In addition, the State's administration vendor will develop a system for flagging alert status papers which indicate a serious or potentially serious problem for the writer (physical/sexual abuse, drug use, gang involvement, running away, suicide, severe anti-social tendencies, etc.). When such a paper is identified, it must be transmitted immediately to the State. The State will then notify the appropriate LEA personnel. These papers, as well as all others, shall be treated as strictly confidential.

## A.15. Assessment Reporting Activities

The State's administration vendor shall have primary responsibility for all Reporting Activities as outlined in section A.15. The requirements for reporting as defined for the State's administration vendor are provided below for the information of the Contractor.

a. The State's administration vendor shall collaborate with the State in the design of score reports at the individual student level as well as summary reports at the teacher/class, school, LEA, and State levels, including any needed subgroups, as defined in section A.10.h.(3).vii. The State shall be involved at each step of report design and shall have final signoff on layout, data, and text presented on all reports. The State's administration vendor shall work in consultation with the Contractor as needed to ensure accurate reporting. The Contractor shall collaborate with the State's administration vendor prior to development of test blueprints for report design on all new assessments. The State's administration vendor shall utilize a single, unique and accurate Tennessee state-assigned student id number and the student's current school and LEA unique code identification number at the time of testing. Reports may be designed and developed for each assessment and/or each test year separately. All reports shall be submitted to the State for review and approval prior to distribution.

b. The State's administration vendor shall provide technical training, support, required programming and software, including installation and upgrading of proprietary software and programming, to the State necessary to furnish LEAs with student scores and State approved reports. The software shall produce student scores in an easily updated electronic format. The State's administration vendor shall provide written assurance of confidentiality and appropriate security measures to ensure student data is protected. All data security requirements as outlined in A.6.b and A.12.a-c shall be met for reporting.

c. The State's administration vendor shall work with the State and other State vendors to facilitate required services.

d. The State's administration vendor shall work with the State to score and report student scores from straggler documents. These late documents, submitted after deadlines established for summary data aggregation, shall be processed by the Contractor. The Contractor shall provide final student level reports as defined in A.15.l.(5) in both printed and online formats. The student data from straggler documents shall be made available for ad hoc reporting but shall not be included in summary reports.

e. The State's administration vendor shall work with the State to score and report student scores from late online testers due to makeup testing. These late tests, taken after deadlines established for summary data aggregation, shall be processed by the State's administration vendor. The State's administration vendor shall provide final student level reports as defined in A.15.l.(5) in both printed and online formats. The student data for late online testers shall be made available for ad hoc reporting but shall not be included in summary reports.

f. The State's administration vendor shall be responsible for shipping all printed student level reports and labels with parent brochures at a 1:1 ratio to each LEA, State special school, private school, and the State. Reports for home school students shall be sent to the State Home School Coordinator. Printed reports shall be organized and packaged according to State specifications.

g. The State's administration vendor shall be responsible for compliance with the confidentiality provisions of the Family Education Rights and Privacy Act (FERPA), 20 USC 1232g, 34 CFR 99, Attachment A, the National School Lunch Act 42 USC 1758 (b) (2) (c), TCA 49-1-Chapter 7, and any other state or federal laws, rules, or policies intended to protect individual privacy in all cases. These data shall only be included in data files provided to the State. In addition, the protection of pupil confidentiality shall uphold the ethics procedures that are usual and customary within the profession.

h. The State's administration vendor shall provide a web-based online reporting and report delivery system. The system shall meet the same specifications and support requirements of other online products as defined in section A.12.b & c. Reports shall be designed to meet state and federal reporting requirements and may be revised as needed after each administration. Customized backer text may be included for each report.

i. The online reporting and report delivery system shall provide the following programming:

(1) An online help section that provides users with a searchable database that can be used to answer most usability and technology questions. The help section shall include, but not be limited to: GTI, tutorials, user's guide, training materials, a quick reference guide,

frequently asked questions, and links to State and other reference websites. The customer support phone numbers and email addresses shall be posted in the help section.

(2) An administrative section that will allow State, LEA, and school administrators to manage all user accounts within their authoritative domain. Provide security measures to include user hierarchy as defined in A.12.b.(4). This section shall include usage reporting to indicate when/if users have logged in and what reports they have viewed, downloaded, or created.

(3) A downloads section that will allow users to download all data and reports to their desktop or CD based upon user security level.

(4) A notification section that will allow the State's administration vendor and the State to post information concerning the reports for users to view and/or print. The State issues an embargo on certain data until its official release by the State; this notice and others may be posted on the web-site.

(5) All electronic files and web-based programming shall be compatible with Windows and Macintosh applications as specified in A.12.b & c. The State's administration vendor shall provide the state with technical specifications required for any online applications.

(6) Final data shall be uploaded after Student Demographic Data Verification (SDDV) review, editing, and scoring have been completed. Data uploads shall be considered complete after LEA staff have completed SDDV and State staff have completed editing and review.

(7) Interactive ad hoc reporting may be customized to allow users to select data based upon various criteria (including all subgroups and demographic data as defined in A.10.h.(3)vii and create custom reports for use in activities including but not limited to: re-rostering for future classes, student intervention, school improvement plans, and federal reporting requirements.

(8) Each customized report, as it is viewed on the screen, will be capable of rendering in a .pdf format through a print function. The customized report may be printed in hard copy or downloaded to the desktop or CD.

(9) The online reporting system shall maintain an archive of data from previous administrations for the life of the administration contract. Interactive reporting shall allow for users to access archived data in the creation of custom reports. All reports created using the online reporting system shall be archived for future retrieval.

(10) The State's administration vendor shall work with the State and the State's previous assessment vendor to transition historical .pdf reports and data files. The online reporting system shall provide historical .pdf reports and available data files in a separate archive. There is no expectation that such data shall be available for interactive reporting.

(11) The online reporting system archive with limited technical support shall remain available until the end of the test year following the end of the administrative contract, (through June 30, 2020).

j. Report designs shall be reviewed by the State and the State's administration vendor at a minimum of once per test year. The State's administration vendor shall make any required changes to report design, including but not limited to modification of data presentation, backer text, and/or creation of new reports, to meet State needs and/or federal guidelines. Significant design changes shall be defined as comprehensive revision of overall report format and layout or addition/deletion of more than five data sets.

k. Technical Report – The State's administration vendor in collaboration with the Contractor shall develop, produce and provide a technical report for each assessment as defined in section A.9.z. The State's administration vendor shall design the technical report in collaboration with the State and consultation with the Contractor. The technical report shall be supplied in both PDF and Microsoft Word, appendixes containing data may be provided in Microsoft Excel or other agreed upon data software. The Technical Report shall be submitted to the State electronically for review and approval. Any discrepancies are to be immediately adjusted by the State's administration vendor at the State's administration vendor expense to

the State's satisfaction. The Contractor shall provide any necessary item or test form information and consultation required to make corrections. Five electronic copies on CD and ten bound paper copies of each technical report shall be submitted to the State after final approval.

I. The State's administration vendor shall provide customized Student, Teacher/Class, School, LEA, and State level reports including but not limited to the following:

(1) The State's administration vendor shall include certain common information on all reports including but not limited to: report name, time of administration (i.e. Fall 15) and/or test date, assessment name, content area, test form, including modified version if applicable, teacher name, school name and LEA name. Separate reports may be required for Performance Standards and/or State accountability as defined in A.3.ss.

(2) The data from paper and online test-takers shall be aggregated together at the school, LEA, and state levels for operational online tests. The State's administration vendor shall use encryption to ensure security of the assessments and all student information entered through the program online.

(3) Reports shall include scoring information for all SR and CR items.

(4) The State's administration vendor shall assist the State in the composition of a response to any challenges to student scores, scoring rubrics, and/or scoring methodologies after reports are made public.

(5) Student Level Reports – The State's administration vendor shall produce and distribute student level reports that include, but are not limited to, raw scores, scale scores, academic cluster, standard, domain and/or reporting category information and performance levels for each content area. Scores must be displayed both numerically and graphically with written explanations.

i. Student label – Pre-printed label for student permanent record indicates scale score for Performance Standards as defined in A.3.ss, student's scale score, achievement level, and number correct for each content area. Includes student name, date of birth (DOB), ID number, class period and grade level. Labels shall be provided on sheets and sorted at a minimum of content area by teacher. Labels shall be provided in .pdf in the online reporting system for printing at the school and LEA level. Labels shall be standard size and specifications of the labels will be provided with instructions for printing.

ii. Individual Student Report (ISR) – Pre-printed report forms on which student's scores are reported. Reports shall include student name, ID number, DOB, other special codes as required by the State, content area, test form, including modified version if applicable, test administration, grade level, class period, teacher name, school name, LEA name, number correct, scale score, overall Performance Standards as defined in A.3.ss, and reporting category performance by content area. Reports will include graphic representation of student performance in each Reporting Category with overall achievement level and performance in comparison to a proficient student. Text shall provide information regarding student areas of proficiency or needed improvements in categories to be defined in collaboration with the State.

iii. Student Response Reports (SRR) – The State's administration vendor shall work with the State and the Contractor to create student level reports of student responses to test items. These reports shall not include response information for field test or linking items. The State's administration vendor shall collaborate with the Contractor to provide a booklet of released items for each grade level and/or content area assessment. Released items shall not include items used for field testing or linking. Items related to passages or other stimuli that cannot be released due to copyright restraints shall not be included in the item release booklet. The Item Release Booklet and student response reports shall be provided in .pdf on the online reporting system and in hard copy to be given to parents.

(6) Summary Reports – The State's administration vendor shall work with the State to develop and produce summary reports at the school, LEA and State level. Summary reports shall contain scores for each content area at the standard and domain levels.

Summary reports shall include but not be limited to:

i. Class performance roster – School level reports which summarize the results of the ISRs for all students tested, absent, and/or exempt for a teacher/class (per header). Student names sorted alphabetically with raw score, scale score, and Performance Standards as defined in A.3.ss. PDF print-on-demand online reports shall provide student performance in each reporting category graphically and numerically. Teacher, school, and LEA average percent proficient shall be provided per reporting category. Static .pdf reports shall include number of students tested, absent, exempt (medically or EL), nullified, refusal/did not attempt and student grade level. Interactive online ad hoc reports will allow for the creation of custom student rosters that will allow teachers the following year to view their students' test scores and responses. Preliminary class roster quick score reports containing raw number correct information are required for completion of student grades and the State's administration vendor will work with the State and the State's technology vendor to ensure quick score reports are completed prior to the end of the school year.

ii. Response roster – Reports which provide the average percent correct at the class, school, LEA, and state levels to align with the Item Release Booklets and SRRs. Separate reports shall be provided at the class, school, LEA and State levels. Reports shall be provided in .pdf and posted to the online reporting system.

iii. Performance summaries – Reports containing school, LEA and/or State n-counts, average raw score, scale score and Performance Standards as defined in A.3.ss. Multiple reports may be required to accurately and clearly provide all available performance data at each level. PDF print-on-demand online reports shall provide analysis of proficiency in each reporting category including but not limited to percent of students, schools, and/or LEAs proficient/advanced by performance level. Summary information will be provided by teacher within each school, for each school overall, the schools within each LEA, each LEA overall, and for the State overall. Class/teacher, school, and LEA average percent by performance level shall be provided graphically and numerically by reporting category and for the content area overall. Static pdf reports shall include number of students tested, absent, exempt (medically or EL), nullified, refusal/did not attempt and student grade level. Performance level summary report information shall include graphic representation and explanation of all students per content area in each performance level for each school and LEA. Students will be listed alphabetically by performance level per content area with number correct and scale score on class and/or school level reports. Absent, exempt (medically or EL), nullified, refusal/did not attempt students shall be listed separately. Students shall not be listed at the LEA or State level. Separate reports shall be provided at the class, school, LEA and State levels. Interactive online ad hoc reports will allow for the creation of custom summary reports for use in school improvement planning, teacher evaluations, teacher mentoring, school teams and other reporting as needed.

iv. Disaggregation summaries – Reports containing average percent of students by performance level by reporting category in various groups of students based on demographic variables as defined in section A.10.h.(3)vii including but not limited to: gender, race, ethnicity, disability category, EL status, accommodation usage, migrant, and any other category collected from student accountability demographic data. Interactive online ad hoc reports will allow for the creation of custom summary reports that may be sorted on any single or combination of available demographic categories for use in various analyses and for various purposes, including, but not limited to, school improvement planning and other state or federal reporting. Separate reports shall be provided at the school, LEA and State levels.

