STATE OF TENNESSEE
DEPARTMENT OF TREASURY

REQUEST FOR INFORMATION
FOR
Project ARIS

RFI # 30901-57524

STATEMENT OF PURPOSE:

The State of Tennessee, Department of Treasury ("the State") issues this Request for Information ("RFI") for the purpose of ascertaining options and offerings currently available in the business market focused on Pension Administration Software ("PAS") systems. The intent of this RFI is to gather information and better understand current industry practices and service options available to the Tennessee Consolidated Retirement System (TCRS). TCRS has provided the questions below in an attempt to understand the services available and the level of maturity of the market. We appreciate your input and participation in this process.

All vendors with appropriate product offerings and knowledge relating to the requirements described herein are invited to submit a response to this RFI. The response should discuss the vendor's capabilities to provide products and assist TCRS in understanding product offering capabilities. Reponses should also address the functional, technical, and other questions specified in this RFI.

The information obtained from responses to this request will be used to assist TCRS

(i) in determining whether to implement a new and enhanced pension administration software system and if so, (ii) to improve the quality of any future Request for Proposal ("RFP") developed to procure products and services. This request is strictly a mechanism for gathering information and will not constitute a procurement process. This RFI is not a competition, and the information submitted in writing will be used only to improve the State's knowledge of a vendor's capability to provide the products and services sought. No evaluation of participating vendors will occur, and your participation is not a promise of future business with TCRS. The State appreciates your cooperation and looks forward to a meaningful and productive research effort.

The response should provide a straightforward, concise delineation of the Responder's capabilities to serve the needs of TCRS. In your response, please describe your organization's qualifications and the resources available to draw on, to assist TCRS. It is expected that the Responder will possess a minimum ten (10) years of demonstrable business experience with Pension Administration Solutions.

1. **BACKGROUND:**

TCRS is a public employee retirement system that is a division of the Tennessee Department of Treasury. TCRS provides defined benefit pension plans for four large groups of public employees: kindergarten through – 12th grade public school teachers (K-12 teachers), higher education employees, state government employees, and local government (also called political subdivision) employees. Each local government (such as a city, county, utility district, and the like) voluntarily decides whether to be a participating employer in TCRS and thereby cover its local government employees in TCRS.

There are three defined benefit pension plans with TCRS as described as follows:

(1) The Public Employee Retirement Plan, which is an agent, multiple employer defined benefit pension plan for state and higher education government employees and for political subdivisions.

(2) The Teacher Legacy Pension Plan, which is a cost-sharing, multiple- employer defined benefit plan for teachers of local education agencies (LEAs) that is closed to new membership effective June 30, 2014.

(3) The Teacher Retirement Plan is a cost-sharing, multiple-employer defined benefit plan for teachers of LEAs hired after June 30, 2014.

The following are each a separate coverage group in TCRS for accounting and funding purposes:

(1) State and Higher Education employees hired prior to July 1, 2014

(2) State and Higher Education employees hired after June 30, 2014

(3) K-12 public school teachers hired before July 1, 2014

(4) K-12 public schools teachers hired after June 30, 2014

(5) State judges and other officials hired before July 1, 2014

(6) State judges and other officials hired after June 30, 2014

(7) As of June 30, 2023, there were over 625 separate political subdivisions actively participating in TCRS. Each political subdivision may elect to participate in one of the following plans within TCRS and may under the terms of the respective plan, change from such plan to one of the following plans on a prospective basis:

   (i) TCRS Legacy Plan as defined and established in Tennessee Code Annotated, Title 8, Chapters 34 – 37,
   (ii) Local Government Alternate Defined Benefit Plan as defined and established in Tennessee Code Annotated, Section 8-35-25,
   (iii) Local Government Hybrid Plan as defined and established in Tennessee Code Annotated, Section 8-35-256, and
   (iv) Hybrid Retirement Plan for State Employees and Teachers as defined and established in Tennessee Code Annotated, Title 8, Chapter 36, Part 9.

Assets are accounted separately for each plan, i.e., assets for each political subdivision are accounted for separately as well as for each of the state and higher education and teacher plans. These plans may also have different plan provisions and rules for each political subdivision. Examples would be rules around vesting, cost of living adjustments, mandatory retirement, employee contributions, and bridge requirements as well as coverage for part-time employees.

