



ITEM 18

Executive Staff

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**For Agenda of:
August 17, 2016**

August 12, 2016

TO: President and Members
Board of Retirement

FROM: Richard Stensrud
Chief Executive Officer

SUBJECT: IT Modernization Program – Request for Proposals for
Data Conversion Services

Recommendation:

That your Board: (1) Approve the attached Request for Proposals for Data Conversion Services (RFP); (2) Direct Staff to issue the RFP; and (3) Direct Staff to review the responses to the RFP and develop a recommendation to your Board regarding the firm that should be selected for the engagement.

Discussion:

As you will recall, efforts have been underway to assess the capability of SCERS' current technological platforms and determine whether and how those platforms should be improved (the IT Modernization Program). You will further recall that the IT Modernization Program includes engagement with your Board at key junctures so that your Board can determine whether a recommended aspect of the Program should move forward and/or what the next phase or phases of the Program should be.

At the April Board Meeting, Brian Colker, Project Advisor from Linea Solutions (Linea) provided your Board with a Current State Assessment of SCERS' current systems and processes. The Assessment discussed Linea's opinions regarding the current state of SCERS' systems and related risks; their recommendations for modernization and the objectives of the modernization program; recommended sequencing of the projects;

resource requirements; cost considerations; and next steps. Two key systems – a Pension Administration System (PAS) and a Financial Reporting Solution (FRS) – will be the centerpiece of the program.

One of the projects identified for the IT Modernization Program is data conversion. Complete and accurate data is the cornerstone in any automated system. Unless the data is complete, accurate, and trusted there is the need for constant manual research and re-verification. Because of the long history of data that is needed for public pension defined benefit systems, data is both critical to the business and difficult to maintain.

The data currently used by SCERS comes from three primary sources:

- MBASE (active member data);
- COMPASS (retiree data and financial data); and
- Microfiche (pre-1991 membership detail data).

SCERS Staff believes it is likely there are quality issues with this data, stemming from numerous sources, and that a significant amount of data profiling, cleansing, and migration work will need to be performed as part of a new PAS and FRS implementation.

Discussion:

The entire data migration process is difficult, requires highly skilled technical resources, is time-consuming, and continues throughout the duration of an IT project. Because of these requirements, most PAS and FRS implementation projects benefit from engaging a third-party data migration vendor. These vendors have expertise in providing data cleansing advice, guidance and services gained through extensive experience in working on comparable PAS and FRS system projects.

Within the public pension systems market there are a limited number of data profiling, cleansing, and migration experts. They have developed methodologies, tools, and processes to aid in the understanding of the existing pension data, in cleansing the data, and in helping PAS and FRS vendors migrate data to the new systems.

The objectives of the data conversion and migration effort include the following:

- Conduct and report on an initial assessment of current production data to identify what, if any, data problems exist. Currently there are concerns that the data is not complete and is not always accurate. The vendor will help to determine exactly what the gaps and issues are by evaluating the existing SCERS data against the existing business rules.

- Manage data correction in the existing source systems prior to migration as well as corrections during the data migration process. Some corrections can be done in the existing system while others will wait for the conversion to the new system. These corrections will become a critical part of the data migration to the new PAS and FRS solutions.
- Manage the population of staging data that will be used to populate the new system and assist the PAS and FRS vendors in data migration and in resolving data issues during the migration. Engaging the services of a data migration vendor in this process will ensure that SCERS has a full understanding and control of the data migration process from a party that is independent of the PAS and FRS system provider.
- Provide support for data validation and reconciliation during (and after) PAS and FRS implementation. The expert knowledge of how challenges have been handled during earlier conversions will be an invaluable resource to SCERS in this regard.

Because data conversion is a major risk to PAS and FRS projects, best practice is to start the effort as early as possible. Starting 6-9 months prior to the PAS or FRS implementation allows the project team time to focus on the conversion infrastructure, initial data profiling, and conversion processes. The head start gives the data team the ability to send converted data to the development team as the new systems are delivered. Testing can then be performed using real data, which both validates the system is working as designed and gives more opportunity to find data issues.

There are three national vendors that specialize in data projects for defined benefit systems. There are also local companies who have done a similar scope of work for CalSTRS/CalPERS. It is unlikely more than five companies will meet the minimum qualifications

Please note that the development of an RFP is not a commitment to hire a data conversion provider. Rather, it represents only a solicitation and evaluation of a potential strategic partner for the project. The decision on whether to engage such a partner will be made by your Board with the benefit of additional information and discussion.

Please also note that our current engagement with Linea regarding the data conversion aspect of the IT Modernization Program only pertains to the issuance of the RFP and procurement of the data conversion services vendor, and does not address oversight of the data conversion project. Oversight of the data conversion work by a party with expertise in integrating such efforts into a broader IT project will be critical. Accordingly, Staff expects to present a proposed amendment to our contract with Linea to incorporate data conversion project oversight at the same time that we recommend the data conversion vendor.

The proposed timeline for the RFP process is as follows:

- August 2016 – Release RFP
- September 2016 – Discovery Day/Vendor Conference
- October 2016 – RFP Responses Due
- Late October 2016 – Oral Interview of Finalists
- November 2016 – Update to Board on Procurement Results
- December 2016 – Recommendation of Award to the Board

As suggested by the timeline, it is proposed that the RFP responses be reviewed by an Evaluation Committee (the Committee). The Committee would be comprised of key staff, at least one outside person (possibly from a fellow retirement system that has previously hired a consultant for similar services and/or from County DTech), plus at least one Board Member, if there is interest. The Committee would then prepare and present to your Board a report and recommendation regarding which firm to engage. The recommended candidate will be invited to make a presentation at the meeting.

The proposed Request for Proposals for Data Conversion Services is attached. Also attached is a PowerPoint presentation by Linea Solutions. Brian Colker of Linea will lead the discussion of these materials at the meeting.

Respectfully,

Richard Stensrud
Chief Executive Officer

Attachments



SCERS

SACRAMENTO COUNTY
EMPLOYEES' RETIREMENT SYSTEM

**REQUEST FOR
PROPOSAL: DATA
CONVERSION
SERVICES**

PROPOSAL DATE:
August 19th, 2016

RESPONSE DUE:
October 7th, 2016



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1 Specifications

1.1 Project Concept

This Request for Proposal (“RFP”) is issued by the Sacramento County Employees’ Retirement System (“SCERS”) for the purpose of soliciting proposals from data conversion vendors (“Vendor”) with extensive experience providing data profiling, cleansing and migration services in the area of Public Sector Pension Administration. The successful vendor will provide data profiling, data cleansing, and data migration technical services to SCERS in support of the implementation of a new Pension Administration System (PAS) and Investment Accounting System (IAS).

SCERS has recently embarked on a multi-year project to replace their current PAS. The project includes replacing SCERS’ current pension administration and financial systems. SCERS has contracted with Linea Solutions Inc. (“Linea”) for project oversight and consulting services. SCERS is currently gathering requirements for an RFP to select a new PAS solution software vendor.

This new PAS will enable SCERS staff to perform all of their duties associated with pension administration including: Employer Payroll, Benefit Estimates, Benefit Adjustments, Buybacks (Service Purchase), New Retiree Benefit Set-up, Annual COLA/Special COLA Processing, Death Processing, Disability Retirement, QDRO Processing, Reciprocity, Refunds, Retiree Payroll, Payment Maintenance (stop payments, stale dates, etc.), Healthcare Deductions, 1099R Processing, Actuarial Extract, Member Statements, General Ledger Processing/Extracts, Interest Posting, Member Counseling, New/Re-hire Member Enrollment, Member Correspondence, Calculating and Processing 415(b) & 415(m) Capping, Vendor Payroll, Web Portal/Self-Service, and Terminations.

As part of the PAS Project, SCERS is seeking an experienced data conversion vendor to analyze the data, manage the process of correcting data, and prepare and test staging data for the new PAS. The data conversion vendor must be experienced in using automated tools for data analysis, clean-up, and conversion.

SCERS is also evaluating the possibility of procuring and implementing a new Investment Accounting System (IAS), and will potentially require the support of a data conversion vendor to evaluate, cleanse, and migrate investment and financial data to the new solution. The specific scope of the conversion will be determined once SCERS selects an IAS.

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1.2 Background

Sacramento County Employees' Retirement System (SCERS) is a multiple-employer public employee retirement system, enacted and administered in accordance with the provisions of the County Employees Retirement Law of 1937 (California Government Code Section 31450, et seq.) (1937 Act). Since its creation by the Sacramento County Board of Supervisors in 1941, SCERS has provided retirement, disability, and survivors' benefits to eligible participants which include permanent full-time and part-time employees of the County of Sacramento; Superior Court of California (County of Sacramento); and eleven Special Districts.

SCERS has approximately 12,400 active members, 11,000 retired members, and 3,400 deferred members. As of June 30, 2015, SCERS' net position restricted for pension benefits totaled \$7.9 billion.

SCERS has utilized their current systems to administer pension benefits for over 15 years. The use of multiple systems requires SCERS staff members to conduct a number of core business functions through various manual processes. The use of the current non-integrated systems is preventing SCERS from achieving automation and creates obstacles to achieve the following objectives:

- Providing excellent customer service to members
- Operating the fund in an efficient and cost-effective manner
- Safely and accurately maintaining member and financial information

To address these challenges, SCERS has defined and undertaken an Information Technology Modernization project. This project will include replacing the current pension administration system, incorporating workflow solutions, implementing new member and employer-facing web portals, implementing a new investment accounting system, introducing case management, and integrating or replacing the legacy Electronic Content Management System (ECM). This project will also involve the migration from the County's Financial Reporting System to a SCERS owned system. By initiating an IT Modernization Program to address these issues, SCERS is preparing for the future through continuous process improvement and implementation of best practices in the pension industry.