(7) Electronic Student Data Files – The Contractor shall:

i. Provide the State an electronic comprehensive data file (CDF) containing the complete record of student demographic, item response, and score data of all students to be aggregated by content area for each school, LEA, and the State. Files shall be delivered on agreed upon timelines as established in the Annual Work Plan. The CDF shall contain student data in a format which enables data to be

disaggregated by any and all fields on the student demographic form. Statewide summary data will also include item statistics.

ii. Draft a layout for this file for State approval. The State's administration vendor shall work with the State to define data elements and field lengths for all files. Prior to submission to the State, the State's administration vendor is responsible for checking to ensure that all files are consistent and accurately reflect the data provided on reports.

iii. Post the CDF to the secure SharePoint or FTP website (A.6.a) for review and approval by the State. A final CDF shall be posted to the secure SharePoint or FTP website after written approval by the State Psychometrician. The Contractor shall provide three copies of the final CDF via CD shipped to the State and the State Psychometrician via certified carrier.

iv. Separate files shall be provided for each assessment, content area and administration. A comprehensive file shall be provided for each assessment, content area and administration at the end of the test year and delivered on timelines established in the Annual Work Plan.

v. Provide data files for the LEAs via the online reporting system. Data files shall download raw data in a format approved by the State, i.e. csv, HTML, XML, or text. The LEA data files shall be an abbreviated form of the State CDF and shall contain the student records for all students in the LEA. LEA data files shall provide data for each student by school. Item data shall not be included in the LEA data files. The State shall approve the file format and layout.

vi. Check the accuracy and consistency of all student level data on data files before submission to the State. This includes but is not limited to:

1) Ensuring all students tested are included,

2) Ensuring that all demographic fields are included and are accurate reflections of the test answer documents,

3) Braille and Large Print, student records are coded correctly,

4) All data is included accurately in the printed reports and data files, and

5) All absentee, exempt (medically or EL), nullified, and/or refusal/did not attempt records are included appropriately in the data.

6) The State will independently verify the consistency and accuracy of the data files. Any discrepancies are to be immediately adjusted by the State's administration vendor at the vendor's expense to the State's satisfaction.

(8) Interpretive Guides – The State's administration vendor shall:

i. Develop, print, and distribute parent brochures for interpretation of individual student score reports as defined A.10.g.(5),

ii. Provide comprehensive guides as defined in A.10.g.(5) that are clear and easily understood by students, parents, teachers, and administrators,

iii. Provide assistance to the State and LEAs on the interpretation and use of summary test results for program evaluation and accountability,

iv. Provide all thumbnails, graphics, and other content to the State for use in training materials in original format, and

v. Post guides in the help section of the online reporting program.

m. The State's administration vendor shall provide customized reports on paper, .pdf, CD, and/or online format for each assessment based upon the following report matrix:

(1) Student Level Reports – One paper copy with post-test parent brochure, and pdf print-on-demand via online reporting.

(2) Student Label – One paper copy (on sheets) and pdf print-on-demand via online

reporting.

(3) School Level Reports – One copy of each Roster and all Summaries at school level and 1 copy of each Class Report and Summary at LEA level pdf print-on-demand, and interactive ad hoc reports via online reporting.

(4) LEA Level Reports - One copy each of Class Rosters, all School and LEA Summaries at LEA level and one copy of each LEA Summary at State level pdf print-on-demand, and interactive ad hoc reports via online reporting.

(5) State Level Reports – One copy of each School and LEA Summary Report and the State Summary at State level pdf print-on-demand, and interactive ad hoc reports via online reporting

A.16. Warranty. Contractor represents and warrants that throughout the Term of this Contract ("Warranty Period"), the goods or services provided under this Contract shall conform to the terms and conditions of this Contract. Any nonconformance of the goods or services to the terms and conditions of this Contract shall constitute a "Defect" and shall be considered "Defective." If Contractor receives notice of a Defect during the Warranty Period, then Contractor shall correct the Defect, at no additional charge.

Contractor represents and warrants that all goods or services provided under this Contract shall be provided in a timely and professional manner, by qualified and skilled individuals, in conformity with standards generally accepted in Contractor's industry.

If Contractor fails to provide the goods or services as warranted, then Contractor will re-provide the goods or services at no additional charge. If Contractor is unable or unwilling to re-provide the goods or services as warranted, then the State shall be entitled to recover the fees paid to Contractor for the Defective goods or services.

A.17. Inspection and Acceptance. The State shall have the right to inspect all goods or services provided by Contractor under this Contract. If, upon inspection, the State determines that the goods or services are Defective, the State shall notify Contractor, and Contractor shall re-deliver the goods or provide the services at no additional cost to the State. If after a period of thirty (30) days following delivery of goods or performance of services the State does not provide a notice of any Defects, the goods or services shall be deemed to have been accepted by the State.

**B. TERM OF CONTRACT:**

This Contract shall be effective on September 14, 2015 ("Effective Date") and extend for a period of sixty (60) months after the Effective Date ("Term"). The State shall have no obligation for goods or services provided by the Contractor prior to the Effective Date.

**C. PAYMENT TERMS AND CONDITIONS:**

C.1. Maximum Liability. In no event shall the maximum liability of the State under this Contract exceed twenty-five million dollars and zero cents ($25,000,000.00) ("Maximum Liability"). This Contract does not grant the Contractor any exclusive rights. The State does not guarantee that it will buy any minimum quantity of goods or services under this Contract. Subject to the terms and conditions of this Contract, the Contractor will only be paid for goods or services provided under this Contract after a purchase order is issued to Contractor by the State or as otherwise specified by this Contract.

C.2. Compensation Firm. The payment methodology in Section C.3. of this Contract shall constitute the entire compensation due the Contractor for all goods or services provided under this Contract regardless of the difficulty, materials or equipment required. The payment methodology includes all applicable taxes, fees, overhead, and all other direct and indirect costs incurred or to be incurred by the Contractor.

C.3. Payment Methodology. The Contractor shall be compensated based on the payment methodology for goods or services authorized by the State in a total amount as set forth in Section C.1.

a. The Contractor's compensation shall be contingent upon the satisfactory provision of goods or services as set forth in Section A.

b. The Contractor shall be compensated based upon the following payment methodology:

For Per unit calculations:
Per Assessment = 1
Per Administration = 6 - 4 EOC and 2 Ach
Per Content Area = 5 - 3 EOC and 2 ACH
Per Grade = 6 - 3-8 (grades are not used for EOC)
Per Application = 4 (enrollment, pre-id, inventory, reporting)

| COST ITEM DESCRIPTION | PROPOSED UNIT COST |
|---|---|
| A.6. Administration Activities | |
| A.6.a. Annual Work Plan | Per Work Plan |
| Year 1 | $340,756.00 |
| Year 2 | $220.889.00 |
| Year 3 | $219,999.00 |
| Year 4 | $222,166.00 |
| Year 5 | $222,826.00 |
| A.6.a Annual Work Plan Review | Per Meeting |
| Year 1 | $18,216.00 |
| Year 2 | $19,701.00 |
| Year 3 | $20,095.00 |
| Year 4 | $20,496.00 |
| Year 5 | $20,907.00 |
| A.7. Operations Management | |
| A. 7. a-e. Operations Management (includes administrative tasks, continuity activities, management meetings) | Per Administration Per Content Area |
| Year 1 | $18,046.00 |
| Year 2 | $16,377.00 |
| Year 3 | $15,454.00 |
| Year 4 | $15,689.00 |
| Year 5 | $16,074.00 |
| A.8. Development Activities | |

| A.8.c. Test Specifications (includes full item specifications A.8.d and includes review and consultation with administration vendor) | Per Administration Per Content Area Per Grade |
|---|---|
| Year 1 | $8,485.00 |
| Year 2 | $3,604.00 |
| Year 3 | $2,609.00 |
| Year 4 | $2,733.00 |
| Year 5 | $2,863.00 |
| A.8.e.(1) Alignment Study | Per Report |
| Year 1 | $43,947.00 |
| Year 2 | $44,826.00 |
| Year 3 | $45,723.00 |
| Year 4 | $46,637.00 |
| Year 5 | $47,570.00 |
| A.8.e. (1) Additional Alignment Studies | Per Hour |
| Year 1 | $52.00 |
| Year 2 | $53.00 |
| Year 3 | $54.00 |
| Year 4 | $55.00 |
| Year 5 | $56.00 |
| A.8.e (2)-(3) Item Development | |
| New & Significantly Modified | Per Constructed Response Item |
| Year 1 | $223.00 |
| Year 2 | $226.00 |
| Year 3 | $230.00 |
| Year 4 | $235.00 |
| Year 5 | $239.00 |
| New & Significantly Modified | Per Selected Response Item |
| Year 1 | $209.00 |
| Year 2 | $211.00 |
| Year 3 | $215.00 |
| Year 4 | $219.00 |
| Year 5 | $223.00 |
| New & Significantly Modified | Per Alternative Item |
| Year 1 | $913.00 |
| Year 2 | $876.00 |

| | |
|---|---|
| Year 3 | $549.00 |
| Year 4 | $560.00 |
| Year 5 | $571.00 |
| A.8.e. (4) Test Construction (includes review and consultation with administration vendor) | Per Form |
| Year 1 | $22,532.00 |
| Year 2 | $13,804.00 |
| Year 3 | $9,573.00 |
| Year 4 | $9,415.00 |
| Year 5 | $10,026.00 |
| A.8.e(4) Frameworks (includes Alt Design Patterns, Learning Frameworks, and/or Frameworks for ACH/EOC) | |
| Year 1 | $19,046.00 |
| Year 2 | $19,427.00 |
| Year 3 | $19,816.00 |
| Year 4 | $20,212.00 |
| Year 5 | $20,616.00 |
| A.8.e(3)viii-xvi Passage/Item Review Meetings | |
| A.8.e(3) xiii Virtual Meeting | Per Meeting |
| Year 1 | $5,965.00 |
| Year 2 | $6,199.00 |
| Year 3 | $6,445.00 |
| Year 4 | $6,705.00 |
| Year 5 | $6,979.00 |
| A.8.e(3) xiii Virtual Reviews | Per Item Reviewed |
| Year 1 | $7.00 |
| Year 2 | $7.00 |
| Year 3 | $4.00 |
| Year 4 | $4.00 |
| Year 5 | $4.00 |
| A.8.e(3)viii-xvi Small Meeting (1 day) | Per Meeting |
| Year 1 | $27,406.00 |
| Year 2 | $28,154.00 |
| Year 3 | $28,917.00 |
| Year 4 | $29,695.00 |
| Year 5 | $30,489.00 |