The TCRS-defined benefit pension plans provide lifetime retirement, survivor, and disability benefits for its members and their beneficiaries. After meeting the applicable vesting requirements, a member becomes eligible to receive a monthly retirement benefit upon reaching the age and/or service requirement for the respective plan. Benefits are calculated based on the member's years of creditable service, average final compensation (AFC), age, and the applicable benefit accrual factor. AFC is the average of the highest five consecutive years of compensation.

In 2014, TCRS adopted a hybrid plan for new employees. The Hybrid Plan is funded by contributions from both the employer and the member. The employer contributes an amount equal to 4% of earnable compensation to TCRS and 5% of the respective member's salary into the member's 401(k) account. The member is required to contribute 5% of earnable compensation to TCRS and is automatically enrolled in the State of Tennessee 401(k) plan with a contribution amount of 2%.

With over $65 billion in assets, TCRS serves over 220,000 active members and 149,000 retirees. The annual retiree payroll exceeds $2.8 billion.

TCRS was created in 1972 by combining the administration of seven separate retirement systems. This merging of administration resulted in the TCRS consisting of 3 major groups with respect to how defined benefit plan liabilities are covered, represented by: (1) local government; (2) Local Education Agencies (LEAs) for K-12 teachers; and (3) the State and higher education. As previously described on page 2 above, for plan liability purposes, each local government stands on its own; the State is legally responsible for all of its agencies and higher education institutions; and the K-12 Teachers Plan is a cost sharing plan, whereby all assets accumulated in the plan are available to cover the liabilities for all teachers in the plan. The TCRS system is governed by statute, which sets out the rights and benefits provided.

For additional details regarding TCRS, its respective retirement plans and provisions, and employer participation, please refer to the following materials:

- Tennessee Department of Treasury – 2022 Annual Report
- Tennessee Consolidated Retirement System – Annual Comprehensive Financial Report
- TCRS Employer Manual
- Active Member Guides by Retirement Plan Types:
    - Hybrid Retirement Plan for State Employees and Techers
    - Hybrid Retirement Plan Supplement for General Assembly Members
    - Hybrid Retirement Plan Supplement for Judges
    - Hybrid Retirement Plan Supplement for State Public Safety Officers
    - Legacy Retirement Plan for State and Higher Education Employees
    - Legacy Retirement Plan for Teachers
    - Legacy Retirement Plan for General Assembly Members
    - Legacy Retirement Plan Supplement for Judges
    - Legacy Retirement Plan Supplement for State Public Safety Officers

Political subdivisions in Tennessee sponsoring a defined benefit plan outside of TCRS, i.e., an external pension plan (EPP), may request TCRS to administer their closed EPP on the sponsor's behalf. For EPPs being administered by TCRS, a separate account is established to track asset activity and is separate and apart from TCRS plan assets. These separate accounts are charged administrative costs for the services provided by TCRS and if TCRS also invests their assets, investment income and expense are allocated to the accounts. TCRS administration includes retirement benefit payments to

EPP retirees, maintenance of EPP retirees including address changes, tax withholding changes, bank accounting changes, processing of death notifications, addition of new payees, issuance of 1099Rs, and cost of living adjustments. A separate monthly payroll is generated for each EPP. Monthly, TCRS remits a report and tax withholdings to the EPP who files and remits to the IRS. At calendar year end, TCRS generates a 1099R for EPP retirees and remits a report to the EPP for filing of the EPPs IRS Form 945. Currently, TCRS administers three (3) EPPs with another targeted in calendar year 2024. Actuarial services are the responsibility of the EPP.

TCRS purchased the Concord Pension Administration System from Deloitte Consulting, LLP. The system went live in July 2014, but the architecture and technologies largely originated in 2001 or prior. Since 2014, the State has transitioned to primarily State support including on-premises infrastructure, development, business analysis, and quality assurance. The Concord system has adequately met TCRS administration requirements through this duration. However, new legislation, advancements in technology, increased end-user volume, digitized and automated feature demand, and periodic production reliability issues have resulted in increased organizational risk, increased implementation duration and constraints, and probable alternative product opportunity costs.

