

**NEW YORK STATE EDUCATION DEPARTMENT  
89 WASHINGTON AVENUE  
ALBANY, NY 12234  
MINI-BID # PBITS LOT 2 # 23-004  
SAMS PAYMENTS IMPLEMENTATION**

<b>CONTRACT CATEGORY: PROJECT BASED INFORMATION TECHNOLOGY CONSULTING SERVICES</b>	
<b>GROUP: 73600 AWARD NUMBER: 22772</b>	
<b>FIXED-PRICE DELIVERABLE BASED IT CONSULTING SERVICES ONLY</b>	
<b>Lot #2</b>	
<b>DESIGNATED CONTACTS</b>	
Primary Contact: <b>Jessica Hartjen</b>	Secondary Contact: <b>Gabrielle Fisher</b>
E-mail address: <b>PBITS@nysed.gov</b>	E-mail address: <b>PBITS@nysed.gov</b>
<b>Authorized User shall indicate if Procurement Lobbying Law/Restricted Period is in effect:</b> <input checked="" type="checkbox"/> <b>Yes</b> <input type="checkbox"/> <b>No</b> By signing, Contractor affirms that it understands and agrees to comply with the Authorized User's policies and procedures relative to permissible contacts. Information may be accessed at: <a href="#">NYSED's Procurement Lobbying Law Policy Guidelines</a>	

**Questions Submission**

Questions about this Mini Bid MUST be sent electronically to [PBITS@NYSED.GOV](mailto:PBITS@NYSED.GOV) no later than 10/2/2023. A Questions and Answers Summary will be posted to <https://www.nysed.gov/funding-opportunities-procurements/procurements> on or about 10/13/2023.

**Proposal Submission**

Please complete, attach and deliver the documentation referenced in Section 4.0 Contractor Response to [cau@nysed.gov](mailto:cau@nysed.gov). **Bids must be received by: (11/3/2023, 5:00 PM).**

Please DO NOT send questions to [CAU@NYSED.GOV](mailto:CAU@NYSED.GOV).

**CONTRACT TERM, EXTENSIONS AND NO COST CHANGE REQUESTS/ENHANCEMENTS**

**Tentative Start Date** *January 2024 through August 2024*

Change Requests to fixed-price Deliverables that do not include a price increase or materially change the scope of the Deliverable may be authorized using the No Cost Change Request Template. Written approval is required from both the Contractor and the Authorized User regarding the no cost change order.

Enhancements that include additional functionality and additional Deliverables unknown at the time of Mini-Bid release may be authorized using the Enhancement Request Template. The total project value including the Enhancement budget cannot exceed the Lot maximum value. Written approval is required from both the Contractor and the Authorized User for the Enhancement request.

**Authorized User's Maximum Enhancement Budget Allowable Percentage 10%**

This figure is applied after the negotiations with Tentative Awardee and should not be included with the Contractor's submission in response to this document.

**MWBE GOALS, UTILIZATION AND STAFFING PLANS**

**Minority and Women-Owned Business Enterprise (M/WBE) Participation Goals Pursuant to Article 15-A of the New York State Executive Law**

For purposes of this procurement, NYS Education Department hereby establishes an overall goal of 30% of the total contract amount for M/WBE participation, in any percentage combination for Minority-Owned Business Enterprises ("MBE") participation and for Women-Owned Business Enterprises ("WBE") participation based on the current availability of qualified MBEs and WBEs. All bidders must document good faith efforts to provide meaningful participation by MWBEs as subcontractors or suppliers in the performance of this Contract. Minority and Women-

Owned Business Enterprise (M/WBE) participation includes any and all services, materials or supplies purchased from New York State certified minority and women-owned firms. Utilization of certified Minority and Women-Owned firms will be applied toward the goals. Bidders can achieve compliance with NYSED's Minority and Women-Owned Business Enterprise goals as described below.

#### **ACHIEVE FULL COMPLIANCE WITH PARTICIPATION GOALS (PREFERRED)**

Bidders should submit subcontracting/supplier forms that meet or exceed NYSED's participation goals for this procurement. All subcontracting/supplier forms must be submitted with the bid proposal. In addition, bidders must complete and submit M/WBE 100: Utilization Plan, M/WBE 102: Notice of Intent to Participate and EEO 100: Staffing Plan. Instructions and copies of these forms are located in the Submission Documents. All firms utilized must be certified with the NYS Division of Minority and Women Business Development before beginning any work on this contract. For additional information and a listing of currently certified M/WBEs, see the [NYS Directory of Certified Minority and Women-Owned Business Enterprises](#).

The contact person on M/WBE matters is available throughout the application and procurement process to assist bidders in meeting the M/WBE goals. NYSED reserves the right to approve the addition or deletion of subcontractors or suppliers to enable bidders to comply with the M/WBE goals, provided such addition or deletion does not impact the technical proposal and/or increase the total cost of the bid proposal.

#### **DOCUMENTATION OF GOOD FAITH EFFORTS**

Bidders must undertake a good faith effort to solicit NYS Certified M/WBE firms as subcontractors and/or suppliers in fulfillment of this procurement. Means of solicitation may include but are not limited to: advertisements in minority centered publications; solicitation of vendors found in the [NYS Directory of Certified Minority and Women-Owned Business Enterprises](#); and the solicitation of minority and women-oriented trade and labor organizations. Bidders will be required to certify and attest to their good faith efforts by completing NYSED's Certification of Good Faith Efforts (Form M/WBE 105). See the M/WBE Submission Documents for detailed examples of and required forms to document good faith efforts.

NYSED reserves the right to reject any bid for failure to document "good faith efforts" to comply with the stated M/WBE goals.

IN THE EVENT BIDDERS CANNOT COMPLY WITH NYSED DESIGNATED PARTICIPATION GOALS, SAID BIDDERS MUST DOCUMENT THEIR "GOOD FAITH EFFORTS" TO COMPLY AND SUBMIT ONE OF THE FOLLOWING REQUESTS:

#### **REQUEST A PARTIAL WAIVER OF PARTICIPATION GOALS**

In order to request a partial waiver of the participation goals for this procurement, Bidders must provide documentation of their good faith efforts to obtain the use of certified M/WBE enterprises along with their bid proposal forms. The subcontracting forms must include the participation percentage(s) for which they seek approval. Bidders will be required to certify and attest to their good faith efforts. Bidders should submit a request for a partial waiver (Form M/WBE 101) and document their Good Faith Efforts (Form M/WBE 105) at the same time as the bid is submitted. Bidders must also complete and submit M/WBE 100: Utilization Plan, M/WBE 102: Notice of Intent to Participate and EEO 100: Staffing Plan. The M/WBE Coordinator is available throughout the procurement process to assist in all areas of M/WBE compliance.

#### **REQUEST A COMPLETE WAIVER OF PARTICIPATION GOALS**

In order to request a complete waiver of the participation goals for this procurement, Bidders must provide documentation of their Good Faith Efforts to obtain the use of certified M/WBE enterprises along with their bid proposal forms. Bidders will be required to certify and attest to their good faith efforts. Bidders should submit a request for a complete waiver on Form M/WBE 101 and document their Good Faith Efforts (Form M/WBE 105) at the same time as they submit their bid. The M/WBE Coordinator is available throughout the procurement process to assist in all areas of M/WBE compliance.

All payments to Minority and Women-Owned Business Enterprise subcontractor(s) must be reported to NYSED M/WBE Program Unit using M/WBE 103 Quarterly M/WBE Compliance Report. This report must be submitted on a quarterly basis and can be found at NYSED's [M/WBE Forms and Compliance Forms webpage](#).

#### **Service-Disabled Veteran-Owned Business (SDVOB) Participation Goals Pursuant to Article 3 of the Veterans' Services Law**

Article 3 of the Veterans' Services Law allows eligible Veteran business owners to get certified as a New York State Service-Disabled Veteran-Owned Business (SDVOB). The goal of Article 3 was to encourage and support eligible SDVOBs to play a greater role in the State's economy by increasing their participation in New York State's contracting opportunities. To this end, NYSED strongly encourages bidders to make maximum possible use of SDVOBs as

subcontractors and/or suppliers under this contract, consistent with the requirements of State Finance Law and State procurement guidelines, as well as NYSED policies and procedures. Bidders should consider fulfilling the requirements of this contract through the participation of SDVOBs at a rate of 6%. For additional information about this program, including a list of SDVOBs, please visit the [Office of General Services, Division of Service-Disabled Veterans' Business Development website](#).

**M/WBE AND EQUAL EMPLOYMENT OPPORTUNITIES REQUIREMENTS CONTRACTOR REQUIREMENT AND OBLIGATION UNDER NEW YORK STATE EXECUTIVE LAW, ARTICLE 15-A (PARTICIPATION BY MINORITY GROUP MEMBERS AND WOMEN WITH RESPECT TO STATE CONTRACTS)**

In an effort to eradicate barriers that have historically impeded access by minority group members and women in State contracting activities, Article 15-A, of the New York State Executive Law §310-318, (Participation By Minority Group Members and Women With Respect To State Contracts) was enacted to promote equality of economic opportunities for minority group members and women.

The New York State Education Department ("NYSED") has enacted its policies Equal Opportunity, Non-Discrimination and Affirmative Action and on Minority and Women-Owned Business Enterprise Procurements, consistent with the requirements as set forth under the provisions of Article 15-A (the "Article") incorporated by reference, requiring Contracting Agencies to implement procedures to ensure that the "Contractor" (as defined under Article 15-A, §310.3 shall mean an individual, a business enterprise, including a sole proprietorship, a partnership, a corporation, a not-for-profit corporation, or any other party to a state contract, or a bidder in conjunction with the award of a state contract or a proposed party to a state contract, complies with requirements to ensure Equal Employment Opportunities for Minority Group Members and Women, in addition to providing Opportunities for Minority and Women-Owned Business Enterprises on all covered state contracts.

In keeping with the intent of the Law, it is the expectation of the Commissioner and the responsibility of all contractors participating in and/or selected for procurement opportunities with NYSED, to fulfill their obligations to comply with the requirements of the Article and its implementing regulations.

In accordance with these requirements, the contractor hereby agrees to make every good faith effort to promote and assist the participation of certified Minority and Women-Owned Business Enterprises ("M/WBE") as subcontractors and suppliers on this project for the provision of services and materials in an amount at least equal to the M/WBE goal (Included in the procurement document) as a percentage of the total dollar value of this project. In addition, the contractor shall ensure the following:

1. All state contracts and all documents soliciting bids or proposals for state contracts contain or make reference to the following provisions:

a. The contractor will not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability, marital status, gender, religion, veteran status, sexual orientation, genetic disposition or carrier status and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities without discrimination.

For purposes of the Article, affirmative action shall mean recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff or termination and rate of pay or other forms of compensation.

b. The contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability, marital status, gender, religion, veteran status, sexual orientation, genetic disposition or carrier status and that such union or representative will affirmatively cooperate in the implementation of the contractor's obligation herein.

c. The contractor shall state in all solicitations or advertisements for employees, that, in the performance of the State contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability, marital status, gender, religion, veteran status, sexual orientation, genetic disposition or carrier status.

2. The contractor will include the provisions of subdivision one of this section in every subcontract as defined under §310.14, except as provided under §312.6 of the Article, in such a manner that the provisions will be binding upon each subcontractor as to work in connection with the State contract.