| A.8.e(3)viii-xvi Small Meeting (2-3 days) | Per Meeting |
|---|---|
| Year 1 | $28,494.00 |
| Year 2 | $30,570.00 |
| Year 3 | $32,779.00 |
| Year 4 | $35,131.00 |
| Year 5 | $37,635.00 |
| A.8.e(3)viii-xvi Small Meeting (4 days) | Per Meeting |
| Year 1 | $52,528.00 |
| Year 2 | $53,578.00 |
| Year 3 | $54,650.00 |
| Year 4 | $55,848.00 |
| Year 5 | $56,965.00 |
| A.8.e(3)viii-xvi Large Meeting (1 day) | Per Meeting |
| Year 1 | $28,710.00 |
| Year 2 | $29,284.00 |
| Year 3 | $29,869.00 |
| Year 4 | $30,467.00 |
| Year 5 | $31,076.00 |
| A.8.e(3)viii-xvi Large Meeting (2-3 days) | Per Meeting |
| Year 1 | $49,198.00 |
| Year 2 | $50,182.00 |
| Year 3 | $51,185.00 |
| Year 4 | $52,209.00 |
| Year 5 | $53,253.00 |
| A.8.e(3)viii-xvi Large Meeting (4 days) | Per Meeting |
| Year 1 | $73,603.00 |
| Year 2 | $75,075.00 |
| Year 3 | $76,576.00 |
| Year 4 | $78,108.00 |
| Year 5 | $79,670.00 |
| A.8.e(3)xvii Sight Reviews | |
| A.8.e(3)xvii Ink Print/Braille (1 day) | Per Meeting |
| Year 1 | $1,323.00 |
| Year 2 | $1,350.00 |
| Year 3 | $1,377.00 |

| | |
|---|---|
| Year 4 | $1,404.00 |
| Year 5 | $1,432.00 |
| A.8.e(3)xvii Ink Print/Braille (2-3 days) | Per Meeting |
| Year 1 | $589.00 |
| Year 2 | $600.00 |
| Year 3 | $612.00 |
| Year 4 | $625.00 |
| Year 5 | $637.00 |
| A.9. Psychometric Activities | |
| A.9.a Equating Study | Per Report Per Grade and/or Content Area Per Year |
| Year 1 | $5,561.00 |
| Year 2 | $3,144.00 |
| Year 3 | $1,659.00 |
| Year 4 | $1,692.00 |
| Year 5 | $1,726.00 |
| A. 9. b, u & w. Research Studies | Per Hour |
| Year 1 | $75.00 |
| Year 2 | $76.00 |
| Year 3 | $77.00 |
| Year 4 | $79.00 |
| Year 5 | $81.00 |
| Collaborative Activities<br>Collaborate with the administration vendor and any other state appointed vendor for the activities listed as needed | |
| A.9. Psychometrics<br>A.10. Materials<br>A.14. Scoring<br>A.15. Reporting | Per Hour |
| Year 1 | $75.00 |
| Year 2 | $71.00 |
| Year 3 | $73.00 |
| Year 4 | $75.00 |
| Year 5 | $76.00 |

| A.9. Psychometrics<br>A.10. Materials<br>A.14. Scoring<br>A.15. Reporting | Per onsite meeting<br>(Contractor travel and prep) |
|---|---|
| Year 1 | $10,227.00 |
| Year 2 | $10,550.00 |
| Year 3 | $11,401.00 |
| Year 4 | $11,774.00 |
| Year 5 | $12,163.00 |

C.4. Travel Compensation. The Contractor shall not be compensated or reimbursed for travel time, travel expenses, meals, or lodging.

C.5. Invoice Requirements. The Contractor shall invoice the State only for goods delivered and accepted by the State or services satisfactorily provided at the amounts stipulated in Section C.3., above. Contractor shall submit invoices and necessary supporting documentation, no more frequently than once a month, and no later than thirty (30) days after goods or services have been provided to the following address:

Tennessee Department of Education
Office of Assessment Logistics
Andrew Johnson Tower – 10th Floor
710 James Robertson Parkway
Nashville, TN 37243
615.741.0720

a. Each invoice, on Contractor's letterhead, shall clearly and accurately detail all of the following information (calculations must be extended and totaled correctly):

(1) Invoice number (assigned by the Contractor);
(2) Invoice date;
(3) Contract number (assigned by the State);
(4) Customer account name: Tennessee Department of Education & Division of Data and Research;
(5) Customer account number (assigned by the Contractor to the above-referenced Customer);
(6) Contractor name;
(7) Contractor Tennessee Edison registration ID number;
(8) Contractor contact for invoice questions (name, phone, or email);
(9) Contractor remittance address;
(10) Description of delivered goods or services provided and invoiced, including identifying information as applicable;
(11) Number of delivered or completed units, increments, hours, or days as applicable, of each good or service invoiced;
(12) Applicable payment methodology (as stipulated in Section C.3.) of each good or service invoiced;
(13) Amount due for each compensable unit of good or service; and
(14) Total amount due for the invoice period.

b. Contractor's invoices shall:

(1) Only include charges for goods delivered or services provided as described in Section A and in accordance with payment terms and conditions set forth in Section C;
(2) Only be submitted for goods delivered or services completed and shall not include any charge for future goods to be delivered or services to be performed;

(3) Not include Contractor's taxes, which includes without limitation Contractor's sales and use tax, excise taxes, franchise taxes, real or personal property taxes, or income taxes; and

(4) Include shipping or delivery charges only as authorized in this Contract.

c. The timeframe for payment (or any discounts) begins only when the State is in receipt of an invoice that meets the minimum requirements of this Section C.5.

C.6. Payment of Invoice. A payment by the State shall not prejudice the State's right to object to or question any payment, invoice, or other matter. A payment by the State shall not be construed as acceptance of goods delivered, any part of the services provided, or as approval of any amount invoiced.

C.7. Invoice Reductions. The Contractor's invoice shall be subject to reduction for amounts included in any invoice or payment that is determined by the State, on the basis of audits conducted in accordance with the terms of this Contract, to not constitute proper compensation for goods delivered or services provided.

C.8. Deductions. The State reserves the right to deduct from amounts, which are or shall become due and payable to the Contractor under this or any contract between the Contractor and the State of Tennessee, any amounts that are or shall become due and payable to the State of Tennessee by the Contractor.

C.9. Prerequisite Documentation. The Contractor shall not invoice the State under this Contract until the State has received the following, properly completed documentation.

a. The Contractor shall complete, sign, and present to the State an "Authorization Agreement for Automatic Deposit Form" provided by the State. By doing so, the Contractor acknowledges and agrees that, once this form is received by the State, all payments to the Contractor, under this or any other contract the Contractor has with the State of Tennessee, shall be made by automated clearing house.

b. The Contractor shall complete, sign, and present to the State a "Substitute W-9 Form" provided by the State. The taxpayer identification number in the Substitute W-9 Form must be the same as the Contractor's Federal Employer Identification Number or Tennessee Edison Registration ID.

**D. MANDATORY TERMS AND CONDITIONS:**

D.1. Required Approvals. The State is not bound by this Contract until it is duly approved by the Parties and all appropriate State officials in accordance with applicable Tennessee laws and regulations. Depending upon the specifics of this Contract, this may include approvals by the Commissioner of Finance and Administration, the Commissioner of Human Resources, the Comptroller of the Treasury, and the Chief Procurement Officer. Approvals shall be evidenced by a signature or electronic approval.

D.2. Communications and Contacts. All instructions, notices, consents, demands, or other communications required or contemplated by this Contract shall be in writing and shall be made by certified, first class mail, return receipt requested and postage prepaid, by overnight courier service with an asset tracking system, or by email or facsimile transmission with recipient confirmation. All communications, regardless of method of transmission, shall be addressed to the respective Party at the appropriate mailing address, facsimile number, or email address as stated below or any other address provided in writing by a Party.

The State:

Deborah Sauberer, Executive Director
Office of Assessment Logistics
Tennessee Department of Education
Andrew Johnson Tower – 10th Floor

710 James Robertson Parkway
Nashville, TN 37243
deb.malone-sauberer@tn.gov
Telephone # 615.741.0720
FAX # 615.532.7510

The Contractor:

John H. Oswald, Vice President & Chief Operating Officer, K-12 Student Assessment Programs
Educational Testing Service
10999 Interstate Highway 10 West, Suite 400
San Antonio, TX 78230
joswald@ets.org
Telephone # (210) 558-5633
FAX # (210) 558-5636

Barbara Burstein, Contract Manager
Educational Testing Service
660 Rosedale Road, MS 03-J
Princeton, NJ 08541
bburstein@ets.org
Telephone # (609) 683-2714
FAX # (609) 683-2766

All instructions, notices, consents, demands, or other communications shall be considered effective upon receipt or recipient confirmation as may be required.

D.3. Modification and Amendment. This Contract may be modified only by a written amendment signed by all Parties and approved by all applicable State officials.

D.4. Subject to Funds Availability. The Contract is subject to the appropriation and availability of State or federal funds. In the event that the funds are not appropriated or are otherwise unavailable, the State reserves the right to terminate this Contract upon written notice to the Contractor. The State's exercise of its right to terminate this Contract shall not constitute a breach of Contract by the State. Upon receipt of the written notice, the Contractor shall cease all work associated with the Contract. If the State terminates this Contract due to lack of funds availability, the Contractor shall be entitled to compensation for all conforming goods requested and accepted by the State and for all satisfactory and authorized services completed as of the termination date. Should the State exercise its right to terminate this Contract due to unavailability of funds, the Contractor shall have no right to recover from the State any actual, general, special, incidental, consequential, or any other damages of any description or amount.

D.5. Termination for Convenience. The State may terminate this Contract for convenience without cause and for any reason. The State shall give the Contractor at least ninety (90) days written notice before the termination date. The Contractor shall be entitled to compensation for all conforming goods delivered and accepted by the State or for satisfactory, authorized services completed as of the termination date. In no event shall the State be liable to the Contractor for compensation for any goods neither requested nor accepted by the State or for any services neither requested by the State nor satisfactorily performed by the Contractor. In no event shall the State's exercise of its right to terminate this Contract for convenience relieve the Contractor of any liability to the State for any damages or claims arising under this Contract.

D.6. Termination for Cause. If the Contractor fails to properly perform its obligations under this Contract in a timely or proper manner, or if the Contractor materially violates any terms of this Contract ("Breach Condition"),the State shall have the right to immediately terminate the Contract and withhold payments in excess of compensation for completed services or provided goods. Notwithstanding the above, the Contractor shall not be relieved of liability to the State for damages sustained by virtue of any Breach Condition and the State may seek other remedies allowed at law or in equity for breach of this Contract.

D.7. Assignment and Subcontracting. The Contractor shall not assign this Contract or enter into a subcontract for any of the goods or services provided under this Contract without the prior written approval of the State. Notwithstanding any use of the approved subcontractors, the Contractor shall be the prime contractor and responsible for compliance with all terms and conditions of this Contract. The State reserves the right to request additional information or impose additional terms and conditions before approving an assignment of this Contract in whole or in part or the use of subcontractors in fulfilling the Contractor's obligations under this Contract.

D.8. Conflicts of Interest. The Contractor warrants that no part of the Contractor's compensation shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Contractor in connection with any work contemplated or performed under this Contract.

The Contractor acknowledges, understands, and agrees that this Contract shall be null and void if the Contractor is, or within the past six (6) months has been, an employee of the State of Tennessee or if the Contractor is an entity in which a controlling interest is held by an individual who is, or within the past six (6) months has been, an employee of the State of Tennessee.

D.9. Nondiscrimination. The Contractor hereby agrees, warrants, and assures that no person shall be excluded from participation in, be denied benefits of, or be otherwise subjected to discrimination in the performance of this Contract or in the employment practices of the Contractor on the grounds of handicap or disability, age, race, creed, color, religion, sex, national origin, or any other classification protected by federal or state law. The Contractor shall, upon request, show proof of nondiscrimination and shall post in conspicuous places, available to all employees and applicants, notices of nondiscrimination.