TCRS has initiated Project ARIS (Advanced Retirement Information System) with the goal of analyzing organizational and technical requirements for a future system. The project aims to implement a new and enhanced pension administration software system and strategically plan by continuously improving processes and adopting best practices in the pension industry.

The primary objective for gathering this information is to elicit, outline, and compare solution options, from existing products to custom development viability for the State's consideration.

Organizational Principles guiding the future PAS system are as follows:
- Enable TCRS to better provide integrated member services
- Develop an intuitive system that improves usability for internal users, members/retirees, and employers
- Review existing processes and identify which to maintain, which to modify, and which to eliminate
- Modernize software/platform
  - Provide capabilities for transparency and accountability, enabling TCRS to continuously monitor key system and security metrics and events
  - Use Application Programming Interfaces (APIs) to modernize the TCRS's file-based interfaces with manual exception processing and to extend the product's capabilities without impacting the ability to perform product upgrades
  - Automate IT capabilities and implement self-healing capabilities to streamline IT processes and reduce the time to deliver business capabilities
  - Provide self-service data query, reporting and analysis that also considers role-based access control to protect sensitive data (e.g., Personally Identifiable Information ("PII") and banking information). Self-service capabilities will rely on continuous data quality
  - Provide user self-service for user administration functions such as user registration, role assignments (aka delegated administration), and periodic user access reviews
- Allow for adaptation should changes to plan administration be necessary (different

requirement of current plan or addition of a completely new plan)

1.1. Scope of Work
Based on the above, the State is seeking information on the product market and best practices for the purpose of preparing a competitive proposal from qualified organization(s) for the development and installation of a BAS having software from qualified firms with in-depth knowledge and technical expertise. This RFI provides details and information needed by TCRS and instructs interested vendors on the RFI process.

The State seeks to acquire and implement a software solution for TCRS that encompasses a core line of business PAS, Customer Relationship Management (CRM) solution, and an Enterprise Content Management (ECM) solution necessary to support current and future departmental business processes. CRM and ECM functionality may be delivered as part of an integrated system or a third-party solution.

2. COMMUNICATIONS:

2.1. Please submit your response to this RFI via email to Dawn Rochelle at dawn.rochelle@tn.gov by no later than the Response Deadline date specified in Section 3. In the event your response with all attachments and supporting documentation will exceed fifteen (15) megabytes in total, please place the documents in a zip file or make two (2) or more submissions such that the documents, per email submission, do not exceed fifteen (15) megabytes.

2.2. Please feel free to contact the State with any questions regarding this RFI. The main point of contact will be:

> Dawn Rochelle, Solicitation Coordinator
>
> Tennessee Treasury Department
> Telephone: (615) 253-8770
> Email: dawn.rochelle@tn.gov

Note: If you have any questions or comments concerning this RFI, it is important you e-mail them to the State's main point of contact by no later than the Written Questions & Comments Deadline detailed in RFI Section 3, Schedule of Events. The State will e-mail its responses to written questions and comments to prospective Respondents on the date detailed in RFI Section 3, Schedule of Events. The State will also post a copy of the amendment to the following website:
https://www.tn.gov/generalservices/procurement/central-procurement-office--cpo-/supplier-information/request-for-proposals--rfp--opportunities1.html

3. RFI SCHEDULE OF EVENTS:

	EVENT	TIME (Central Time Zone)	DATE (All dates are State business days)
1.	RFI Issued		September 26, 2023
2.	Intent to Respond Deadline	2:00 p.m.	October 2, 2023
3.	Written "Questions & Comments" Deadline	2:00 p.m.	October 6, 2023

	EVENT	TIME (Central Time Zone)	DATE (All dates are State business days)
4.	State Response to Written "Questions and Comments"		October 16, 2023
5.	RFI Response Deadline	2:00 p.m.	October 27, 2023
6.	Scheduling of Optional Meetings		November 6-7, 2023
7.	Optional Meetings		November 15-17, 2023

4. GENERAL INFORMATION:

4.1. Please note that responding to this RFI is **not** a prerequisite for responding to any future solicitations related to this project, and a response to this RFI will not create any contract rights. Responses to this RFI will become property of the State.

