



Legislative Report – March 2, 2012

In Partnership With:

**Department of Finance
State Controller's Office
State Treasurer's Office
Department of General Services**

LEGISLATIVE MANDATE

Chapter 727, Statutes of 2010 (AB 1621) requires the Department of Finance, 90 days prior to executing a contract for a prime system integrator to implement the Financial Information System for California (FI\$Cal) system, to submit a report to the Legislature with the following information:

- Costs and benefits of alternative approaches to the implementation of the FI\$Cal system, including a scaled back version of the system
- Summaries of system integrator assessments of the state's current financial system and future automation goals, as presented in the request for proposal
- Details related to the development of the FI\$Cal system, including system integrator costs and timeframes
- Details about how the proposed solution will develop a robust and flexible financial management system with the technical capability to implement performance-based budgeting, or any other budgeting approach the Legislature chooses to adopt
- Rationale for selecting the winning system integrator

Additional copies of this report can be obtained from:

FI\$Cal
2000 Evergreen Street, Suite 107
Sacramento, CA 95815
(916) 576-4880
(916) 576-4833 FAX

Copies also may be obtained from the following website:

<http://fiscal.ca.gov/>

EXECUTIVE SUMMARY

This Legislative report complies with the requirements of Chapter 727, Statutes of 2010 (AB 1621), concerning the Financial Information System for California (FI\$Cal). The Department of Finance (Finance) is reporting at least 90 days prior to awarding the contract for implementing the system, as required.

This report provides details and analysis of the vendor selected to complete the FI\$Cal project.

After a two-stage procurement process, FI\$Cal has selected Accenture LLP (Accenture) as the System Integrator for FI\$Cal. Accenture received the highest score, based on the requirements set forth in the Request for Proposal (RFP) FI\$Cal 8860-30. Upon contract signature, FI\$Cal will begin implementing the system in 5 waves, over 5 years, at a total cost of \$616.8 million.

The two-stage procurement allowed the state to provide bidders in depth knowledge of the state's processes, systems, and needs while simultaneously providing the state critical insight into the proposed ERP solution, implementation plan, and system integrator proposed staff members. This procurement process facilitated remarkable competition among the bidders resulting in more competitive rates for hardware, software, and System Integrator services. As a result of the intense planning and research of the FI\$Cal team as well as the in depth interactions with the bidders and ERP advisors, the project has revised several fundamental elements of the strategy detailed in SPR 2, thereby substantially reducing the implementation timeline from 7 years to 5 years and the total Project cost estimates from \$1.6 billion to \$616.8 million.

For example, while the state had previously committed to minimize customizations to the ERP solution, ERP software has evolved substantially over the last 5 years providing a level of flexibility that was not previously available thereby further reducing the need for expensive customizations. Additionally, since SPR 2, system integrators have gained significant experience in large scale public sector ERP implementations resulting in reduced implementation timelines and reduced state staffing needs. Consequently, the project was able to substantially reduce staffing and overhead costs by reducing the number of positions needed to implement FI\$Cal.

The selected system can be configured for various budgeting approaches (zero-based, performance-based, incremental budgeting, etc.). In fact, the system can be configured to use multiple budgeting approaches simultaneously. However, because the various budgeting approaches need to be configured in the system, it would be prudent for the state to determine the details for the preferred approaches prior to when it is time to design and configure the system in order to avoid potential additional configuration costs.

In addition, the Legislature asked Finance and FI\$Cal to identify the costs and benefits of various alternatives to full implementation, including a scaled back version of the system. The options identified in this report include Functional Phasing (accounting, budgeting, etc.), Department Phasing (Finance, State Treasurer's Office, State Controller's Office, etc.), and Managed Services Models (cloud computing or other particular services).

Each of these alternatives potentially provides some indeterminate short term savings benefit, but will ultimately result in greater long term expense for several reasons: 1) longer duration to get to the same benefits as FI\$Cal; 2) the possibility that the state may never complete implementation of the modern and fully integrated system the state needs for comprehensive financial management; 3) greater project risks including the state's ability to retain the systems integrator and project staff; 4) greater likelihood that the state cannot continue to maintain and operate many of the outdated and critical business systems currently supporting the state's financial activities; and 5) the need for a new procurement process if an alternate approach were to be taken, which would involve substantial additional costs and time to implement the project.

Additional fiscal, scheduling, and benefits detail is available in Special Project Report 4¹.

¹ Once approved, all Special Project Reports are available on our website: <http://www.fiscal.ca.gov>

BACKGROUND

FI\$Cal is a technology business transformation project that will enable the state to combine its accounting, budgeting, cash management, and procurement operations into a single, integrated financial management system. FI\$Cal will eliminate hundreds of independent legacy systems and department-specific applications that now support internal business operations of the state. Most of these antiquated legacy systems were built in the 1970s and 1980s and have exceeded their useful lives. In addition, most of these systems do not communicate with each other, and business operations often rely on separate downstream databases. These databases also must be maintained and often contain duplicate or inconsistent data. Because of the decentralized and antiquated nature of the state's business operating systems, the state's financial operations have become highly inefficient and challenging to manage.

FI\$Cal will provide the state with a centralized, integrated system for fiscal information that employs standard data definitions and modern data management processes. The project will use proven technology from a reputable source, and leverage best practices and lessons learned from Enterprise Resource Planning (ERP) experts and other projects. By standardizing business processes, FI\$Cal will eliminate the need for redundant manual input, time-consuming reconciliations, and auxiliary systems and spreadsheets. These changes also will increase the accuracy, timeliness and flexibility of data reporting, improve financial management, and enhance transparency.

FI\$Cal will use a commercial-off-the-shelf (COTS) ERP solution to implement the new system. COTS ERP solutions have been widely and successfully deployed for years in both the private and public sectors. Generally, they are sophisticated and complex systems built around a standard business process that works for most organizations. The benefit of using this approach is greater operational efficiency due to the institution of more effective business practices, and the elimination of unnecessary steps.