D.10. Prohibition of Illegal Immigrants. The requirements of Tenn. Code Ann. § 12-3-309 addressing the use of illegal immigrants in the performance of any contract to supply goods or services to the state of Tennessee, shall be a material provision of this Contract, a breach of which shall be grounds for monetary and other penalties, up to and including termination of this Contract.

a. The Contractor agrees that the Contractor shall not knowingly utilize the services of an illegal immigrant in the performance of this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant in the performance of this Contract. The Contractor shall reaffirm this attestation, in writing, by submitting to the State a completed and signed copy of the document at Attachment A, semi-annually during the Term. If the Contractor is a party to more than one contract with the State, the Contractor may submit one attestation that applies to all contracts with the State. All Contractor attestations shall be maintained by the Contractor and made available to State officials upon request.

b. Prior to the use of any subcontractor in the performance of this Contract, and semi-annually thereafter, during the Term, the Contractor shall obtain and retain a current, written attestation that the subcontractor shall not knowingly utilize the services of an illegal immigrant to perform work under this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant to perform work under this Contract. Attestations obtained from subcontractors shall be maintained by the Contractor and made available to State officials upon request.

c. The Contractor shall maintain records for all personnel used in the performance of this Contract. Contractor's records shall be subject to review and random inspection at any reasonable time upon reasonable notice by the State.

d. The Contractor understands and agrees that failure to comply with this section will be subject to the sanctions of Tenn. Code Ann. § 12-3-309 for acts or omissions occurring after its effective date.

e. For purposes of this Contract, "illegal immigrant" shall be defined as any person who is not: (i) a United States citizen; (ii) a Lawful Permanent Resident; (iii) a person whose

physical presence in the United States is authorized; (iv) allowed by the federal Department of Homeland Security and who, under federal immigration laws or regulations, is authorized to be employed in the U.S.; or (v) is otherwise authorized to provide services under the Contract.

D.11. Records. The Contractor shall maintain documentation for all charges under this Contract. The books, records, and documents of the Contractor, for work performed or money received under this Contract, shall be maintained for a period of five (5) full years from the date of the final payment and shall be subject to audit at any reasonable time and upon reasonable notice by the State, the Comptroller of the Treasury, or their duly appointed representatives. The financial statements shall be prepared in accordance with generally accepted accounting principles.

D.12. Monitoring. The Contractor's activities conducted and records maintained pursuant to this Contract shall be subject to monitoring and evaluation by the State, the Comptroller of the Treasury, or their duly appointed representatives.

D.13. Progress Reports. The Contractor shall submit brief, periodic, progress reports to the State as requested.

D.14. Strict Performance. Failure by any Party to this Contract to require, in any one or more cases, the strict performance of any of the terms, covenants, conditions, or provisions of this Contract shall not be construed as a waiver or relinquishment of any term, covenant, condition, or provision. No term or condition of this Contract shall be held to be waived, modified, or deleted except by a written amendment signed by the Parties.

D.15. Independent Contractor. The Parties shall not act as employees, partners, joint venturers, or associates of one another. The Parties are independent contracting entities. Nothing in this Contract shall be construed to create an employer/employee relationship or to allow either Party to exercise control or direction over the manner or method by which the other transacts its business affairs or provides its usual services. The employees or agents of one Party are not employees or agents of the other Party.

D.16 Patient Protection and Affordable Care Act. The Contractor agrees that it will be responsible for compliance with the Patient Protection and Affordable Care Act ("PPACA") with respect to itself and its employees, including any obligation to report health insurance coverage, provide health insurance coverage, or pay any financial assessment, tax, or penalty for not providing health insurance. The Contractor shall indemnify the State and hold it harmless for any costs to the State arising from Contractor's failure to fulfill its PPACA responsibilities for itself or its employees.

D.17. Limitation of State's Liability. The State shall have no liability except as specifically provided in this Contract. In no event will the State be liable to the Contractor or any other party for any lost revenues, lost profits, loss of business, decrease in the value of any securities or cash position, time, money, goodwill, or any indirect, special, incidental, punitive, exemplary or consequential damages of any nature, whether based on warranty, contract, statute, regulation, tort (including but not limited to negligence), or any other legal theory that may arise under this Contract or otherwise. The State's total liability under this Contract (including any exhibits, schedules, amendments or other attachments to the Contract) or otherwise shall under no circumstances exceed the Maximum Liability. This limitation of liability is cumulative and not per incident.

D.18. Limitation of Contractor's Liability. In accordance with Tenn. Code Ann. § 12-3-701, the Contractor's liability for all claims arising under this Contract shall be limited to an amount equal to two (2) times the Maximum Liability amount detailed in Section C.1. and as may be amended, PROVIDED THAT in no event shall this Section limit the liability of the Contractor for intentional torts, criminal acts, fraudulent conduct, or omissions that result in personal injuries or death.

D.19. Hold Harmless. The Contractor agrees to indemnify and hold harmless the State of Tennessee as well as its officers, agents, and employees from and against any and all claims, liabilities, losses, and causes of action which may arise, accrue, or result to any person, firm, corporation, or other entity which may be injured or damaged as a result of acts, omissions, or negligence on

the part of the Contractor, its employees, or any person acting for or on its or their behalf relating to this Contract. The Contractor further agrees it shall be liable for the reasonable cost of attorneys for the State to enforce the terms of this Contract.

In the event of any suit or claim, the Parties shall give each other immediate notice and provide all necessary assistance to respond. The failure of the State to give notice shall only relieve the Contractor of its obligations under this Section to the extent that the Contractor can demonstrate actual prejudice arising from the failure to give notice. This Section shall not grant the Contractor, through its attorneys, the right to represent the State in any legal matter, as the right to represent the State is governed by Tenn. Code Ann. § 8-6-106.

D.20. HIPAA Compliance. The State and Contractor shall comply with obligations under the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), Health Information Technology for Economic and Clinical Health ("HITECH") Act and any other relevant laws and regulations regarding privacy (collectively the "Privacy Rules"). The obligations set forth in this Section shall survive the termination of this Contract.

a. Contractor warrants to the State that it is familiar with the requirements of the Privacy Rules, and will comply with all applicable requirements in the course of this Contract.

b. Contractor warrants that it will cooperate with the State, including cooperation and coordination with State privacy officials and other compliance officers required by the Privacy Rules, in the course of performance of the Contract so that both parties will be in compliance with the Privacy Rules.

c. The State and the Contractor will sign documents, including but not limited to business associate agreements, as required by the Privacy Rules and that are reasonably necessary to keep the State and Contractor in compliance with the Privacy Rules. This provision shall not apply if information received or delivered by the parties under this Contract is NOT "protected health information" as defined by the Privacy Rules, or if the Privacy Rules permit the parties to receive or deliver the information without entering into a business associate agreement or signing another document.

d. The Contractor will indemnify the State and hold it harmless for any violation by the Contractor or its subcontractors of the Privacy Rules. This includes the costs of responding to a breach of protected health information, the costs of responding to a government enforcement action related to the breach, and any fines, penalties, or damages paid by the State because of the violation.

D.21. Tennessee Consolidated Retirement System. Subject to statutory exceptions contained in Tenn. Code Ann. §§ 8-36-801, *et seq*., the law governing the Tennessee Consolidated Retirement System ("TCRS"), provides that if a retired member of TCRS, or of any superseded system administered by TCRS, or of any local retirement fund established under Tenn. Code Ann. §§ 8-35-101, *et seq.*, accepts State employment, the member's retirement allowance is suspended during the period of the employment. Accordingly and notwithstanding any provision of this Contract to the contrary, the Contractor agrees that if it is later determined that the true nature of the working relationship between the Contractor and the State under this Contract is that of "employee/employer" and not that of an independent contractor, the Contractor, if a retired member of TCRS, may be required to repay to TCRS the amount of retirement benefits the Contractor received from TCRS during the Term.

D.22 Tennessee Department of Revenue Registration. The Contractor shall comply with all applicable registration requirements contained in Tenn. Code Ann. §§ 67-6-601 – 608. Compliance with applicable registration requirements is a material requirement of this Contract.

D.23. Debarment and Suspension. The Contractor certifies, to the best of its knowledge and belief, that it, its current and future principals, its current and future subcontractors and their principals:

a. are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal or state department or agency;

b. have not within a three (3) year period preceding this Contract been convicted of, or had a civil judgment rendered against them from commission of fraud, or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or grant under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;

c. are not presently indicted or otherwise criminally or civilly charged by a government entity (federal, state, or local) with commission of any of the offenses detailed in section b. of this certification; and

d. have not within a three (3) year period preceding this Contract had one or more public transactions (federal, state, or local) terminated for cause or default.

The Contractor shall provide immediate written notice to the State if at any time it learns that there was an earlier failure to disclose information or that due to changed circumstances, its principals or the principals of its subcontractors are excluded or disqualified.

D.24. Force Majeure. "Force Majeure Event" means fire, flood, earthquake, elements of nature or acts of God, wars, riots, civil disorders, rebellions or revolutions, acts of terrorism or any other similar cause beyond the reasonable control of the Party except to the extent that the non-performing Party is at fault in failing to prevent or causing the default or delay, and provided that the default or delay cannot reasonably be circumvented by the non-performing Party through the use of alternate sources, workaround plans or other means. A strike, lockout or labor dispute shall not excuse either Party from its obligations under this Contract. Except as set forth in this Section, any failure or delay by a Party in the performance of its obligations under this Contract arising from a Force Majeure Event is not a default under this Contract or grounds for termination. The non-performing Party will be excused from performing those obligations directly affected by the Force Majeure Event, and only for as long as the Force Majeure Event continues, provided that the Party continues to use diligent, good faith efforts to resume performance without delay. The occurrence of a Force Majeure Event affecting Contractor's representatives, suppliers, subcontractors, customers or business apart from this Contract is not a Force Majeure Event under this Contract. Contractor will promptly notify the State of any delay caused by a Force Majeure Event (to be confirmed in a written notice to the State within one (1) day of the inception of the delay) that a Force Majeure Event has occurred, and will describe in reasonable detail the nature of the Force Majeure Event. If any Force Majeure Event results in a delay in Contractor's performance longer than forty-eight (48) hours, the State may, upon notice to Contractor: (a) cease payment of the fees until Contractor resumes performance of the affected obligations; or (b) immediately terminate this Contract or any purchase order, in whole or in part, without further payment except for fees then due and payable. Contractor will not increase its charges under this Contract or charge the State any fees other than those provided for in this Contract as the result of a Force Majeure Event.

D.25. State and Federal Compliance. The Contractor shall comply with all applicable state and federal laws and regulations in the performance of this Contract.

D.26. Governing Law. This Contract shall be governed by and construed in accordance with the laws of the State of Tennessee. The Tennessee Claims Commission or the state or federal courts in Tennessee shall be the venue for all claims, disputes, or disagreements arising under this Contract. The Contractor acknowledges and agrees that any rights, claims, or remedies against the State of Tennessee or its employees arising under this Contract shall be subject to and limited to those rights and remedies available under Tenn. Code Ann. §§ 9-8-101 - 407.

D.27. Entire Agreement. This Contract is complete and contains the entire understanding between the Parties relating to its subject matter, including all the terms and conditions of the Parties'

agreement. This Contract supersedes any and all prior understandings, representations, negotiations, and agreements between the Parties, whether written or oral.

D.28. Severability. If any terms and conditions of this Contract are held to be invalid or unenforceable as a matter of law, the other terms and conditions of this Contract shall not be affected and shall remain in full force and effect. The terms and conditions of this Contract are severable.

D.29. Headings. Section headings of this Contract are for reference purposes only and shall not be construed as part of this Contract.

D.30. Incorporation of Additional Documents. Each of the following documents is included as a part of this Contract by reference. In the event of a discrepancy or ambiguity regarding the Contractor's duties, responsibilities, and performance under this Contract, these items shall govern in order of precedence below:

a. any amendment to this Contract, with the latter in time controlling over any earlier amendments;
b. this Contract with any attachments or exhibits (excluding the items listed at subsections c. through f., below);
c. any clarifications of or addenda to the Contractor's proposal seeking this Contract;
d. the State solicitation, as may be amended, requesting responses in competition for this Contract;
e. any technical specifications provided to proposers during the procurement process to award this Contract; and,
f. the Contractor's response seeking this Contract.