3. Contractors or subcontractors shall comply with the requirements of any federal law concerning equal employment opportunity, which effectuates the purpose of this section.
4. Contractors and subcontractors shall undertake programs of affirmative action and equal employment opportunity as required by this section<sup>1</sup>. In accordance with the provision of the Article, the bidder will submit, with their proposal, Staffing Plan (EEO 100).
5. Certified businesses (as defined under Article 15-A, §310.1 means a business verified as a minority or women-owned business enterprise pursuant to §314 of the Article) shall be given the opportunity for meaningful participation in the performance of this contract, to actively and affirmatively promote and assist their participation in the performance of this contract, so as to facilitate the award of a fair share of this contract to such businesses.
6. Contractor shall make a good faith effort to solicit active participation by enterprises identified in the [Empire State Development \("ESD"\) directory of certified businesses](#). The contractor must document its good faith efforts as set forth in 5 NYCRR 142.8. This document, Contractors Good Faith Efforts, can be found in the M/WBE Submission Documents.
7. Contractor shall agree, as a condition of entering into said contract, to be bound by the provisions of Article 15-A, §316.
8. Contractor shall include the provisions set forth in paragraphs (6) and (7) above, in every subcontract in a manner that the provisions will be binding upon each subcontractor as to work in connection with this contract.
9. Contractor shall comply with the requirements of any federal law concerning opportunities for M/WBEs that effectuates the purpose of this section.
10. Contractor shall submit all necessary M/WBE documents and/or forms as described above as part of their proposal in response to NYSED procurement.
11. The percentage goals established for this RFP are based on the overall availability of M/WBEs certified in the particular areas of expertise identified under this RFP. These goals should not be construed as rigid and inflexible quotas which must be met, but as targets reasonably attainable by means of applying every good faith effort to make all aspects of the entire Minority and Women-Owned Business Program work.
12. Contractor shall ensure that enterprises have been identified (M/WBE 102) within the Utilization Plan, and the contractor shall attempt, in good faith, to utilize such enterprise(s) at least to the extent indicated in the plan, as to what measures and procedures contractor intends to take to comply with the provisions of the Article.
13. Upon written notification from NYSED M/WBE Program Unit as to any deficiencies and required remedies thereof, the contractor shall, within the period of time specified, submit compliance reports documenting remedial actions taken and other information relating to the operation and implementation of the Utilization Plan.
14. Where it appears that a contractor cannot, after a good faith effort, comply with the M/WBE participation requirements, contractor may file a written application with NYSED M/WBE Program Unit requesting a partial or total waiver (M/WBE 101) of such requirements setting forth the reasons for such contractor's inability to meet any or all of the participation requirements, together with an explanation of the efforts undertaken by the contractor to obtain the required M/WBE participation.

#### **BEST VALUE AWARD METHODOLOGY**

An award will be made to the Contractor who offers the Best Value solution.

Evaluation Weights:

Technical: 70%

Financial/Cost: 30%

The total price quoted/negotiated will be a fixed-price for the term of the Authorized User Agreement. Prices will remain firm for the entire Project duration.

<sup>1</sup> Notice – Contractors are provided with notice herein, NYSED may require a contractor to submit proof of an equal opportunity program after the proposal opening and prior to the award of any contract. In accordance with regulations set forth under Article 15-A §312.5, contractors and/or subcontractors will be required to submit compliance reports relating to the contractor's and/or subcontractor's program in effect as of the date the contract is executed.

## MINI-BID PROPOSAL VALIDITY

All Contractor responses to Authorized User Mini-Bids must remain open and valid for at least 60 days from the Mini-Bid opening date, unless the time for awarding the Authorized User Agreement is extended by mutual consent of the Authorized User and the Contractor. A Contractor's Mini-Bid response shall continue to remain an effective offer, firm and irrevocable, subsequent to such 60 day period until either tentative award of the Authorized User Agreement by the Authorized User is made or withdrawal of the Contractor Submission in writing by the Contractor. Tentative award of the Authorized User Agreement shall consist of written notice to that effect by an Authorized User to a successful Contractor, who shall thereupon be obligated to execute a formal Authorized User Agreement.

## INTRODUCTION

This Mini-Bid is being distributed to the Contractors awarded under Lot **2** to acquire Project Based Information Technology (IT) Consulting Services for **NEW YORK STATE EDUCATION DEPARTMENT**, an Authorized User of OGS Centralized Contract Award 22772 on a fixed-price basis.

1. The purpose of this Mini-Bid is to obtain Proposals for **SAMS PAYMENTS IMPLEMENTATION** as detailed in this document and any attachments(s) that may be included.
2. Responses will only be accepted from Contractors listed under Award #22772, Lot # **2**
3. Responses which include pricing in excess of the maximum "Not-To-Exceed" price on the Contractor's price list must be found non-responsive by the Authorized User.
4. Responses which include titles/descriptions not listed in a Contractor's Appendix D must be found non-responsive by the Authorized User.

## AUTHORIZED USER PROCUREMENT RIGHTS

New York State reserves the following rights. These reserved rights are applicable to an Authorized User's Mini-Bid. The Authorized User may reserve additional rights in the Mini-Bid.

- A. Reject any or all Contractor Submissions received in response to the Mini-Bid.
- B. Withdraw the Mini-Bid at any time, in Authorized User's sole discretion.
- C. Make an award under the Mini-Bid in whole or in part.
- D. Disqualify any Contractor whose conduct and/or Contractor Submission fails to conform to the requirements of the Mini-Bid.
- E. Seek clarifications and revisions of Contractor Submission(s).
- F. Prior to the Submission opening, amend the Mini-Bid specifications to correct errors or oversights, or to supply additional information, as it becomes available.
- G. Prior to the Submission opening, direct Contractor to submit Contractor Submission modifications addressing subsequent Mini-Bid amendments.
- H. Eliminate any mandatory, non-material specifications that cannot be complied with by all of the prospective Contractors.
- I. Waive any requirements that are not material.
- J. The Authorized User may utilize any and all ideas submitted in the Mini-Bids received.
- K. Adopt all or any part of a Contractor's Submission in selecting the optimum solution.
- L. Negotiate with the Contractor(s) responding to this Mini-Bid within the Mini-Bid requirements to serve the best interests of the State. This includes requesting clarifications of any or all Contractors' Submissions.
- M. All Contractor Submissions and accompanying documentation shall become the property of the Authorized User and shall not be returned.
- N. Require clarification at any time during the Mini-Bid process and/or require correction of arithmetic or other apparent errors for the purpose of assuring a full and complete understanding of a Contractor's Submission and/or to determine a Contractor's compliance with the requirements of the Mini-Bid.
- O. The Authorized User reserves the right to exclude any price lists that do not fall within the scope of the Mini-Bid.
- P. Upon discovery of non-material completeness or conformance issues with a Contractor's Submission, contact the Contractor to attempt to cure the issue prior to completion of the evaluation of the Contractor's Submission.
- Q. OGS reserves the right to post information about Authorized User Contract usage of Centralized Contracts.

## KEY EVENTS AND DATES

Event	Date	Time
Mini-Bid Release	9/19/2023	5:00 PM
Pre-Bid Conference	N/A	N/A

Contractor Question Period End	10/2/2023	5:00 PM
Authorized User Answer Issuance	10/13/2023	5:00 PM
Intent to Bid Deadline	N/A	N/A
Mini-Bid Response Due Date	11/3/2023	5:00 PM
Please note: <b>NEW YORK STATE EDUCATION DEPARTMENT</b> will not accept any Mini-Bid responses received after <b>[11/3/2023 @ 5:00 PM]</b> .		

### PRE-BID CONFERENCE

Not Applicable

### QUESTION AND ANSWER PERIOD

Questions regarding the mini-bid must be submitted by email to [PBITS@nysed.gov](mailto:PBITS@nysed.gov) no later than September 27, 2023. Questions regarding this request should be identified as Program, Fiscal or M/WBE. A Questions and Answers Summary will be posted to <https://www.nysed.gov/funding-opportunities-procurements/procurements> on or about October 13, 2023.

### INTENT TO BID

Not Applicable

### DOWNSTREAM PROHIBITION

Not Applicable

### FORMAT AND DELIVERY OF PROPOSALS

Bidders are requested to submit their bids electronically to [cau@nysed.gov](mailto:cau@nysed.gov). Please see the information below for instructions on submitting an electronic bid. **Bids must be received by 5:00 pm Eastern Time on November 3, 2023.**

1. The Administrative Proposal, Technical Proposal, and MWBE Documents should be submitted in PDF format. The Financial Proposal should be submitted in Excel format. PDF files for the Technical Proposal should be editable and Optical Character Recognition (OCR) searchable. Please do not submit as a scanned PDF.
2. Submission documents requiring a signature must be signed using one of the methods listed below and may be submitted in as a scanned PDF.
3. The following forms of e-signatures are acceptable:
  - a. handwritten signatures on faxed or scanned documents
  - b. e-signatures that have been authenticated by a third-party digital software, such as DocuSign and Adobe Sign
  - c. stored copies of the images of signatures that are placed on a document by copying and pasting or otherwise inserting them into the documents
4. Unacceptable forms of e-signatures include:
  - a. a typed name, including a signature created by selecting a script or calligraphy font for the typed name of the person "signing"
5. To identify the signer and indicate that the signer understood and intended to agree to the terms of the signed document, the signer will sign beside or provide by email the following attestation: "I agree, and it is my intent, to sign this document by [describe the signature solution used] and by electronically submitting this document to [name of recipient individual or entity]. I understand that my signing and submitting this document is the legal equivalent of having placed my handwritten signature on the submitted document and this attestation. I understand and agree that by electronically signing and submitting this document I am affirming to the truth of the information contained therein."
6. In order to ensure the timely receipt of your bid, please use the subject line "BID SUBMISSION PBITS 23-004" - failure to appropriately label your bid or submitting a bid to any email address other than the one identified above may result in the bid not being received by the deadline and considered for award.

# SAMS PAYMENTS IMPLEMENTATION

## 1. PROJECT OVERVIEW

### 1.1 PROJECT BACKGROUND

The New York State Education Department (NYSED) State Aid Management System (SAMS) is the main application used by NYSED to determine and distribute the correct amount of state aid to public school districts and BOCES throughout the year and provide accurate and timely data for use in State Aid projections. Today, SAMS disburses \$30 billion in payments to approximately 700 districts and BOCES (Boards of Cooperative Educational Services) in NYS.

Beginning in 2003, SAMS was designed and developed to replace a decades-old mainframe system and a temporary data entry assistant system. Large scale SAMS development ceased in 2009 leaving the application straddled between the legacy mainframe and the SAMS Java application. Since then, there has been a tremendous amount of manual work ensuring data is properly sent between systems as well as COBOL resource attrition creating significant application maintenance risk. Furthermore, the Unisys mainframe contract which will soon be expiring. This is especially challenging for managing the Payments functionality as there is limited documentation to train retiring resource backfills.

To remedy this situation, NYSED seeks to partner with a Contractor to lead an OutSystems implementation migrating the entire payment functionality from the mainframe and legacy Oracle database to a cloud based low code development platform (LCDP). The Contractor selected for this will be responsible for the full technical delivery for this project. The NYSED Modernization Team will provide business requirements, technical specifications, and integration support necessary to produce the project deliverables.

This project is highly visible and highly consequential due to the devastating impact of late or incorrect payments to school districts and BOCES.

### 1.2 PROJECT PURPOSE / OBJECTIVES

NYSED expects the below end results upon execution:

1. The new Payments System will continue to execute payments seamlessly to all Districts and BOCES.
2. Implementation will streamline the Payment process and minimize manual work.
3. 95% of the paper processes needed for payment approvals (for example: emails with Word attachments and PDFs) will be replaced with automated workflows and online signatures. The remaining paper processes are dependent upon external stakeholders which will be manual uploads required for record keeping and will not be consumed by the new system.
4. The Payments System will enable an easier and more efficient ability to track all payments in progress, see all payment information, and generate forms, documents and reports related to payment disbursement.
5. A more maintainable Payment System with a lower total cost of ownership (TCO) will be built.

### 1.3 BUSINESS PROCESSES IMPACTED

The key business processes for payment disbursement will remain the same as they are currently. These are listed below:

1. Payments are scheduled and calculated.
2. Payment voucher Word documents register the calculated payments.
3. Generally Approved Accounting Principles (GAAP) certificates are generated and approved.
4. Payments are sent to Oracle Financials and the State Financial System (SFS) for check distribution.
5. Any issues with SFS check distribution are resolved. Upon resolution, any payments which require re-processing will proceed with step 4 above.

