REQUEST FOR PROPOSAL (RFP)

for

Data Profiling, Analysis and Technical Services

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November 8th, 2016
4:30 p.m. Central Standard Time
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SECTION I – INTRODUCTION

A. Nature of Request
The Missouri State Employees’ Retirement System (MOSERS), located in Jefferson City, Missouri, is seeking a vendor to perform a comprehensive data profiling, analysis, cleansing, and migration effort in preparation for a large-scale, legacy modernization project.

B. Deadline for Receipt of Proposals
Proposals must be received by 4:30 p.m. Central Standard Time on November 8th, 2016, to be considered. MOSERS will not reimburse responders for any expenses incurred in preparing proposals. MOSERS reserves the right to request additional information or clarifications from responders during the evaluation process or to allow corrections for errors or omissions at any time during the evaluation process.

C. For More Information
If you are interested in responding to this RFP and need additional information to complete it or have specific questions, please contact the project manager as noted on the cover page of this RFP. Any correspondence, including your submission of a response to this RFP, should be emailed to the project manager by the date specified in Section IV (A) herein.

D. MOSERS Background Information
MOSERS is an instrumentality of the State of Missouri vested with the powers and duties specified in state law. MOSERS provides retirement, disability, and life insurance benefits to its members. MOSERS has approximately 110,000 members, including 51,000 actives, 40,000 benefit recipients, and 19,000 terminated vested members. MOSERS is responsible for managing an $8 billion dollar portfolio of investments held in trust for the payment of member benefits. MOSERS also administers the State of Missouri Deferred Compensation Plan for state employees and retirees and the College and University Retirement Plan (CURP), a defined contribution plan for higher education faculty employees. The CURP has approximately 2,200 members. MOSERS also administers a long-term disability plan and a life insurance plan which is insured by The Standard located in Portland, OR.

For additional general information about MOSERS, please refer to our website at www.mosers.org and specifically to our Comprehensive Annual Financial Report for the fiscal year ended June 30, 2015, which is available on our website at: https://www.mosers.org/About-MOSERS/Annual-Report.aspx.
Mission
MOSERS exists to advance the financial security of its members.

Vision
We endeavor to:
- Exceed customer expectations
- Educate stakeholders
- Ensure sound investment practices
- Encourage responsible funding of the plan through a commitment to EXCELLENCE ALWAYS.

Values
Quality - Strive to exceed the expectations of internal and external customers through innovation, competence, and teamwork. Seek to "do it right" the first time.

Respect - Be sensitive to the needs of others, both within and outside of the organization. Be courteous, considerate, responsive, and professional.

Integrity - In all endeavors, act in an ethical, honest, and professional manner.

Openness - Be willing to listen to, and share information with, others. Be receptive to new ideas. Be trusting of others.

Accountability - Take ownership of and responsibility for actions and their results. Learn from mistakes. Control system risks and act to protect the security of member information and system assets.
SECTION II – PROJECT SCOPE

A. Specific Scope
The selected contractor will provide data profiling, data cleansing, data migration technical services, and data models in support of the implementation of a new line of business Pension Administration System (PAS). Approximately 80% of the data is stored in IBM DB2 while the remaining 20% is housed in Microsoft SQL Server.

Objective 1 – Data Profiling
The MIBS (MOSERS Integrated Benefits System) data must be confirmed and analyzed; and determinations must be made regarding what data elements need to be cleansed, what data needs to be migrated, and how it should be migrated.

Goals:

- Report on an initial assessment of production data and identify what data problems exist.
- Define the approach to be used for Data Profiling including a detailed project plan that covers Data Profiling activities. It should identify all resources necessary for successfully completing the Data Profiling.
- Identify key data components, key points of time related to the data, missing elements of the data, and summarize elements of the data.
- Identify the attributes and relationships of the key data components data.
- Analyze key data components to identify data that will need to be cleaned and/or corrected prior to the implementation of the new PAS system.
Objective 2 – Data Cleansing
Data Cleansing and Development are activities that create procedures needed to perform data conversion tasks.