**E. SPECIAL TERMS AND CONDITIONS:**

E.1. Conflicting Terms and Conditions. Should any of these special terms and conditions conflict with any other terms and conditions of this Contract, the special terms and conditions shall be subordinate to the Contract's other terms and conditions.

E.2. Insurance. The Contractor shall carry adequate liability and other appropriate forms of insurance.

a. The Contractor shall maintain, at minimum, the following insurance coverage:

(1) Workers' Compensation/ Employers' Liability (including all states coverage) with a limit not less than the relevant statutory amount or one million dollars ($1,000,000) per occurrence for employers' liability whichever is greater.
(2) Comprehensive Commercial General Liability (including personal injury & property damage, premises/operations, independent contractor, contractual liability and completed operations/products) with a bodily injury/property damage combined single limit not less than one million dollars ($1,000,000) per occurrence and two million dollars ($2,000,000) aggregate.

(3) Automobile Coverage (including owned, leased, hired, and non-owned vehicles) with a bodily injury/property damage combined single limit not less than one million dollars ($1,000,000) per occurrence.

(4) Errors and Omission Coverage with a limit of not less than one million dollars ($1,000,000) per claim and two million dollars ($2,000,000) aggregate.

b. The Contractor shall provide a valid Certificate of Insurance naming the State as an additional insured and detailing Coverage Description; Insurance Company & Policy Number; Exceptions and Exclusions; Policy Effective Date; Policy Expiration Date; Limit(s) of Liability; and Name and Address of Insured. Contractor shall obtain from Contractor's insurance carrier(s) and will deliver to the State waivers of the subrogation rights under the respective policies. Failure to provide required evidence of insurance coverage shall be a material breach of this Contract.

E.3. Confidentiality of Records. Strict standards of confidentiality of records and information shall be maintained in accordance with applicable state and federal law. All material and information, regardless of form, medium or method of communication, provided to the Contractor by the State or acquired by the Contractor on behalf of the State that is regarded as confidential under state or federal law shall be regarded as "Confidential Information." Nothing in this Section shall permit Contractor to disclose any Confidential Information, regardless of whether it has been disclosed or made available to the Contractor due to intentional or negligent actions or inactions of agents of the State or third parties. Confidential Information shall not be disclosed except as required or permitted under state or federal law. Contractor shall take all necessary steps to safeguard the confidentiality of such material or information in conformance with applicable state and federal law.

The obligations set forth in this Section shall survive the termination of this Contract.

E.4. Printing Authorization. The Contractor agrees that no publication coming within the jurisdiction of Tenn. Code Ann. §§ 12-7-101, *et. seq*., shall be printed pursuant to this Contract unless a printing authorization number has been obtained and affixed as required by Tenn. Code Ann. § 12-7-103 (d).

E.5. Ownership of Software and Work Products.

a. Definitions.

(1) "Contractor-Owned Software," shall mean commercially available software the rights to which are owned by Contractor, including but not limited to commercial "off-the-shelf" software which is not developed using State's money or resources.

(2) "Custom-Developed Application Software," shall mean customized application software developed by Contractor solely for State.

(3) "Rights Transfer Application Software," shall mean any pre-existing application software owned by Contractor or a third party, provided to State and to which Contractor will grant and assign, or will facilitate the granting and assignment of, all rights, including the source code, to State.

(4) "Third-Party Software," shall mean software not owned by the State or the Contractor.

(5) "Work Product," shall mean all deliverables exclusive of hardware, such as software, software source code, documentation, planning, etc., that are created, designed, developed, or documented by the Contractor exclusively for the State during the course of the project using State's money or resources, including Custom-Developed Application Software. If the deliverables under this Contract include Rights Transfer Application Software, the definition of Work Product shall also include such software. Work Product shall not include Contractor-Owned Software or Third-Party Software.

b. Rights and Title to the Software

(1) All right, title and interest in and to the Contractor-Owned Software shall at all times remain with Contractor, subject to any license granted under this Contract.

(2) All right, title and interest in and to the Work Product, and to modifications thereof made by State, including without limitation all copyrights, patents, trade secrets and other intellectual property and other proprietary rights embodied by and arising out of the Work Product, shall belong to State. To the extent such rights do not automatically belong to State, Contractor hereby assigns, transfers, and conveys all right, title and interest in and to the Work Product, including without limitation the copyrights, patents, trade secrets, and other intellectual property rights arising out of or embodied by the Work Product. Contractor and its

employees, agents, contractors or representatives shall execute any other documents that State or its counsel deem necessary or desirable to document this transfer or allow State to register its claims and rights to such intellectual property rights or enforce them against third parties.

(3) All right, title and interest in and to the Third-Party Software shall at all times remain with the third party, subject to any license granted under this Contract.

c. The Contractor may use for its own purposes the general knowledge, skills, experience, ideas, concepts, know-how, and techniques obtained and used during the course of performing under this Contract. The Contractor may develop for itself, or for others, materials which are similar to or competitive with those that are produced under this Contract.

E.6. Prohibited Advertising or Marketing. The Contractor shall not suggest or imply in advertising or marketing materials that Contractor's goods or services are endorsed by the State. The restrictions on Contractor advertising or marketing materials under this Section shall survive the termination of this Contract.

E.7. Environmental Tobacco Smoke. Pursuant to the provisions of the federal "Pro-Children Act of 1994" and the Tennessee "Children's Act for Clean Indoor Air of 1995," the Contractor shall prohibit smoking of tobacco products within any indoor premises in which services are provided pursuant to this Contract to individuals under the age of eighteen (18) years. The Contractor shall post "no smoking" signs in appropriate, permanent sites within such premises. This prohibition shall be applicable during all hours, not just the hours in which children are present. Violators of the prohibition may be subject to civil penalties and fines. This prohibition shall apply to and be made part of any subcontract related to this Contract.

E.8. Lobbying. The Contractor certifies, to the best of its knowledge and belief, that:

a. No federally appropriated funds have been paid or will be paid, by or on behalf of the Contractor, to any person for influencing or attempting to influence an officer or employee of an agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.

b. If any funds other than federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with any contract, grant, loan, or cooperative agreement, the Contractor shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

c. The Contractor shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into and is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352.

E.9. Contractor Commitment to Diversity. The Contractor shall comply with and make reasonable business efforts to exceed the commitment to diversity represented by the Contractor's Response to RFP # 33111-00116 (Attachment 6.2 – Section B, Item Reference B.15) and resulting in this Contract.

The Contractor shall assist the State in monitoring the Contractor's performance of this

commitment by providing, as requested, a quarterly report of participation in the performance of this Contract by small business enterprises and businesses owned by minorities, women, and Tennessee service-disabled veterans. Such reports shall be provided to the State of Tennessee Governor's Office of Diversity Business Enterprise in the required form and substance.

E.10. Intellectual Property. The Contractor agrees to indemnify and hold harmless the State of Tennessee as well as its officers, agents, and employees from and against any and all claims or suits which may be brought against the State concerning or arising out of any claim of an alleged patent, copyright, trade secret or other intellectual property infringement. In any such claim or action brought against the State, the Contractor shall satisfy and indemnify the State for the amount of any settlement or final judgment, and the Contractor shall be responsible for all legal or other fees or expenses incurred by the State arising from any such claim. The State shall give the Contractor notice of any such claim or suit and full right and opportunity to conduct the Contractor's own defense thereof, however, the failure of the State to give such notice shall only relieve Contractor of its obligations under this Section to the extent Contractor can demonstrate actual prejudice arising from the State's failure to give notice. This Section shall not grant the Contractor, through its attorneys, the right to represent the State of Tennessee in any legal matter, as provided in Tenn. Code Ann. § 8-6-106.

E.11. Liquidated Damages. If a failure to meet deadlines as established in the Annual Work Plan, inaccurate calculations resulting from errors on the part of the Contractor, or failure or partial performance of any term or provision of the Contract occurs, ("Liquidated Damages Event"), the State may assess damages on Contractor ("Liquidated Damages"). The State shall notify the Contractor of amounts to be assessed as Liquidated Damages. The Parties agree that due to the complicated nature of the Contractor's obligations under this Contract it would be difficult to specifically designate a monetary amount for Contractor's failure to fulfill its obligations regarding the Liquidated Damages Event as these amounts are likely to be uncertain and not easily proven. Contractor has carefully reviewed the Liquidated Damages contained in Attachment B and agrees that these amounts represent a reasonable relationship between the amount and what might reasonably be expected in the event of a Liquidated Damages Event, and are a reasonable estimate of the damages that would occur from a Liquidated Damages Event. The Parties agree that the Liquidated Damages represent solely the damages and injuries sustained by the State in losing the benefit of the bargain with Contractor and do not include any injury or damage sustained by a third party. The Contractor agrees that the Liquidated Damages are in addition to any amounts Contractor may owe the State pursuant to the indemnity provision or any other sections of this Contract.

The State is not obligated to assess Liquidated Damages before availing itself of any other remedy. The State may choose to discontinue Liquidated Damages and avail itself of any other remedy available under this Contract or at law or equity.

E.12. Partial Takeover of Contract. The State may, at its convenience and without cause, exercise a partial takeover of any service that the Contractor is obligated to perform under this Contract, including any service which is the subject of a subcontract between Contractor and a third party (a "Partial Takeover"). A Partial Takeover of this Contract by the State shall not be deemed a breach of contract. The Contractor shall be given at least thirty (30) days prior written notice of a Partial Takeover. The notice shall specify the areas of service the State will assume and the date the State will be assuming. The State's exercise of a Partial Takeover shall not alter the Contractor's other duties and responsibilities under this Contract. The State reserves the right to withhold from the Contractor any amounts the Contractor would have been paid but for the State's exercise of a Partial Takeover. The amounts shall be withheld effective as of the date the State exercises its right to a Partial Takeover. The State's exercise of its right to a Partial Takeover of this Contract shall not entitle the Contractor to any actual, general, special, incidental, consequential, or any other damages irrespective of any description or amount.

E.13. Unencumbered Personnel. The Contractor shall not restrict its employees, agents, subcontractors or principals who perform services for the State under this Contract from performing the same or similar services for the State after the termination of this Contract, either as a State employee, an independent contractor, or an employee, agent, subcontractor or principal of another contractor with the State.

E.14. Personally Identifiable Information. While performing its obligations under this Contract, Contractor may have access to Personally Identifiable Information held by the State ("PII"). For the purposes of this Contract, "PII" includes "Nonpublic Personal Information" as that term is defined in Title V of the Gramm-Leach-Bliley Act of 1999 or any successor federal statute, and the rules and regulations thereunder, all as may be amended or supplemented from time to time ("GLBA") and personally identifiable information and other data protected under any other applicable laws, rule or regulation of any jurisdiction relating to disclosure or use of personal information ("Privacy Laws"). Contractor agrees it shall not do or omit to do anything which would cause the State to be in breach of any Privacy Laws. Contractor shall, and shall cause its employees, agents and representatives to: (i) keep PII confidential and may use and disclose PII only as necessary to carry out those specific aspects of the purpose for which the PII was disclosed to Contractor and in accordance with this Contract, GLBA and Privacy Laws; and (ii) implement and maintain appropriate technical and organizational measures regarding information security to: (A) ensure the security and confidentiality of PII; (B) protect against any threats or hazards to the security or integrity of PII; and (C) prevent unauthorized access to or use of PII. Contractor shall immediately notify State: (1) of any disclosure or use of any PII by Contractor or any of its employees, agents and representatives in breach of this Contract; and (2) of any disclosure of any PII to Contractor or its employees, agents and representatives where the purpose of such disclosure is not known to Contractor or its employees, agents and representatives. The State reserves the right to review Contractor's policies and procedures used to maintain the security and confidentiality of PII and Contractor shall, and cause its employees, agents and representatives to, comply with all reasonable requests or directions from the State to enable the State to verify and/or procure that Contractor is in full compliance with its obligations under this Contract in relation to PII. Upon termination or expiration of the Contract or at the State's direction at any time in its sole discretion, whichever is earlier, Contractor shall immediately return to the State any and all PII which it has received under this Contract and shall destroy all records of such PII.