However, all these steps are completely manual:

1. The State Aid team sends the IT team (aka the application team supporting legacy SAMS) a Word document with the rules for making a specific payment.
2. IT runs calculation logic in the mainframe and exports this for State Aid.
3. State Aid compares the export with an offline Excel workbook which includes all payment types and payment calculations to be sure their Excel workbook matches the mainframe. If there are issues, the State Aid team will work with IT to see if the issue is with the mainframe calculations or the Excel workbook.
4. State Aid team sends IT a Word document with voucher information (aka voucher memo) such as cost center and financial attributes for the payments.
5. IT generates a GAAP certificate PDF which includes the list of all Districts who will be getting paid and the payment amount using the cost center and financial information included in the voucher memo. GAAP certificates often authorize millions of dollars.
6. IT emails the GAAP certificate as an attachment to the State Aid team for a signature.
7. State Aid person presumably responsible for signatures signs and emails the signed GAAP certificate back to IT.
8. IT generates a Payment File that includes all Districts to be paid, payment amount, and cost center information. The Payment File is uploaded to a SFTP server.
9. Oracle Financials, which is managed by NYSED, consumes the Payment File and sends the enclosed Payment information to SFS for check distribution (Improving this step is out of scope for this implementation.)
10. SFS sends a response back to Oracle Financials with success/fail messages for each payment generated (Improving this step is out of scope for Payments implementation.)
11. Oracle Financials sends the State Aid team an email with possibly hundreds of logs.
12. State Aid team scrolls down to find any failure messages. Upon identification of issue, State Aid proceeds with step 4 above by sending IT a Word document with voucher information in order to re-process failed payments.

This implementation will automate all the above except for 9 and 10 as these are systems separate from the State Aid team's portfolio of applications. We intend to automate the entire process from start to finish. This automation will decrease the risk of typos, manual attachments getting lost in emails, and incorrectly approving millions of dollars in payments.

#### **1.4 CUSTOMERS / END USERS IMPACTED**

The State Aid payments team will be the only end user group for the Payments implementation. This will improve their daily routine related to payment execution. This is a large change and we have been working with the State Aid team to prepare for this.

#### **1.5 EXISTING SYSTEM DESCRIPTION**

The current Payments system is a subsystem of the SAMS Financial System. The core system of record is hosted on a Unisys mainframe. Replicate data and user interfaces are hosted on a Java Enterprise Edition (JEE) application with an Oracle Relational Database Management System (RDBMS) datastore. Data replicates are also created on dBase data stores.

Much of the data processing and payment calculations are performed manually by the State Aid team and IT staff. Calculations are developed annually in COBOL and are manually verified by a complex Excel file.

ITS will hide the internals of the legacy system. All data that will be required by the legacy system and other external systems will be provided through a representational state transfer (REST) service or a JavaScript Object Notation (JSON) data file that conforms to a standardized format.

The legacy data model resembles a key-value data store. This model can be challenging to navigate for developers. ITS will provide detailed specifications on how to retrieve legacy data to mitigate this risk.



The Contractor is expected to develop the new Payment System based on the requirements provided by NYSED. Legacy requirements have already been evaluated by NYSED staff and have already been incorporated within the target requirements.

## 2. DETAILED PROJECT SCOPE

### Scope

- For more detailed information, please refer to section 2.1 for Project Requirements, and section 2.4 for Project Deliverables. At a high level, please see below:
  - o Requirements knowledge transfer between SAMS Modernization team and Contractor
  - o Implementation of all functional and non-functional requirements in accordance with the provided technical design
  - o QA testing
  - o UAT testing strategy and support
  - o Pre-Production preparation
  - o Production deployment support (NYSED will perform the production deployments.)
  - o Post-production monitoring

### Purpose of Project

- Please refer to section 1.1 Project Background to understand purpose of project.

### Project Period

- NYSED is striving to have a Contractor on board in January 2024, and for the project to go live in July 2024.

### Services to be Performed:

- Please refer to section 2.1 for Project Requirements.

### Specific Individuals to Perform Services

- Please see section 2.2 for Project consulting Personnel Requirements for specific duties for each member of the Contractor's team.
- The Project Manager will own all project management related work and deliverables.
- The Business Analyst will own all requirements elaboration related work.
- The Developers will own all aspects of development and technical work on the project.
- The QA testers will own all work related to testing on the QA environment, and support UAT testing.
- The Information Architect/UX designer will own designing the information architecture of the overall site as well as creating wireframes and clickable prototypes to be reviewed with business stakeholders, and for the developers to develop accordingly.

### Work Location

- The vast majority of the work may be performed at a remote work location within the Continental United States (CONUS). Key staff, such as the Project Manager and the Business Analyst, may be required to attend periodic meetings on-site in Albany, NY. All vendor staff must perform all work on NYSED issued laptops, which will be shipped to the vendor staff. All equipment must be returned to NYSED at the end of the project engagement.

### Non-compliance with Contract Terms

- Non-compliance with Contract terms will require corrective action. If corrective action does not resolve, NYSED will terminate contract.

## 2.1 PROJECT REQUIREMENTS

Project requirements are indicated below.

### Contractor requirements, licenses and responsibilities

Please refer to the below sections. It is expected that the Contractor will fulfill all requirements listed in the below. These encapsulate all responsibilities expected of the Contractor:

1. Personnel Requirements in section 2.2
2. Contractor Deliverables in section 2.4
3. Functional requirements found below
4. Non-functional requirements found below
5. Minimum bidder qualifications found below
6. Contractor will generate a burn report every week indicating variances between forecasted and actual hours. Variances of +/-10% will require mitigation plan. Four weeks of variances greater than 25% will result in free work until the variance is under 10%.

No specific licenses are needed for the PM, BA and QA testers as long as the team members meet the requirements of the role. OutSystems certification would be preferred for development staff but is not required.

### Project Stages:

1. General Project Management: This project will be implemented using a hybrid agile approach. The application will be developed and tested incrementally using agreed upon sprints. Sprint length to be determined prior to start of development. The Contractor should plan to provide sprint demos as incremental development is underway, as well as a plan for addressing scope changes should these occur while the implementation is underway. It is assumed that the Contractor will be fully responsible for the development of this implementation. NYSED will not be building this with existing developers.
2. Functional/Non-Functional Requirements: The Contractor will be able to leverage existing requirements. The expected deliverable for this implementation will be modified wireframes and user stories covering related business requirements and business rules. These artifacts will be used for development, functional testing and user acceptance testing. Additional detailed business requirements and business rules will need to be identified and addressed on top of the above high-level scope. It is assumed that the SI will comply with non-functional requirements including accessibility and cloud compliance/security.
3. UI/UX/Information Architecture: The Contractor should be prepared to bring a User Experience (UX) and Information Architect to design the user interface. This includes navigation, form, report, and dashboard design. These designs must conform to the NYSED application style guide. The UX and Information Architect will be able to update existing wireframes as needed. The Contractor will need to develop an OutSystems Template and Theme that conforms to NYSED's branding guidelines. All of this should be included in the Contractor's statement of work.
4. Accessibility: Any documents, web-based information and applications development, or programming delivered pursuant to the contract or procurement, will comply with New York State Education Department IT Policy NYSED-WEBACC-001, Web Accessibility Policy as such policy may be amended, modified or superseded, which requires that state agency web-based information, including documents, and applications are accessible to persons with disabilities. Documents, web-based information and applications must conform to NYSED-WEBACC-001 as determined by quality assurance testing. Such quality assurance testing will be conducted by NYSED employees and the Contractor. The results of such testing must be satisfactory to NYSED before web-based information and applications will be considered a qualified deliverable under the contract or procurement.
5. Solution Architecture and System Integration: NYSED has attached the architecture and design requirements titled Appendix 1: *SAMS Payment System Architecture Requirements*. This document lists the required external system integrations along with their communication protocols. NYSED will provide and support all external system integrations that are required for this project. Architecture requirements are listed below and are provided within Appendix 1:
  - a. Key Architecture Principles

- b. Target Business Process
  - c. Conceptual Data Architecture
  - d. Application Context Architecture
  - e. Service Model
  - f. Conceptual Deployment Architecture
  - g. OutSystems Module Architecture
6. Development: Development must follow the design specified in the *SAMS Payment System Architecture Requirements*. Once development is underway, NYSED will rely on the Contractor to produce a test-driven development approach to include unit testing, test driven development, peer reviews, and a formal code review process to be completed by NYSED developers. The Contractor will be responsible for developing an automated testing suite as well. Automated test scripts must be stored in a central repository such as git or Bitbucket.
  7. Testing: NYSED will rely on the Contractor to support unit testing and other test-driven development approaches to be sure the code is as clean as possible before being tested by the Contractor's QA. Additionally, NYSED will look to the Contractor to support UAT testing by developing test scripts and working with the business to ensure they are clear on what should be tested/how this should be tested as part of UAT. Also, as mentioned under infrastructure, Contractor testing will include performance testing. This should be included in the Contractor statement of work. It is assumed that the Contractor will provide a structure for UAT testing and for training end users. NYSED will not be supplying staff for these phases.
  8. Training: The Contractor should plan on preparing training materials for the NYSED State Aid team so that they are familiar with how to use the new application and delivering training the NYSED State Aid team. Additionally, the SI should be responsible for training the dev team as well. It is assumed that the SI will provide training for the NYSED State Aid team, and for the NYSED ITS dev team as members on board.

#### Project Timelines

NYSED will look to the Contractor to develop a timeline/Gantt of all activities and milestones. We would like the Payments system to be live in July 2024 so that this can be used to generate payments during the 2024-2025 school year.

#### Project Completion Factors

Upon approval of the project timeline, which should include at minimum knowledge transfer (KT) of requirements, UI/UX, development, testing, UAT, Pre-PROD Prep, and production deployment, completion factors will also include confirmation of completion of all deliverables for each of these areas. Please see section 2.4 for Contractor Deliverables.

#### Work Location

Work may be performed at a remote work location within the Continental United States (CONUS). Key staff, such as the Project Manager and the Business Analysts, may be required to attend periodic meetings on-site in Albany, NY. All Contractor staff must perform all work on NYSED issued laptops. The Contractor must return all NYSED equipment at the end of the engagement.

#### Elements of the project plan requested

NYSED expects the below from the Contractor:

1. Statement of Work including all deliverables
2. Work breakdown structure
3. Gantt/Project Timeline with milestones and tasks
4. RAID Log (Risks, Actions, Issues, Decisions)
5. Weekly status reports
6. Weekly burn reports

Performance requirements essential for contract

NYSED expects all Contractor team members to perform to the levels indicated under Personnel Requirements in section 2.2. If team members do not perform at this level, NYSED requests a replacement to backfill the hours burned against unqualified team members who were not able to perform.

Record keeping and reporting requirements

NYSED expects the below from the Contractor:

1. Invites from Contractor for daily scrum which should include Contractor + NYSED implementation team.
2. Weekly status meeting scheduled with NYSED project manager and implementation team.
3. Weekly status report and meeting notes.
4. Participate in separate weekly status meeting with the business.
5. Participate in bi-monthly Steering Committee meetings as needed.
6. Participate in any other meetings which are requested by NYSED.
7. Weekly burn report - Contractor will generate a burn report every week indicating variances between forecasted and actual hours. Variances of +/-10% will require mitigation plan.

Minimum Bidder Qualifications

The Bidder responding to this Mini-Bid must meet the following minimum bidder qualifications:

1. A minimum of five (5) years' experience developing financial systems
2. A minimum of two (2) years' experience developing on the OutSystems platform
3. A minimum of two (2) projects developing OutSystems Theme templates
4. Must be a current Contractor listed under OGS Award #22772, Lot # 2
5. Pricing may not be excess of the "maximum Not-To-Exceed price" established by OGS Award 22772

Functional Requirements:

Please see below matrix of system features which need to be built as part of the Payments implementation.

The Contractor will create user stories for each of the below. Each user story should include agreed upon acceptance criteria to be used by the developers, QA testers and UAT Team to ensure correct behavior.

In the event of requirements clarification, the Contractor will update existing user stories with corrected information and acceptance criteria.

In the event of a change order, the Contractor will create new user stories with new acceptance criteria.