4.2. The information gathered during this RFI is part of an ongoing procurement. To prevent an unfair advantage among potential respondents, the RFI responses will not be available until after the completion of evaluation of any responses, proposals, or bids resulting from a Request for Qualifications, Request for Proposals, Invitation to Bid, or other procurement method. If the state chooses not to go further in the procurement process and responses are never evaluated, the responses to the procurement, including the responses to the RFI, will be considered confidential by the State.

4.3. The State will not pay for any costs associated with responding to this RFI.

4.4. The State Point of Contact will contact entities that have submitted responses to this RFI to schedule presentations relative to the respondent's systems, tools, and services.

5. OPTIONAL MEETINGS:

5.1. If the State determines it to be beneficial to the State, the contact person listed in your response will be emailed and your organization will be given an opportunity to participate in an optional meeting. Participating in the meetings is not mandatory. Meetings will be conducted remotely via web conference, hosted by the State, during the period indicated in RFI Section 3, Schedule of Events. The meetings provide an opportunity for Respondents to explain and clarify their responses with respect to addressing the items detailed in Section 6 of this RFI below.

6. INFORMATIONAL FORMS:

The State is requesting the following information from all interested parties. Please fill out the following forms:

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COMPANY INFORMATION
1.   RESPONDENT LEGAL ENTITY NAME:
2.   RESPONDENT CONTACT PERSON: Name, Title:

Address:
Phone Number:
Email:

3. Briefly describe the company experience/or clients with the same or a similar solution(s). If you have worked with multiple clients and projects, please list as many projects as possible including when the solution went live. Please include a list of current clients indicating any that could serve as references.

4. Background:
   - Please provide general information about your company. Provide a company overview and history, including total number of staff, locations, strategic partnerships, and financial position.
   - Will the company be involved in any acquisitions or mergers within the next 12 months? If yes, please describe.

5. Capacity and Capacity Management
   - **Current projects** – What percent of your workforce are currently allocated to implementation, upgrade, or maintenance and support work? What percent are "on the bench"? Provide an approximate breakdown by type of work. Include a separate breakdown by onshore vs. offshore.
   - Based on your known work as of today, what percent of your workforce are allocated in the 2nd half of 2024?

6. What is your firm's **ideal project start date** for a project of this size and scope, assuming 2nd half of 2024 and beyond?

Product Overview

1. Is your solution a single integration PAS solution or would you consider it a Best-of-Breed solution? Please provide a detailed explanation, and if possible, provide an architecture diagram for your preferred, standard PAS solution implementation.

2. Explain the types of pension administration products offered by your company and include an overview of hardware or software used by your solution. Please include detailed documentation on platform design, database design, and physical hardware vs. cloud solutions.

3. Is your PAS solution capable of configuring multiple and varying tier structures? If so, can these be maintained historically and, on a go-forward basis? Examples include contribution rates, formulas (e.g., dollars per hour, percent of salary, etc.) and caps? Are these types of changes supported by online configuration or is development required?

4. Describe the functionality of the CRM tool and if it is not an integrated solution, describe how it will be integrated.
   - Describe the functionality of the CRM tool and how it will support TCRS's needs.
   - Describe how your system efficiently allows approved external partners access to TCRS data.

5. Briefly describe any Chatbot integration, Artificial Intelligence (AI), or mobile functionality.

6. How do you address considerations for a high-change legislative environment with hard deadlines and high expectations?
   - How have you been successful? How do your SLAs support this?

- Where have you failed? What lessons have been learned and what corrective actions taken?

7. Innovation/Product Roadmap
   - Describe the company's **PAS product roadmap for the next 5-10 years**. Indicate how your proposed solution will take advantage of cloud services and technologies. Is AI included in the roadmap?
   - Is there a planned sunset date for your proposed solution describe the potential replacement solution.
   - Provide a **10-year retrospective product roadmap** of the proposed solution. TCRS is interested in understanding how the proposed solution has been enhanced and upgraded.