System Integrator Assessment

During the Fit Gap and negotiation processes the bidders consistently conveyed the following key themes:

- (1) California's financial system is complex, convoluted, outdated and inefficient in its current condition. Most components of the state's convoluted fiscal system were developed in the 1970s and 1980s, when the state budget was only a mere fraction of what it is today--the world's 8th largest economy exceeding \$200 billion dollars in annual expenditures. The current information technology being used was not designed to handle today's volume of transactions and business needs; it is very inefficient and necessitates labor intensive, duplicative, and manual processes (such as cumbersome reconciliations, or manual data gathering and consolidation efforts). Today's outdated technology is stressed, costly to run and maintain, slow, and provides incomplete information and errors in some instances, compared to modern technology and industry standards. Therefore, the system needs to be replaced.
- (2) The FI\$Cal business objectives (including, but not limited to, replacing aging and costly legacy systems, implementing a standardized and fully-integrated system, increasing competition through electronic bidding and other means, centralizing

financial data, increasing investment returns through automation, improving fiscal controls, automating manual processes, enhancing transparency, streamlining payables and receivables, and improving system security) are appropriate, reasonable, and consistent with state information technology goals and policies.

- (3) The proposed information technology solution, coupled with associated business process reengineering, will address these high priority state policy objectives. The new system can be tailored to meet California's needs while remaining flexible enough to adapt to changes in policy and programs, subject to reconfiguration in extreme situations. Service delivery and business operations will be more efficient and effective as a result.

Assessment of Current Environment

FI\$Cal's benefits dovetail with the statutory objectives identified for the project. These benefits include:

- Establish a single source of financial information through the establishment of a single statewide financial management system.
- Provide more meaningful and current financial information and reports to decision makers, program managers, and stakeholders.
- Provide transparent financial information for better decision making and accountability.
- Make information more readily available to the public and the state's business partners.
- Track statewide purchase volumes by vendor and/or commodity type to identify areas where quantity discounts might save money.
- Facilitate workforce mobility and efficiency by establishing portable work skills.
- Automate manual processes.
- Minimize manual reconciliations among control agencies, state agencies, and other separately maintained systems and databases.
- Avoid significant costs of duplicate new financial management systems throughout state government.

Benchmarking

In July 2011, the state contracted with Solutions West (who subcontracted with benchmarking experts The Hackett Group (Hackett)) to analyze the state's accounting, budgeting, cash management, contracting and procurement functions to: 1) provide baseline data against which post-implementation measurements could be compared and, 2) conduct a benchmarking study to assess and compare California's current performance to other similar organizations. Hackett also used the benchmarking analysis to identify and estimate the expected benefits from FI\$Cal.

Benchmarking studies are a well-established practice to measure the utilization of best practices and various specific capabilities (such as level of automation in a given process) and factors that directly impact performance (such as labor cost per full time equivalents (FTE)). These additional metrics provide insights into the main factors that

explain performance deficiencies, allowing organizations to develop informed and realistic improvement plans. Benchmarking is widely acknowledged to be a useful basis for developing and quantifying business cases for technology implementations and transformation projects such as FI\$Cal. Hackett has benchmarked the activities of thousands of public and private organizations worldwide. Its comprehensive and proprietary database of benchmarked data can be used to assess the performance of individual client organizations and measure their progress over time.

Methodology

For California's benchmarking study, two peer groups were developed from the Hackett database; one based on other state governments, the other based on world-class companies – companies that rank in the first quartile in terms of efficiency and effectiveness. Hackett gathered fiscal year 2010-11 information from the four Partner Agencies and 39 participating state departments. There were three key steps to the benchmark study:

- A quantitative baseline was established, based on a survey question set that was aligned to FI\$Cal statutory objectives and completed by subject matter experts (SMEs). There were 74 data collection groups across the 43 departments.
- Interviews with 7 senior executives yielded management's perspective on overall effectiveness and efficiency of the functions, and expected impact of FI\$Cal.
- Surveying 181 stakeholders from the participating departments to gain insight on specific areas of support and service delivery and to complement the quantitative baseline with 'customer feedback'.

By measuring such things as process costs, cycle times, resource effort, and technology utilization required for the accounting, budgeting, cash management, contracting and procurement functions, state performance baselines were established. Hackett completed the benchmarking study in October 2011. Hackett then used the benchmarking results to provide estimates of the tangible benefits that could be achieved based on their experience and knowledge of best business practices, and improvements gained by other organizations after implementing an ERP (See Benchmarking - Expected Quantifiable Benefits below).

Key Benchmark Inputs and Findings

The benchmarking analysis provided in the next two sections uses and refers only to the data from the 43 participating departments.

Contracting and Procurement Activities

California's baseline cost for contracting and procurement (C&P) for the participating departments is \$108 million, which is made up of \$90 million of labor costs (salary, benefits, and overtime), \$8 million of technology costs and \$10 million of other costs (such as facilities, training and travel). The baseline staffing level is 1,095 full time equivalents (FTEs).

Compared to peer states, California's costs (including labor and technology) for procurement activities as a percent of expenditures (i.e., spend) is 1.98% which is more than double the peer group percentage. While staffing levels are higher than the peer group median, California had a lower allocation of labor supporting transaction

processing and higher allocation for solicitation and contracting. A specific transaction metric, the number of purchase orders processed per employee, is less favorable with 1,279 in California versus 2,008 for the peer group or 36% lower than the peer group.

The technology costs to support the procurement and contracting function are much higher than the peer group (as a percentage of expenditures it is about double the state peer group median); however, the degree of functionality of the supporting systems is significantly lower than the peer group benchmark. In addition to duplicative master vendor and purchase order data entry and processing, there is a lack of analytical data and reporting tools needed to perform statewide expenditures (i.e., spend) analysis, and limited supplier performance reporting and score-carding capabilities.

At the process level, master data and compliance management staffing levels are significantly higher because of multiple data entry points, the lack of integrated systems and the inability to report transaction history. Requisition and purchase order processing and order follow up are highly manual and decentralized processes. In many instances, multiple data entries are required to support complete process execution. Receipt processing is typically performed using hard copies. Vendor bidding, solicitation, negotiation and contract creation are time-consuming processes that currently result in less expenditures being 'professionally managed'. There are few technology enabled process controls for compliance management. Another outcome of lower automation is 25% higher error rates and 250% longer procurement cycle times. (More detailed C&P findings are in Appendix G of SPR 4 within Hackett's report).

In summary, the overall cost and effectiveness performance for C&P is in the third quartile. Stakeholders view C&P as an administrative function and as having limited or no involvement in key contracting and process improvement activities that contribute to benefit creation and realization. While California's investment in technology is higher than its peers, its automation and functionality rates are significantly lower and play a key role in higher costs.