SCERS is a tax-qualified governmental defined benefit plan. Eligible employees automatically become members of SCERS as a condition of employment. Benefits are determined by formulas that vary according to the type of benefits payable (for example, retirement, disability or survivor benefits). The formulas are based on such factors as a member's salary, age, years of service credit, and membership classification (First, Second, Third, Fourth, and Fifth Tier Miscellaneous, and Safety First, Second, Third, and Fourth Tier). The plan is funded by employer contributions, employee contributions, and investment earnings.

SCERS members have a five (5) year vesting requirement. SCERS, the nineteen other 1937 Act County systems, CalPERS, and CalSTRS have a reciprocal agreement to ensure continuity

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of benefits for members who change employers and transfer between the retirement systems under certain circumstances. If a SCERS member qualifies for reciprocity with a reciprocal system, service credit accrued under both systems can be used to determine whether a member is vested in his or her benefits under both retirement systems. Salary from employment covered under both systems can also be used in the benefit calculation.

Basic retirement income is the member's normal monthly lifetime benefit. This basic amount may be adjusted if the member wants to provide monthly income for a spouse, domestic partner or another person. The general formula for calculating basic retirement income is:

$$\text{Service Credit} \times \text{Age Factor} \times \text{Final Compensation}$$

SCERS' main sources of revenues are investment income and contributions from participating employers and members, \$1.1 billion and \$268.0 million, respectively, during fiscal year 2013-2014 and \$158.0 million and \$291.0 million, respectively, during fiscal year 2014-2015. For the same years, SCERS provided and administered total annual benefit payments of approximately \$345 million in 2013-2014 and \$372.0 million in 2014-2015 to its retired members and beneficiaries.

1.3 Current Environment

1.3.1 Current Pension Administration System

SCERS' current solution uses two systems, MBASE and COMPASS. For active members, MBASE is the system of record. It is a custom database application that is hosted by the County of Sacramento Department of Technology (DTech) and it is maintained by SCERS' IT staff and DTech. The current systems limitations require staff to utilize MS Access databases, MS Excel workbooks, and hard copy resources to assist in processes. COMPASS is used for benefits payments for retired members and also for general accounting, general ledger, procurement, and human resources.

MBASE was implemented in 2001 and is used to import and track data on active and inactive members, excluding retirees and beneficiaries. MBASE has an interface option that imports data from several payroll systems for the County, Special Districts, and the Courts. This application is used to track and manage a variety of items for active employees including but not limited to data used to calculate retirement benefits. The data from this application is used for the Member Web Portal to access the member's account, allowing members to view personal information and to estimate their retirement benefits.

COMPASS is an SAP system used by the County of Sacramento for accounting, payroll, personnel management, procurement, and other functions. This system was custom built for the County, and therefore does not adequately fit the needs of SCERS. SCERS uses COMPASS for accounting, procurement, HR, and to process retiree and beneficiary benefit payments.

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Certain member information from MBASE must be manually input into COMPASS for certain business processes.

In addition to the supported applications, SCERS' in-house IT staff maintains an IBM document management solution (FileNet Workplace) and local PC and Scanner support. Both the PAS and Imaging systems are accessed via web applications accessed through the County's intranet.

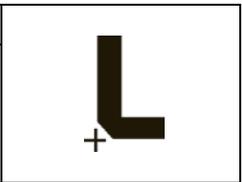
The current PAS supports the following business processes:

1. 1099R Issuance
2. 415(b) & 415(m)
3. Employer Payroll Data
4. Actuarial Extracts
5. Benefit Estimates
6. Buybacks (Service Purchase)
7. COLA / Special COLA
8. Counseling
9. Death Processing
10. Disability
11. DRO
12. Final Average Salary Calculations
13. General Ledger Extracts
14. Healthcare Premium and Other Deductions
15. Interest Posting
16. Member Statements
17. New Hire / Re-hire
18. New Retiree Benefit Set-up
19. Payment Maintenance
20. Reciprocity
21. Refunds (all one-time payments)
22. Retiree Payroll
23. Terminations
24. Vendor Payroll
25. Web Portal / Self-Service

1.3.2 Member Data Sources – MBASE & COMPASS

Active member data is stored in a custom SQL database, MBASE. There are also various custom MS Access databases that contain data that may require conversion to the new system. FileNet Workplace stores electronic content images; SCERS has not yet determined if the images will be migrated to a new imaging solution or if they will remain in FileNet. SCERS does not have a preference for specific database software; the database for the new PAS will likely be Oracle or Microsoft SQL Server.

In the current PAS, monthly records for salary, contributions and service date back to 1991. Salary, contributions and service records prior to 1991 are a mix of monthly and yearly records



that are contained on microfiche (see below). Even though there is data that dates back to 1991, SCERS has indicated that the data from 1991-1998 will require more cleansing since it was introduced before the current county payroll system was implemented.

Retired member data, including all payment history, and detailed employer reporting data is stored in COMPASS. The system also contains information on beneficiaries and alternate payees (DROs) receiving, or designated to receive, ongoing allowances.

The Vendor is expected to analyze, cleanse and convert member and employer data stored in MBASE, COMPASS, Excel, and potentially subsidiary MS Access databases.

1.3.3 Electronic Document Management System and Imaging Infrastructure

SCERS currently uses FileNet Workplace for imaging. It is not integrated with MBASE, but documents are viewable via a portal within MBASE. FileNet Workplace is not integrated with COMPASS. A stand-alone microfiche document management solution is used for pre-1991 archived documents.

All new images are in PDF format and older documents are in TIFF format.

SCERS expects that the Vendor will image all required microfiche as well as key monthly reports containing pay and service data. The microfiche records consist of approximately 33,000 sheets, each of which has 200 or more pages of data, that span from 1978 to the early 2000s.

SCERS expects the microfiche images will be migrated to the new PAS (or the current FileNet system) for storage and retrieval. Additionally, some data may need to be extracted from these images to be loaded into salary or service-related tables within the PAS.

1.3.4 Summary of Data Sources

The data sources are summarized below:

Legacy System	Description of Data	Volume/Complexity (if known)	In Scope?
MBASE	Active member data	90 tables / 19,757.061	Yes
COMPASS	Retired member data & financial data	Unknown – COMPASS is a County-wide SAP program; the vendor will need to assist with data profiling and assessment.	Yes
COMPASS	Historical GL data	Unknown – COMPASS is a County-wide SAP program; the vendor will need to assist with data profiling and assessment.	Yes
FileNet	Member documents	580,000 images, plus 2000 added per month	Potentially

Microfiche records	Payroll records	33,000 sheets with 200 or more pages of data per sheet; each page has many lines of data that may require extraction.	Yes
Access DB	Member retirement application processing data	19 tables/5,053 records	Potentially

1.3.5 Data completeness in the current system

SCERS has indicated that there are quality issues with the data, stemming from numerous sources—special district payroll reporting, County payroll, etc. SCERS has indicated that the majority of the payroll data from 1999 forward is accurate, but SCERS’ benefit calculations require more detail than what is currently imported into MBASE from COMPASS. Obtaining this additional payroll detail will be part of the scope of the PAS implementation project.

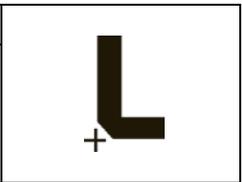
MBASE and COMPASS are the systems of record for the PAS. However, due to limitations of the system, the business has created several Excel workbooks for various member processes. The standard practice is to capture the output of these workbooks in the imaging system and associate that data with the member records. In some cases, these workbooks may not reside in FileNet, and as a result the data conversion vendor may need to profile, cleanse and convert some of these workbooks into the new solution.

1.4 Anticipated Procurement Timetable

1.4.1 Milestones

The following table presents the schedule for the selection of SCERS’ Data Conversion Vendor. SCERS will make its best efforts to stay on schedule but reserves the right to adjust the timeline.

ID	Milestone	Date	Time
1	Release of RFP	8/19/2016	N/A
2	Discovery Day	9/9/2016	TBD
3	Questions from Vendor due	9/16/2016	11:59 PM PST
4	Response to Vendor questions and RFP Addendum Released	9/23/2016	5:00 PM PST
5	RFP Submission deadline – electronic version via email	10/07/2016	11:59 PM PST



6	RFP Submission deadline – 6 paper copies due	10/10/2016	5:00 PM PST
7	Vendor Interview(s)	October (dates TBD)	N/A
8	Contract Completed	December (date TBD)	N/A
9	Project to begin	January, 2017	N/A

1.4.2 Written questions from Vendors due

Questions are to be submitted to the SCERS no later than the due date and time listed above, in order to allow sufficient time for SCERS to research and prepare helpful answers. All questions must be documented electronically and sent as an attachment to SCERS' email address at Retirement-ITProjects@saccounty.net. Failure to request clarification of any inadequacy, omission, or conflict will not relieve the Vendor of any responsibilities under this solicitation or any subsequent contract. It is the responsibility of the interested Vendor to assure that they received responses to questions if any are issued.

1.5 Vendor Qualifications

1.5.1 Minimum Qualifications

All Vendors must clearly demonstrate and document in their proposal the following minimum qualifications. Proposals not meeting the minimum qualifications will not be considered.