Goals:

- Define the approach to be used for Data Cleansing.
- Provide data correction and cleansing in the existing source data prior to migration, as well as corrections during the data migration process.
- Eliminate unnecessary data records.
- Identify and correct inaccurate data.
- Merge duplicated data where appropriate.
- Reformat and standardize data so that it can be converted.
- Gather information that does not exist in any legacy system but is required in the new PAS.
- Provide scripts which will correct the extracted data from the legacy data sources and place the data into a staging database, as applicable and appropriate. NOTE: This means the MOSERS production data shall not be changed in any manner.
- Conduct ongoing data validation against all identified data sources during the cleansing process.
- Provide a data analysis report (e.g., description of problem, data source, number of occurrences, impact, type of fix applied, number of records fixed, and number of records not fixed).
  - Identify the following types of problems:
    - duplicates;
    - missing primary-foreign key relationships;
    - redundant data;
    - "fuzzy" matches for the same data;
    - incorrect formatting;
    - incorrect data based on a numeric range;
    - incorrect data based on relationship rules;
    - non-unique keys;
    - missing data;
    - incomplete data elements based on MOSERS business rules, policies and statutes;
    - referential integrity;
    - orphaned records (records that should be associated to others but are not);
    - childless parents (records that should have related records but do not) based on MOSERS business rules, policies and statutes;
    - valid codes for specific instances (only specific codes are valid for a given situation);
    - data value commonality (same code used multiple places with varying values);
• invalid date value based on a date range (when the dates do not conform to business or logical standards);
• invalid dates;
• code value anomalies based on MOSERS business rules, policies and statutes;
• amount totals vs. summarized detail;
• amount deltas based on MOSERS business rules, policies and statutes;
• other ad hoc or miscellaneous problems

- Provide a prioritized list of data elements, (e.g. age, grouping, status, class) to be cleansed.
- Provide an on-going data cleansing maintenance plan.
- Provide a Quality Assurance/Audit plan to ensure counts, dollars, etc.
- Retain history (audit trail) of all data elements that are changed through cleansing (before and after).
- Provide reconciliation reports between the legacy system and the Staging Database.
- Develop scripts needed to populate the Staging database.
Objective 3 – Data Migration Technical Services
Migrate the data into production and identify any issues that may exist as a result of the conversion.

Goals:

- Work with the PAS Software Vendor in data migration and in resolving data issues during the migration.
- Conduct data validation and reconciliation during PAS implementation.
- Develop and Publish Data Migration/Conversion Directives.
- Develop and Publish Data Cleansing Directives.
- Conduct Data Cleansing Analysis.
- Establish Milestones for Conversion and Clean-up.
- Work with PAS Vendor to map data to new PAS.
- Extract and Transform Data for use in new PAS.
- Develop an On-going Strategy for Data Validation/Reconciliation and Cleansing to validate and reconcile during Data Migration Project Activities.
- Define data extraction architecture.
- Execute the data conversion scripts to populate a Test environment.
- Work out any bug fixes needed in the conversion scripts based on items identified during Testing.
- Create and tune test scripts for performance and identify the attributes necessary for the implementation run. Attributes should include things such as script run order, script run time expectations, identification of risk points during the run, etc.
- Execute the data conversion scripts to populate the final Production environment.
- Identify, develop and run any “mini-conversion” scripts needed between parallel and reverse parallel processing aka “Bridging”. (NOTE: these are usually simple and provide things such as alignment of check numbering between the old system of record and the new system of record).
- Provide support to PAS Vendor for items identified after production implementation that require data or information from the primary data sources.
- Provide general support to the project team for any needs related to converted data.
- Develop Automated Data Reconciliation and Reporting Methods that reconcile data from the legacy system to the new PAS.
- Assist with the reconciliation during the UAT and Parallel periods as part of reconciliation of “processed” data.
- Develop automated comparison reports which compare legacy system data with corresponding data from the new PAS system.
- Develop and run queries/reports against processed data (e.g., payroll results, etc.). The example of the type of reports that may be required include:
  o Comparison of the total number of processed payroll records in legacy system and new PAS.
  o Comparison of the amount of taxes after a payroll run.
  o Number of benefits processed.
  o Total number of interest records processed.
- Detailed interest granted, by member, contributions, interest posted.
  