Features	Description
Payment Processor Persona	<ul style="list-style-type: none"> <li>• Access Dashboard (for initial launch all users will have the same dashboard view)</li> <li>• Access all Payment Listings</li> <li>• Receive Alert / Work Notifications to initiate mandated payments and relevant tasks.</li> <li>• Upload Calculation Data</li> <li>• Trigger the calculation of payments unless the calculation can be automatically scheduled</li> <li>• Review calculation / payment data for approval (view calculation)</li> <li>• Verify payment vs budget (not in system - manual process – but they will need to see the payment information)</li> <li>• Approve calculation</li> <li>• Generate and submit voucher memo, which will be an online form with financial payment information (cost center, chart of accounts)</li> <li>• Request GAAP (Generally Accepted Accounting Principles) Approval</li> <li>• Verify IDL (Interface Description Language) errors returned from New York State Financial System (SFS)</li> <li>• Export Data</li> <li>• Review payment certificates (report outputs) before posting to NYSED website</li> </ul>

	<ul style="list-style-type: none"> <li>• Ability to make manual payment related data changes directly on PROD, referred to business as "Uppy". Modifies payment data directly on PROD.</li> <li>• Dashboard view</li> </ul>
GAAP Certificate Approver Persona	<ul style="list-style-type: none"> <li>• Access Dashboard</li> <li>• Receive approval notifications (email or Teams notification), alerts and reminders for relevant tasks.</li> <li>• View listing of approvals</li> <li>• Review and export GAAP Listing (Generally Acceptable Accounting Principles)</li> <li>• Integrate with Adobe Sign for document approval.</li> <li>• Collect data from Adobe Sign if necessary.</li> <li>• View Report Output (ex., Payment Cert)</li> <li>• Dashboard view</li> </ul>
View and Download Persona	<ul style="list-style-type: none"> <li>• Access Dashboard</li> <li>• View listing of approved GAAP Listing</li> <li>• Export GAAP Listing</li> <li>• Dashboard view</li> <li>• Alerts and notifications for relevant tasks.</li> </ul>
Administrator Persona	<ul style="list-style-type: none"> <li>• Manage user roles</li> <li>• Maintain user management data</li> <li>• Maintain payment schedules</li> <li>• Maintain payment data</li> <li>• Maintain payee data</li> <li>• Maintain and view global audit</li> </ul>
User Management	<ul style="list-style-type: none"> <li>• The out of the box OutSystems User and Role authorization functionality will be utilized for the Payments system.</li> <li>• Identity Provider (IDP) integration for user authentication will be provisioned by NYSED staff prior to the start of the engagement.</li> <li>• The Contractor will create and configure the initial user base.</li> </ul>
Payment Schedule	<ul style="list-style-type: none"> <li>• A payment schedule will be built within the application. The State Aid team will be able to enter all milestone dates related to the payment (eg when it should be paid, when the voucher memo should be generated, etc.)</li> <li>• A feature will be available to copy from a prior year to facilitate the set up for the following year.</li> <li>• Payment notifications will be based on the Payment Schedule.</li> </ul>
Payment Data	<ul style="list-style-type: none"> <li>• Ability to create key attributes for a Payment Type, eg: Fund, Fiscal Year, Account code, Transactional Program Code, Data Sources, Payment sub-types etc.</li> </ul>
Payees	<ul style="list-style-type: none"> <li>• District data will be pulled from a separate system called SEDREF (State Education Department Reference File) which houses all contact information for Districts, BOCES, Consortium for Workers Education and Charter Schools. This data may change over time and be refreshed through the application.</li> <li>• All district data must be searchable and filterable. District data may be overwritten if the SEDREF information is incorrect.</li> </ul>
Payments Listing Page	<ul style="list-style-type: none"> <li>• The Payment Listing will be the default page / home page for all user types.</li> <li>• Completed records will be archived after 8 years (data will be available but will not be on website).</li> <li>• Alerts will highlight critical actions:</li> <li>• Due dates (Dates &lt;= today and the task is not completed)</li> <li>• IDL (Interface Description Language) errors returned by the NYS State Financial System</li> <li>• GAAP Rejection</li> </ul>

	<ul style="list-style-type: none"> <li>• Clicking on a record will take the user to the tab / area for attention by status.</li> <li>• Table will be sorted by date by default (date column to be discussed)</li> <li>• Alerts would be default if they exist (for payment processor and GAAP Approver).</li> <li>• There are times when the Legislature will request that a district should only get paid 80% of a particular payment, and the remaining 20% at a later date. This is called the 80/20 rule. When this happens, the global multiplier (80/20) and will appear as two line items (ex. one for 80 and one for 20).</li> <li>• There are also times when the Legislature will request an Advance payment for a District. In this case there will be two lines indicated: one for the first Advance payment and a second line for the balance.</li> <li>• The migrated data will also appear in the payment listing and may have some slight variations in the data elements we have to populate the columns.</li> </ul>
Payments Overview Page	<ul style="list-style-type: none"> <li>• Summary data about the payment type.</li> <li>• All users will have access to VIEW the Payment overview. Only Payment Processors will be allowed to update.</li> <li>• The Data elements would be the same for all payment types.</li> <li>• Data edits for: Payment Date, Status &amp; Target dates (List to be finalized in development).</li> <li>• Some key data elements on the overview will be populated as the payment progresses (ex. Actual dates, approver name, etc.)</li> <li>• All data changes will be captured in the audit log.</li> <li>• The migrated payments may not have complete data to populate all overview elements. A flag / notation on the overview will denote migrated records.</li> <li>• The overview data values will / may be different for split payments, but the variables presented would be the same.</li> </ul>
Alerts and Notifications	<ul style="list-style-type: none"> <li>• Scheduled <ul style="list-style-type: none"> <li>○ Based upon data entered in Payments Listing Page</li> <li>○ Not picked up, calculation not run</li> </ul> </li> <li>• Started <ul style="list-style-type: none"> <li>○ Entry: Calculation has been run at least once</li> <li>○ Exit: GAAP generated</li> </ul> </li> <li>• Needs Approval <ul style="list-style-type: none"> <li>○ Entry: GAAP Generated</li> <li>○ Exit: GAAP approved or rejected</li> </ul> </li> <li>• Processing <ul style="list-style-type: none"> <li>○ Entry: GAAP Approved</li> <li>○ Exit: Payment Cert is posted</li> </ul> </li> <li>• Completed - Payment Cert posted <ul style="list-style-type: none"> <li>○ There should also be some sort of functionality indicating when a manual change has been made on PROD.</li> <li>○ Status should be visible in the UI.</li> </ul> </li> </ul>
Payment Calculation Configuration / Modification	<ul style="list-style-type: none"> <li>• All users will have access to VIEW the Calculation, but Only Payment Processors will be allowed to perform calculations, recalculations, etc.</li> <li>• A payment can be selected from the payment list, or the user can select to add a new payment by selecting the type from a dropdown (additional input data may be required for this flow on overview screen).</li> <li>• Attributes of the payment type-payment subtype will denote what experience is needed to initiate a calculation: <ul style="list-style-type: none"> <li>○ Request Calculation by selecting Payment Parameters</li> <li>○ Uploaded Needed Input Files (&gt; 1 file may be used for a given payment type)</li> <li>○ Complete Web Form</li> <li>○ Complete Web form + Uploaded Needed Input Files</li> </ul> </li> <li>• A total of 9 input files need to be accommodated for the various payment types.</li> <li>• Payment type and sub-type are mapped to the list of possible file types for upload (some may be required and some optional).</li> <li>• A file (and the associated data) can be deleted and re-uploaded to perform a recalculation.</li> </ul>

	<ul style="list-style-type: none"> <li>• Manual Payment types will be supported allowing a user to select the payees and enter the amount.</li> <li>• Uppy Correction: When a final PMT is made to SFS and then a change on PROD is required, an additional variation of the manual payment type but there may be some additional data elements to collect / update to tie it to the original calculation. (occurrence ~ 2 / year)</li> <li>• After all the necessary data has been collected, the calculation will be performed.</li> <li>• Payment Calculations have been groups by complexity (High, Medium, Low).</li> <li>• The calculation will handle consolidations of districts when needed.</li> <li>• Once completed, calculated data will populate the appropriate fields on the payment overview.</li> <li>• For Split payments, the 2nd payment (80/20 - the 20 version), the user would not be able to re-calculate. View only of calculation data.</li> <li>• Calculations will not be run on migrated data - all will be complete records.</li> <li>• All data changes must be written to the audit log.</li> </ul>
Voucher Memo	<ul style="list-style-type: none"> <li>• Can be created after calculation has been run and approved</li> <li>• Does not require pdf generation or signature</li> </ul>
GAAP Listing	<ul style="list-style-type: none"> <li>• Can only be created once Voucher Memo submitted. If voucher memo not submitted, cannot generate GAAP Listing</li> <li>• System must generate an approval document by invoking the Adobe Sign API.</li> <li>• Only designated GAAP Approvers may sign.</li> <li>• Adobe Sign will use a call-back service to notify the Payment system that a GAAP listing was accepted or rejected.</li> </ul>
Audit Requirements	<ul style="list-style-type: none"> <li>• The Payments system will utilize out of the box OutSystems logging features to manage the majority of logging requirements. The vendor will need to support the below: <ul style="list-style-type: none"> <li>○ Any end user changes to a payment calculation, payment authorization or voucher memo must correspond to an audit record. This audit record must exist and must be immutable, therefore the audit record must be stored in the OutSystems business data database (opposed to the logging database).</li> <li>○ All users will be able to view the payment audit log associated with a given payment.</li> <li>○ The key milestones (performed by system or user) will be listed in the payment audit log.</li> </ul> </li> <li>• Migrated data will not have archival, legacy payment logs associated with it (meaning historical logs in legacy system will not be migrated over). However, upon migration, logging will be captured.</li> </ul>
File Upload / Download Capability	<ul style="list-style-type: none"> <li>• All users will be able to view the files uploaded and the associated data but only the payment processor can upload files.</li> <li>• Files will be listed along with the aid year, date/time of upload, user who uploaded file.</li> <li>• Only 1 file type per aid year payment will be allowed for each file type. If an update is needed, the data will be re-uploaded and tables overwritten.</li> <li>• Upload File: select file and enter key data associated with the file (aid year).</li> <li>• System will validate below data: <ul style="list-style-type: none"> <li>○ Required fields</li> <li>○ Alphanumeric rules</li> </ul> </li> <li>• Download file: ability to generate file, and also ability to export database and download</li> <li>• Archive after 8 years.</li> </ul>
Payment Processing + Certification	<ul style="list-style-type: none"> <li>• Upon GAAP Listing approval, a file with all payments information will be sent to the Oracle Financial Services Database (NYSED on prem). Subsequent downstream communication with Statewide Financial System (SFS) is out of scope for this work.</li> <li>• The Payments system will display SFS success/error messages, sent via the Oracle Financial Services Database, and picked up by the Payments system.</li> </ul>

	<ul style="list-style-type: none"> <li>• If the payment has a success message, the Payments system will generate an HTML report and send to the NYSED website with the payment information found here: <a href="https://www2.nysed.gov/stateaid/dist/cert/PY21/A010100.HTML">https://www2.nysed.gov/stateaid/dist/cert/PY21/A010100.HTML</a></li> <li>• Each of the below certifications and/or reports will need to be generated and posted to the NYSED site. All of the data will reside in the Payments system and will need to be generated for each report listed below. These are clickable links which will take you to the NYSED website:   <a href="#">2021-22 Lottery Aid Cert</a>  <a href="#">2021-22 Teachers Retirement System Cert</a>  <a href="#">2021-22 VLT Lottery Grant</a>  <a href="#">2021-22 Commercial Gaming Grant</a>  <a href="#">2021-22 STAR Aid Cert</a>  <a href="#">2021-22 General Aid Cert - October to December</a>  <a href="#">2021-22 General Aid Cert - January to May</a>  <a href="#">2021-22 General Aid Spring Advance Cert</a>  <a href="#">2021-22 General Aid End of State Fiscal Cert</a>  <a href="#">2021-22 General Aid Cert - June</a>  <a href="#">2021-22 September General Aid Cert</a>  <a href="#">2021-22 Textbook,Software,Library Materials,Hardware Cert</a>  <a href="#">2021-22 Excess Cost Aid Cert</a>  <a href="#">2021-22 Charter School Supplemental Basic Tuition Aid Cert</a>  <a href="#">2021-22 STAC 4408 Cert (Summer School)</a>  <a href="#">2021-22 STAC Chapter Tuition Aid Cert</a>  <a href="#">2021-22 STAC NonResidential Homeless Cert</a>  <a href="#">2021-22 Combined Fixed &amp; Individualized Payment Schedule</a>  <a href="#">2021-22 State Aid Payments End of Year Report</a> </li> </ul>
Payment Calculations	<ul style="list-style-type: none"> <li>• Please see appendices for sample payments with High, Medium and Low complexity</li> <li>• There are a total of 48 payments which require calculation logic to be built into the system: 12 H / 16 M / 20 L</li> <li>• Many of the payment parameters will be provided by the SAMS Service or the Payment Parameter Repository. However, the bulk of this implementation is building out the calculation logic used in each of the above payment types.</li> <li>• Generally speaking, the payment calculations themselves could change year over year based upon the Legislature. At minimum, however, the calculations should be built so that they easily roll over from year to year. Example: October General Aid payment for the 2023-2024 school year should reference aid data from the 2023-2024 school year. October General Aid payment for the 2024-2025 school year should reference aid data from the 2024-2025. This process should be automated in the system and not require manual rolling over from one year to the next.</li> </ul>

Non-Functional and System Requirements

The Contractor will follow the below non-functional requirements and implement as needed.