1. The conversion company must have a demonstrated record, as a company, of at least five (5) years performing data migrations, data analysis and data cleansing for large ERP-type implementations. Experience must include the following areas:
 1. Data profiling, analysis, and summarization
 2. Automated data clean-up tools and techniques
 3. Data extraction, transformation, and loading
 4. Problem resolution including pension industry expertise
 5. Quality assurance, quality control, and data verification
 6. Project management and planning for data migrations
2. The Vendor must have a minimum of three (3) years' experience working with defined benefit pension plans.
3. The Vendor must demonstrate that they have worked with systems converting data in the following areas:
 - a. Member Demographic Information
 - b. Member Employment Information

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- c. Member Contribution, Salary, and Service
- d. Service Credit Purchases
- e. Refunds / Withdrawals
- f. Repayment of Refunds
- g. Benefit Calculations
- h. QDRO
- i. Disability
- j. Death
- k. Retiree, Survivor, QDRO, and other payee Benefit Payroll
- l. Pay history: deductions, adjustments, COLA
- m. 415(b) and (m)
- n. Contribution and calculation tables
- o. Imaging

Please complete the questionnaire regarding Minimum Qualifications in Attachment 1.

1.5.2 Experience

To be successful, this project will require a variety of skill sets and a successful Vendor must be able to adequately demonstrate their ability to perform in each of these areas. A successful Vendor will be able to demonstrate competency in the following technologies and systems:

- Data migrations for pension administration systems or defined benefit systems.
- Data migrations to a Commercial Off The Shelf (COTS) browser-based pension administration systems using Oracle and/or Microsoft SQL Server.
- Application of business rules to migrations.
- Data extractions from SQL server and SAP solutions.
- Data migrations involving very large data sets.
- In-depth data profiling and data analysis specifically for pension administration systems
- Data migrations from multiple user-based data sources such as Excel spreadsheets and Access databases.
- Image extractions from FileNet Workplace, including index, and metadata associated with the images.
- Working with software vendors in delivering staged data and/or executing the data conversion completely from source systems to the target system database.

Please complete the questionnaire regarding Project Experience and Approach in Attachment 4.

1.5.3 Project Resources

A successful Vendor will need to show that they can provide the resources that will be able to execute this project given the following requirements:

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- Each resource used by the conversion company on the project must have no less than five (5) years professional work experience in the specific area of expertise for which they are being leveraged. Ideally, the Vendor should propose a team who have worked together previously in similar retirement and benefits administration projects for comparable clients while in the Vendor's employment.
- The proposed technical resources must demonstrate that they have experience in data migrations for pension systems and with environments and PAS projects similar to that described in this RFP.

Please complete the questionnaire regarding Organization and Staffing in Attachment 3.

2 Scope of Work

2.1 Vendor Scope of Work

SCERS is seeking expert assistance from an experienced Data Conversion Vendor to manage and execute the data profiling, cleansing, and migration effort in support of the overall system replacement program (PAS and IAS replacement). Vendor duties include the following:

1. Overall coordination of the SCERS data cleansing, data migration, and data conversion activities related to the PAS replacement project.
2. Provide data analysis, data cleansing, and data migration technical services.
3. Provide tools, processes, and automation to support the data analysis, data cleansing, and data migration services.
4. Provide technical documentation, verification, and certification documentation for each data point.
5. Development of a stand-alone database system of all converted and non-converted data for archival purposes.
6. Set up on-site data conversion infrastructure, including server hardware, database software, and peripherals. Provide ongoing administration of the data conversion infrastructure during the project.

Because SCERS is looking to replace its pension administration system, all of the data sources must be confirmed, analyzed, and determinations must be made regarding what data elements need to be cleansed, what data needs to be migrated, and how.

The goal of the data migration project is to identify and address the data migration areas and work required in the undertaking of SCERS' PAS replacement project. The objectives necessary to achieve this goal will extend beyond the data migration efforts, and will become part of an ongoing effort to maintain a high degree of data integrity.

Objectives:

- Assemble data migration and data cleansing teams and define roles

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- Develop and publish data migration/conversion directives
- Analyze and define data
- Develop and publish data cleansing directives
- Conduct data cleansing analysis
- Establish milestones for conversion and clean-up
- Complete data cleansing/corrections and test
- 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

To accomplish the project objectives:

- The Vendor will conduct and report on an initial assessment of current production data to identify what, if any, data problems exist.
- The Vendor may provide data correction and cleansing in the existing source systems prior to migration, as well as corrections during the data migration process (note: most data cleansing is expected to take place in the staging database).
- The Vendor will stage the data to populate the new system.
- The Vendor will work with the PAS Software Vendor in data migration and in resolving data issues during the migration.
- The Vendor will conduct data validation and reconciliation during PAS implementation.
- The Vendor will develop an archival database system.
- The Vendor will provide two models for these services: on-site at the County data center in Sacramento, CA and off-site at the vendor's secure facility.

2.2 Project Responsibilities

2.2.1 Data Profiling

The purpose of Data Profiling is for the Data Conversion Vendor to gain a detailed understanding of the data and to begin to identify the data that needs cleansing. The goals of this phase are as follows:

Primary goals:

- Identify key data components, key points of time related to the data, missing elements of the data, and summarized elements of the data.



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- 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.

Secondary goals:

- Gain awareness of the User Community's needs, concerns, and priorities as they relate to the data.
- Begin building the foundation of how to approach the overall project and how communication will work with the interested parties of the project.

The Vendor will:

1. Define the approach to be used for Data Profiling.
2. Define the approach to be used for Data Cleansing.
3. Identify key data elements and the attributes and relationships to other data that make them important (for example: contributions are a key element, taxability is a key attribute, the ties to salary and service are key relationships).
4. Develop a detailed project plan that covers the Data Profiling activities and includes all resources necessary for successfully completing the Data Profiling.
5. Conduct analysis of existing system:
 - Identify all functions of current system that are expected to be in scope for conversion.
 - Evaluate key areas: Contributions, Salary, Service, and Membership for completeness and consistency of data, etc.
 - Query areas known to be problems in other implementations (e.g., multiple people with same SSN, missing SSNs, members missing key data elements, etc.).
6. Identify the following type of problems:
 - Duplicates
 - Missing primary-foreign key relationships
 - Redundant data
 - Soundex 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 SCERS business rules, policies, and statutes



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- 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 SCERS 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 ranges (when the dates do not conform to business or logical standards)
 - Invalid/incomplete dates
 - Invalid code values
 - Code value outliers outside of expected values
 - Code value anomalies based on SCERS business rules, policies, and statutes
 - Amount totals vs. summarized detail
 - Amount deltas based on SCERS business rules, policies, and statutes
 - Other ad hoc or miscellaneous problems
7. Work with SCERS to define the data cleansing strategy
 8. Define data extraction architecture
 9. Gain agreement on project planning methodology with Linea Solutions and SCERS

2.2.2 Project Planning

Project planning provides time for the Data Conversion Vendor to identify the procedures that they will use to interact with the PAS Vendor, SCERS, and any other project teams during the course of the project. It also overlaps with the project planning that must go on from the PAS Vendor and the other project teams, allowing the Vendor to have a properly integrated plan with the rest of the project. The goals of this phase are as follows:

- Develop a data conversion strategy that integrates properly with the PAS Vendor's implementation plan.
- Prioritize with SCERS the order of the data to be cleansed.
- Identify project milestones and resource needs throughout the project.
- Establish procedures for all interfaces with the PAS Vendor and other project teams, such as data mapping, data conversion requirements collection and tracking, cycle run processing, reconciliation processing, data conversion testing, issue resolution, etc.
- Develop a full project plan for data migration activities that can integrate with the project plan of the PAS Vendor and the master project plan for the PAS Project.
- Agree on a glossary of terms that will be used to communicate throughout the project with the other project teams.

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The Vendor will:

1. Develop a workable data migration project plan that feeds key points to the overall PAS project plan.
2. Develop overall approach/strategy documentation.
3. Work with SCERS and the PAS Vendor to plan the overall conversion strategy.
4. Work with SCERS to define the data reconciliation strategy.
5. Work with SCERS to establish procedures for requirements gathering.
6. Work with SCERS and the PAS Vendor to establish procedures for issue resolution.
7. Work with SCERS and the PAS Vendor to establish testing procedures.
8. Work with PAS Vendor to establish plan for data conversion test cycle processing.
9. Identify resources necessary to support transformation.

2.2.3 Set up of Data Conversion Infrastructure

SCERS may request the Vendor to procure, set up, and manage the data conversion architecture at their own facility. Alternatively, DTech may provide these services at the County's data center, and the Vendor would access this environment remotely. SCERS is requesting the Vendor consider both options in the response.

If the conversion is done at the Vendor's facility` SCERS requires ODBC relational database platforms as the target RDBMS. In the response the Vendor must specify the database platform, ETL platform, and how conversion logic and rules will be documented.

2.2.4 Data Cleansing and Development

Data profiling enables the Data Conversion Vendor to understand the data details and project planning is used to consider the approach and procedures needed to perform the conversion tasks. Data cleansing and development includes the activities to execute against these plans. It is anticipated that plans may shift during the execution of these activities, so the Vendor must be able to adapt to the changes as they come. The goals of these responsibilities are as follows:

- Execute against the project plan to perform data cleansing, build the entire conversion process, perform test cycles, resolve issues, etc.
- Tune the scripts that are created 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.
- Build out supporting processes like reconciliation, cleansing routines, etc.
- Validate that the data conversion was complete and represents a successful conversion for SCERS.
- Provide multiple environments for data conversion as required by SCERS.

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- Anticipate and expect ongoing changes to data mapping and the conversion requirements based on design changes that will occur up through the conclusion of User Acceptance Testing (UAT).
- Provide physical data models (source and target), data definitions, and source to target mapping documentation, including transformations. The models should be in Erwin. The UTF8 character set should be used, and date time stamp format to be used must be specified.