Accounting, Budgeting, and Cash Management Activities

The State of California's baseline cost for accounting, budgeting and cash management for the participating departments and four Partner Agencies is \$262 million, which represents 4.8% of reported expenditures. Eighty percent of these costs (\$210 million) are labor costs (salary, benefits, and overtime) and baseline staffing levels are 2,702 FTEs. Compared to peer states, California's overall cost as a percentage of expenditures for finance activities is 15 percent higher than the peer median (4.81 percent versus 4.20 percent). Similarly, staffing levels are 19 percent higher (2,702 for California versus 2,268). There are also significant lags in the number of accounts payable processed per FTE (2,568 for California versus 5,283 for the peer group) and in the number of customer bills processed (6,676 for California compared to 25,531 for the peer group). The cost to process those bills is \$14.30 per transaction compared to \$2.25 for peers or more than 6 times as expensive. Overall, California's accounts payable costs per transaction is more than double that of peers, while the time to process invoices once they are in accounts payable is more than double that of peers (15 days compared to 6). And California requires corrections to 20 percent more payables than peers.

Benchmark findings at the process level show that accounts payable cost-per-invoice-processed and productivity (invoices processed per FTE) are negatively affected by

incomplete automation, duplication of effort and long cycle times. There is a lack of integration between purchasing, accounts payable and the general ledger. The result is a highly paper-intensive process with a high percentage of transactions requiring correction (5.4%).

Similar challenges exist in other transactional process areas. Billing process automation is not available in most departments and billing cycle times are long relative to peer group metrics. A high number of billing transactions are incomplete and require re-work. In cash application, a low percentage of remittances are received electronically and the cycle time to apply cash is long. Collections and dispute management do not have invoice and collection detail information available online and a high percentage of accounts receivable is over 90 days past due. Accounting and external reporting subsystems are not integrated to the general ledger and a high volume of journal entries must be entered manually into current systems.

In summary, accounting, budgeting and cash management costs as a percent of expenditures falls in the third quartile of the state government peer group. Accounts payable, billing and cash application productivity rates are below the peer group. Cycle times are longer in accounts payable, billing, cash application and audit processes. Automation levels are low, particularly in accounts payable and cash application processes. The integration of systems between functions and between control agencies and departments is limited. Most budgeting and reporting activity is completed with spreadsheets and standalone database applications, and the use of budgeting software and data warehouses for reporting is minimal.

Some of the peer group organizations have just implemented or are in the process of implementing an integrated technology solution similar to FI\$Cal. This factor may account for some of California's benchmark results being lower than those of the peer groups.

Benchmarking - Expected Quantifiable Benefits

Based upon the results of the benchmarking study as discussed above, Hackett created a model to quantify the anticipated statewide benefits from the implementation of FI\$Cal. Their model reflects California's ability to achieve higher efficiency levels than its peer group, yet not as high as the world-class group. This presumes that the state will realize economies of scale relative to the other states in the benchmark peer group and that through the implementation of FI\$Cal it is able to execute a comprehensive transformation program consisting of process redesign, technology enablement and data standardization.

As noted above, the benchmarking effort was completed with 43 state agencies. It is estimated that these agencies represent about 46% of the total scope of the FI\$Cal project. To calculate the value of the benefits stream for all state departments in scope of FI\$Cal, benefits at benchmarked agencies were multiplied by 2.2 (i.e., 1 divided by 0.46). These indexed numbers have been used in the estimates below.

The overall estimate of quantifiable benefits will provide a very high rate of return for the investment in FI\$Cal. Using conservative estimates, Hackett's model predicts that the Project's cumulative expenditures will be offset by the benefits during fiscal year 2017-18. Each fiscal year thereafter, benefits will exceed the annual ongoing maintenance costs for the system.

Hackett's model forecasts the ongoing benefits to be approximately \$415 million annually. The model organizes the benefits into three main areas, or "streams":

- **Process cost savings (\$173.2 million):** This refers to the direct cost savings resulting from efficiency and productivity improvements to processes within the scope of the FI\$Cal project. Estimated benefits are \$173.2 million annually. The process-cost savings opportunity will come primarily from a reduction in labor costs, which can be achieved through natural attrition over the next 8 years. The new FI\$Cal system along with streamlined processes will reduce the amount of effort required for transaction processing activities such as payables, billing, general accounting and purchase orders. Estimated annual savings will result in the following by key process: Finance Transactions (\$79M); Control and Audit Processes (\$8.1M); Planning and Budgeting (\$19.2M) and Procurement Process (\$66.9M).
- **Technology cost savings (\$28.0 million):** Although there will be a net *increase* in technology cost as a result of the investment in FI\$Cal, the new system will allow many state agencies to retire their legacy finance and procurement systems. This is estimated to save \$16 million in annual recurring operating costs. Additionally, FI\$Cal will yield \$12 million in "other" cost savings, driven largely by lower facilities' cost. The combined technology and other cost is a savings opportunity of \$28 million.
- **Procurement Effectiveness Improvement (\$213.4 million):** The previous two sections dealt with potential cost savings achievable through more efficient delivery of finance and procurement services (i.e., using fewer resources and at lower cost). However, additional – and potentially larger – benefits may be realized through more effective processes. These include better management of the statewide procurement and ability to increase strategic sourcing. The new FI\$Cal system will provide improved purchasing compliance functionality and access to statewide contracts and leveraged procurement agreements. FI\$Cal will also provide sophisticated analytical capability on such things as statewide expenditure and vendor performance that has never been available to California. The synergy between higher usage of statewide contracts and visibility into statewide spending will give the state the ability to negotiate more optimal supplier agreements, higher volume discounts and better quality. Based on their peer group data, Hackett estimated the annual cost savings from this increase in effectiveness to conservatively be over \$213.4 million through volume purchasing and leveraged procurements that result in a lower cost of goods and services.

Non-Quantifiable Benefits

In addition to the quantifiable improvements discussed above, Hackett also identified the following non-quantifiable benefits of FI\$Cal as described below:

Technology, Business and Compliance Risk Reduction

There is substantial risk involved in operating critical systems that are poorly documented (or not documented at all); using applications that are difficult to support or outdated; and running on technology platforms that are no longer supported. Many legacy systems, that have such risks will be replaced by FI\$Cal. This situation makes

users dependent on IT support staff members who are the only ones who understand these applications. In addition, many of these legacy systems are susceptible to "breakage" that, to avoid the risk of system failure, necessary functional upgrades are not carried out. Even if modifications can be developed and implemented, costs are high and delivery time is slow. These legacy systems also carry the risks related to business-process disruption. By migrating to a modern ERP system, the state gains access to a vast pool of resources with deep knowledge of this technology, which reduces the risks described above. The architecture of such systems also allows for far more flexibility and configurability, making it easier and less costly to support new business requirements as they arise.