Requirement	Description
Architecture & Code Quality Requirements	<ul style="list-style-type: none"> <li>• The Contractor must build the Payments system using the core design specified in the SAMS Payment System Architecture Requirements, which is attached as Appendix 1.</li> <li>• The current OutSystems Platform Best Practices (<a href="https://success.outsystems.com/documentation/best_practices/development/outsystems_platform_best_practices/">https://success.outsystems.com/documentation/best_practices/development/outsystems_platform_best_practices/</a>) must be adhered to.</li> <li>• Custom pro-code technologies, such as C#, Java, Python and JavaScript, may not be used.</li> <li>• All interactions with the OutSystems managed database must be implemented by using Outsystems managed Aggregates. Direct queries or Advanced Queries may not be used.</li> </ul>



	<ul style="list-style-type: none"> <li>• NYSED will perform our best effort to provide immutable service interfaces to interact with all external services and data exchanges. In the event of a required change to an existing interface, NYSED and the Contractor will mutually review and approve service interface changes prior to its implementation.</li> <li>• NYSED reserves the right to make changes to the underlining OutSystems platform or external system components.</li> </ul>
Performance Requirements	<ul style="list-style-type: none"> <li>• The median response time for all user interactions must be less than one (1) second.</li> <li>• The maximum response time for any user interaction must be less than five (5) seconds. Synchronous calls to external services are exempt from this requirement.</li> <li>• The system must support up to 400 user transactions per hour.</li> </ul>
Reliability	<ul style="list-style-type: none"> <li>• The developed system must accommodate the overall availability requirements of the system. Outages may not exceed a total of four (4) hours within a single calendar year.</li> </ul>
Availability Requirements	<ul style="list-style-type: none"> <li>• After initial production deployment, production and staging changes may not occur during payment processing blackouts. A tentative schedule is provided in Appendix 7.</li> </ul>
Configuration Management	<ul style="list-style-type: none"> <li>• Contractor staff will have access to the development environment of NYSED's OutSystems managed instance. The Contractor's Tech Lead will have deployment privileges for the QA environment. NYSED staff will perform the deployments to the staging and production environments.</li> <li>• All deployments to environments other than development must be performed through the OutSystems Lifetime console.</li> </ul>
Audit System Requirements	<ul style="list-style-type: none"> <li>• Out-of-the-box (OOTB) audit features should be used on the OutSystems platform. Audit logs that result from payment processing changes must be sent to the primary OutSystems database. This is due to the possibility of lost logs that are sent to the OutSystems logging database.</li> </ul>
Issue Response Time	<ul style="list-style-type: none"> <li>• During the post-production stage, the Contractor must respond within the following response times: <ul style="list-style-type: none"> <li>○ Any Production Issue: 1 hour (available 24/7)</li> <li>○ Any Issues Blocking Development: 24 hours (NYSED Business Hours)</li> <li>○ Any Other Issue: 2 Business Days</li> </ul> </li> <li>• All issues will be registered and tracking using JIRA.</li> </ul>
Identity Provider	<ul style="list-style-type: none"> <li>• NYSED will configure the Identity Provider (IDP) integration on the OutSystems platform. The Contractor must utilize the User and Role functionalities that are provided by the OutSystems platform.</li> </ul>
Third Party Components	<ul style="list-style-type: none"> <li>• NYSED will provide all requisite Forge components onto the managed platform. Additional third-party Forge plugins must be reviewed, approved and installed by NYSED staff.</li> <li>• Custom components developed using Integration Studio must not be us</li> </ul>

Please refer to the below appendices included with this proposal for contextual information:

Appendix #	Name	Description
1	Payments Architecture	SAMS Payments System architecture requirements
2	Payments As Is Workflow	Current state business process, please see To Be in Appendix 1
3	SAMS Payments System As Is Context Diagram	Current state context diagram, please see To Be in Appendix 1
4	J J Schedule – High Complexity	Sample high complexity payment

5	TRS Payment_Medium Complexity	Sample medium complexity payment
6	VLT Payment_Low Complexity	Sample low complexity payment
7	Production Blackout Schedule	Blackout times when payment calculation and processing underway

## 2.2 PROJECT CONSULTING PERSONNEL REQUIREMENTS

JOB FUNCTION / DESCRIPTION	REQUIREMENTS	KEY PERSONNEL
Senior Project Manager	<ul style="list-style-type: none"> <li>Establish and manage the overall vendor project plan and schedule.</li> <li>Act as SAMS Modernization implementation team daily counterpart by responding to emails, joining daily standups and weekly statuses as needed.</li> <li>Answer all project related questions on behalf of the Contractor.</li> <li>Using Jira/Confluence and Smartsheets, convert estimates into releases and sprints with timelines.</li> <li>Lead weekly status with SAMS implementation team and business stakeholders.</li> <li>Hold daily scrums, and other agile ceremonies to achieve the planned milestones.</li> <li>Ensure requirements, stories, done/acceptance criteria, test strategies are defined well and set-up processes from same.</li> <li>Manage schedule, cost, efforts, quality of deliverables and risks/contingency planning.</li> <li>Provide weekly burn reports of actual vs forecast hours, and compare to project percent complete, and provide mitigation plan if + or – 10% variance.</li> <li>Facilitate management and technical meetings, sending meeting notes and tracking action items.</li> <li>Managing RAID for projects - (Risk, Assumptions, Issues and Dependencies), and work in conjunction with SAMS Modernization implementation project manager.</li> <li>Develop and implement project management processes, tools and artifacts;</li> <li>Track project progress and publish project health reports;</li> <li>Maintain project status with tools like Jira/Confluence, Selenium, MPP, Visio, SharePoint, etc.</li> </ul>	☒
Senior Business Analyst	<ul style="list-style-type: none"> <li>Set -up and facilitate meetings with the implementation team – and business office as needed – to understand business processes (As-Is and To-Be) and pain points.</li> <li>Routinely sending out meeting minutes, decisions, and action items to team members.</li> <li>Document clear and detailed business requirements including creation of process flows, flowcharts, and review</li> </ul>	☒

	<p>these artifacts with respective members for feedback and timely approvals.</p> <ul style="list-style-type: none"><li>• Analyze business processes, functions and procedures across multiple functions and bring cohesiveness in all initiatives for optimal business and technical solutions.</li><li>• Operate in a hybrid Agile environment and actively manage requirements, change requests and user accessibility testing needs (see Accessibility deliverable in section 2.4.)</li><li>• Contribute to design and architecture discussions, daily stand-ups, sprint planning sessions and other meetings.</li><li>• Create/update user stories for all business, functional and non-functional requirements (F/NFR), including workflows, business rules, use cases, wireframes, activity &amp; sequence diagrams.</li><li>• Describe in comprehensive written documentation what the system / process / service must do in order to satisfy the determined business needs.</li><li>• Act as liaison between business teams and software development teams, management, PMO and end-users.</li><li>• Become a subject matter expert (SME) for the proposed system and involved business processes/rules.</li><li>• Support testing as needed by participating in end-user testing and deliverables validation.</li><li>• Develop training materials (quick reference guides, recorded demos, videos and presentations)</li><li>• Validate/verify requirements throughout the software development life cycle (SDLC) including all changes during the project(s).</li><li>• Escalate issues to Project Manager.</li></ul>	
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Senior Developer/Tech Lead	<ul style="list-style-type: none"> <li>• Demonstrates a deep technical knowledge of the OutSystems Managed Platform, AWS services, REST and XML services.</li> <li>• Supervises vendor development staff.</li> <li>• Communicates and collaborate with NYSED architecture staff.</li> <li>• Performs code reviews using Mentor Studio and Service Studio.</li> <li>• Develops unit tests using the BDD Framework Forge Plugin.</li> <li>• Demonstrates knowledge and experience of the Forge plugin library.</li> <li>• Develops OutSystems applications, modules, and services.</li> <li>• Develops HTML5, CSS, JavaScript, SQL and C# code as needed.</li> <li>• Prepares and executes application deployments using OutSystems Lifetime.</li> <li>• Enters and tracks issues and status updates to JIRA and the OutSystems support portal.</li> <li>• Develops security logic using the OutSystems Crypto API.</li> <li>• Determines time estimates for feature development and other tasks.</li> <li>• Proposes detailed technical solutions for various technical issues.</li> <li>• Authors and reviews technical documentation.</li> </ul>	☒
Mid-Level Developer	<ul style="list-style-type: none"> <li>• Develops Reactive Outsystems applications, core services, modules and templates.</li> <li>• Develops unit tests using the BDD Framework Forge Plugin.</li> <li>• Develops HTML5, CSS and JavaScript code as needed.</li> <li>• Troubleshoots issues with custom OutSystems applications.</li> <li>• Enters issues and status updates to JIRA and the OutSystems support portal.</li> <li>• Develop security logic using the OutSystems Crypto API.</li> <li>• Determine time estimates for feature development and other tasks.</li> <li>• Authors technical documentation.</li> </ul>	☒
Senior QA Tester	<ul style="list-style-type: none"> <li>• Lead QA team of two on all QA related activities.</li> <li>• Understand the business requirements, functional requirements and non-functional requirements and establish the testing strategy, testing plan and other testing and validation deliverables.</li> <li>• Estimate, prioritize, plan, and coordinate testing activities.</li> <li>• In partnership with BAs, set-up and facilitate meetings with the business office to understand business processes (As-Is and To-Be), testing needs and report on testing progress.</li> <li>• Routinely sending out testing meeting minutes, decisions, and action items to team members.</li> </ul>	☒

- Using QA and validation techniques, translate and document clear and detailed testing requirements including test scripts, testing plan, defects/bugs tracker, validation of process flows, data flowcharts, mockups, wireframes, etc.
- Review these testing artifacts with respective members for feedback and secure timely approvals.
- Validate the data mapping of the fields between the legacy and the proposed new system.
- Perform manual and automation testing as needed for end-to-end testing the new system including the core features, customizations, adaptations, and interfaces.
- Create automated test scripts for the smoke, integration, and regression test suites utilizing different testing tools such as Selenium, Jira/Confluence etc. for the mission-critical and frequently used functionalities in the Payments system.
- Create detailed, comprehensive, and well-structured test plans, test scenarios, and test cases for manual as well as automated testing to address business use cases and end-to-end testing.
- Document, report, track, assign, and escalate defects appropriately; perform thorough regression testing when defects are resolved.
- Generate and analyze Test Automation Reports utilizing appropriate testing frameworks
- Support User Acceptance Testing (UAT) by answering UAT questions regarding how to test features and functions.
- Analyze business processes, functions and procedures across multiple functions and bring cohesiveness in all testing initiatives for optimal business and technical solutions.
- Operate in a hybrid Agile environment and actively manage testing requirements, change requests and user accessibility testing needs.
- Contribute to design and architecture discussions as needed, daily stand-ups, sprint planning sessions and other meetings, all from a testability standpoint.
- Become a subject matter expert (SME) and validation expert for the proposed system and involved business processes/rules.
- Engage other BAs/QAs in testing efforts by developing timely test plans, writing and executing test cases, done/acceptance criteria, end-user testing and deliverables validation.
- Validate/verify various tests with the approved requirements throughout the software development life cycle (SDLC) including all changes during the project(s).