The Vendor will:

- Develop and run validation queries.
- Analyze results for root cause.
- Conduct data validation against all identified data sources to identify the data that needs to be corrected.
- Correct and re-test.
- Report results to SCERS.

Data cleansing at SCERS must encompass the following activities:

- Eliminate unnecessary data records.
- Identify and correct inaccurate data.
- Merge duplicated data.
- 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.

The Vendor must therefore also:

- Ensure the data is cleansed according to administrative rules, statutes, policies and agency business rules.
- When required, the Vendor will 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 SCERS production data is not 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 on production data, type of fix that was applied, number of records fixed, and number of records unable to be fixed).
- 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.

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- Retain history (audit trail) of all data elements that are changed through cleansing (before and after) and conversion.
- Provide reconciliation reports between legacy system sources, and the staging database.
- Develop scripts needed to populate the staging database.
- Produce a data mapping schema for all the data sources being used to load the staging database, and revise that schema as required throughout the design and testing phases.
- Produce a data dictionary for the staging database.
- Produce a data model of the staging database.
- Work with PAS Vendor to map legacy system business dimensions to the new PAS. This also includes how missing data will be created, what data transformations are required, and what verifications will have to be performed.

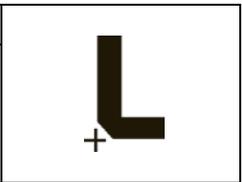
2.2.5 Implementation

The purpose of this phase is to convert the data into production and identify any issues that may exist as a result of the conversion. The following are the data migration activities during implementation:

- Conversion of data for User Acceptance Testing (UAT).
- Conversion of data for parallel testing.
- Reconversion of data for reverse parallel, if necessary.

The Vendor will:

- Execute the data conversion scripts to populate the UAT environment.
- Work out any bug fixes needed in the conversion scripts based on items identified during UAT.
- 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. (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 support to the SCERS user community to understand the changes in data as they are applied in the new environment vs. how they applied in the old environment.
- Provide general support to the project team for any needs related to converted data.
- Identify and develop reconciliation and comparison tools (i.e. scripts, queries, reports, etc.) that reconcile data from the legacy system to the new PAS.
- Develop automated data reconciliation and reporting methods.
- Assist with the reconciliation during the UAT and parallel periods as part of reconciliation of “processed” data. This type of reconciliation will validate and compare the results from data that has been processed in the legacy system and new PAS.
- 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:



- Comparison of the total number of processed payroll records in legacy system and new PAS
 - Comparison of the amount of taxes after a payroll run
 - Number of benefits processed
 - Total number of interest records processed
 - Detailed interest granted extract
- 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 SCERS and the PAS Vendor in performing data dry run (mock) conversions as part of its testing, at least monthly.
 - Provide and develop automated process (i.e., scripts) needed to populate the cleansing exception database.
 - 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 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.
 - Document business rules used for conversion.

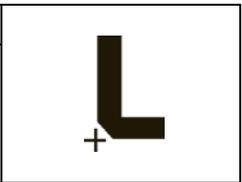
2.2.6 Data Archive

SCERS requires the Data Conversion Vendor to create a full data archive of all data extracted from the legacy system, including data that is not converted.

2.2.7 Project Management

The Vendor must designate a person to take on the Data Migration project management role/responsibilities. Project management responsibilities include:

- Periodic attendance and reporting at SCERS Steering Committee and project team meetings during the project, as required by SCERS.
- Report project status to the Linea Oversight Project Manager at intervals during the project work, including findings and recommendations as follows:
 - SCERS and Linea will collaborate with vendor on report format;
 - Regular written reports which must include information on work completed, work planned for the following week, any preliminary findings, identified risks and any issues to be addressed;
 - At scheduled deadline dates for the identified deliverables; and



- At other times as needed at the discretion of SCERS and the Linea Oversight Project Manager.
- Develop Project Plan in coordination with SCERS and the Linea Oversight Project Manager for each major phase as defined in the Scope of Services.
- Provide weekly metrics against the project plan to measure the progress of the project.
- Assign resources and their effort for each project phase with SCERS and the Linea Oversight Project Manager and further understand that SCERS has the right to modify the amount of effort needed for each phase of the implementation process for project monitoring, quality assurance, and project management purposes.
- Provide minutes for meetings related to vendor services and deliver the minutes to SCERS within the time period as specified in the Project Charter. The minutes shall, at a minimum, list the attendees, summarize the major topics discussed, and include any action items and decision points.
- Provide an overall Data Migration Project Schedule with key milestone dates within the first month of the contract.
- Update/revise the Project Schedule with key milestone dates and an updated detailed data component project plan whenever there is an approved change to a key milestone date.
- Develop deliverables in accordance with SCERS guidelines and standards.
- Respond to any SCERS request that changes the contract, and advise SCERS of any cost and schedule impacts. When there is a cost impact, either an increase or a decrease, the Vendor shall advise SCERS in writing of the increase or decrease involved and any schedule impact. The contract changes will follow the formal change control process established by SCERS and will require approval from SCERS. (Note: Any change to the contract requires a contract amendment.)
- Negotiate in good faith and in a timely manner as to the cost and schedule impact of any change request. If the parties reach an agreement on a change request, the Vendor will incorporate all modifications called for by the Change Order into applicable plans or other documentation.
- Conduct a project kick-off meeting. During the kick-off meeting, the Vendor will include an overview of the process, the deliverables to be produced, and the role SCERS staffing will play in each phase of the Data Migration Project.
- Work with the PAS Vendor data conversion team and the PAS Vendor Project Manager as needed to appropriately facilitate the overall data conversion process.

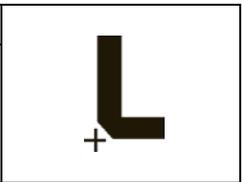
Please complete the questionnaire regarding Project Experience and Approach in Attachment 4.

2.2.8 Constraints and Guidelines

- The Vendor will work with SCERS' project team, which consists of SCERS staff and the Linea Oversight Project Manager and, upon selection of the PAS system, the PAS Software Vendor.



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- To ensure common vocabulary, the Vendor should explicitly define vocabulary used in their project lifecycle as the usage of words like testing, data profile, dry run, requirements, validation, migration, reconciliation, etc., is often unique to a Vendor's practice.
- The Vendor shall conduct the data migration as a systematic and automated process. Whenever possible, automated methods must be used to cleanse, consolidate, validate, and transfer in the approach to converting data to the new PAS.
- Data must be transferred among the data conversion team members in an automated and secure manner. The Vendor must adhere to SCERS' data security policy when handling member data. Encryption, data masking/data scrambling and the use of FTP and/or other secure file delivery must be addressed as part of the PAS Data Migration project.
- The Vendor shall assign staff that has significant experience (as indicated in Section 2.4.3, Project Resources) working with a project of this scope. The Key Personnel proposed will be required to come to any Vendor interview and will be interviewed by the Selection Committee at no cost to SCERS.
- The Vendor's proposed cost of the project shall include:
 - Data migration, data profiling, data cleansing, data validation, data reconciliation and project management for these tasks.
 - Testing that will be performed by the Vendor.
 - Any software and/or tools proposed by the Vendor that will require SCERS purchase or license.
 - Documentation for the system requirement specifications, technical architecture and the system configuration.
- A project such as this, which has various teams and many areas of interest, requires team members to be committed to the success of the project as a whole. As an organization SCERS expects the winning Vendor to commit to the following requirements to help ensure that the overall team functions with synergy and that they are able to maintain control of their project budget:
 - The Vendor will be able to expand and contract resources with varying skill sets on the project based on varying needs at various points of time of the project.
 - The Vendor will be able to quickly adapt to the new environment and become a productive member of the team.
 - The Vendor will be able to quickly adapt to the target environment regardless of what may be chosen through the RFP process for the target system.
 - The Vendor will provide their own tools, software licenses and equipment required to perform their duties. If SCERS is expected to purchase tools and/or software licenses as part of these services, they must be included in the Cost Proposal.
- The Vendor will be restricted from downloading data or taking data off-site without SCERS' permission. The vendor and SCERS will mutually determine the encryption and

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other security measures required to ensure SCERS' member data is properly secured throughout the project.

2.3 Vendor References

The Vendor will provide a list of at least three (3) references from clients for whom they have done similar work. These references will be contacted and asked to confirm:

- That the provider has, under previous agreement, successfully performed work of a similar nature to that detailed in this RFP.
- That the provider met all obligations under the aforementioned agreement with regard to the provision of services, quality of work, and completion dates.
- That the provider and all staff conducted themselves in a highly professional and ethical manner.
- That the provider met all obligations to subcontractors and transportation providers.

Submission of the required references will be evaluated as a pass or fail.

If unfavorable information is obtained from contact with references, the Vendor may be deemed a non-responsible vendor and the proposal may be rejected.

Please complete the questionnaire regarding References in Attachment 6.

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3 Terms and Conditions

The RFP response from the selected Vendor will be incorporated by reference into the final contract. A final contract will be negotiated between SCERS and the selected Vendor upon approval from the SCERS Retirement Board.

Vendors are responsible for reviewing all specifications, requirements, terms and conditions, insurance requirements, and other requirements herein.

By submitting a proposal, the Vendors acknowledge and agree that such submission is an acceptance of the special terms and conditions that are noted in this RFP. Vendors are to price and submit proposals to reflect all the specifications and requirements in this RFP and terms and conditions substantially the same as those included in this RFP. Failure to do so will result in such RFP proposal being deemed non-responsive.

Any specific areas of dispute with the following terms and conditions must be identified in the Vendor's response and may, at the sole discretion of SCERS, be grounds for disqualification from further consideration in award of a contract.