Business Performance Improvement

Process redesign and technology enablement will drive broad-based business performance improvements. In the private sector, financial planning and budgeting is rapidly evolving away from a routine administrative process in which there is little concern about optimizing resource allocation. Instead, the substantial changes occurring in the business and economic environment have encouraged management to remake the process into one in which resources are deliberately allocated in a way that will help companies achieve their strategic and operational objectives. Although state agencies will always operate under a very different set of constraints than private sector enterprises, funding cutbacks make it necessary for state governments to embed far more business discipline than they ever have in decisions about resource allocation.

Therefore, an improved budgeting and planning process, supported by advanced analytics and techniques such as predictive modeling, will yield many benefits.

The following are just a few of the potential benefits:

- A more efficient process that consumes fewer resources (in dollars and FTEs) and can be accomplished faster. This in turn will lead to more-effective allocation of these resources, which in turn will help state agencies to deliver higher-value services to state residents.
- Advanced performance reporting and analytical capabilities will provide state agencies with the information needed to optimize service portfolios and resource allocations, based on a clear understanding of the effectiveness of services delivered to the consumers of these services.
- More accessible, flexible data will provide the state's leaders better access to information in a more uniform way, allowing them to make informed policy decisions.

(A complete discussion of these benefits appears in Appendix G of SPR 4 within Hackett's report.)

Two-Stage Procurement Complete, Pending Award

Most relatively smaller scale ERP procurements typically use a one-stage procurement process. Conversely, to help minimize the impact of the size and complexity of this project, FI\$Cal adopted the state's first full two-stage procurement strategy. This more thorough procurement approach utilized best practices and leveraged lessons learned from ERP experts and other projects, and allowed the state to conduct a 12 month "Fit

Gap” analysis. The objective of the Fit Gap was to conduct an in depth knowledge transfer with the bidders (system integrators), thus producing more accurate, thought-out, informed bids. The intent of providing the system integrators with more in-depth knowledge of current practices and desired changes is to generate better quality and more accurate costing in the final system integrator’s proposals. This will enhance the likelihood that the final contract will minimize change orders and disputes caused by a lack of understanding between the state and the winning bidder.

Following this approach, in June 2010, FI\$Cal awarded Stage 1 contracts to systems integrators of COTS ERP products that met specified minimum qualifications. The role of the systems integrator is to work with the client to implement a software solution. Three firms met the minimum qualifications; Accenture, CGI, and IBM.

During the Fit Gap analysis, the state worked with the three Stage 1 contractors to further detail the state’s business needs and requirements and ensure alignment with the proposed product’s ability to meet those needs. In June 2011, the contractors submitted final proposals for the development and implementation of the FI\$Cal system. The state then entered into negotiations with each contractor pursuant to Public Contract Code Section 6611 to ensure the final proposals provided the state with the best value for the FI\$Cal system. Award of the Stage 2 contract is anticipated in May 2012, 90 days after submission of this report to the Legislature. This will complete the two-stage procurement.

This two-stage procurement process has enabled the State of California to maximize value, minimize risks, and lower costs for implementing the system.

Flexible Financial Management

Among various other financial specifications, the FI\$Cal system budgeting requirements stipulate that the system shall allow a user to budget using various methodologies including program, line-item, zero-based, and performance-based budgeting approaches. Moreover, establishing an ERP system for the State of California encompassing standardized functionality for accounting, budgeting, cash management, and procurement efforts will effectively modernize and standardize these critical service areas. Substantial efficiencies will be obtained after implementing the system and achieving the many benefits associated with the project business objectives referenced previously. The integrated nature of an ERP system will provide additional process efficiencies.

New statewide processes and procedures will be developed, based on industry standards. Modern statewide budget preparation tools will be available, thereby allowing data to be easily queried to support financial decisions. A single book of record will provide unprecedented statewide transparency, control and reporting capabilities on a real-time basis. Immediate cash balances will be available, and reconciliation and closing activities will be done by an automated and fully integrated system. Aging and costly systems will be retired. The end result is that California’s inefficient business processes will be transformed and optimized. Time and resources can be used more effectively from a single and automated source of information. Enhanced information would improve decision making capability. More accurate and in-depth financial reporting would be achieved, and duplicative data entry and other redundancies would be eliminated. The enterprise approach respects and builds on the existing autonomy of

constitutional offices and key departments, while facilitating collaboration. The system also allows for data sharing while preserving the integrity of source information, provides for improved analysis all while ensuring appropriate security and controls. This allows the state to adapt to changing business and technical environments, which reduces financial and economic risk and prevents obsolescence. This also provides the state with more internal controls than have ever been available before and should significantly improve the state's ability to prevent fraud and control spending.

Although ERP systems are inherently flexible, that flexibility is most effectively embraced during the processes of design and configuration. Executive order B-13-11 requires the Director of Finance, in collaboration with agency secretaries and department directors, to create a plan for modifying the budget process to increase efficiency and focus on accomplishing program goals. This executive order fulfills the Governor's promise in his veto message of SB 14 (Wolk, 2011), which directs the state to take a thoughtful, efficient, flexible and common sense approach to budget reform.

The selected system can be configured for various budgeting approaches (zero-based, performance-based, incremental budgeting, etc.). In fact, the system can be configured to use multiple budgeting approaches simultaneously. However, because the various budgeting approaches need to be configured in the system, it would be prudent for the state to determine the details for the preferred approaches prior to when it is time to design and configure the system in order to avoid potential additional configuration costs. While this concern applies during implementation, post implementation when the system is being operated and maintained by the state, future changes to or between budgeting approaches would be easier and less costly as they would not have a contract impact.

Currently, there are different budgeting methodologies utilized across state organizations. While the majority of state organizations are budgeted using an incremental budgeting approach, some activities, such as capital outlay and select bond-funded projects, utilize a zero-based budgeting approach. The FI\$Cal system can and will be designed to continue this practice of utilizing different budgeting methodologies for different portions of the budget.

In summary, the FI\$Cal system is flexible and could be changed to adapt to various budget methodologies – offering the state budgeting options that are currently not easily available and with better tracking and accuracy.

Bid Proposals

All of the proposals would take roughly 5 years to implement, would take a phased implementation approach on functionality (accounting, budgeting, procurement, and cash management) and by user departments. As discussed in SPR3 and SPR 3.A, FI\$Cal has been diligent in seeking and implementing strategies to reduce risk and ensure project success and best value. The two-stage procurement as noted above facilitated remarkable competition among the bidders, resulting in more competitive rates for hardware, software, and system integrator services. As a result of the intense planning and research of the FI\$Cal team as well as the in depth interactions with the bidders and ERP advisors, the project has revised several fundamental elements of the strategy detailed in SPR 2 thereby reducing the implementation timeline from 7 years to

5 years (2012-2017) and the total Project cost estimates from \$1.6 Billion to \$616.8 million.