	<ul style="list-style-type: none"> <li>• Coordinate among business &amp; technical teams and Contractor to identify and resolve testing issues that arise during the course of the project.</li> <li>• Create/update testing issues, logging bugs, user stories for testing all the business, functional and non-functional requirements (F/NFR), including workflows, business rules, use cases, wireframes, activity &amp; sequence diagrams.</li> <li>• Act as testing lead among business teams, PM, BAs and software development teams, management, PMO, end-users and Contractors.</li> <li>• Ensure testing artifacts including but not limited to epics, stories, done criteria, test strategies, release plans are defined well and set-up needed processes.</li> <li>• Using different types of testing artifacts, validate and describe in comprehensive written documentation whether the system / process / service satisfies the determined business needs.</li> <li>• Work with tools such Jira/Confluence, Selenium, MS tools, MS SQL Server DB, Visio, SharePoint, and other web-based testing applications.</li> </ul>	
Mid-Level QA Tester	<ul style="list-style-type: none"> <li>• Understand the business requirements, functional requirements and non-functional requirements and establish the testing strategy, testing plan and other testing and validation deliverables.</li> <li>• Estimate, prioritize, plan, and coordinate testing activities.</li> <li>• In partnership with BAs, set-up and facilitate meetings with the business office to understand business processes (As-Is and To-Be), testing needs and report on testing progress.</li> <li>• Routinely sending out testing meeting minutes, decisions, and action items to team members.</li> <li>• Using QA and validation techniques, translate and document clear and detailed testing requirements including test scripts, testing plan, defects/bugs tracker, validation of process flows, data flowcharts, mockups, wireframes, etc.</li> <li>• Review these testing artifacts with respective members for feedback and secure timely approvals.</li> <li>• Validate the data mapping of the fields between the legacy and the proposed new system.</li> <li>• Perform manual and automation testing as needed for end-to-end testing the new system including the core features, customizations, adaptations, and interfaces</li> <li>• Create automated test scripts for the smoke, integration, and regression test suites utilizing different testing tools such as Selenium, Salesforce, Jira/Confluence etc. for the mission-critical and frequently used functionalities in the Payments system.</li> </ul>	☒

	<ul style="list-style-type: none"> <li>• Create detailed, comprehensive, and well-structured test plans, test scenarios, and test cases for manual as well as automated testing to address business use cases.</li> <li>• Document, report, track, assign, and escalate defects appropriately; perform thorough regression testing when defects are resolved.</li> <li>• Generate and analyze Test Automation Reports utilizing appropriate testing frameworks</li> <li>• Support User Acceptance Testing (UAT)</li> <li>• Analyze business processes, functions and procedures across multiple functions and bring cohesiveness in all testing initiatives for optimal business and technical solutions.</li> <li>• Operate in a hybrid Agile environment and actively manage testing requirements, change requests and user accessibility testing needs.</li> <li>• Contribute to design and architecture discussions as needed, daily stand-ups, sprint planning sessions and other meetings.</li> <li>• Become a subject matter expert (SME) and validation expert for the proposed system and involved business processes/rules.</li> <li>• Engage other BAs/QAs in testing efforts by developing timely test plans, writing and executing test cases, done/acceptance criteria, end-user testing and deliverables validation.</li> <li>• Validate/verify various tests with the approved requirements throughout the software development life cycle (SDLC) including all changes during the project(s).</li> <li>• Coordinate among business &amp; technical teams and Contractor to identify and resolve testing issues that arise during the course of the project(s).</li> <li>• Create/update testing issues, logging bugs, user stories for testing all the business, functional and non-functional requirements (F/NFR), including workflows, business rules, use cases, wireframes, activity &amp; sequence diagrams.</li> <li>• Work with tools such Jira/Confluence, Selenium, MS tools, MS SQL Server DB, Visio, SharePoint, and other web-based testing applications.</li> </ul>	
Senior UX Designer	<ul style="list-style-type: none"> <li>• Collaborate and partner with business team to support and advocate for modern best practices for end-to-end experience design and delivery, such as design research, journey mapping, personas, storyboards, concept designs, prototyping and final production designs for our end user experiences.</li> <li>• Deliver end user experiences through exceptional craft design and execution on end-to-end journeys.</li> </ul>	☒

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|  | <ul style="list-style-type: none"><li>• Identify key areas of enhancement and improvement in information architecture designs.</li><li>• Formulate prospective informational designs, wireframes and templates for further development.</li><li>• Design wireframes and prototypes for informational architecture flows and experiences, to include dashboards, screens, reports, and admin functionality.</li><li>• Develop draft information architectures for final products to be used by the State Aid team.</li><li>• Evaluate the performance of information architectures through analysis and research.</li><li>• Enhance existing information architectures to be more interactive and digitally friendly.</li><li>• Update team members on information architecture design principles and developments.</li><li>• Improve information architectures for products and services in both digital and print mediums.</li><li>• Develop site map for entire application.</li><li>• Investigate and interpret how users feel about a system, looking at items like ease of use, perception of the value of the system, utility and efficiency in performing tasks.</li><li>• Translate user needs and business requirements into features and functionality for digital experiences.</li><li>• Maintain proficiency in design tools and possesses highly specialized knowledge of a specific technology.</li></ul> |  |
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## 2.3 PROJECT DELIVERABLES NARRATIVE

This implementation will follow a typical software development lifecycle of requirements, technical design, development, testing, UAT, production deployment, and post-production monitoring. Each phase will have its own set of deliverables. This process will be governed using general project management, which has its own set of deliverables. Please note that the NYSED SAMS modernization team will provide requirements to the Contractor team. We do not expect the Contractor team to begin requirements elaboration from scratch, although we do anticipate requirements clarifications along the way.

There is no timeframe yet as we expect the Contractor to develop this as part of the project management deliverables. Ideally, we would like this to go live July 2024 so that the Payments system can be used during the 2024 – 2025 school year.

NYSED has been using Confluence and SharePoint for documentation: Confluence for requirements and SharePoint for legacy documentation storage and we will ensure the Contractor has access to both for the life of this engagement.

Please note the below deliverables are ongoing throughout the life of the project:

- SPD\_5 Conduct Sprint Ceremonies, Reporting and Demos
- SPD\_6 Prepare Weekly and Bi-Monthly Project Management Reporting

The below deliverables are ongoing through the dev and test phases, and will extend through UAT if defects are found which require bug fixing and re-testing:

- SPD\_1 Develop OutSystems Modules and Features
- SPD\_2 Test OutSystems Modules and Features
- SPD\_3 Develop Non-Functional Requirements
- SPD\_4 Test Non-Functional Requirements
- SPD\_8 Deliver Automated Functional Testing

The remaining deliverables will take place at specific times during the implementation and will not be ongoing:

- SPD\_7 Deliver UX Design and Information Architecture
- SPD\_9 Adhere to Accessibility Guidelines
- SPD\_10 Create User Acceptance Testing Strategy and Plan
- SPD\_11 Deliver User Acceptance Testing Strategy and Plan
- SPD\_12 Develop End User Training Strategy and Plan
- SPD\_13 Deliver End User Training Strategy and Plan
- SPD\_14 Manage Pre-Deployment Preparation
- SPD\_15 Conduct Dry Run / Soft Launch and Testing
- SPD\_16 Conduct PROD Deployment
- SPD\_17 Conduct Post-Deployment Monitoring

2.4 PROJECT DELIVERABLES		
#	DELIVERABLE	NOTES
SPD_1	Develop OutSystems Modules and Features	<ul style="list-style-type: none"> <li>• Create user stories and acceptance criteria for all features listed under <i>Functional Requirements</i> in section 2.1.</li> <li>• Develop all user stories per agreed upon acceptance criteria.</li> <li>• Develop OutSystems Modules. See <i>Functional Requirements</i> in section 2.1 and <i>SAMS Payment System Architecture Requirements</i> in Appendix 1 for more details.</li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>
SPD_2	Test OutSystems Modules and Features	<ul style="list-style-type: none"> <li>• Develop and execute functional requirement test plan covering all features listed under <i>Functional Requirements</i> in section 2.1.</li> <li>• Test all user stories per agreed upon acceptance criteria prior to handing off to NYSED team for QA. Any defects should be sent back to the Contractor development team for fixing.</li> <li>• Use NYSED provided defect tracker (JIRA).</li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>
SPD_3	Develop Non-Functional Requirements	<ul style="list-style-type: none"> <li>• Develop and execute non-functional requirement test plan that covers all <i>Non-Functional Requirements</i> in Section 2.1.</li> <li>• Test all non-functional requirements to ensure all are working correctly.</li> <li>• Create defect tracker (can use Jira for this.)</li> <li>• Ensure all non-functional requirements listed in section 2.1 are properly adhered to.</li> <li>• Provide documentation supporting the fact that all non-functional requirements are adhered to.</li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>
SPD_4	Test Non-Functional Requirements	<ul style="list-style-type: none"> <li>• Develop and execute non-functional requirement test plan that covers all <i>Non-Functional Requirements</i> in Section 2.1.</li> <li>• Test all non-functional requirements to validate that all requirements are met.</li> <li>• Use NYSED provided defect tracker (JIRA.)</li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>
SPD_5	Conduct Sprint Ceremonies, Reporting and Demos	<ul style="list-style-type: none"> <li>• Adhere to all sprint ceremonies used in scrum including sprint planning, daily stand-up, sprint review, sprint retrospective.</li> <li>• Work with NYSED implementation team on defining upcoming sprint issues and backlog review.</li> <li>• At the end of each sprint, prepare a sprint demo for the NYSED team to review what has been developed thus far.</li> <li>• At the end of each sprint, prepare burn report indicating what was on track for development / what missed development and how capacity can be course corrected.</li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>
SPD_6	Prepare Weekly and Bi-Monthly Project Management Reporting	<ul style="list-style-type: none"> <li>• Create weekly status reports.</li> <li>• Participate in weekly status call with NYSED implementation team (alone) and with business.</li> <li>• Participate in daily standup with NYSED SAMS Modernization Team (can be combined with sprint stand-up).</li> </ul>

		<ul style="list-style-type: none"> <li>• Prepare bi-monthly Steering Committee report, to be presented by Project Manager or Account Executive.</li> <li>• Create and update project plan which should include all project phases including deliverables.</li> <li>• Track issues and risks in RAID Log and report on status during weekly meetings and bi-monthly steering committee calls.</li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>
SPD_7	Deliver UX Design and Information Architecture	<ul style="list-style-type: none"> <li>• Create clickable interactive wireframes/prototype for each page/feature within the system.</li> <li>• Create information architecture map for Payments system.</li> <li>• Create style guide for development using NYSED branding and colors</li> <li>• Create UX journey and story maps for each persona.</li> <li>• Create Mock-ups indicating how pages will render on screens.</li> <li>• Workflows for persona notifications, alerts and approvals</li> <li>• Adhere to Accessibility documentation per WCAG 2.0.</li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>
SPD_8	Deliver Automated Functional Testing	<ul style="list-style-type: none"> <li>• Identify, in collaboration with business and NYSED implementation team, core set of features to be included in automation testing.</li> <li>• Create Selenium automated test scripts, and test to be sure these work as expected.</li> <li>• Develop unit tests for all business logic using the OutSystems Behavior-Driven Development (BDD) framework.</li> <li>• In case of requirements change, update test scripts as needed.</li> <li>• Maintain all test scripts.</li> <li>• Provide knowledge transition documentation to NYSED implementation team in order to transition test scripts once engagement completed.</li> <li>• Create defect tracker (can use Jira for this.)</li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>
SPD_9	Adhere to Accessibility Guidelines	<ul style="list-style-type: none"> <li>• Implement accessibility requirements as per WCAG Level 2.0 AA or later <a href="https://www.w3.org/WAI/standards-guidelines/wcag/">https://www.w3.org/WAI/standards-guidelines/wcag/</a> and NYSED accessibility guidelines: <a href="https://www.nysed.gov/webaccess/nysed-web-accessibility-policy">https://www.nysed.gov/webaccess/nysed-web-accessibility-policy</a> and Section 508 standards: <a href="https://www.section508.gov/sell/vpat/">https://www.section508.gov/sell/vpat/</a></li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>
SPD_10	Create User Acceptance Testing Strategy and Plan	<ul style="list-style-type: none"> <li>• Create UAT test strategy including plan for functional and regression testing.</li> <li>• Provide UAT training and walkthroughs for program staff.</li> <li>• Create defect tracker (can use Jira for this.)</li> <li>• Prioritize UAT defects with critical launch fixes versus fast follows post launch.</li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>
SPD_11	Deliver User Acceptance Testing Strategy and Plan	<ul style="list-style-type: none"> <li>• Deliver UAT testing per SPD_10.</li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>
SPD_12	Develop End User Training Strategy and Plan	<ul style="list-style-type: none"> <li>• Create training strategy and plan for all end users.</li> <li>• Deliver training for all end users</li> <li>• Create training artifacts (QRGs, videos, documents)</li> </ul>