- Provide the testing process, including the test plan, test cases, test scenarios and expected results for the migration from the staging database to the new PAS database.

- Work with the PAS vendor in performing data dry run (mock) conversions as part of its testing.

- Develop audit trail and retain history (audit trail) of all data elements that are changed through migration.

- If the PAS project is undertaken as a staged implementation, the Data Services Vendor will create bridging scripts to map data from the new PAS database back to the legacy data sources.

- Continue to perform data cleansing for those records that were identified as being incorrect during the migration and testing process.

- Stage the data to populate the new system in a SQL Server 2012 (or later) database.
Objective 4 – Data Modeling

Data modeling during systems analysis is to provide a logical data model as part of the development of a new staging database.

Goals:

- Produce a data mapping schema for all the data sources being used to load the staging database.
- Produce a data dictionary for the staging data database.
- Produce a data model of the staging database.
- Work with PAS Vendor to map legacy system business dimensions to the new PAS. This shall also include how missing data will be created, what data transformations are required, and what verifications will have to be performed.
- Provide a list of data modeling tools the vendor will be using for this effort.
- Provide a non-technical Data Business Rules Summary document.

Data must be transferred between the data conversion team members and the MOSERS team members or representatives in an automated and secure manner. Data may not be transferred via USB key, CD, DVD or similar device. Sensitive information inclusive, but not limited to, MOSERS members and beneficiaries found within MOSERS database and data sources is not permitted to be taken off-site of MOSERS’ premises nor permitted to be stored in electronic format outside of MOSERS’ computer network. Encryption, data masking/data scrambling and the use of FTP and/or other secure file delivery must be addressed as part of this project.

B. Timeline

The selected contractor will be required to meet an agreed upon start date to be no later than March 1st, 2017.

MOSERS separation from the contractor would be contingent upon the completion of the objectives outlined within this RFP and may coincide with MOSERS’ deployment of a new pension administration software solution within the next five years.
SECTION III – PROPOSAL FORMAT

To assist in comparing all proposals, responders must format their proposals by labeling the sections as they are labeled below for items B-H. Failure to do so may result in the proposal being disregarded.

A. Cover Letter
   Responders shall provide a cover letter signed by an authorized representative. The cover letter should at a minimum include:
   
   1. Certification that the person signing the proposal is authorized to represent the submitting responder, empowered to submit the proposal, and authorized to sign a contract with MOSERS on behalf of the submitting responder (if selected) by including the following wording:

   "I hereby certify that I have read the RFP in its entirety and fully understand the requirements listed therein. I further certify that I am authorized to represent the submitting responder, empowered to submit this proposal, and authorized to sign a contract with MOSERS on behalf of the submitting responder (if selected)."

   2. A statement that the responder assures that its key professionals and/or their organizations do not have or potentially have any material conflict of interest with MOSERS or any of MOSERS’s service providers.

   3. A statement that the responder agrees to comply with the Political Contribution Policy set forth in Exhibit A and the Federal Work Authorization Policy set forth in Exhibit B.

B. Contact Information
   Include name, address, phone, and email information for the responder’s primary contact person on the proposal.