The Contractor shall report to the State any instances of unauthorized access to or potential disclosure of PII in the custody or control of Contractor ("Unauthorized Disclosure") that come to the Contractor's attention. Any such report shall be made by the Contractor within twenty-four (24) hours after the Unauthorized Disclosure has come to the attention of the Contractor. Contractor shall take all necessary measures to halt any further Unauthorized Disclosures. The Contractor, at the sole discretion of the State, shall provide no cost credit monitoring services for individuals whose PII was affected by the Unauthorized Disclosure. The Contractor shall bear the cost of notification to all individuals affected by the Unauthorized Disclosure, including individual letters and public notice. The remedies set forth in this Section are not exclusive and are in addition to any claims or remedies available to this State under this Contract or otherwise available at law.

E.15. Federal Funding Accountability and Transparency Act (FFATA). This Contract requires the Contractor to provide supplies or services that are funded in whole or in part by federal funds that are subject to FFATA. The Contractor is responsible for ensuring that all applicable requirements, including but not limited to those set forth herein, of FFATA are met and that the Contractor provides information to the State as required.

The Contractor shall comply with the following:

a. Reporting of Total Compensation of the Contractor's Executives.

(1) The Contractor shall report the names and total compensation of each of its five most highly compensated executives for the Contractor's preceding completed fiscal year, if in the Contractor's preceding fiscal year it received:

i. 80 percent or more of the Contractor's annual gross revenues from federal procurement contracts and federal financial assistance subject to the Transparency Act, as defined at 2 CFR 170.320 (and subawards); and

ii. $25,000,000 or more in annual gross revenues from federal procurement contracts (and subcontracts), and federal financial assistance subject to the Transparency Act (and subawards); and

iii. The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at http://www.sec.gov/answers/execomp.htm.).

As defined in 2 C.F.R. § 170.315, "Executive" means officers, managing partners, or any other employees in management positions.

(2) Total compensation means the cash and noncash dollar value earned by the executive during the Contractor's preceding fiscal year and includes the following (for more information see 17 C.F.R. § 229.402(c)(2)):

i. Salary and bonus.

ii. Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.

iii. Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.

iv. Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.

v. Above-market earnings on deferred compensation which is not tax qualified.

vi. Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the executive exceeds $10,000.

b. The Contractor must report executive total compensation described above to the State by the end of the month during which this Contract is awarded.

c. If this Contract is amended to extend the Term, the Contractor must submit an executive total compensation report to the State by the end of the month in which the term extension becomes effective.

d. The Contractor will obtain a Data Universal Numbering System (DUNS) number and maintain its DUNS number for the term of this Contract. More information about obtaining a DUNS Number can be found at: http://fedgov.dnb.com/webform/

The Contractor's failure to comply with the above requirements is a material breach of this Contract for which the State may terminate this Contract for cause. The State will not be obligated to pay any outstanding invoice received from the Contractor unless and until the Contractor is in full compliance with the above requirements.

E.16. Survival. The terms, provisions, representations, and warranties contained in this Contract which by their sense and context are intended to survive the performance and termination of this Contract, shall so survive the completion of performance and termination of this Contract.

E.17. FERPA Compliance. The State and Contractor shall comply with the Family Education Rights and Privacy Act of 1974 (20 U.S.C. § 1232g) (FERPA) and its accompanying regulations (34 C.F.R. 99). Contractor warrants that it is familiar with requirements of FERPA and its accompanying

regulations and that it will comply with all applicable FERPA requirements in the performance of its duties in this contract. Contractor agrees to cooperate with the State as required by FERPA and its regulations in the performance of its duties in this contract. Contractor agrees to maintain the confidentiality of all education records and student information and use such records and information for the exclusive purpose of performing its duties in this contract. The Contractor shall reaffirm this attestation, in writing, by submitting to the State a completed and signed copy of the Authorization and Acknowledgement of Compliance document at Attachment C.

E.18. Tennessee Data Accessibility, Transparency and Accountability Act (the "Act"). The State and Contractor shall comply with Sections 3-9 of Chapter 905 of the Tennessee Public Acts of 2014, known as the Data Accessibility, Transparency and Accountability Act, and any accompanying administrative rules or regulations. Contractor agrees to maintain the confidentiality of all records containing student and de-identified data in any databases, to which the State has granted Contractor access, and to only use such data for the exclusive purpose of performing its duties in this Contract.

E.19. Any instances of unauthorized disclosure of data containing personally identifiable information in violation of the laws cited above in sections E.17 and E.18 that come to the attention of the Contractor shall be reported to the State within twenty-four (24) hours. In addition to any damages required to be paid by Contractor pursuant to Attachment B, Contractor shall indemnify and hold harmless State as well as its employees, agents and representatives from and against any and all claims, liabilities, losses, and causes of action which may arise, accrue, or result to any person or entity which may be injured or damaged as a result of Contractor's failure to comply with sections E.17 and E.18.

**IN WITNESS WHEREOF,**

**EDUCATIONAL TESTING SERVICE:**

August 27, 2015

**CONTRACTOR SIGNATURE** **DATE**

John H. Oswald, Vice President & Chief Operating Officer

**PRINTED NAME AND TITLE OF CONTRACTOR SIGNATORY (above)**

**TENNESSEE DEPARTMENT OF EDUCATION:**

9/02/15

**DR. CANDICE McQUEEN, COMMISSIONER** **DATE**

**ATTACHMENT A**

# ATTESTATION RE PERSONNEL USED IN CONTRACT PERFORMANCE

| | |
|---|---|
| **SUBJECT CONTRACT NUMBER:** | 47402 |
| **CONTRACTOR LEGAL ENTITY NAME:** | Educational Testing Service |
| **FEDERAL EMPLOYER IDENTIFICATION NUMBER:** (or Social Security Number) | [redacted] |

**The Contractor, identified above, does hereby attest, certify, warrant, and assure that the Contractor shall not knowingly utilize the services of an illegal immigrant in the performance of this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant in the performance of this Contract.**

**CONTRACTOR SIGNATURE**

NOTICE: This attestation MUST be signed by an individual empowered to contractually bind the Contractor. Attach evidence documenting the individual's authority to contractually bind the Contractor, unless the signatory is the Contractor's chief executive or president.

John H. Oswald, Vice President & Chief Operating Officer

**PRINTED NAME AND TITLE OF SIGNATORY**

August 27, 2015

**DATE OF ATTESTATION**

**ATTACHMENT B**
**LIQUIDATED DAMAGES**

| PRODUCT DESCRIPTION | COST PER STATE WORK DAY |
|---|---|
| A.6. Administration Activities | |
| A.6.a. Annual Work Plan | $25,000.00 |
| A.7. Operations Management | |
| A. 7. a - e. Operations Management (includes administrative tasks, continuity activities, management meetings) | $10,000.00 |
| A.8. Development Activities | |
| A.8.c. Test Specifications (includes full item specifications A.8.d and includes review and consultation with administration vendor) | $50,000.00 |
| A.8.e.(1) Alignment Study | $25,000.00 |
| A.8.e. (1) Additional Alignment Studies | $10,000.00 |
| A.8.e (2)-(3) Item Development | $50,000.00 |
| A.8.e. (4) Test Construction (includes review and consultation with administration vendor) | $50,000.00 |
| A.8.e(3)viii-xvi Passage/Item Review Meetings | |
| A.8.e(3) xiii Virtual Meeting/Reviews | $25,000.00 |
| A.8.e(3)viii-xvi Small Meetings | $25,000.00 |
| A.8.e(3)viii-xvi Large Meetings | $25,000.00 |
| A.9. Psychometric Activities | |
| A.9.a Equating Study | $25,000.00 |
| A. 9. b, u & w. Research Studies | $10,000.00 |
| Collaborative Activities<br>Collaborate with the administration vendor and any other state appointed vendor for the activities listed as needed | |
| A.9. Psychometrics<br>A.10. Materials<br>A.14. Scoring<br>A.15. Reporting | $25,000.00 |

**ATTACHMENT C**
**AUTHORIZATION AND ACKNOWLEDGEMENT OF FERPA COMPLIANCE**

**Whereas,** State has contracted with **Contractor** on **September 14, 2015** through **September 13, 2020** (**Agency Tracking # 33111-00116**), for **Item and Test Form Development of State Summative Assessments for Science and Social Studies**, and

**Whereas,** The above referenced contract may require the disclosure by the State to **Contractor** of certain personally identifiable student information that is confidential under the Family Educational Rights and Privacy Act (FERPA), and

**Whereas**, 34 C.F.R. 99.31, authorizes an educational agency or institution to disclose personally identifiable information from an education record of a student without the consent required by Sec. 99.30 to a contractor, consultant, volunteer, or other party to whom an agency or institution has outsourced institutional services.

Therefore, the State and **Contractor** hereby agree as follows:

1. **Contractor** is authorized to maintain certain student information for the sole purpose of compliance with the requirements of the above referenced contract. This student information may include test scores and the demographic data listed in Scope of Services Sections A.10.h.(3)vii.
2. **Contractor** agrees to comply fully with FERPA by maintaining the confidentiality of all student information and to use the information solely to fulfill its obligations under the above referenced contract with the state.
3. **Contractor** agrees to destroy all confidential student information when it is no longer needed for purposes of fulfilling its obligations under the above referenced contract.

| | |
|---|---|
| August 28, 2015 | |
| **EDUCATIONAL TESTING SERVICE** | **DATE** |
| 9/02/15 | |
| **TENNESSEE DEPARTMENT OF EDUCATION** | **DATE** |

# CONTRACT AMENDMENT COVER SHEET

| Agency Tracking # | Edison ID | Contract # | Amendment # |
|---|---|---|---|
| 33111-00116 | 47402 | 47402 | 1 |

| Contractor Legal Entity Name | Edison Vendor ID |
|---|---|
| Educational Testing Service | 12160 |

**Amendment Purpose & Effect(s)**

Revise scope to add test form development for English language arts and mathematics

**Amendment Changes Contract End Date:** ☐ YES ☒ NO **End Date:** September 13, 2020

**TOTAL Contract Amount INCREASE or DECREASE per this Amendment** (zero if N/A): **$12,500,000.00**

**Funding —**

| FY | State | Federal | Interdepartmental | Other | TOTAL Contract Amount |
|---|---|---|---|---|---|
| 2016 | $4,000,000.00 | $1,000,000.00 | $0.00 | $0.00 | $5,000,000.00 |
| 2017 | $4,000,000.00 | $1,000,000.00 | $0.00 | $0.00 | $5,000,000.00 |
| 2018 | $3,513,762.00 | $1,486,238.00 | $0.00 | $0.00 | $5,000,000.00 |
| 2019 | $7,050,000.00 | $1,950,000.00 | $0.00 | $0.00 | $9,000,000.00 |
| 2020 | $7,050,000.00 | $1,950,000.00 | $0.00 | $0.00 | $9,000,000.00 |
| 2021 | $3,525,000.00 | $975,000.00 | $0.00 | $0.00 | $4,500,000.00 |
| **TOTAL:** | **$29,138,762.00** | **$8,361,238.00** | **$0.00** | **$0.00** | **$37,500,000.00** |

**American Recovery and Reinvestment Act (ARRA) Funding:** ☐ YES ☒ NO

**Budget Officer Confirmation:** There is a balance in the appropriation from which obligations hereunder are required to be paid that is not already encumbered to pay other obligations.

| Speed Chart (optional) | Account Code (optional) |
|---|---|
| Various | Various |