Development costs from the potential systems integrators ranged from \$213.1 million to \$270.6 million total funds compared to the \$372.1 million identified in SPR #2. Since SPR 2, system integrators have gained significant experience in large scale public sector ERP implementations resulting in reduced implementation timelines and reduced state staffing needs. In addition, state costs have gone from \$1.2 billion to \$383.2 million and from 499 positions to a peak of 304 positions.

Winning Bid

FI\$Cal selected the winning bidder after scoring all of the proposals – based on the requirements set forth in the Request for Proposal (RFP) FI\$Cal 8860-30, by a diverse group of evaluators (including representation of Partner Agencies, FI\$Cal Customer Impact Committee, and a broad array of diverse unit representation from the project team). Evaluation criteria included, but was not limited to, Corporate Financial Requirements, Staff Qualification Requirements, Software and Solution Requirements, Implementation Requirements, Methodologies and Tools Requirements, system costs, and more (see Part IV.6 of the RFP for more detail). Similar to the overall project itself, the rating criteria was thoughtfully and collaboratively developed, leveraged lessons learned from ERP experts and other projects, and incorporated industry best practices.

Table VI.5 from the RFP shown below contains more specific scoring detail.

Table IV.5 Allocation of Points for Stage 2

ID	Requirement	Maximum Points
Mandatory Corporate Financial Requirements (Pass/Fail)		
S2-CF1	Bidder Financial Statements	Pass/Fail
S2-CF2	Bidder Bankruptcy or Insolvency Proceedings	Pass/Fail
Mandatory Staff Qualification Requirements (540 Points)		
S2-SM1	Project Manager	60
S2-SM2	Change Management Lead	40
S2-SM3	Training Lead	40
S2-SM4	Technical Lead	40
S2-SM5	Enterprise Architect	40
S2-SM6	Operations Lead	40
S2-SM7	Business Lead	40
S2-SM8	Accounting Lead	40
S2-SM9	Budget Lead	40
S2-SM10	Procurement Lead	40
S2-SM11	Testing Lead	40
S2-SM12	Data Conversion Lead	40
S2-SM13	Business Intelligence Lead	40
S2-SM14	Additional Staff	Pass/Fail
Desirable Staff Qualification Requirements (60 Points)		
S2-SD1	Prior Working Relationship Between Staff Desirable Requirement	30
S2-SD2	Staff With Stage 1 Key Staff Experience Desirable Requirement	30
Software and Solution Requirements (535 Points)		
Proposed Solution's Fit to Requirements		370
S2-SS1	Response to System Requirements Matrix	
	Accounting Requirements	93
	Budget Requirements	93
	Procurement Requirements	93
	Technical Requirements	55
S2-SS1A	Productive Use Requirement	Pass/Fail
S2-SS2	Solution and Gap Analysis Approach	36
S2-SS3	Technology Solution Components	80
S2-SS4	Technology Solution Features	35
S2-SS5	Partnership with ERP and Third-Party Vendors	Pass/Fail
S2-SS6	Licensing	50
Implementation Requirements (265 Points)		
S2-IM1	Implementation Approach	40
S2-IM2	Project Workplan	45
S2-IM3	Proposed Activity Milestones and Deliverables	Pass/Fail
S2-IM4	Resource Loading	Pass/Fail
S2-IM5	Transition Approach	25
S2-IM6	Data Conversion Approach	25
S2-IM7	Testing Approach	15
S2-IM8	Interface Approach	25
S2-IM9	Training Approach	25
S2-IM10	Change Management Approach	40
S2-IM11	Operational Support Approach	25
Methodologies and Tools Requirement		
S2-MT1	Methodologies and Tools Requirement	Pass/Fail
Mandatory Optional Requirement		
S2-MO1	LPA Usage by Local Governments	Pass/Fail
S2-MO2	"Service Desk - After Service Hours" Support	Pass/Fail
Stage 2 Contract Requirement		
S2-CS1	Selection of Negotiated Stage 2 Contract	Pass/Fail
Cost Proposal (600 Points)		
S2-CW1	Cost Worksheets	600
Total		2000

Consistent with the requirements set forth in RFP FI\$Cal 8860-30, Accenture was determined to be the bidder with the highest scoring compliant revised Best and Final

Offer (BAFO). The Project intends to award Accenture the Stage 2 Contract to design, develop and implement the FI\$Cal system in May, 2012.

The proposals were thoroughly reviewed to determine the response that offered the best value to the state utilizing a multi-step process comprised of a Final Proposal, BAFO and revised BAFO from each of the three (3) Stage 1 contractors. The best value proposal was defined as the response that met requirements set forth in the RFP and offered the state the best combination of value as determined through the evaluation process.

Accenture's proposal provides for a phased rollout of functionality and departments over a series of five (5) deployment waves spanning a period of 5 years (2012- 2017) with a system integrator cost of \$213.1 million. A summary of each of the five (5) waves are as follows:

- Pre-Wave - The Pre-Wave sets the framework for the DDI Phase by establishing foundational project documents, such as the project schedule, communication management plans, and change control plans. Additional work efforts include the following:
 - Business Process Reengineering (BPR): The Project will work closely with the SI and selected departments to analyze the business process reengineering opportunities identified by the SI and the Project. High-level BPR documents will be refreshed to review and reconcile all proposed approaches into a master inventory. Following this consolidation, BPR documents will be validated with Partner Agencies and selected departments to confirm their feasibility and define roadmaps required to implement the proposed changes.
 - Legacy Application Disposition: FI\$Cal and the SI will meet with legacy system owners to define the blueprint for interfaces and conversions. Additional details, including historical data and data mapping will also be assessed. A key benefit to the state, in addition to expedited requirement gathering, will be the ability for legacy system owners to be engaged early and gain an understanding of the data requirements for FI\$Cal. This will enable the system owners to begin working with the Conversion Team on early data mapping and legacy data extraction tasks.
 - Chart of Accounts (COA): The SI will work closely with the FI\$Cal COA Workgroup and selected departments to build on the recommendations of the FI\$Cal COA workgroup and finalize the high-level Statewide COA. The department level detailed COA will be developed for each department in the future waves.
 - Master Vendor File: The SI will consolidate and convert vendor data from selected Wave 1 departments into the FI\$Cal vendor file. This vendor data will be used by the FI\$Cal system for transactions and reporting in support of procurement and accounting.