C. Corporate Background & Human Resources
   Provide summarized information regarding the responder. The summary, at a minimum, should include the following:

   1. A general description of the services provided by the responder.
   2. A brief history of the responder, including the founding date and number of years in business as currently constituted.
   3. The structure of the responder’s organization, including any board of directors, partners, top departmental management, corporate organization, corporate trade affiliations, any parent/subsidiary affiliations with other firms, etc.
   4. The responder’s experience with data profiling and analysis projects.
   5. A list of public pension systems with which the responder has successfully completed data profiling and analysis projects.
6. The size of responder’s firm, number of staff employed by responder trained to provide the services requested, and the location of the office from which the work on the engagement would be performed.

7. The name, title, and contact information for the staff the responder plans to assign to the project and a brief description of the staff member’s role in the process. Include a brief biography for each such staff member, detailing his or her education and business experience.

D. Work Plan
Provide a detailed work plan describing the steps the responder would take to complete the project. Include the required steps in the scope of work (Section II), specific details about how the responder would fulfill those steps, any additional steps the responder would take, and a timeline for completing the project.

E. Fee Schedule
Provide a not-to-exceed fixed fee price quote for this entire project, showing the fee for the project in total. The quote should be accompanied by an estimate of all costs, reimbursable expenses, or other charges to MOSERS for out-of-pocket disbursements in connection with the project. Provide a list of expenses that are anticipated to be the direct responsibility of MOSERS related to the project. The selected responder must have MOSERS’s approval before incurring any expenses that will be the responsibility of MOSERS.

F. Limitations
Provide information about any restrictions on the responder’s ability to complete this project.

H. References
Provide names and contact information for three current or previous clients to be contacted as references for which the responder has provided similar services as those requested in this RFP.
SECTION IV - INSTRUCTIONS FOR INQUIRIES & SUBMITTING PROPOSALS

A. Inquiries
   All questions regarding this RFP must be submitted via email to Carson Lepper at carsonl@mosers.org by November 8th, 2016, at 4:30 pm CST. To ensure that all responders have the same information and instructions concerning the preparation of their proposals, all questions and answers will be posted on MOSERS’s website under “bidding opportunities.” The identity of parties submitting questions will remain anonymous on the website.

B. Submission Requirements
   Proposals must be emailed and received by MOSERS by 4:30 p.m. CST, on November 8th, 2016.

   Please refer to the cover page for the delivery name and email address for delivery.

   All proposals and accompanying documentation become the property of MOSERS and will not be returned.

   Each proposal must conform to the requirements of this RFP. Conciseness and clarity of content are emphasized and encouraged. Vague and general proposals will be considered non-responsive and may be disregarded. Failure to provide the required information may also result in disqualification. MOSERS reserves the exclusive right in its sole discretion to determine compliance with these requirements and to exclude from consideration proposals which, in MOSERS’s sole and absolute judgment, do not so conform.

   A responder’s preparation and submission of a proposal or subsequent participation in presentations or contract negotiations create no obligation for MOSERS to award a contract or to pay any associated costs to the responder.

C. Open Records
   Copyrighted proposals are unacceptable and will be disregarded as non-responsive. Following the execution of a contract, all proposals are subject to release without notice under the Missouri Open Records Law, RSMo Chapter 610.
SECTION V - SELECTION PROCESS AND EVALUATION CRITERIA

A. Selection Process
MOSERS's staff will review compliant proposals that are submitted by the deadline. In evaluating proposals, MOSERS's staff will consider:

- The soundness of the approach and the quality of the responders’ work plans.
- The responders’ qualifications.
- The individual qualifications of the responders’ assigned staff.
- The responders’ price quotes.

B. Right to Reject
MOSERS reserves the right to reject any and all proposals for any reason and without any obligation or payment for costs incurred by the responders. MOSERS reserves the right to request additional information or clarification from any responder, to allow corrections of errors or omissions, or to discuss points in the proposals after submission. MOSERS reserves the right to waive any and all formalities contained within this RFP except for the deadline for filing. Proposals received late will not be considered. MOSERS reserves the right to retain each proposal submitted.