SCERS may, for informational purposes, request the Vendor submit its licensing and maintenance agreement with the Vendor's response. However, this should not be construed as SCERS' willingness to sign a licensing or maintenance agreement supplied by the Vendor. If the Vendor requires SCERS to agree to its licensing and maintenance agreement, the Vendor is required to supply this as a requested exception to the contract and it will be considered in the same manner as other exceptions.

SCERS may consider and may choose to accept some, none, or all contract modifications that the Vendor has submitted with the Vendor's proposal.

Nothing herein prohibits SCERS, at its sole option, from introducing or modifying contract terms and conditions and negotiating with the highest ranked apparent successful Vendor to align the proposal to SCERS' needs. SCERS has significant and critical time frames for this initiative; therefore, should such negotiations with the highest ranked, apparent successful Vendor fail to reach agreement in a timely manner as deemed by SCERS, SCERS, at its sole discretion, retains the option to terminate negotiations and continue to the next-highest ranked proposal.

3.1 Terms and Conditions

As noted in the previous section, the final contract will be negotiated after approval from the SCERS Retirement Board.

The following are terms and conditions that will become, in whole or in part of the final contract.

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3.1.1 Fixed Price

The pricing structure for the contract for the Vendor's solution will be set up as part of a fixed-price agreement.

3.1.2 Escrow

Although SCERS does not have any intention of developing the Vendor's solution on its own, the contract will require that the complete source code and associated technical documentation (including programming/code comments) be put in escrow, to be exercised if the Vendor becomes unable to provide its goods and services to the client and to the market at large. Each subsequent version of the source code will be placed in escrow in order to preserve a full and complete version history in escrow.

3.1.3 Price Increases

The successful Vendor will be entitled to raise its hourly rates for personnel by the local CPI but in no event by more than 3% per year.

3.1.4 Advance Payments

No request for early payment, down payment, or partial payment will be honored except for products or services already received. Milestone payments are not considered partial payments or progress payments; however, as part of the evaluation process, milestones may be rejected or negotiated with SCERS if they do not appear to represent completion of deliverables. Maintenance subscriptions may be paid in advance provided that, should SCERS terminate early, the amount paid shall be reimbursed to SCERS on a prorated basis; all other expenses are payable net 30 days after receipt of a proper invoice and acceptance of satisfactory compliance.

3.1.5 Performance Holdbacks

The selected Vendor will be allowed to put forth a milestone payment schedule based on its rate chart. However, the contract will specify a performance holdback of 10% of each milestone payment, to be released upon successful go-live of the system and approval/sign-off from SCERS.

3.1.6 Prime Contractor

Proposals that includes multiple Vendors must clearly identify one Vendor as the prime contractor and all others as subcontractors.

3.1.7 Data Security / Data Handling

SCERS will not allow data containing member information, in particular that containing Personally Identifiable Information, to be used outside of the United States. All data is the

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property of SCERS, and any use or access by the selected Vendor during the implementation must be guaranteed to be encrypted in transit and at rest, and scrambled.

3.1.8 Most Favorable Terms

Selected Vendor guarantees that SCERS will receive the most favorable terms for the overall agreement.

3.1.9 Taxes

SCERS is exempt from federal, state and local income taxes. SCERS will not be responsible for any taxes levied on the Vendor as a result of any contract resulting from this RFP.

3.1.10 Insurance Requirements

Insurance requirements presented in the contract shall prevail. If formal proof of insurance is required to be submitted to SCERS before execution of the contract, SCERS will remind the apparent successful Vendor in the Intent to Award letter. The apparent successful Vendor must promptly provide such proof of insurance to SCERS in reply to the Intent to Award letter. Contracts will not be executed until all required proof of insurance has been received and approved by SCERS.

Any exceptions that Vendors may have to insurance requirements must be submitted prior to the deadline for questions. Insurance requirements will not be considered for negotiations.

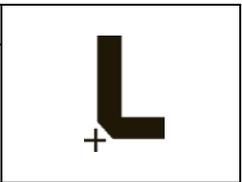
Vendors are encouraged to immediately contact their broker to begin preparation of the required insurance documents, in the event that the Vendor is selected as a finalist. Vendors may elect to provide the requested insurance documents within their proposal.

The Vendor selected for award shall procure and maintain, during the entire period of performance, the types of insurance specified below. The Vendor shall have its insurance broker or insurance company submit a Certificate of Insurance to SCERS listing, as applicable, SCERS as certificate holder and additional insured and giving evidence of the required coverage prior to commencing performance under this contract. All insurance shall be written with financially responsible companies authorized to do business in California or in the jurisdiction where the work is to be performed and have an A.M. Best Company rating of A or A- and a FSC of VIII, or higher. The Vendor shall ensure that all policies provide that SCERS shall be given thirty (30) days prior written notice in the event the stated limit in the declarations page of the policy is reduced via endorsement or the policy is canceled prior to the expiration date shown on the certificate. The Vendor shall provide SCERS with ten (10) days prior written notice in the event of non-payment of premium.

1. Commercial General Liability Insurance. The Vendor shall provide evidence satisfactory to SCERS with respect to the services performed that it carries \$5,000,000 per occurrence limits; \$10,000,000 aggregate; Bodily Injury and Property Damage including,



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but not limited to: premises-operations; broad form property damage; Products and Completed Operations; Personal and Advertising Injury; contractual liability and independent Offerors. The policy coverage shall include SCERS as an additional insured, shall be primary and non-contributory with any other insurance maintained by SCERS, and shall contain a waiver of subrogation. The Vendor shall maintain Completed Operations coverage for five (5) years following final acceptance of the work performed under this contract.

2. Workers' Compensation Insurance. The Vendor shall provide Workers' Compensation insurance in accordance with the statutory mandates of the state of California or the jurisdiction in which the contract is performed.
3. Employer's Liability Insurance. The Vendor shall provide employer's liability insurance as follows: \$1,000,000 per accident for injury; \$1,000,000 per employee for disease; and \$1,000,000 for policy disease limit.
4. Errors and Omissions Insurance. The Vendor shall provide evidence satisfactory to SCERS with respect to the services performed that it carries \$5,000,000 per occurrence limits; \$10,000,000 aggregate; Data Breach/Loss and IT Security coverage including but not limited to: software installations, network, mistakes and oversights that creates financial harm to SCERS. The policy coverage shall include SCERS as an additional insured, shall be primary and non-contributory with any other insurance maintained by SCERS, and shall contain a waiver of subrogation. The Vendor shall maintain E&O coverage at this level for five (5) years following final acceptance of the work performed under this contract.
5. Minimum Liability Auto Insurance Requirements. The Vendor shall provide evidence satisfactory to SCERS with respect to the services performed that it carries Bodily Injury Liability Coverage: \$15,000 per person / \$30,000 per accident minimum. Property Damage Liability Coverage: \$5,000 minimum. The Vendor shall carry all required insurance from the date that a contract is awarded until all contract work is accepted by SCERS.

The Vendor is solely responsible for any loss or damage to their personal property, including but not limited to tools and equipment, rented machinery, or owned and leased equipment. A waiver of subrogation shall apply in favor of SCERS.

The Vendor shall immediately, or as soon as practicable thereafter, provide SCERS with written notice in the event that its insurance coverage has or will be substantially changed, canceled or not renewed, and provide an updated certificate of insurance to SCERS.

The Vendor shall submit certificates of insurance giving evidence of the required coverage as specified in this section prior to commencing work. Evidence of insurance shall be submitted to:

Kathy Regalia
Chief Operations Officer
980 9th Street, Suite 1900

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Sacramento, CA 95814

The Vendor agrees that SCERS may disclose the name and contact information of its insurers to any third party which presents a claim against SCERS for any damages or claims resulting from or arising out of work performed by the Vendor, its agents, employees, servants or sub Vendors in the performance of this contract.

3.1.11 Effective Dates of Offer

Vendor submission must remain valid until SCERS completes the award. Should any Vendor object to this condition, the Vendor must provide objection through a question or complaint to SCERS prior to the proposal due date.

3.1.12 Cost of Preparing Proposal

SCERS will not be liable for any costs incurred by the Vendor in the preparation and presentation of proposals submitted in response to this RFP including, but not limited to, costs incurred in connection with the Vendor's participation in demonstrations and the pre-proposal conference.

3.1.13 Readability

Vendors are advised that SCERS' ability to evaluate proposals is dependent in part on the Vendor's ability and willingness to submit proposals which are well ordered, detailed, comprehensive, and readable. Clarity of language and adequate, accessible documentation is essential. Vendors should maintain the sequence of sections as they are depicted in the RFP.

3.1.14 Vendor Responsibility

It is the Vendor's responsibility to examine all specifications and conditions thoroughly and comply fully with specifications and all attached terms and conditions. Vendors must comply with all federal, state, and City laws, ordinances, and rules.

3.1.15 Changes in Proposals

If it becomes necessary to revise any part of this RFP, or if a more exact interpretation of provisions of this RFP are required prior to the due date for proposals, a supplement will be emailed to all participating Vendors. If such addenda issuance is necessary, SCERS reserves the right to extend the due date of proposals to accommodate such interpretations or additional data requirements.

3.1.16 Vendor Responsibility to Provide Full Response

It is the Vendor's responsibility to provide a full and complete written response which does not require interpretation or clarification by SCERS. The Vendor is to provide all requested

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materials, forms, and information. The Vendor is responsible to ensure the materials submitted will properly and accurately reflect the Vendor specifications and offering. During scoring and evaluation (prior to any interviews), SCERS will rely upon the submitted materials and shall not accept materials from the Vendor after the RFP deadline; however, this does not limit the right of SCERS to consider additional information (such as references that are not provided by the Vendor but are known to SCERS, or past experience by SCERS in assessing responsibility), or to seek clarifications as needed by SCERS.