- Requisition to PO functionality: In preparation for Wave 1, the SI will evaluate the application(s) that Wave 1 departments currently use to issue purchase orders, and in conjunction with the Project, determine which are the best candidates for inclusion in this portion of the Pre-Wave. Departments with no purchasing system or those that use a standalone purchasing system are good candidates for inclusion. Departments that use a system that integrates requisitioning and purchase order functions with accounts payable and general ledger functions are not good candidates for inclusion.
- Transparency Portal: The SI will establish the Portal consisting of legacy data in its current format and values extracted from the applicable legacy systems. The SI will work with the Project to define the data privacy rules and data source(s).
- Wave 1 - This Wave provides a broad set of departmental accounting, budgeting, and procurement functionality to a limited number of departments and the Partner Agencies'. Control-related business processes of the Partner Agencies remain the same during Wave 1. This means departmental users will be taking incremental steps towards the final end-state business processes to be fully deployed in Wave 2. This incremental approach to business process change will ease the transition for the departmental users from the current to the future state since the portions of their process that interact with Control Agencies will still be familiar. Wave 1 users will receive business process workshops and training to re-engage them and verify that they are fully familiar with and ready to use the new end-to-end business process implemented in Wave 2.
- Wave 2 - This wave nearly completes the rollout of functionality by deploying statewide control functions to the Partner Agencies, including transition to FI\$Cal as the General Ledger Book of Record, Budget System of Record, Procurement System of Record and cash management control functions. This wave also delivers full FI\$Cal departmental functionality to a new group of departments, resulting in 40 percent of FI\$Cal users being live on the new system.
- Wave 3 - This Wave delivers existing, proven FI\$Cal functionality to 30 percent of departments on a mid-fiscal year implementation timeline.
- Wave 4 - This Wave scales the proven functionality to all remaining in-scope departments.

Additional details regarding FI\$Cal's implementation plan, including anticipated dates, organizations and functionality by wave, and total project costs are included in the FI\$Cal Special Project Report 4.

Outside Experience with ERP Systems

Significant research has been done on existing ERP systems in both the public and private sectors to allow us to learn from previous implementation efforts.

Public Entities

While the private sector has led the way on implementing modern enterprise resource planning systems, several states have implemented ERP projects with functionality covering core business functions such as accounting, budgeting, human resources, and more. Examples include Arkansas (AASIS), Louisiana (ISIS), Connecticut (CORE), Georgia (HRMS), Kansas (SHARP), Kentucky (MARS), Nebraska (NIS), North Dakota (NDS), Ohio (OAKS), Oklahoma (CORE), Vermont (VISION), and California (Department of Transportation, Department of Water Resources, and the Department of Corrections and Rehabilitation).

Other states have experienced similar benefits as envisioned for FI\$Cal, such as:

- Replacing current systems.
- Standardizing business processes.
- Generating timely, accurate information.
- Increasing data access.
- Integrating the roles of various personnel.
- Aligning accountability and responsibility.
- Transparency into financial data to state employees and the public.
- Eliminating or reducing the amount of time spent on data entry, pre-approval, auditing, reporting, tracking, manual processes, and reconciliations. This enables agency employees instead to focus on value-added activities, such as analysis and decision making.

Some examples of public ERP projects are as follows:

- US Navy ERP--The US Navy Air Systems Command saw its implementation of ERP eliminate 52 legacy systems at a cost savings of \$10M to \$15M per year. Additionally, the approval time for aircraft engineering change proposals dropped from 87 days to 25 days².
- State of Texas--ProjectONE, the ERP project for the state of Texas will provide a single set of accounting systems for all state agencies to improve accuracy and efficiency, real time and reliable information on the state's revenue and spending, and simpler and more transparent reporting on the state's business. Over the last year, ProjectONE established collaboration among the Comptroller's office, the Department of Information Resources, the five Health and Human Services agencies and the Texas Department of Transportation. This unprecedented

² http://findarticles.com/p/articles/mi_m0lBO/is_2_31/ai_n27404662/

collaboration will create a new, statewide financial and payroll system that will integrate functions into a single, secure system that meets the state's business needs. With this system, lawmakers and taxpayers will see enhanced accountability and transparency for government operations and funding. Data will be available across agencies in real-time and will enable the state to maximize funding. By automating processes, the system also will reduce payroll errors while freeing agency staff to focus on mission-critical tasks. ERP promises to provide the tools needed to shine the brightest light on the state's finances, give decision makers seamless access to state data and allow the state to make better use of the information at its fingertips. Texas decision makers will have an unmatched ability to count every dollar – and make every dollar count³.

- Commonwealth of Pennsylvania—ERP implementation for five business functions was completed in 2004 for 53 agencies, including all 49 of the agencies under the Governor's jurisdiction. In July 2004, as a result of the successful implementation, the Imagine PA *project* began its transition to the ongoing Integrated Enterprise System (IES) *program*. This transition from a *project* to *program* was a very explicit and pragmatic strategy for the Commonwealth. Imagine PA was a high-visibility change project with start and end dates, dedicated funding, assigned organizational roles and responsibilities, and a project management office charged with design and implementation of both new technology and new business process standards. In contrast, the IES program is responsible for continuous and now institutionalized sustainment of the existing infrastructure and functionality of the initial ERP implementation project as well as the managed improvement and growth of the IES enterprise. The transition from project to program signaled new funding approaches, modified organizational roles and responsibilities, and an overarching program strategy to maintain existing enterprise capabilities and while creating new features and enhancements through multiple improvement projects. From the beginning, Imagine PA was much more than a technology project. The ERP implementation continued through three gubernatorial administrations with consistent top level executive support; eventually putting in place the technical infrastructure and enterprise standards for core administrative functions with improved public value. Immediate returns in the form of improved government operations were realized soon after implementation and continue today. This infrastructure also provides the Commonwealth with capability that can be further leveraged to support additional improvements in government operations that go well beyond direct improvements in core administrative functions. The Commonwealth has begun such efforts. The IES infrastructure provides public returns in the form of direct improvements in the efficiency and effectiveness of core administrative functions. This infrastructure also provides the basis for improvements in the back office operations of other service areas which in turn offer improved services to the public. The Commonwealth has recently taken steps to move in this direction by implementing the necessary institutional structures and policies to take fuller advantage of this enterprise-level asset.⁴

³ *ProjectOne report to the 82nd Legislature*, January 2011

⁴ *The Commonwealth of Pennsylvania's Integrated Enterprise System (Case Study)*, Center for Technology in Government, 2006

Other ERP projects have been financed using either a combination of pay-as-you-go, notes, and bonds; or using only pay-as-you-go funds. Financing options were discussed with two states, and the three fit-gap bidders provided presentations on how projects were financed in other states. In addition, assessment studies completed for other states' ERP projects presented financing models for up to 16 other states. A majority of states have opted to use pay-as-you-go as the primary means of financing ERP systems. However, bonds or other debt instruments were used by some states as the primary means of financing one-time implementation costs. Several states used a combination of pay-as-you-go and financing to for the developmental costs of their ERP systems.