8. Experience with Retirement Integration
   - Describe your experience integrating hybrid-type plans where a portion of the benefit comes from a traditional defined benefit plan and a portion from a deferred compensation type plan.
   - What is your experience producing a consolidated benefit estimate for hybrid plan members? Provide functional and technical details that you believe are pertinent to provide a conceptual understanding of the functionality as designed.
   - Explain how your product will be able to support TCRS in providing robust retirement counseling. What is your preferred approach?
   - What is your company's typical approach to working with DC vendor(s) in PAS implementations? What worked well and what has not worked well?
   - Provide any experience you have interfacing with DC plans and any experience with common remitters.

9. Describe your system's <u>workflow</u> capabilities and if these capabilities are part of your core product or implemented via integration with 3rd party workflow solutions? How are the workflows integrated with the system process?

10. Describe your system's ECM/<u>document management</u> capabilities, indicating if the capabilities are performed by the core product or third-party products for:

#	Capability	Method	Products supported
1.1.	Document ingestion, imaging and index via paper, fax, email, and uploaded documents	<PAS, 3rd party>	<List proven 3rd party products integrated and supported>
1.2.	Document viewing and annotation	<PAS, 3rd party>	<e.g., Open Text Brava Viewer>
1.3.	Document electronic signature	<PAS, 3rd party>	<e.g., DocuSign>
1.4.	Document generation based on templates and PAS data merge	<PAS, 3rd party>	< e.g., SmartComm, Ghostscript>
1.5.	Document distribution based on recipient channel preferences	<PAS, 3rd party>	< e.g., SmartComm, Ghostscript>

11. Describe the <u>services</u> your company provides related to the services listed below and describe the information needed in a client's RFP to accurately estimate the work required for these activities:
- Data and document migration and conversion
- Legacy system integration as incremental capabilities deployed over time

12. Describe how your system's product architecture and implementation processes ensure that TCRS-specific configurations and extensions do not inhibit the ability for TCRS to upgrade to new product versions.

FUNCTIONAL INFORMATION

1. Briefly describe the following capabilities of your company's product related to the following processes**:**

   a. Employer Services: Employer reporting, Payroll contribution submission

   b. Employer Asset Management including administrative cost allocation and investment earnings distribution and audit

   c. Calendar Year-End Reporting including issuance of 1099s and reporting to the IRS

   d. Fiscal Year End Closing and Reporting to include financial reports, actuarial information, GASB 68 data and application of COLA increases

   e. Member Self Service

   f. Retirement Processing and Payroll

   g. Refunds

   h. Service Purchase

   i. Benefit Estimates and Member Annual Statements

   j. Return to Work

   k. Disability Retirement Benefit Administration

   l. Death Identification and Processing

   m. Qualified Domestic Relations Orders (QDROs)

   n. Accounting/Financial Reporting including General Ledger

2. In what way does the system's structure ensure that all functionality works seamlessly together and avoids data redundancy and synchronization issues?

3. What do you see as your competitive advantage?

4. What do you see as your system's differentiators and how does it exceed other PAS solutions?

5. How does your company implement innovative strategies to improve your products?

6. Why would TCRS users like using your system?

IMPLEMENTATION STRATEGY

1. Briefly describe your implementation strategy including information on your project management approach and what TCRS should consider when identifying and forecasting project resources.

2. Based on the solution you propose, what is generally the number of client staff (in hours or FTEs) that TCRS should plan to have available for implementation. Is there an average ratio of vendor staff to client staff that can be estimated? Please provide any relevant details to estimate staffing requirements for TCRS.

TECHNICAL INFORMATION

PAS System Architecture

Hosting

Describe the solution's available hosting options:

Hosting Model	Currently Supported	Can Support if Required
Vendor Hosted	<Yes, No>	<Yes, No>
State Hosted – AWS, Azure, or Google	<Yes, No>	<Yes, No>
On-Premises	<Yes, No>	<Yes, No>

If a hybrid model is recommended, complete the following table to describe the components that are deployed to different platforms, describe where components are deployed, the rationale for deployment recommendation and any implications (e.g., latency, cost, security).

Component	Deployed	Rationale	Implications
<e.g., Imaging)	<On-prem, hosted>	<Describe rationale of deployment choice>	<implication of deployment choice>
<e.g., PAS>	<On-prem, hosted>	<rationale>	<implication>
<e.g., Business Intelligence platform>	<On-prem, hosted>	<rationale>	<implication>

Data Architecture

1. Describe the solution's data architecture.

2. If there are multiple architecture patterns supported (e.g., data lake, data warehouse, and/or data marts), please describe the advantages and disadvantages of each option.