3.1.17 Errors in Proposals

Vendors are responsible for errors and omissions in their proposals. No such error or omission shall diminish the Vendor's obligations to SCERS.

3.1.18 Withdrawal of Proposal

The Vendor or an authorized representative may withdraw proposals by written notice received at any time before award. The withdrawal is effective upon receipt of notice by SCERS. Vendors may submit modifications to proposals at any time before the solicitation closing date and time, and may submit modifications in response to an amendment, or to correct a mistake at any time before award.

Vendors shall state in their cover letter that the Proposal will be valid for up to 180 days from the receipt of the proposals.

3.1.19 Rejection of Proposals, Right to Cancel

SCERS reserves the right to reject any or all proposals at any time with no penalty. SCERS also has the right to waive immaterial defects and minor irregularities in any proposal. SCERS reserves the right to cancel this RFP at any time, for any reason. Issuing this RFP does not obligate SCERS to enter into a contract with any Vendor.

3.1.20 Incorporation of RFP and Proposal in Contract

This RFP and the Vendor's response, including all promises, warranties, commitments, and representations made in the successful proposal, shall be binding and incorporated by reference in SCERS' contract with the Vendor.

3.1.21 Non-Endorsement and Publicity

In selecting a Vendor to supply to SCERS, SCERS is not endorsing the Vendor's products and services or suggesting that they are the best or only solution to SCERS' needs. The Vendor agrees to make no references to SCERS or the department making the purchase in any literature, promotional materials, brochures, news releases, sales presentation, or the like, regardless of method of distribution, without prior review and express written consent of the SCERS' CEO.

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SCERS may use Vendor's name and logo in promotion of the contract and other publicity matters relating to the contract, without royalty. Any such use of Vendor's logo shall inure to the benefit of Vendor.

3.1.22 Indemnification During the RFP Process

By submitting a proposal, Vendors acknowledge and agree to fully indemnify, hold harmless and defend SCERS, its Board, officers, participants, employees, agents and representatives against and in respect of any and all claims, demands, damages, suits, actions, costs, charges, losses, liabilities, expenses, and deficiencies, (including without limitation legal fees and expenses), whether or not involving a third party claim, resulting from, arising out of, or in any way related to (a) any untrue warranty or representation or material omission of the Vendors contained in their proposal; (b) any breach of any warranty or representation of the Vendors contained in their proposal; (c) any breach of any covenant or other obligation or duty of Vendors under this RFP or under applicable law; and, (d) any liens, claims, encumbrances, or infringement of any patent, trademark, copyrights, or other proprietary or intellectual property right in each case whether or not caused by the negligence of SCERS or any other Indemnified Party and whether or not the relevant claim has merit.

3.1.23 Sole Property

All deliverables, reports, and documents produced in the performance of this Agreement shall be the sole property of SCERS. Vendors shall make no distribution of work specifically produced for SCERS to others without the express written consent of SCERS. Vendors agree not to assert any rights at common law or in equity or establish any claim to statutory copyright in such reports.

3.1.24 Proprietary Information

Pages of a proposal containing confidential or proprietary information shall contain a header and footer with an appropriate restrictive legend.

If the Vendor includes in the proposal information that it does not want disclosed for any reason, or used by SCERS for any reason other than for evaluation purposes, the Vendor will:

1. Mark the title page with the following:

“This proposal includes information that shall not be disclosed outside of SCERS and shall not be duplicated, used, or disclosed in whole or in part for any purpose other than to evaluate this proposal. If a contract is awarded to the Vendor as a result of, or in connection with, the submission of this information, SCERS shall have the right to duplicate, use, or disclose the information to the extent provided in the resulting contract. This restriction does not limit SCERS's right to use the information if it is obtained from another source without restriction.”

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2. Mark each sheet with information it wishes to restrict with the following:

“Use or disclosure of information contained on this sheet is subject to the restriction on the title page of this proposal”.

3.1.25 Independent Contractor

The Vendor shall at all times be acting in the capacity of an independent contractor. A successful bid is not intended, and shall not be construed, to create the relationship of servant, employee, partnership, joint venture, or association as between SCERS and the Vendor. The Vendor shall not have any claim against SCERS for retirement benefits, Social Security, disability, Worker’s Compensation or unemployment insurance benefits, civil service protection, or employee benefits of any kind. For all purposes, including but not limited to Workers’ Compensation liability, the Vendor understands and agrees that all persons furnishing services are deemed employees or agents solely of the Vendor and not of SCERS.

4 Submission Format

The following enumerated section describes the required sections of the proposal and the order in which they **MUST** be presented in the proposal. **Failure to follow this format or failure to include any item below will deem the proposal as non-responsive and be rejected.**

RFP SECTION 1 – COVER LETTER

Provide a letter on company letterhead that confirms the submission of a proposal in response to this RFP and that verifies that the proposal is valid and binding for a period of 180 calendar days from the proposal submission deadline as identified in the RFP. The letter must be signed by a person authorized to legally bind the company.

RFP SECTION 2 – EXECUTIVE SUMMARY

The Executive Summary must be limited to no more than three (3) pages and must provide a concise summary of the services and deliverables being offered to meet the requirements of this solicitation; the Vendor’s approach to providing services; and justification as to why the Vendor is the best qualified to provide services.

RFP SECTION 3 THROUGH 9 – ATTACHMENT RESPONSES

Each vendor **must** complete and submit the following Appendices which are attached to this solicitation:

- Minimum Qualifications - **Attachment 1**
- Company Information - **Attachment 2**
- Organization and Staffing - **Attachment 3**
- Experience and Approach - **Attachment 4**
- Cost Proposal - **Attachment 5**
- References - **Attachment 6**
- Confidentiality Agreement - **Attachment 7**



4.1 Submission Requirements

To be considered, all submission materials must be received electronically at SCERS by 11:59 pm PDT on October 7th, 2016.

- **One (1) electronic copy of each document described in the Submission Format** that comprises the overall response, in native format. This means that there may be multiple files.
- **One (1) electronic copy of the compiled response** in an Adobe Acrobat PDF (version 10.0 or lower). The Vendor should put all of the documents in the order that they should appear and be printed into one (1) PDF file.

Following the electronic submission, six (6) printed copies of the compiled response must be sent to SCERS bound or in a binder. These printed materials must arrive at SCERS by 5:00 pm PDT on October 10th, 2016.

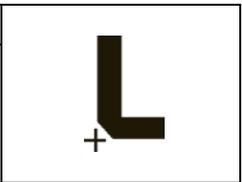
The electronic copies must be copied onto CD-ROM or DVD media.

All submissions become the property of SCERS and will not be returned to Vendors.

All proposals shall be valid until SCERS completes the award, or for up to 180 days from receipt of the proposal, and no more than one proposal per Vendor is allowed.

All submissions must be delivered prior to the deadline specified in the selection timeline. Please send one emailed electronic submission to SCERS at Retirement-ITProjects@saccounty.net and six (6) hard copy submissions to:

Kathy Regalia
Chief Operations Officer
980 9th Street, Suite 1900
Sacramento, CA 95814



5 Criteria for Selection

Following the RFP opening, proposals will be evaluated in three phases. The first phase will determine if the mandatory requirements of the RFP have been agreed to and/or met. Failure to comply will deem the proposal non-responsive. Any proposal that is incomplete may be rejected by SCERS. However, SCERS may waive minor irregularities.

The second phase is evaluation of each section of the submission using the considerations referenced in this RFP. This phase will be completed by an impartial committee established by SCERS.

In the third phase the proposals will be evaluated and awarded points based on a comparative formula of relative weighting as detailed below:

Criteria	Weighting
Attachment 1 – Minimum Qualifications	Pass/Fail
Attachment 2 – Company Information	15
Attachment 3 – Organization and Staffing	20
Attachment 4 – Experience and Project Approach	50
Attachment 5 – Cost Proposal	15
Attachment 6 – References	Pass/Fail
Attachment 7 – Confidentiality Agreement	Pass/Fail
TOTAL SCORE	100



RFP for Data Conversion Services



Attachment 1: Minimum Qualifications

State how your organization meets the following Minimum Qualifications. Companies who do not meet ALL of the Minimum Qualifications for response will be disqualified.

1	<p>Please provide a description of how your firm meets the following requirement:</p> <p>The conversion company must have a demonstrated record, as a company, of at least five (5) years performing data migrations, data analysis and data cleansing for ERP projects. Experience must include the following areas:</p> <ul style="list-style-type: none"> • Data profiling, analysis and summarization • Automated data clean-up tools and techniques • Data extraction, transformation, and loading • Problem resolution including pension industry expertise • Quality assurance, quality control, and data verification • Project management and planning for data migrations <p>Response:</p>
2	<p>Please provide a description of how your firm meets the following requirement:</p> <p>The Vendor must have three (3) years of experience working on pension administration system conversions or similar projects.</p> <p>Response:</p>
3	<p>Please provide a description of how your firm meets the following requirement:</p> <p>The Vendor must have completed at least three (3) or more data migration projects of similar size and complexity to that described in this RFP, preferably for defined benefit pension systems.</p> <p>Response:</p>



RFP for Data Conversion Services



Attachment 2 – Company Information

Company Name	
Company Address	
Contact Name	
Title	
Phone	
Fax	
Email	

Provide the following information for the proposing firm:

1	A brief history of your firm's organization, number of years in business, form of organization, affiliates (if any), locations of principal and branch offices, and a list of your present directors or partners.
2	State the year firm was formed and the year it began providing data migration services.
3	Indicate professional employee turnover of the firm for the last five (5) years in terms of number of employees who have left vs. the number hired. Also describe situations where former consultants have gone to work for pension plans or where you have hired consultants from pension plans.
4	Are your accounts managed by teams or individuals? Who would be SCERS' back-up consultant, if any?
5	In the last three (3) years, has your firm had a project or contract terminated prior to successful conclusion? If so, please describe the circumstances.
6	For any similar project completed within the last three (3) years, indicate any time where your firm caused the delivery schedule to increase by more than 90 days from the original schedule over the life of the project. Describe the situation, circumstances, variances and other relevant information to explain the reason(s) for the variance.
7	Describe any recent or pending mergers, acquisitions, or re-organizations that have been or may be encountered by your firm in the next 12 – 36 months and the anticipated impact of such events on your firm.
8	Has your firm been involved in any litigation over the past seven (7) years? If so, please explain.
9	Describe your general level of business that is devoted to the support data migration services.
10	Discuss in general your firm's competitive advantage(s) over other firms in the data conversion consulting industry. Why should SCERS select your firm?