For example:

- Louisiana's financing model for its ERP system used a central appropriation of state general funds to cover the implementation and on-going costs.
- Montana issued bonds to amortize the one-time implementation costs of the ERP system over a ten-year period.
- Ohio appropriated general revenue funding along with financing (certificate of participation) to fund the costs of its ERP project.
- South Carolina funded 25% of the implementation costs centrally, with 75% funded by user agencies. Agencies established restricted accounts to reserve funds for their share of the project implementation costs. These accounts had full carry-forward authority and were protected from mid-year budget reductions.
- Massachusetts sold commercial paper during the preliminary phase and the development and implementation phase to cover project costs. Ultimately, costs were partially funded from the proceeds of five-to-seven year general obligation bonds.

While other states have used various funding mechanisms, California's options may be more limited for a variety of reasons that are discussed in FI\$Cal's Funding Plan. Because of these concerns, FI\$Cal and its Partners believe that a pay-as-you-go model to be in the state's best interest. For additional detail, see the attached Funding Plan (Appendix A).

Private Sector

The first ERP systems were implemented by private sector companies that wanted to integrate their diverse business processes. Since the early 1990s, private sector ERP implementations have grown steadily. Today, most Fortune 500 companies—and many mid-sized companies—use ERP systems to integrate their manufacturing, marketing, finance, procurement, human resources, and other systems.

Private sector companies with ERP systems are experiencing the benefits of single integrated systems, enterprise-wide access to standardized, real-time data, improved coordination between functional departments, improved analysis, decision-making, and reporting capabilities, and other operational efficiencies. They are also realizing savings through more efficient, integrated operations, limited duplication of effort, and improved

productivity. Among other benefits, their employees are better able to focus on the analytical, rather than technical, aspects of their work, leading to better decision-making.

The private sector has also experienced most, if not all, of the problems associated with ERP implementations (e.g., cost overruns, scope increases, and scheduling delays). As a result, most system integrators are in a better position today to help their clients, both public and private, to avoid the more common pitfalls.

Some examples of private ERP projects are as follows:

- Hershey Foods Corporation--In late 1996, Hershey began modernizing hardware and software systems in the company. The company was running on legacy systems, and with the impending Y2K problems, it chose to replace those systems and shift to client/server environment. Due to issues that arose during implementation, and hard pressed for time, Hershey went in for a Big Bang ERP implementation which led to several problems pertaining to order fulfillment, processing and shipping. The retailers who ordered Hershey's products could not get them on time, even though the company had ample supplies stocked at its warehouses. Hershey's revenues dropped by 12% during the third quarter of 1999 compared to the third quarter of 1998. Eventually, Hershey saw ERP implementation result in more accurate demand forecasts and the capability to forecast requirements. This implementation, along with additional improvements allowed the company to achieve \$325M in savings⁵.
- IBM's Storage System Division cut the time it took to reprice its product inventory from 5 days to 5 minutes. Shipping and replacement time was cut from 22 days to 3 days, and customer credit checks were cut from 20 minutes to three seconds⁶.

ALTERNATIVE APPROACHES

AB 1621 requires an examination of the costs and benefits of alternative approaches to the implementation of the FI\$Cal system, including a scaled back version of the system. The Project has identified three⁷ implementation alternatives: functional phasing, department phasing, and a managed services model. Each alternative is explained in more detail below. Although we sought assistance from state experts and the Gartner Group to quantify savings from other ERP implementations, quantitative metrics are not available for extrapolation to FI\$Cal to determine the specific costs or savings that may be feasible if the state elected to pursue one of these alternatives. Accordingly, conceptual impacts are discussed below.

⁵ <http://www.icmrindia.org/casestudies/catalogue/IT%20and%20Systems/ITSY059.htm>
http://www.pemeco.com/v1000/resources_center/erp-implementation-importance-testing-and-scheduling
http://www.cio.com/article/31066/Nestl_eacute_s_Enterprise_Resource_Planning_ERP_Odyssey

⁶ http://findarticles.com/p/articles/mi_m0lBO/is_2_31/ai_n27404662/

⁷ Other system approaches previously considered and discarded by the state are not being repeated in this report (such as options presented in public feasibility study and supplemental project reports, or legislative analyses).

Functional Phasing

A functional phasing approach would implement one or more (but not all) FI\$Cal business process areas in succession. For example, accounting could be implemented first, followed by budgeting, procurement, etc. Each business process, or functional area, could be further divided into smaller sub-processes, each of which could be implemented separately. For example, the state's accounting functions could be separated into the accounts payable, accounts receivable, and financial reporting sub-processes. Under this implementation alternative, the state could award the project with the original broad vision and scope, but approval and funding for the project could be executed in phases. This alternative would require a new procurement. (See below for an in-depth discussion of the procurement impact.)

A functional phasing implementation would allow components of the project to proceed independently. It would allow the state to realize some of the immediate benefits of an ERP system, particularly if the state lacks the resources to complete the entire project as envisioned. Each phase also would be self-sustaining; if the overall project were delayed or cancelled, the implemented functional areas could operate in a "stand alone" fashion without the need for other functional area rollouts. Each standalone phase could be viewed as a scaled back version of FI\$Cal.

Advantages

Functional phasing would allow business processes to be implemented with independent benefits. For example, the state could initially implement accounting functionality, and later proceed to areas such as budgeting, procurement and cash management. This approach would be advantageous if the state budget or competing priorities do not permit moving forward with future phases. It would provide a "targeted" or "priority" approach, allowing for stabilization of one business area before implementation of another. This approach also would allow for a phased decommissioning of the state's legacy systems. Indeterminate short term savings may result under a phased approach as the cost for each year may be less because only one function would be designed and implemented at a time.