		<ul style="list-style-type: none"> <li>• Train key NYSED program staff on BDD Framework and developed modules.</li> <li>• Develop Developer Guide for NYSED UX Theme.</li> <li>• Develop training schedule.</li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>
SPD_13	Deliver End User Training Strategy and Plan	<ul style="list-style-type: none"> <li>• Deliver end user training per SPD_12.</li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>
SPD_14	Manage Pre-Deployment Preparation	<ul style="list-style-type: none"> <li>• Create runbook for soft launch and actual deployment with activities, owners, timing and escalation path/plan.</li> <li>• Update runbook after Soft Launch as needed.</li> <li>• Create rollback plan: during deployment, and post deployment.</li> <li>• Create readiness assessment matrix.</li> <li>• Provide production configuration instructions for NYSED staff.</li> <li>• Create and share plan for post production site monitoring.</li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>
SPD_15	Conduct Dry Run / Soft Launch and Testing	<ul style="list-style-type: none"> <li>• Treat soft launch as a dry run for the actual deployment and update runbook as needed.</li> <li>• Conduct data migration to soft launch/temp environment.</li> <li>• Conduct integration testing.</li> <li>• Create defect tracker (can use Jira for this.)</li> <li>• Test rollback plan.</li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>
SPD_16	Conduct PROD Deployment	<ul style="list-style-type: none"> <li>• Schedule all PROD deployments with NYSED Staff.</li> <li>• Address any issues during deployment.</li> <li>• Final data load, data count and integration testing.</li> <li>• Monitor deployment activities and remediate issues as they arise.</li> <li>• Create backlog of launch related issues.</li> <li>• Participate in disaster recovery tests with NYSED and OutSystems.</li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>
SPD_17	Conduct Post-Deployment Monitoring	<ul style="list-style-type: none"> <li>• Execute post PROD monitoring established during Pre-Deployment Prep.</li> <li>• Monitor application post launch (error logs, escalations) and advise on mitigation.</li> <li>• Perform root cause analysis on critical defects.</li> <li>• Fix critical issues post launch.</li> <li>• Create prioritized list of issues coming out of launch.</li> <li>• Final updates to documentation (user stories, dev standards, requirements, automated testing, etc.)</li> <li>• Error log review.</li> <li>• Continue to support engagement for eight weeks while transitioning platform to NYSED implementation team.</li> <li>• Prepare and deliver a final report indicating that work has been completed for this deliverable.</li> </ul>

### 2.4.1 ACCEPTANCE PROCESS AND CRITERIA

All requirements will be converted into user stories with acceptance criteria. The Contractor should follow the acceptance criteria in each ticket to ensure development is completed correctly. At a high level, the acceptance criteria for all requirements indicated in section 2.2 Project Requirements are that the requirement should function as written.

### 2.5 PROJECT RISK ASSESSMENT

KNOWN RISK	SUGGESTED MITIGATION STRATEGY (IF KNOWN)
Data structures of the legacy SAMS system is complex.	NYSED staff will provide well defined interfaces for system integration. These integrations are listed in the Target Solution Architecture document.
Viable network connectivity between the target system and legacy dependencies do not exist.	Prior to the start of the engagement, an Amazon Direct Connect tunnel will be provisioned prior to the start of the engagement.
Limited OutSystems expertise exists at NYSED.	Along with the managed platform subscription, NYSED will procure the OutSystems Premier Success Plan. In the event of critical development issues, OutSystems' resources will be available (NYSED staff must be present during all communications with OutSystems).
Limited window for go-live is Summer 2024.	The ideal launch date for the Payments system is during Summer 2024, while New York State schools are on summer holiday and before any school year payments are made. Once the school year starts, it will become increasingly difficult to "flip the switch" from Legacy to the new Payments system.

### 2.6 AUTHORIZED USER SECURITY REQUIREMENTS

The information security impact ratings for the Payment system is:

- Confidentiality: Public/LOW
- Data Integrity: HIGH
- Availability: HIGH

Data that is persisted and transmitted by the Payments system is not regulated by any regulatory body. However, payment processing has a substantial monetary impact to the local school districts and BOCES of New York State. Payment accuracy, timeliness and availability are critical to NYSED's core business and the day to day operations of local school districts and BOCES.

All deliverables proposed and executed by the vendor must be reviewed and approved by the NYSED Chief Information Security Officer (CISO). All controls listed in the NYSED Data Privacy and Security Policy must be implemented for all deliverables. When a control is not technically feasible, a compensating control or a security exception may be issued in writing by the NYSED CISO.

All work performed for this engagement must be performed within CONUS. The vendor may not have direct access to production systems or data. All system deployments to the staging or production environments must be performed by NYSED staff. Other security controls will be specified within the requirements sections of this PBITS.

### 2.7 AUTHORIZED USER INSURANCE REQUIREMENTS

No additional requirements

### 3. GENERAL TERMS AND CONDITIONS

#### 3.1 DEFINITIONS

SAMS (State Aid Management System)	The NYSED State Aid Management System (SAMS) is the main application used by NYSED to determine and distribute the correct amount of state aid to public school districts and BOCES throughout the year, as well as to provide accurate and timely data for use in State Aid projections. Today SAMS disburses \$30 billion in aid to approximately 700 districts and BOCES in NYS.
BOCES	In 1948, the New York State legislature created Boards of Cooperative Educational Services (BOCES) to provide shared educational programs and services to school districts within the state. Today there are 37 BOCES that are partnering with nearly all the state's school districts to help meet students' evolving educational needs through cost-effective and relevant programs.
State Education Department Reference File (SEDREF)	All contact information for districts, BOCES, Consortium for Workers Education (CWE) and charter schools is maintained in the SEDREF system. Also, SEDREF maintains key institutional data like school name, address, phone, grades served, and website URL and the names and contact information for several key personnel of the institution. SEDREF Cognos reports are available to the public with nightly refreshed data. SEDREF provides certain information to SAMS and some SEDREF data can be changed via SAMS.
Educational Finance Redesign Team (EFRT)	EFRT is used by approximately 3000+ users that include NYSED staff, School Districts, Municipalities and Approved Special Education Providers (ASEPs). Rate Setting Unit (RSU) team stores expenditure, revenue, and enrollment data and calculate tuition rates as per the Reimbursable Cost Manual and the approved tuition rate setting methodology applicable for each year. Approximately, 1200 rates are calculated each year for ASEPs and 200,000 reimbursement requests are handled through EFRT system. System to Track and Account for Children (STAC) Unit team uses EFRT to process the reimbursements of the school districts and counties. State Aid (SA) team uses the EFRT system to create and track revision and payment data, and additionally process payments to School Districts.
State Financial System (SFS)	Office of State Comptroller payment system for New York State.
Generally Approved Accounting Principles (GAAP)	This acronym is used as part of the naming convention for the GAAP Listing, which the Payments System will be creating automatically. The GAAP Listing will indicate all districts who will receive aid as part of any given payment, the amount of money they will receive, and the cost center, chart of accounts, and other financial information needed to support processing the payment.

#### 3.2 MINI-BID WITH STATEMENT OF WORK DOCUMENT AND ATTACHMENTS

This Mini-Bid procurement consists of this mini-bid document known as PBITS #23-004 and the following attachments and appendices, which are posted as separate documents:

- Attachment 1 – Financial Proposal
- Attachment 2 – Submission Checklist and Forms
- Attachment 3 – Information Protection Agreement
- Attachment 4 – Non-Disclosure Agreement
- Attachment 5- NYSED Information Security Policy
- Attachment 6 – NYSED User Account Password Policy
  
- Appendix 1 – SAMS Payment System Architecture Requirements
- Appendix 2 – Payments As-Is Workflow
- Appendix 3 – SAMS Payments System As-Is Context Diagram
- Appendix 4 – J/J Schedule High Complexity
- Appendix 5 – TRS Payment Low Complexity
- Appendix 6 – VLT Payment Low Complexity
- Appendix 7 – Production Blackout Schedule

**3.3 ADDITIONAL TERMS AND CONDITIONS****PROCUREMENT LOBBYING LAW**

Pursuant to State Finance Law §§139-j and 139-k, this solicitation includes and imposes certain restrictions on communications between the New York State Education Department (NYSED) and an Offeror/bidder during the procurement process. An Offeror/bidder is restricted from making contacts from the earliest notice of the solicitation through final award and approval of the Procurement Contract by NYSED and, if applicable, Office of the State Comptroller (“restricted period”) to other than designated staff unless it is a contact that is included among certain statutory exceptions set forth in State Finance Law §139-j(3)(a). Designated staff, as of the date hereof, is identified below. NYSED employees are also required to obtain certain information when contacted during the restricted period and make a determination of the responsibility of the Offeror/bidder pursuant to these two statutes. Certain findings of non-responsibility can result in rejection for contract award and in the event of two findings within a four-year period, the Offeror/bidder is debarred from obtaining governmental Procurement Contracts. Further information about these requirements can be found at [NYSED's Procurement Lobbying Law Policy Guidelines webpage](#).

Designated Contacts for NYSED  
 Program Office – Gabrielle Fisher  
 Contract Administration Unit – Jessica Hartjen  
 M/WBE – Brian Hackett

The selected contractor must execute NYSED’s Information Protection Agreement within 7 days after the contract has been executed and prior to any work being done.

**3.4 AUTHORIZED USER AND CONTRACTOR RESPONSIBILITIES**

Not applicable

**3.5 DEBRIEFING**

All unsuccessful bidders may request a debriefing within fifteen (15) calendar days of receiving notice from NYSED of non-award. Bidders may request a debriefing by submitting a written request to [cau@nysed.gov](mailto:cau@nysed.gov).

**3.6 AUTHORIZED USER DISPUTE RESOLUTION PROCEDURE**

Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized), but must, instead, be heard in a court of competent jurisdiction of the State of New York.

**3.7 AUTHORIZED USER BID PROTEST PROCEDURE**

Bidders who receive a notice of non-award or disqualification may protest the NYSED award decision subject to the following. The protest must be in writing and must contain specific factual and/or legal allegations setting forth the basis on which the protesting party challenges the contract award by NYSED. The protest must be filed within ten (10) business days of receipt of a debriefing or disqualification letter. The protest letter must be filed with [cau@nysed.gov](mailto:cau@nysed.gov). A protest review committee will be formed, which will include NYSED counsel, CAU, and the Program Office. Counsel’s Office will provide the bidder with written notification of the review team’s decision within ten (10) business days of the receipt of the protest. The NYSED Contract Administration Unit (CAU) may summarily deny a protest that fails to contain specific factual or legal allegations, or where the protest only raises issues of law that have already been decided by the courts.

**3.8 ENHANCEMENT BUDGET PROVISION**

Following the initial contract award, NYSED may wish to negotiate an Enhancement Budget in excess of the total cost proposal. These enhancements shall not exceed 10% of the initial total cost proposal. This figure is applied after the negotiations with the tentative Awardee and should not be included with the Contractor’s submission in response to this document. The total cost including any enhanced budget amount may not exceed the Lot parameters from which the award was made. Enhanced deliverables agreed to with the Contract Awardee shall be included and paid in the final deliverable payment.