*CPO USE*

# S U P P L E M E N T A L  S U M M A R Y  S H E E T

| | |
|---|---|
| **RFS Number** | 33111-00116 |
| **Edison ID** | 47402 |

| FY | Depart. ID | Speedchart | Program | Account | Fund | Project Code | CFDA # | Amount |
|---|---|---|---|---|---|---|---|---|
| 2016 | 3313600000 | ED177 | 644400 | 70899000 | 25000 | LL15ACX15 | 84.027A | $975,000 |
| 2016 | 3313600000 | ED177 | 644400 | 70803000 | 25000 | LL15ACX15 | 84.027A | $25,000 |
| 2016 | 3311101000 | ED450 | 873300 | 70803000 | 25000 | NA | NA | $2,500,000 |
| 2016 | 3311101000 | ED452 | 873800 | 70803000 | 25000 | NA | NA | $1,500,000 |
| 2017 | 3313600000 | | 644400 | 70899000 | 25000 | LL16ACX16 | 84.027A | $975,000 |
| 2017 | 3313600000 | | 644400 | 70803000 | 25000 | LL16ACX16 | 84.027A | $25,000 |
| 2017 | 3311101000 | ED452 | 873800 | 70803000 | 25000 | NA | NA | $4,000,000 |
| 2018 | 3313600000 | | 644400 | 70899000 | 25000 | EDIDEA61117DISC | 84.027A | $1,461,238 |
| 2018 | 3313600000 | | 644400 | 70803000 | 25000 | EDIDEA61117DISC | 84.027A | $25,000 |
| 2018 | 3311101000 | ED452 | 873800 | 70803000 | 25000 | NA | NA | $3,513,762 |
| 2019 | 3313600000 | TBD | 644400 | 70899000 | 25000 | IDEA611DISC | 84.027A | $1,925,000 |
| 2019 | 3313600000 | TBD | 644400 | 70803000 | 25000 | IDEA611DISC | 84.027A | $25,000 |
| 2019 | 3311101000 | ED452 | 873800 | 70803000 | 25000 | NA | NA | $7,050,000 |
| 2020 | 3313600000 | TBD | 644400 | 70899000 | 25000 | IDEA611DISC | 84.027A | $1,925,000 |
| 2020 | 3313600000 | TBD | 644400 | 70803000 | 25000 | IDEA611DISC | 84.027A | $25,000 |
| 2020 | 3311101000 | ED452 | 873800 | 70803000 | 25000 | NA | NA | $7,050,000 |
| 2021 | 3313600000 | TBD | 644400 | 70899000 | 25000 | IDEA611DISC | 84.027A | $950,000 |
| 2021 | 3313600000 | TBD | 644400 | 70803000 | 25000 | IDEA611DISC | 84.027A | $25,000 |
| 2021 | 3311101000 | ED452 | 873800 | 70803000 | 25000 | NA | NA | $3,525,000 |
| | | | | | | | **TOTAL** | **$37,500,000** |

**AMENDMENT 1**
**OF CONTRACT 47402**

This Amendment is made and entered by and between the State of Tennessee, Department of Education, hereinafter referred to as the "State" and Educational Testing Service, hereinafter referred to as the "Contractor." For good and valuable consideration, the sufficiency of which is hereby acknowledged, it is mutually understood and agreed by and between said, undersigned contracting parties that the subject contract is hereby amended as follows:

1. Contract preamble is deleted in its entirety and replaced with the following:

This Contract, by and between the State of Tennessee, Department of Education ("State") and Educational Testing Service ("Contractor"), is for the provision of Item and test form development of the State summative assessments for English language arts, math, science, and social Studies, as further defined in the "SCOPE." State and Contractor may be referred to individually as a "Party" or collectively as the "Parties" to this Contract.

2. Contract section A.3.t is deleted in its entirety and replaced with the following:

t. Content Areas – English language arts (ELA), math, science, and social studies.

3. Contract section A.4.a.(3) is deleted in its entirety and replaced with the following:

(3) Content/Bias and Content Accessibility Passage/Stimulus Reviews – As detailed in section A.8.e are conducted on an annual basis with participation of the State on a schedule to be determined by the Contractor in collaboration with the State.

4. Contract section A.4.a.(4) is deleted in its entirety and replaced with the following:

(4) Content/Bias and Content Accessibility Item Reviews – As detailed in section A.8.e are conducted on an annual basis with participation of the State on a schedule to be determined by the Contractor in collaboration with the State.

5. Contract section A.5.a.(1) is deleted in its entirety and replaced with the following:

(1) Achievement Assessment required for grades 3-8, using Tennessee Academic Standards in ELA, math, science, and social studies.

6. Contract section A.5.a.(2) is deleted in its entirety and replaced with the following:

(2) End of course (EOC) assessments required for specified secondary content areas. Secondary content areas include Biology, Chemistry, U.S. History, English I & II, Geometry, Algebra I & II, Integrated I, II, and III. Additional content areas may be added at the discretion of the State.

7. Contract section A.5.a.(3) is deleted in its entirety and replaced with the following:

(3) Alternative Assessment (TCAP/Alt) to be given to students in grades 3-11. The TCAP/Alt shall be an alternate assessment based on alternate achievement standards for students with significant cognitive disabilities in the areas of science for grades 3-8 and 10, and social studies in grades 3-8 and 11. The TCAP/Alt shall be developed in collaboration with the State using the principles of ECD. The goal of the alternative assessment is to ensure that students with significant cognitive disabilities achieve increasingly higher academic outcomes and leave high school ready for post-secondary options.

8. Contract section A.5.a.(4) is deleted in its entirety and replaced with the following:

(4) The Contractor shall work in collaboration with the State to ensure all assessments adhere to current and future standards for ELA, math, science, and social studies.

9. Contract section A.6.b.(3) is deleted in its entirety and all subsequent sections are renumbered accordingly.

10. Contract section A.8.e.(2)vii.1 is deleted in its entirety and replaced with the following:

1. Reading passages and items developed for ELA, math, social studies, and science will adhere to specifications as outlined in the Tennessee Academic Standards located at the web address in A.3.nnn.

11. The following is added as Contract section A.8.e.(2)vii.4)6.

6. The Contractor shall work with Questar Assessment, Inc. to ensure all copyright licenses held by Questar Assessment, Inc. used in the execution of this Contract are transferred to the Contractor by November 30, 2018. The Contractor shall assume these copyright licenses and maintain them for twelve (12) months following the end date of this Contract.

12. Contract section A.8.e.(3)i is deleted in its entirety and replaced with the following:

i. The Contractor shall write new items each year. New items shall be field tested to replenish the item bank and maintain fresh items for future test administrations for all grade level and/or content areas for each assessment. T.C.A. § 49-1-610 requires 30% fresh and non-redundant items for operational forms of each assessment. The State reserves the right to include previously developed and/or implemented items in the item bank. Items which have been used may be reused after three (3) test years for secondary content areas and four (4) test years for 3-8 content areas with State approval.

13. Contract section A.8.e.(3)iv is deleted in its entirety and replaced with the following:

iv. Field test items shall not be included in the 30% fresh items and may be scattered throughout each version of the assessments (random placement not required) and/or placed at the end of a subtest for each grade level/content area

14. Contract section A.8.e.(3)iv.3) is deleted in its entirety and all subsequent sections are renumbered accordingly.

15. Contract section A.8.e.(3)xiv is deleted in its entirety and replaced with the following:

xiv. Content and bias/sensitivity/accessibility review shall be provided for passages/stimulus materials for all assessments as necessary. Reviews for item content and bias shall be provided for all content areas for all assessments. Representatives from the State of Tennessee shall have the opportunity to participate in all reviews.

16. Contract section A.8.e.(3)xvi is deleted in its entirety and replaced with the following:

xvi. During the bias/sensitivity/accessibility review, items, passages and graphics/illustrations shall be reviewed for bias, for sensitivity, and for accessibility/universal design. The Contractor shall present an adequate number of passages to provide enough items and passages to maintain the item bank for future form development. At the end of these meetings, some items and/or passages may need more work or additional items/passages may still need to be written and/or acquired. Illustrations may need revision or replacement. This work is undertaken by the Contractor under timelines developed in the Annual Work Plan.

17. Contract section A.8.e.(3)xvii.1) is deleted in its entirety and replaced with the following:

1) The Contractor shall work with the State's administration vendor to create a process to review, critique, and revise items from proposed items or test forms. Items will be examined for ease of translation into Braille and recommendations will be given for Braille and audio tape transcription.

Items shall be supplied in embeddable field test (EFT) Form format as defined in section A.8.e.(4).viii.1). A minimum of two forms shall be provided for item selection. A minimum of 15 ink print versions will be made available.

18. Contract section A.8.e.(3)xx is deleted in its entirety and replaced with the following:

xx. The Contractor shall create items to develop practice tests for each grade and content area. Items used for the practice tests shall go through the full item review process including field testing. Practice tests shall mirror the operational tests in style, item quantity, and layout. Practice tests shall contain items from all reporting categories. Practice tests should be reviewed and minor revisions made yearly. Practice tests shall be updated any time there is a new adoption of standards by the Tennessee State Board of Education in any given content area. Provision of the practice tests shall disclose sample test format and content to the public. Items used in the practice tests shall not be used in operational test forms. Practice tests reflecting the design of the 2017-18 operational assessment in math, ELA, and social studies shall be available for all subjects and grades as defined in A.5. Science practice tests shall be created for the 2019-20 school year based on science standards adopted by the Tennessee State Board of Education in October 2016. The provision of practice tests in .pdf, print and online shall be the responsibility of the State's administration vendor.

19. Contract section A.8.e.(4)i is deleted in its entirety and replaced with the following:

i. The Contractor shall prepare formatted test forms for each grade level and content area for each assessment. Separate forms may be provided for online and paper testing. Forms shall include linking items and field test items. Form layout and page design shall be completed in collaboration with the State and the State's administration vendor and should follow the approved TCAP Style Guide as provided to the vendor by the State. At least one version of each form shall be modified in large print for visually impaired students.

20. Contract section A.8.e.(4)i.4) is deleted in its entirety and all subsequent sections are renumbered accordingly.

21. Contract section A.8.e.(4)i.5) is deleted in its entirety and replaced with the following:

4) Braille versions shall consist of enough items common to the regular assessment necessary for equating purposes. Braille versions shall not include field test items.

22. Contract section A.8.e.(4)viii is deleted in its entirety and replaced with the following:

viii. The Contractor is responsible for production stages of all materials and products developed for each assessment up to print proofs. The Contractor shall provide print ready proofs to the State's administration vendor for printing and packaging. The State shall review and approve all products provided or developed through this Contract. All items for review shall be delivered to the State via the Contractor's secure FTP site. Hard copies, including but not limited to: Large Print, Braille, Printer's proof and Printed Samples shall be delivered via overnight carrier. Receipt of hard copies by the State shall initiate the review window. All test items and test forms shall be reviewed by State personnel. Items and item forms for each assessment will also be reviewed by the appropriate State personnel for the assessment, e.g. Special Education, Curriculum, and Federal Programs (EL). Timelines for these reviews and each stage of production shall be included in the Annual Work Plan for each assessment. A minimum of ten State working days shall be allotted for State staff to review materials at each stage of production. The State reserves the right to make changes in materials at any stage of the project prior to final printing. The Contractor shall create a tracking log using Microsoft Excel or other approved software to provide clear lines of communication between the different State departments and Contractor staff. The log shall include the item summary as defined in section A.8.e.(4)viii.1. The tracking log shall be maintained on a unique and secure FTP site established specifically for item review and accessible by Contractor staff as well as multiple State departments. Production stages at which the State will be involved for all printed products are defined below.

1) Core Form Review: The Contractor shall provide items for review by content specialists via secure web portal or electronically in .pdf. Core form review provides each item individually and includes the item stem, all responses, all art/graphics, the correct response, alignment with Tennessee Academic Standards to include the standard, cluster and reporting category, and all item statistics to include p-value for items that have been field tested. The test form planner shall be supplied to the State in an Excel spreadsheet and shall include but not be limited to:

1. Item reference number,
2. Item type (SR, CR, TEI, etc)
3. Reporting category,
4. Depth of knowledge/taxonomy info
5. Correct response/key or proposed scoring rubric (including point value),
6. Target grade,
7. Content area,
8. Classical Test Theory (CTT) item statistics (p-value and item discrimination/point bi-serial) (for items that have been field tested),
9. Item Response Theory (IRT) parameters (a, b & c)
10. Differential Item Functioning (DIF) (A, B, or C)
11. Omit rate
12. Origination of item (author, contractor, date written),
13. Item placement in previous forms, and
14. Copyright information.