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Attachment 3: Organization and Staffing

1	Provide an organizational chart as Attachment 3. Please identify the key personnel that you propose to be involved in the project on this chart. If your company provides services other than data migration, please explain your overall business, how data migration fits in with the greater business, and the percentage of revenue derived from data migrations.
2	List the names of staff to be assigned to this project with a description of their role and responsibilities, the percentage of time they would be committed to this project, and the percentage of time that is expected to be onsite vs. offsite.
3	Provide resumes of your key personnel that will be assigned to this project showing employment history, education, years of experience, relevant certifications, information regarding comparable projects worked (description of project and responsibilities, dates of assignment) and project role.



RFP for Data Conversion Services



Attachment 4: Experience and Approach

1	Describe your qualifications and experience with data profiling, data cleansing and data migration for ERP implementations.
2	Describe how you will meet the requirements of this RFP. Include in your discussion a description of your methodology for data migration and data cleansing, as well as your methodology for project management and control of data migration activities and risk management.
3	Describe your proposed scope of work based on SCERS' requirements as stated in the RFP.
4	Describe the automated tools and software that will be required and used, including expectations for software purchases/licensing by SCERS.
5	Describe your expectations regarding SCERS' role in the entire data migration process (data profiling, data cleansing, etc.). For each task that uses SCERS' staff, identify the role, number of people, type of skills/knowledge required, and the approximate number of hours expected each week required by SCERS' staff.
6	Describe your methodology and experience with data validation and reconciliation. Include the type of validation that will be performed, type of queries and reports that will be required and the key data elements that must be reconciled.
7	<p>Describe your technical approach for profiling, cleansing and migration of the legacy data that meets the requirements of this RFP. The approach should, at a minimum:</p> <ul style="list-style-type: none"> • Clearly identify the technical approach involved for each phase of the project. • Ensure that adequate documentation is in place so that SCERS has the ability to maintain all rights and permissions to the implemented data profiling and cleansing process in order to operate and maintain it. • Include a plan to perform data testing during the Data Cleansing Phase. • Describe how you will work with the PAS Vendor to perform data testing and resolved issues during the Data Migration and Implementation phases. • Describe the use of staging and cleansing exception databases
8	<p>Provide a high-level project plan with Gantt chart of your approach that includes the following:</p> <ul style="list-style-type: none"> • Breakdown of tasks by phases as defined in the RFP (i.e., Data Profiling, Data Cleansing and Data Migration). • Within each phase, identify the main activities to be completed with estimated start and end dates. • Each activity should identify the Vendor's staff that will be required to complete the activity.
9	Attach a sample Data Mapping document from one of your previous PAS conversion or similar projects.



RFP for Data Conversion Services



10	Provide a description of a data conversion you conducted where the source and target systems were developed by different companies and different teams. Conversions to support upgrades, or version shifts, of the same software do not qualify for this requirement.
11	Describe data cleansing functions your firm conducted for at least two (2) different projects where you were responsible for defining, designing and implementing the varying styles of data cleansing methods. This includes the use of automated processes and managing resources to manually cleanse the data. This experience must also include the definition and implementation of a data cleansing approach and the creation scripts and reports to identify and communicate the detailed records that require cleansing. You may use a project or projects described for a previous question, focusing on the relevant factors for this question.
12	Describe data conversions your firm has done for at least two (2) different target COTS-type systems where you worked with the target vendor in delivering staged data and/or executing the conversion completely from source systems directly to the target system database. You may use a project or projects described for a previous question, focusing on the relevant factors for this question.
13	Describe data conversions your firm has done on at least two (2) different projects that included complex transformations, on very large data sets with targets or sources that have more than 1,000,000 rows in a single target or source. You may use a project or projects described for a previous question, focusing on the relevant factors for this question.
14	Describe the minimum infrastructure that is needed to support the data profiling and cleansing project.
15	Describe how your firm intends on securing sensitive data during the project and what additional measures will be taken if data must be transferred offsite.
16	Describe your process for ensuring the data validation rules used are in compliance with SCERS rules and relevant statutes.
17	Describe how you measure the success of the data cleansing and data migration efforts.
18	How does your approach to data cleaning and data migration differ from others? Is there anything about the services your firm offers that distinguishes you from other consulting firms?
19	Indicate the percentage of time that resources will be expected to be onsite at SCERS. How many resources will be onsite? Please indicate expectations as to desk space, supply requirements, system access requirements, etc.
20	Describe how you handle data conversion code management.



RFP for Data Conversion Services



21	Describe (or include as an attachment) written data security / encryption standards your firm uses as part of your standard methodology.
22	Indicate how you handle conversion of SSNs and other private data. Provide details as to how this is handled when you are migrating data from one staging area to another staging area versus what is done during dry runs.
23	Include a diagram depicting your data conversion approach, including the ETL process, the data cleansing process, data validation and reconciliation process, the staging process, how the staging database will be converted to the software vendor's intermediate tables, etc.

	Sacramento County Employees' Retirement System	
	RFP for Data Conversion Services	

Attachment 5: Cost Proposal

Provide a detailed cost proposal for the proposed scope of work, including:

- Data migration, data profiling, data cleansing, data validation, data reconciliation and project management for these tasks.
- Testing that will be performed by the Vendor.
- Documentation for the system requirement specifications, technical architecture, and the system configuration.
- Any software and/or tools proposed by the Vendor that will require SCERS purchase or license.

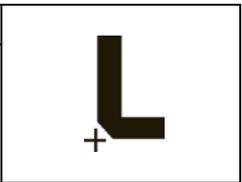
Provide cost options for performing all services on-site versus working primarily off-site.

You may propose a fixed price or a Time and Materials/expenses (T&E) quote with a Not-To-Exceed limit for each set of project activities:

- Data Profiling
- Planning
- Data Cleansing and Development
- Data Conversion/Implementation
- Project Management

Guidelines:

- SCERS will not accept pure T&E estimates.
- You may provide multiple options as long as they are clearly explained.
- Please include a list of assumptions.



Attachment 6 – References

Provide the following information on separate sheets for each of the **three (3) required** reference projects.

Reference #1			
Client Name:			
Address:			
Client Membership Size:			
Name of Contact:		Title:	
Telephone Number:		E-mail:	
Project Start Date (Use month / year):		Project Completion (Use month / year):	
Data Volume			
Total Cost:			
Approximate number of implementation hours:			
Number of full-time resources assigned:			
Please briefly describe the scope of the project:			

Reference #2			
Client Name:			
Address:			
Client Membership Size:			
Name of Contact:		Title:	
Telephone Number:		E-mail:	
Project Start Date (Use month / year):		Project Completion (Use month / year):	
Data Volume			
Total Cost:			
Approximate number of implementation hours:			
Number of full-time resources assigned:			
Please briefly describe the scope of the project:			

Reference #3			
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RFP for Data Conversion Services



Client Name:			
Address:			
Client Membership Size:			
Name of Contact:		Title:	
Telephone Number:		E-mail:	
Project Start Date (Use month / year):		Project Completion (Use month / year):	
Data Volume			
Total Cost:			
Approximate number of implementation hours:			
Number of full-time resources assigned:			
Please briefly describe the scope of the project:			

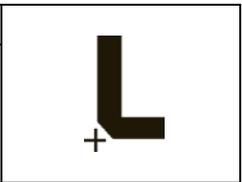
	Sacramento County Employees' Retirement System	
	RFP for Data Conversion Services	

Attachment 7

**VENDOR AND VISITOR CONFIDENTIALITY AGREEMENT
GOVERNING THE ACCESS AND USE OF
SCERS' CONFIDENTIAL INFORMATION**

Instructions

This form is to be signed by a contractor or visitor to SCERS who, in order to perform the desired service, must have access to private or confidential information or areas containing private or confidential information. The signed form must be filed along with any contract information for a period of no less than six (6) years from the last day of service provided by the contractor.



VENDOR AND VISITOR CONFIDENTIALITY AGREEMENT GOVERNING THE ACCESS AND USE OF SCERS' CONFIDENTIAL INFORMATION

I, _____, NAME

a representative of _____, COMPANY

have read and understand the Sacramento County Employees' Retirement System's (SCERS) Privacy Policy. I understand that, during my association with SCERS, I may be exposed to or given access to the following kinds of information:

- Personal Information (PI), which is non-public information identifiable to an individual,
• SCERS' proprietary information.

PI and SCERS' proprietary information are collectively referred to as "Confidential Information (CI)." I further understand that all Confidential Information must be protected from improper use or disclosure.