**3.9 TRAVEL**

Travel reimbursement will not be provided under this agreement.

**3.10 RETAINAGE**

NYSED will retain an amount equal to ten percent (10%) of the cost of each Deliverable performed by Contractor for services under this Agreement. The retained amount shall be paid to Contractor upon the occurrence of both of the following:

- Final Acceptance by SED of all Deliverables for services under this agreement.
- Final Review of the SAMS Payment Implementation aligning to the Deliverables within this contract.

**3.11 ADDITIONAL INCENTIVES**

Not applicable



## 4. CONTRACTOR RESPONSE

Contractor: Please convert the Administrative Proposal, Technical Proposal, and MWBE Documents to PDF, attach the PDFs with the Financial Proposal in Excel format, and e-mail before the Mini-Bid Deadline as specified on page 1.

The Contractor's full submission shall consist of four responses:

- Administrative Proposal (PDF format of forms included in Attachment 2)
- Technical Proposal (PDF format, following instructions in section 4.2)
- Financial Proposal (Excel format of completed Attachment 1)
- MWBE Documents (PDF of completed forms included in Attachment 2)

### 4.1 ADMINISTRATIVE RESPONSE

The Contractor Submission must be fully and properly executed by an authorized person. By signing you certify your express authority to sign on behalf of yourself, your company, or other entity; full knowledge and acceptance of this Mini-Bid (including any Questions/Answers or addendums) and the OGS Centralized Contract; and that all information provided is complete, true and accurate.

Contractor affirms that it understands and agrees to comply with the Authorized User's procedures relative to permissible contacts. Information may be accessed at:

Procurement Lobbying: [NYSED's Procurement Lobbying Law Policy Guidelines](#)

The Authorized User will not be held liable for any cost incurred by the Contractor for work performed in the preparation of a response to this Mini-Bid or for any work performed prior to the formal execution of an Authorized User Agreement. Responses to the Mini-Bid must be received as specified in Key Dates and Events. Contractor assumes all risks for timely, properly submitted deliveries of this Mini-Bid response. A Contractor is strongly encouraged to arrange for delivery of Mini-Bid responses prior to the date of the bid opening. Late mini-bid responses will be rejected. The received time of Mini-Bid responses will be determined by the clock at the Authorized User's location.

### 4.2 TECHNICAL RESPONSE

The purpose of the Technical Proposal is to demonstrate the qualifications, competence, and capacity of the Bidder to perform the services contained in this Mini-Bid. The Technical Proposal should demonstrate the qualifications of the Bidder and of the staff to be assigned to provide the defined services.

**A Technical Proposal that is incomplete in any material respect may be eliminated from consideration. The following outlines the required information to be provided by Bidders, in the designated order. The information requested should be provided in the prescribed format. Responses that do not follow the prescribed format may be eliminated from consideration. All responses to the Mini-Bid shall be subject to verification for accuracy.**

Please provide the information in the same order in which it is listed below, with tabulated format to match each criterion. For example, Tab I – Title Page, Tab II – Table of Contents, Tab III – Executive Summary, etc. The Bidder's proposal should contain sufficient information to ensure NYSED of its accuracy. The Bidder's Technical Proposal (excluding attachments, work samples and project plan), should be limited to **no more than 25 pages**. Failure to follow these instructions may result in disqualification.

If the Contractor's proposal includes use of a subcontractor to meet the bid requirements and / or complete work on the Mini-Bid's required deliverables, the Contractor must note throughout the technical proposal when Contractor resources and when subcontractor resources will be used. The Contractor must also note in the technical proposal the name and business address of the subcontractor and the Contractor's previous work with the subcontractor. NYSED reserves the right to require proof of the selected contractor and subcontractor agreement for work on the required deliverables prior to executing a final agreement with the selected contractor.

***Cost information must not be included in the Technical Proposal documents, doing so may invalidate the submission of your bid.***

#### 1. Title Page

The Title Page should identify the Mini-Bid subject and number; the Bidder's name and address; the name, address, telephone number, and e-mail address of the Bidder's contact person; and the date of the Proposal.

## 2. Table of Contents

The Table of Contents should identify each major section of the Bidder's proposal and corresponding page number. It should also include all attachments or addendums to the Proposal.

## 3. Executive Summary

The Bidder should provide a brief and concise description of the proposed approach. The Bidder should describe any unique capabilities that speak to why its services may be superior to those of its competitors.

## 4. Minimum Qualifications

The Bidder must provide certification on the Minimum Qualifications Certification Form (contained in Attachment 2) and documentation proving it meets the requirements defined in Section 2.1, Minimum Bidder Qualifications.

## 5. Experience and Staffing

In addition to meeting the Minimum Qualifications in Section 2.1, the Bidder shall elaborate and provide qualitative details about its experience and ability to meet the preferred qualifications in Section 2.2. This experience should include the following:

### *Work Samples*

The Bidder should provide relevant work samples that provide tangible evidence of experience similar in nature to the work defined in this Mini-Bid.

### *Company References*

Using Contractor References form in Attachment 2, the Bidder should provide three references from recent engagements, preferably other public sector entities.

### *Personnel*

The Bidder should provide profile information for each of the proposed key staff, including subcontracted staff. Profile information should include:

- Name
- Proposed role on this project and planned time to be spent on this project
- Years of relevant experience
- Description of relevant experience
- Educational qualifications and professional certifications
- Indication as to which referenced projects this individual worked on

## 6. Project Schedule and Staffing Plan

The project schedule should include:

- Tasks and milestones
- Start and finish dates/task durations
- Task/Milestone dependencies (i.e., predecessors and successors)
- Resource allocations
- Critical path

The Bidder should also provide an accompanying staffing plan that includes, at a minimum:

- Details of how staffing will be provided to meet the project deliverables over the entire lifecycle of the engagement
- The degree to which Bidder staff will work on-site at NYSED
- Any assumptions that the Bidder has made about the expected level of effort of staff on the project

## 7. Approach

The Bidder should describe its approach to executing the project and achieving all required deliverables, including:

- How its experience, practices, and procedures will ensure a successful project
- How its approach will ensure a quality product and timely completion

### **4.3 FINANCIAL RESPONSE**

The Bidder shall complete and submit Attachment 1 – Mini-Bid Financial Proposal. **Failure to comply with the mandatory format and content requirements may result in disqualification.** The bid price shall cover the cost of furnishing all of

the defined services and deliverables, including but not limited to materials, equipment, travel expenses, profit and labor, and the performance of all work set forth in this document. The Mini-Bid Financial Template requires the Bidder to provide pricing for each deliverable and a Total Fixed Price for the Project. Totals will be automatically calculated based on the hours and pricing entered.

The Total Fixed Price for the Project as shown in Attachment 1 – Mini-Bid Financial Proposal will be used for the cost evaluation.

## **5. MINI-BID EVALUATION PROCESS**

NYSED will evaluate each proposal based on the “Best Value” concept. This means that the proposal that best “optimizes quality, cost, and efficiency among responsive and responsible offerors” shall be selected for award (State Finance Law, Article 11, §163(1)(j)).

NYSED, at its sole discretion, will determine which proposal(s) best satisfies its requirements. NYSED reserves all rights with respect to the award. All proposals deemed to be responsive to the requirements of this procurement will be evaluated and scored for technical qualities and cost. Proposals failing to meet the requirements of this document may be eliminated from consideration. The evaluation process will include separate technical and cost evaluations, and the result of each evaluation shall remain confidential until both evaluations have been completed and a selection of the winning proposal is made.

The evaluation process will be conducted in a comprehensive and impartial manner, as set forth herein, by an Evaluation Committee. The Technical Proposal and compliance with other Mini-Bid requirements (other than the Cost Proposal) will be weighted at 70% of a proposal’s total score, and the information contained in the Cost Proposal will be weighted at 30% of a proposal’s total score.

Bidders may be requested by NYSED to clarify the contents of their proposals. Other than to provide such information as may be requested by NYSED, no Bidder will be allowed to alter its proposal or add information after the Deadline for Submission of Proposals listed in Key Events and Dates.

In the event of a tie, the determining factors for award, in descending order, will be: (1) lowest cost; and (2) proposed percentage of M/WBE participation.

### **5.1 SUBMISSION REVIEW**

NYSED will examine all proposals that are received in a proper and timely manner to determine if they meet the proposal submission requirements, as described in Section 4 (Contractor Response), and include the proper documentation, including all documentation required for the Administrative Response, as stated in this Mini-Bid. Proposals that are materially deficient in meeting the submission requirements or have omitted material documents, in the sole opinion of NYSED, may be rejected.

### **5.2 TECHNICAL EVALUATION**

A Technical Evaluation Committee (TEC) comprised of NYSED staff will review and evaluate all proposals that meet minimum Bidder Qualifications and submission requirements. The TEC members will independently score each Technical Proposal that meets the submission requirements of this Mini-Bid. The Technical Evaluation is 70% (up to 70 points) of the final score.

<b>Technical Evaluation</b>	<b>70 Points</b>
Written Technical Proposal Experience and Staffing (20 points) Project Schedule and Staffing (20 points) Approach (20 points)	60
Technical Presentation	10

### **5.3 COST EVALUATION**

The Cost Evaluation Committee (CEC) will review and evaluate all Financial Proposal documents. The Financial Proposals will be opened and reviewed for responsiveness to cost requirements. If a Financial Proposal is found to be non-responsive, that proposal will not receive a cost score, and will be eliminated from consideration.

Each proposal that meets the submission requirements and meets the Financial Proposal requirements will receive a cost score. The Financial Proposal will be scored based on a maximum of 30 points. The Total Bid Price submitted in Attachment 1 - Mini-Bid Financial Proposal will be used for the cost evaluation.

The maximum cost score will be allocated to the proposal with the lowest all-inclusive not-to-exceed maximum price. All other responsive proposals will receive a proportionate score based on the relation of their Financial Proposal to the proposals offered at the lowest final cost, using this formula:

$$C = (A/B) * 30 \text{ points}$$

A is Total price of lowest cost proposal;

B is Total price of cost proposal being scored; and

C is the Cost score.

The Cost Evaluation is 30% (up to 30 points) of the final score.

#### **5.4 PRELIMINARY COMPOSITE SCORE**

After completion of the Written Technical Proposal and Cost evaluation, a preliminary composite score will be calculated by the CEC by adding the technical evaluation points and the cost evaluation points.

The CEC will determine which Bidders are susceptible to a contract award based on the preliminary composite scores. The highest preliminary composite scoring Bidder and those Bidders within 10 points (no decimals round down) of the highest score will be invited for a technical presentation.

#### **5.5 PRESENTATION**

Presentations will be held either via WebEx or at the Department's main office located in Albany, New York when possible. All members of the Contractor's key personnel must be at the presentation.

The presentation will last approximately one hour. Finalists are expected to make a presentation setting forth their qualifications and experience. The presentation must also address the project approach described in the mini-bid proposal. Throughout the interview, the interview committee will be free to ask questions of the finalist.

#### **5.6 FINAL COMPOSITE SCORE**

A final composite score will be calculated by NYSED by adding the presentation evaluation points to the preliminary technical evaluation points and the cost evaluation points. The proposals will then be ranked based upon each Bidder's Final Composite Score. The highest scoring proposal will be eligible for award.

#### **5.7 REFERENCE CHECKS**

The Bidder will submit references using the Contractor References form in Attachment 02. NYSED reserves the right to contact references at its own discretion. The purpose would be to authenticate bidder claims in its technical proposal.

#### **5.8 BEST AND FINAL OFFERS**

NYSED reserves the right to request best and final offers. In the event NYSED exercises this right, all Bidders who submitted a proposal that met the minimum mandatory requirements will be asked to provide a best and final offer. Bidders will be informed that, should they choose not to submit a best and final offer, the offer submitted with their proposal will be construed as their best and final offer.

#### **5.9 AWARD RECOMMENDATION**

The contract issued pursuant to this proposal will be awarded to the vendor whose aggregate technical and cost score is the highest among all the proposals rated. NYSED will make one award.