C. Competitive Negotiations of Proposals
MOSERS may choose one or more proposals as a basis for further negotiation with the submitting responder(s) toward a potential contract. If MOSERS chooses more than one such proposal, the following shall apply to the negotiations with the responders that submitted the chosen proposals:

- Negotiations may be conducted in person, writing, or by email, fax, or phone.
- Terms, conditions, prices, methodology, or other features of such proposals may be subject to negotiation and subsequent revision.
- As part of the negotiations, responders may be required to submit supporting financial, pricing, and other data in order to allow a detailed evaluation of the feasibility, reasonableness, and acceptability of the proposal.
- Responders involved in the negotiation process may be invited to submit a best and final proposal.

D. Contract
MOSERS and the selected responder will negotiate a contract with terms consistent with this RFP (and any amendments thereto) and the proposal of the selected responder. The contract will incorporate the terms of this Request for Proposal and include the following terms:

- The contract shall be construed according to the laws of the State of Missouri.
- Venue for all lawsuits related to the contract or its subject matter shall be exclusively in the Circuit Court of Cole County, Missouri.
• The selected responder shall comply with all local, state, and federal laws and regulations applicable to the performance of the contract.
• The selected responder is an independent contractor offering such services to the general public and shall not represent itself or its employees to be an employee of the State of Missouri or MOSERS.
• The selected responder shall assume all legal and financial responsibility for taxes, FICA, employee fringe benefits, workers’ compensation, employee insurance, minimum wage requirements, overtime, etc., and agrees to indemnify, save, and hold harmless MOSERS and its officers, agents, and employees from and against any and all loss, cost (including attorney’s fees), and damage of any kind related to such matters.
• The selected responder may not assign its rights or delegate its obligations under the contract without the prior written consent of MOSERS.
• The selected responder shall maintain all files and any other information provided by MOSERS or applicants (hereafter referred to as “Confidential Information”) in a secure and limited access area, under the strictest confidence, and will not alter or disclose such Confidential Information except as provided herein. Upon the completion of services, all Confidential Information will be returned to MOSERS and will not be retained by the selected responder unless otherwise directed by MOSERS. The selected responder will not disclose any of the Confidential Information in whole or in part without the prior written consent of MOSERS, unless required to do so by a court order or by law, in which case the selected responder shall notify MOSERS in writing prior to making any such disclosure. The selected responder shall further limit access to Confidential Information to those of its employees, officers, and directors who reasonably require such access in the performance of their duties and shall take all such necessary precautions and exercise the same duty of care that the selected responder undertakes to prevent the disclosure of its own confidential and proprietary information. In the event the selected responder breaches this confidentiality provision, MOSERS will be entitled to seek any relief and remedy available at law or in equity and the parties recognize and agree that MOSERS would suffer irreparable injury and would be entitled to obtain injunctive relief. The remedies herein provided and those otherwise available at law or in equity shall be cumulative, and no one remedy will be construed as exclusive of any other.

The contract may contain additional terms. No negotiations between MOSERS and the selected responder shall result in any contract or any other obligation on MOSERS’s part until and unless a written contract is signed by MOSERS’s executive director.
Exhibit A

Political Contribution Policy

It is inappropriate and unethical for any current or prospective outside service provider to make any political contribution with the intent of influencing a purchasing, hiring or firing decision made at MOSERS. If the executive director has reason to believe that this policy may or will be violated by a current or prospective external service provider, the executive director shall require the external service provider (including owners and key employees) to disclose political contributions made to any incumbent or candidate for state office in the last two years and shall provide written notice to the Board in the event the disclosure reveals any such contributions were so made.

Exhibit B

Federal Work Authorization Policy

External service providers shall be enrolled and participate in a federal work authorization program with respect to all employees working in connection with the contracted services for contracts for goods and services in excess of five thousand dollars and shall not knowingly employ any person who is an unauthorized alien in connection with the contracted services.