3. Describe how you handle data analytics without impacting production or system performance.

4. Describe how the PAS supports a continuous and flexible data quality management program including the ability to extract, update and refresh data.

5. Describe how the proposed data platform can be supported to incorporate additional data from TCRS or external data sources for advanced analytics (e.g., customer analytics) or industry data sets.

6. Describe how the proposed solution provides data access to the State. Also describe your standard retention requirements and the flexibility for TCRS to configure the retention period.

7. If the relationship would be to cease, how is this data persisted and provided back to the State?

Application Architecture

Describe your system's Application Architecture patterns, technologies, tools, and standards related to the following:

1. Industry standards and mechanisms used to maximize the reuse of solution assets, while increasing the probability of industry resources available to TCRS since the approach is

vendor independent. Examples include Business Process Modeling Notation (BPMN), extended Markup Language (XML) and Decision Modeling Notation (DMN).

2. Methods and mechanisms to enable the architecture to evolve as the industry evolves.

3. Describe the application architecture mechanisms that provide automation that include examples such as:
   - Workflow and workflow task automation
   - Portal self-service features
   - Knowledgebase and knowledge search capabilities
   - Use of AI to streamline customer service or other business activities

Integration Architecture

Describe your system's integration architecture mechanisms, software, data formats/semantics and patterns to provide the following:

1. Application-to-application (A2A) integration for internal integrations

2. Business to Business (B2B) integration (e.g., external interfaces)

3. Payment processing (PCI-DSS or NACHA compliance)

4. Application Programming Interface (API) development, versioning, deployment, management, monitoring capabilities and components (e.g., API Gateway)

5. Batch Processing to support scheduled processing

Responsibility Model

1. Describe how your organization views the responsibility for security and regulatory compliance and risk management in a model where the vendor organization:

   - Provides and manages the underlying infrastructure and the infrastructure health

   - Provides and manages vendor software products (e.g., PAS and enabling technologies)

   - Performs TCRS-specific configurations and extensions

   - Performs as the data custodian for TCRS data

User Experience

1. Describe your system's user experience (UX) including information regarding design for user engagement and compliance with web accessibility standards.

2. Describe the approach for providing mobile capabilities: native mobile App, responsive web, or a combination.

Solution Configuration

Please describe your organization's methodology, products, and tools that support TCRS's ability to do the following:

1. Update existing and create new document types and correspondence templates and test these changes in a non-production environment and promote them in a controlled and automated manner.

2. Describe your system's capabilities in creating dynamic, automated and customer journey-based communications.

3. Update existing and create new business rules and test these changes in a non-production

environment and promote them in a controlled and automated manner.

4. Update existing and create new business processes (i.e., workflows) and test these changes in a non-production environment and promote them in a controlled and automated manner.

5. Update existing and create new system-wide configurations (i.e., policies and settings) and test these changes in a non-production environment and promote them in a controlled and automated manner.

6. Update existing and create new system interfaces (external or internal) and test these changes in a non-production environment and promote them in a controlled and automated manner.

7. Extend the solution's data model and document metadata configurations to support TCRS-specific data attributes and test these changes in a non-production environment and promote them in a controlled and automated manner (e.g., DevDataOps).

8. Identify the impact of proposed changes on the existing configurations and extensions.

Product Compliance

Describe your company's and product's ability to comply with industry practices and standards in the following table:

#	Compliance Requirement	Current Compliance	Commitment to Compliance
1	NACHA compliance including these dimensions: -Security Requirements -Transaction Authorization and Verification -Data Transmission and Formatting -Funds Availability -Reversals and Returns -Compliance and Risk Management -Consumer Protection -Notification and Communication -Audit and Reporting	<Yes, No, Partial>	<Specify organization's commitment to meet standards and ensure continued compliance as the proposed TCRS solution evolves, the operating environment evolves, and the standards evolve.>
2	Secure Software Development Lifecycle based on National Institute of Standards and Technology (NIST and Open Worldwide Application Security Project (OWASP) practices	<Yes, No, Partial>	<Specify organization's commitment to meet standards and ensure continued compliance as the proposed TCRS solution evolves, the operating environment evolves, and the standards evolve.>

TCRS Self Service

Describe your organization's methodology, products, and tools to support TCRS's ability to do the following:

1. Provide self-service data query, reporting and analysis that also considers data role-based access control and protecting sensitive data (e.g., PII and banking information).