During this review stage, the State shall have the right to request revisions to items that have not been field tested and/or replacement of items, such changes shall be made unless obstructed by copyright. The State shall be notified of any changes that would result in invalidation of item statistics; the State reserves the right to make such changes and send an item back for field testing.

2) EFT Form Review: The Contractor shall provide items for review by content specialists via secure web portal or electronically in .pdf. EFT form review provides each item individually and includes the item stem, all responses, all art/graphics, the correct response, alignment with Tennessee Academic Standards to include the standard, cluster and reporting category. The test form planner shall be supplied to the State in an Excel spreadsheet and shall include but not be limited to:

   1. Item reference number,
   2. Item type (SR, CR, TEI, etc)
   3. Reporting category,
   4. Depth of knowledge/taxonomy info
   5. Correct response/key or proposed scoring rubric (including point value),
   6. Content area,
   7. Target grade,
   8. CTT item statistics (p-value and item discrimination/point bi-serial) for items that have been field tested,
   9. IRT parameters (*a, b & c*)
   10. DIF (A, B, or C)
   11. Omit rate
   12. Origination of item (author, contractor, date written),
   13. Item placement in previous forms, and
   14. Copyright information.

   During this review stage, the State shall have the right to request revisions to items that have not been field tested and/or replacement of items, such changes shall be made unless obstructed by copyright. The State shall be notified of any changes that would result in invalidation of item statistics; the State reserves the right to make such changes and send an item back for field testing.

3) Final Form Review: Provided electronically in .pdf, final form review provides the test form in draft layout. Final Form Review will be provided by the Contractor for review by the State and the State's administration vendor. The State's administration vendor will ensure that test forms developed for online testing shall be reviewed through a demonstration site for the online test

platform. The State shall be given an opportunity for Final Form Review to ensure items are included as approved at EFT Form Review and make corrections to item layout, placement and typographical errors. Final Form Review must include art/illustrations/graphics. The State reserves the right to make changes to field test items, art/illustrations/graphics and test form layout at this stage. Each version of the form shall be submitted for review of field test items and their layout.

4) Publication Review: Provided by the State's administration vendor electronically in .pdf for paper-based assessments, and electronically via User Acceptance Testing (UAT) for computer-based assessments. For computer-based testing this stage provides a final review of test forms as uploaded into the testing platform prior to operational testing. Large Print versions of paper-based tests shall be provided by the State's administration vendor in hard copy for review of scaling. Modified versions shall not be submitted until the regular assessment has been reviewed and approved.

5) Printer Proof Review: Provided in hard copy and/ electronically in .pdf, the digital pages provide products in final print format for paper-based testing. The State's administration vendor and printer will make final corrections and submit additional print proofs to the State as required.

6) Printed Sample: Provided in hard copy by the State's administration vendor, printed samples of paper-based tests will be delivered to the State after the product has been printed but before the products are shipped to LEAs. Printed products will be shipped after receiving final State approval in writing via email or electronic transmission.

7) Braille review consists of the following stages:
   1. Ink Print Review – ink print items presented at the sight review committee as defined in section A.8.e.(3).xvii.1)
   2. Braille Sight Review – Braille copies presented at the sight review committee as defined in section A.8.e.(3).xvii.2)
   3. Braille Digital Review – Braille copies provided to the State for review to ensure that all changes are made as requested. The State's administration vendor and the State's administration vendor's subcontractor will make any corrections as required.
   4. Braille sample

23. Contract section A.10.h.(2)ii is deleted in its entirety and replaced with the following:

ii. One test booklet may contain multiple content areas in grades 3-8, one test booklet per content area shall be developed for secondary assessments.

24. Contract section A.10.h.(2)iii is deleted in its entirety and replaced with the following:

iii. For paper based tests, each grade level and/or content area shall either be a test booklet or consumable with a separate scannable answer document.

25. Contract section A.12.b.(10) is deleted in its entirety and replaced with the following:

(10) Trained customer service as defined in section A.7.f. of the contract for the administration scoring and reporting of the ELA, math, science, and social studies assessments.

26. Contract section C.1 is deleted in its entirety and replaced with the following:

C.1. Maximum Liability. In no event shall the maximum liability of the State under this Contract exceed thirty-seven million five hundred thousand dollars and zero cents ($37,500,000.00) ("Maximum Liability"). This Contract does not grant the Contractor any exclusive rights. The State does not guarantee that it will buy any minimum quantity of goods or services under this Contract. Subject to the terms and conditions of this Contract, the Contractor will only be paid for goods or services provided under this Contract after a purchase order is issued to Contractor by the State or as otherwise specified by this Contract.

27. Contract section D.2 is deleted in its entirety and replaced with the following:

D.2. Communications and Contacts. All instructions, notices, consents, demands, or other communications required or contemplated by this Contract shall be in writing and shall be made by certified, first class mail, return receipt requested and postage prepaid, by overnight courier service with an asset tracking system, or by email or facsimile transmission with recipient confirmation. All communications, regardless of method of transmission, shall be addressed to the respective Party at the appropriate mailing address, facsimile number, or email address as stated below or any other address provided in writing by a Party.

The State:

Heather M. Peltier, Chief Assessment Officer
Tennessee Department of Education
710 James Robertson Parkway
Nashville, TN 37209
heather.peltier@tn.gov
Telephone # (615) 626-0391
FAX # (615) 532-8226

The Contractor:

John H. Oswald, Vice President & Chief Operating Officer, K-12 Student Assessment Programs Educational Testing Service
10999 Interstate Highway 10 West, Suite
400 San Antonio, TX 78230
joswald@ets.org
Telephone # (210) 558-5633
FAX # (210) 558-5636

Barbara Burstein, Contract Manager
Educational Testing Service
660 Rosedale Road, MS 03-J
Princeton, NJ 08541
bburstein@ets.org
Telephone # (609) 683-2714
FAX # (609) 683-2766

All instructions, notices, consents, demands, or other communications shall be considered effective upon receipt or recipient confirmation as may be required.

28. Contract section E.17 is deleted in its entirety and replaced with the following:

E.17. Family Educational Rights and Privacy Act & Tennessee Data Accessibility, Transparency and Accountability Act. The Contractor shall comply with the Family Educational Rights and Privacy Act of 1974 (20 U.S.C. 1232(g)) and its accompanying regulations (34 C.F.R. § 99) ("FERPA"). The Contractor warrants that the Contractor is familiar with FERPA requirements and that it will comply with these requirements in the performance of its duties under this Contract. The Contractor agrees to cooperate with the State, as required by FERPA, in the performance of its duties under this Contract. The Contractor agrees to maintain the confidentiality of all education records and student information. The Contractor shall only use such records and information for the exclusive purpose of performing its duties under this Contract.

The Contractor shall also comply with Tenn. Code Ann. § 49-1-701, *et seq.*, known as the "Data Accessibility, Transparency and Accountability Act," and any accompanying administrative rules or regulations (collectively "DATAA"). The Contractor agrees to maintain

the confidentiality of all records containing student and de-identified data, as this term is defined in DATAA, in any databases, to which the State has granted the Contractor access, and to only use such data for the exclusive purpose of performing its duties under this Contract.

Any instances of unauthorized disclosure of data containing personally identifiable information in violation of FERPA or DATAA that come to the attention of the Contractor shall be reported to the State within twenty-four (24) hours. Contractor shall indemnify and hold harmless State, its employees, agents and representatives, from and against any and all claims, liabilities, losses, or causes of action that may arise, accrue, or result to any person or entity that is injured or damaged as a result of Contractor's failure to comply with this section.

29. Contract Attachment C is deleted in its entirety.

Required Approvals. The State is not bound by this Amendment until it is signed by the contract parties and approved by appropriate officials in accordance with applicable Tennessee laws and regulations (depending upon the specifics of this contract, said officials may include, but are not limited to, the Commissioner of Finance and Administration, the Commissioner of Human Resources, and the Comptroller of the Treasury).

Amendment Effective Date. The revisions set forth herein shall be effective July 1, 2018. All other terms and conditions of this Contract not expressly amended herein shall remain in full force and effect.

**IN WITNESS WHEREOF,**

**EDUCATIONAL TESTING SERVICE:**

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**SIGNATURE** **DATE**

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**PRINTED NAME AND TITLE OF SIGNATORY (above)**

**TENNESSEE DEPARTMENT OF EDUCATION:**

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**CANDICE MCQUEEN, COMMISSIONER** **DATE**

# Amendment Request

This request form is not required for amendments to grant contracts. Route a completed request, as one file in PDF format, via e-mail attachment sent to: Agsprs.Agsprs@tn.gov

| APPROVED | |
|---|---|
| CHIEF PROCUREMENT OFFICER | DATE |

| | |
|---|---|
| **Agency request tracking #** | **33111-00116** |
| **1. Procuring Agency** | **Tennessee Department of Education** |
| **2. Contractor** | **Educational Testing Service (ETS)** |
| **3. Edison contract ID #** | **47402** |
| **4. Proposed amendment #** | **1** |
| **5. Contract's Original Effective Date** | **September 14, 2015** |
| **6. Current end date** | **September 13, 2020** |
| **7. Proposed end date** | **September 13, 2020** |
| **8. Current Maximum Liability or Estimated Liability** | **$25,000,000.00** |
| **9. Proposed Maximum Liability or Estimated Liability** | **$37,500,000.00** |
| **10. Strategic Technology Solutions Pre-Approval Endorsement Request** *– information technology service (N/A to THDA)* | ☒ **Not Applicable** ☐ **Attached** |
| **11. eHealth Pre-Approval Endorsement Request** *– health-related professional, pharmaceutical, laboratory, or imaging* | ☒ **Not Applicable** ☐ **Attached** |
| **12. Human Resources Pre-Approval Endorsement Request** *– state employee training service* | ☒ **Not Applicable** ☐ **Attached** |

**13. Explain why the proposed amendment is needed**

**The components of an effective assessment program are: test design, delivery, and scoring and reporting. Currently, ETS provides test design for science and social studies, while Questar Assessment, Inc. (QAI) provides test design for English Language Arts (ELA) and math in addition to all delivery and reporting.**

**This amendment is needed to add test design for ELA and math assessments for grades 3-11 to the ETS contract, increase the maximum liability to account for these additions, and complete clean-up revisions.**

**Aligning all of the test design work under a single contract will improve the efficiency of the state assessment program and reduce the possibility for error by streamlining project management of this component. Additionally, moving this component of work to the ETS**

| Agency request tracking # | 33111-00116 |
|---|---|

**contract will allow Questar to focus project management on the administration, scoring, and reporting of assessments.**

**14. If the amendment involves a change in Scope, describe efforts to identify reasonable, competitive, procurement alternatives to amending the contract.**

**ETS is currently doing test design work for the State, and the changes just add subject areas to what they are already doing. They are able to flexibly and effectively add these subjects and meet fall administration timelines without any delay because they have existing structures and processes in place to support test design; these structures and processes can be utilized for math and ELA assessments without requiring new ones to be developed. This includes effective coordination with both the department and the vendor responsible for administration, scoring, and reporting.**

**Signature of Agency head or authorized designee, title of signatory, and date** (the authorized designee may sign his or her own name if indicated on the Signature Certification and Authorization document)

Candice McQueen_jc

Digitally signed by Candice McQueen_jc
DN: cn=Candice McQueen_jc, o, ou=TN Department of Education, email=joanna.collins@tn.gov, c=US
Date: 2018.05.16 10:21:58 -05'00'