In consideration of my compensation from SCERS permitting me access to the Confidential Information, I hereby warrant and agree that I will not at any time (either during my association with SCERS or after my association ends) use, access or disclose any Confidential Information to any person or entity, internally or externally, except as is required and permitted in the course of my duties and responsibilities with SCERS, as set forth in SCERS' Privacy Policy.

I understand this obligation extends to any Confidential Information that I may have acquired or may acquire during the course of my association with SCERS, whether in oral, written or electronic form and regardless of (1) the manner in which access was obtained, (2) whether the Confidential Information came into my custody, possession, or knowledge, or was developed, compiled, prepared or used by me, before or after the date of this Agreement, and (3) whether the Confidential Information has been published or has become a part of the public domain, or has been put in my possession or knowledge by a third person not acting on behalf of SCERS, or was in my possession or knowledge prior to my commencing work for SCERS.

I understand and acknowledge my responsibility to apply SCERS' policies and procedures during the course of my association. I also understand that unauthorized use or disclosure of Confidential Information may result in disciplinary action, up to and including the termination of my association with SCERS and the imposition of civil penalties and criminal penalties under applicable federal and state law. In the event of a release of CI in breach of this Agreement, I agree to compensate or reimburse SCERS for any and all expenses associated with providing notice to the victims of the released CI as required by California Civil Code §1798.25.

	Sacramento County Employees' Retirement System	
	RFP for Data Conversion Services	

I understand that this obligation will survive the termination of my association with SCERS, regardless of the reason for such termination, and that my obligations under this Agreement are in addition to, and not exclusive of, any and all of my other obligations and duties to SCERS, whether expressed or implied, in fact or in law.

NAME _____ TITLE _____

COMPANY _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

SIGNED _____ DATE _____



IT Modernization Program – Data Conversion RFP Preview

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Presentation to the Board of Retirement
17 August 2016

Brian Colker, Project Advisor

Agenda



1. IT Modernization Program Summary
2. Importance of Data to Project Success
3. Scope of Data Conversion
4. Timing of Project Initiation
5. Other Resources Needed
6. Vendor Landscape
7. Procurement Timeline

IT Modernization Program



- + The program will involve implementing a series of solutions that will improve Member, Accounting, and Investments business processes
- + Two key systems – a Financial Reporting Solution and a Pension Administration System – will be the centerpiece of the program.
- + The Financial Reporting Solution will seek to integrate software systems that support Investments Accounting and other Accounting functions
- + The Pension Administration System will involve integration with FileNet (or a different document management system), integration with the Financial Reporting Solution, and the conversion of legacy data from multiple sources

Program Objectives



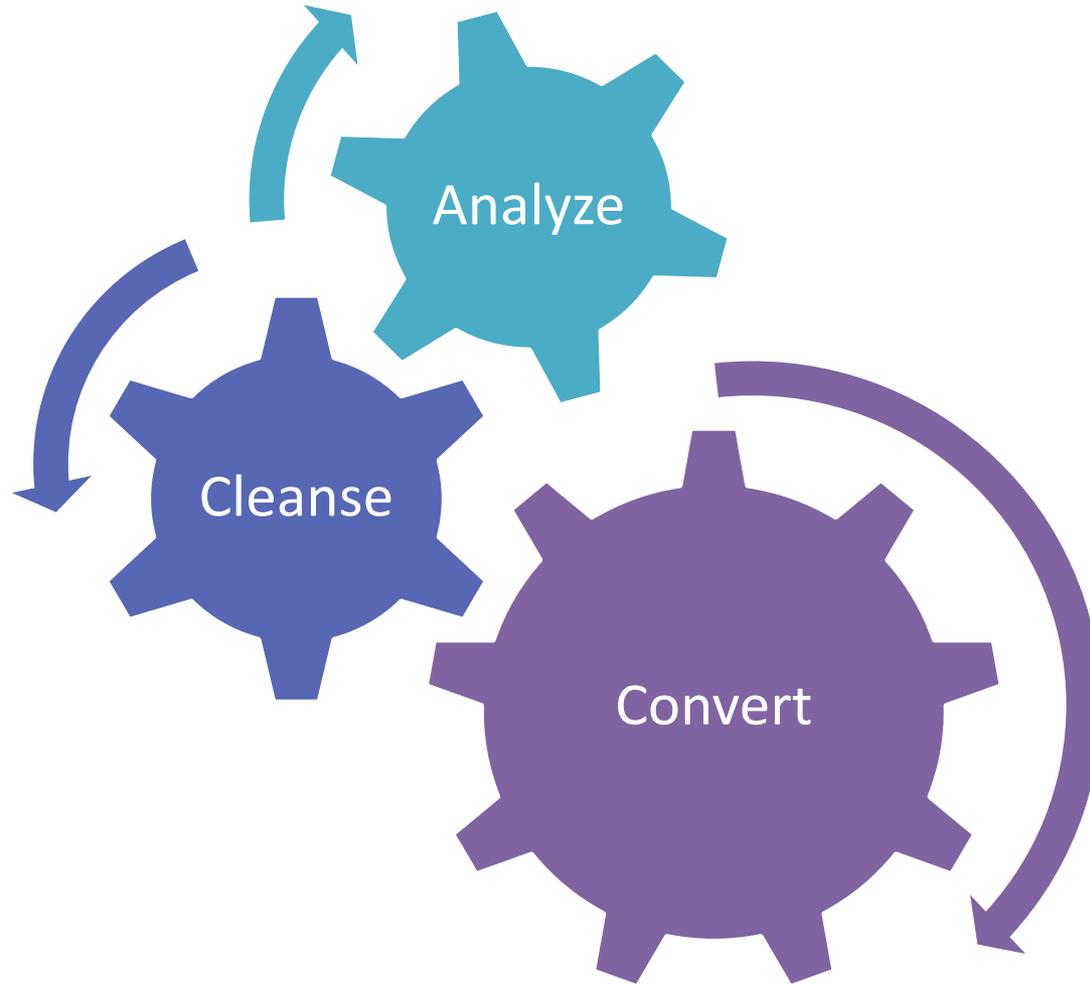
- + The objectives of this program are as follows:
 - Select and procure modern software solutions from vendors with a proven track record in delivering solutions to similar clients
 - Cleanse and convert the legacy data into a single integrated member data set
 - Implement secure functionality that allow members and employers to have greater access to their data and to allow them to more efficiently interact with SCERS
 - Ensure the solutions selected will safeguard SCERS' data to the greatest extent possible
 - Implement systems that automate SCERS' processes and enforce SCERS' business rules, so that SCERS is more efficient and accuracy is improved
 - Implement intuitive systems so SCERS can more easily train new staff members
 - Allow SCERS' staff to add value through more analytical tasks

Importance of Data



- + All benefit calculations rely on accurate underlying data
- + In order to automate 95%+ of benefit calculations, the data must be correct
- + Staff must be confident in the data, or they will develop subsidiary tools to verify calculations
- + Data conversion issues have been one of two major drivers of project delays in the pension industry (the other is lack of resources)
- + Clean data is needed no matter what SCERS decides to do with the system
- + **Systems are only as good as the underlying data!**

Scope of the Conversion



Scope of the Conversion



- + This is not a straightforward migration of data from MBASE / COMPASS to the new Pension Admin System
- + Data must be analyzed field by field
- + Data values must be researched and anomalies explained
- + If the new system needs data that does not exist, SCERS must:
 - Transform existing data to meet the new requirements
 - Manually extract / collect / create new data
 - Modify the new system to work differently
- + Data errors and anomalies must be cleansed – either programmatically or manually
- + SCERS data must be staged in the new system as part of the system development process – module by module

Timing of Conversion



- + Because data conversion is a major risk to PAS projects, our practice is to start the effort as early as possible
- + Starting 6-9 months prior to the PAS implementation allows the project team time to focus on the conversion infrastructure, initial data profiling, and conversion processes
- + The head start gives the data team the ability to send converted data to the development team as the new system is delivered
- + Testing can then be performed using real data, which both validates the system is working as designed and gives more opportunity to find data issues

Resource Needs – SCERS/DTech



Project	Phase	Duration	# of Staff
FRS	Design	1-2 months	1 – Accounting, 100% time 2 - Accounting, 30% time 1 – IT (internal PM), 30% time
FRS	Implementation	4-6 months	3 - Accounting 30% time 1 – IT (internal PM), 30% time
PAS	Design	12-18 months	1 – IT (internal PM), full-time 1 – IT (infrastructure), 25% time 2 – Benefits, 100% time 4 – Benefits, 30% time 1 – Accounting, 25% time
PAS	Data Conversion	36-42 months	1 – IT, 75% time (data extraction) 3 – Benefits, 30% time (data clean-up)
PAS	Testing	~ 24 months	1 – IT (internal PM), full-time 1 – IT (infrastructure), 25% time 3 – Benefits, 100% time 6 – Benefits, 30% time 1 – Accounting, 50% time
PAS	Training / Cutover	~ 6 months	1 – IT (internal PM), full-time 1 – IT (infrastructure), 50% time 3 – Benefits, 100% time All Staff – Benefits, 30% time 1 – Accounting, 100% time 2 – Accounting, 30% time

Vendor Landscape



- + There are three national vendors that specialize in data projects for defined benefit systems
- + There are local companies who have done a similar scope of work for CalSTRS/CalPERS
- + It is unlikely more than five companies will meet the minimum qualifications

Procurement Timeline



Step	Event	Approximate Data
1	Release of RFP	8/19/2016
2	Discovery Day / Vendor Conference	9/9/2016
3	RFP responses Due	10/7/2016
4	Oral Interview of Finalists	Late October, 2016
5	Update to Board on Procurement Results	November, 2016
6	Recommendation of Award to the Board	December, 2016