2. Provide security administration capabilities to manage user roles, the associated system resources, and the privileges to these resources. TCRS desires to have full control over user

account management and provide delegated user administration so Employers and Vendors can manage their own user base.

3. Provide test data generation, management and environment tools that leverage production data to establish de-identified test data sets to perform user acceptance test scenarios.

4. Provide automated environment setup and refresh capabilities to allow TCRS access to environments for product upgrade testing, training, or other unanticipated needs.

Solution Self-Healing & Feedback Loops

 1. Describe any solution capabilities that increase the solution robustness to facilitate a solution's ability to self-heal including examples such as queuing interface requests, re-routing of alerts if thresholds are reached and auto-recover in case of a failover.

Security Governance

1. How does your security align with the NIST Cybersecurity Framework (CSF) to include the implementation of key NIST 800.53 Security Controls? How would you work with TCRS in completing a System Security Plan based on your proposed solution and meeting state cybersecurity requirements?

2. How is overall data governance handled with your solution to maintain security and ensure lifecycle management? If your solution would propose a vendor hosted cloud-based environment, how do you maintain sovereignty over all data transactions to ensure all TCRS data is distinctly segregated and occurs within the US?

3. Do you have an approach to leveraging a deny-by-default and/or zero trust architecture? Please include any key aspects of your "defense in depth" approach.

4. How do you support a defense in depth approach? This could include, but is not limited to, partitioning utilizing mechanisms such as firewall rules, utilization of intrusion detection/prevention, encryption techniques using the most recent version of FIPS 140-2 and 140-3 (include in-transit, at-rest, and file level encryption), patch management, and log management.

Capability Requirements

1. Do you have independent security assessments covering, but not limited to the following?
   - Regular Risk Assessment based on a defined cybersecurity framework (I.e., NIST 800.53 Rev 5.)
   - SOC II Type II Audits

2. What is your approach to managing and monitoring PII and health-related information covered under HIPAA and HITECH?

3. Assuming a vendor hosted cloud-based implementation strategy, what is your experience in:
   - Working with a FedRamp certified cloud environment, and
   - Supporting security requirements defined by your client's cybersecurity program

Detection and Continuous Monitoring

1. What capabilities do you have to integrate with common centralized authentication tools?

2. How do you perform continuous security monitoring and provide alert notifications for your solution? What capability do you have to provide your clients access to monitor or review alerts generated through your monitoring program?

3. What are your capabilities to integrate with third-party security solutions for the purposes of

monitoring and/or threat management? (i.e., SIEM, WAF, DLP, CASB, etc.)

4. What are your log management capabilities to track all changes, deletions, and additions, whether initiated by a user or by the system capturing a detailed transaction audit log that records critical information needed for forensics (i.e., user, date, time, the change that was made?

5. How do you implement appropriate RBAC (Role Based Access Control) covering items such as segregations of duties and the capability to manage the functionality to create/modify user groups, roles, permission, users, and access privileges?

6. What is your approach to managing any third-party vendors and subcontractors that are expected to be leveraged as part of your solution?

MAINTENANCE AND SUPPORT

1. Please discuss your general approach to maintenance and support. What model works best for your clients and why? What is your value proposition for maintenance and support? How do these models enable post implementation success?

2. Describe your firm's standard Maintenance & Support packages (e.g., basic, intermediate, and intensive support). Approximately what percentage of your clients are enrolled in each respective package?

COST INFORMATIONAL FORM

1. Please describe your pricing model and define the factors and primary drivers utilized by your firm in the calculation of cost for a PAS implementation project.

ADDITIONAL CONSIDERATIONS

1. Please provide input on alternative approaches or additional things to consider that might benefit the State.

2. If RFI participants have recently responded to a public solicitation (RFP) like TCRS's request, we would request to have access to the solicitation and your response.