Disadvantages

This alternative implementation approach would require departments to experience multiple rounds of change as each phase, or functional area, is implemented. Numerous and prolonged periods of change may lead to increased staff turnover and staff retention and morale problems for departments. The overall project timeframe and costs would likely expand as implementation would occur over a longer period of time to achieve full FI\$Cal functionality. The longer project timeframe would also delay the benefits of full system implementation (e.g., enterprise-wide transparency of fiscal information) until all phases are deployed. Current systemic inefficiencies, such as duplicative data entry in multiple systems, would continue and may be exacerbated. This approach would require departments to run parallel processes and systems until all functional areas have been rolled out. It would also likely increase the need for manual reconciliations between new business functions and legacy processes and systems. In addition, the longer implementation period associated with functional phasing would increase the risk of failure of the state's current legacy systems. Many of these outdated legacy systems are no longer supported by the hardware and software vendors, and finding available

technical staff able to patch any problems with these systems is increasingly costly and challenging. If a system failure occurred, key data could be lost.

A functional phasing approach would require a policy decision regarding which functional areas have priority for implementation. This would take time to develop, vet, and decide prior to undertaking a new procurement process. While the state could use the existing functional requirements, it would take significant time and resources to carve out which requirements are tied to which functionality and it would increase risk and cost exposure. In addition, the phased approach increases the risk that the project is delayed or only partially implemented. Stakeholders and funding priorities may change, and the state may never receive all the benefits that a fully-implemented ERP system would provide.

Functional phasing also puts the state at risk of not successfully implementing one or more of the phases due to budget constraints, policy changes, practical project management issues (such as SI or state personnel turnover), or potential compatibility issues with prior phases. For example, if the state is designing only the accounting functionality, the system integrator may ask the state if it wants configuration option A or B. Without the ability to see the impact of the two configuration options on the design options of future phases (budgets or procurement), the state may unintentionally limit its options when configuring subsequent modules or open itself up to costly change orders during subsequent phases. It is likely that a system integrator would reassign their staff to other projects while the state evaluates and makes a decision on the roll-out of the next phase. Without the consistency of both state and system integrator staff making a cohesive team for the duration of the project, the risk of failure or poor quality will increase.

Cost Information

The targeted approach of functional phasing could favor smaller implementation teams and result in short term staff savings. However, it should be noted that the overall project costs would be higher under this alternative due to the longer project duration, higher training costs for repeated staff training as additional functionality rolls out, and the costs associated with the need for a new procurement process.

Savings would also be limited for systems currently supporting multiple functions, as a department would be unable to decommission such systems until all of the functional areas are implemented. In addition, state staff savings may be limited, given the continued need for manual reconciliations between new business functions and existing business processes and systems. Costs would increase because system administrators would have to support more interfaces. Further, it would be extremely difficult to plan for and likely more costly to implement the technical infrastructure (e.g. hardware) necessary to support a system that would be built in a piecemeal fashion.

The functional phasing approach would require continued investment in legacy systems. Given the longer implementation period associated with a functional phasing model, this approach would heighten the state's risk of legacy system failure and increase costs associated with system replacement. If the state did experience a significant legacy system failure, it could result in a pressing need to implement the next functional phase without proper planning resulting in increased costs and a higher chance of implementation failure.

Department Phasing

This alternative approach would implement FI\$Cal by department, with departments grouped by organizational structure, business line, or critical need. This approach would allow for a targeted implementation; departments reporting to the same agency or control agency, departments with similar business operations, departments with failing systems, or “complex” departments (such as the Department of Health Care Services) could be rolled out in a single implementation. Once such a deployment group is implemented, the process would be evaluated before the next deployment group moves forward.

Indeterminate short term savings may result under a phased approach. However, overall project costs would likely increase by substantially more over a longer period of time to ultimately achieve full FI\$Cal functionality for all planned departments.

Under this implementation alternative, the state could award the project with the original broad vision and scope, but approval and funding could be executed in phased rollouts of departments. This alternative could be implemented in a modular fashion, allowing for a scaled back approach, or combined with functional phasing for a hybrid approach. While not providing the enterprise benefits desired of FI\$Cal, this approach could be leveraged if budget constraints require a more limited implementation. This alternative would require a new procurement. (See below for an in-depth discussion of the procurement impact).

Advantages

Department phasing could allow for implementation of a large number of departments using a constant level of staffing. This approach would provide a repeatable process that matures and becomes more efficient with each additional rollout. Department phasing would allow for customization of deployment based upon unique departmental requirements and would support the targeting of “at risk” departmental systems for earlier replacement.

Disadvantages

The disadvantages of a department phasing are similar to those of a functional phasing implementation approach. The overall project timeframe would be longer, delaying the benefits of full system implementation (such as enterprise-wide transparency of fiscal information) until all phases are deployed. Current systemic inefficiencies, such as duplicative data entry in multiple systems, would continue and may be exacerbated. This type of implementation approach could require corrective action or change orders throughout deployments if the initial development and deployment group is not fully representative of the statewide enterprise. In addition, given the longer implementation of this approach, departmental phasing would increase the risk of failure of the state’s current legacy systems. Many of these outdated legacy systems are no longer supported by the vendor, and finding available technical staff able to patch any problems with these systems is increasingly costly and challenging. Key data is at risk as a result.

Department phasing also may increase the need for manual reconciliations between new business functions and legacy processes/systems, and it could require the maintenance of multiple versions of statewide standards, such as the Chart of Accounts. For example, a newly deployed department would operate from an updated version of a

statewide standard, while other non-deployed departments would operate from the legacy standard. This could lead to duplicative manual processing (e.g., to create statewide reports) and difficulties in achieving the consistent and accurate categorization of data.

A department phasing approach would require a policy decision regarding which departments have priority for implementation. In addition, the department phasing approach increases the risk that the project is delayed or only partially implemented as stakeholders and funding priorities change and that the state never receives all the benefits that a fully-implemented ERP system provides. If so, existing statute requiring all departments to utilize or interface with FI\$Cal would have to be changed. It is also likely that a system integrator would reassign their staff to other projects while the state evaluates and makes a decision on the roll-out of the next phase. Without the consistency of both state and system integrator staff making a cohesive team for the duration of the project, the risk of failure or poor quality will increase.

Cost Information

Given the targeted approach of department phasing, the costs and risks of the initial implementation could be less than the full FI\$Cal deployment. However, overall project costs would be higher given the lengthier project duration. In addition, the longer duration would require continued investment in legacy systems, and it would likely increase the risk of, and replacement costs associated with, legacy system failure. Further, if the state did experience a significant legacy system failure, it could result in a pressing need to implement the next department phase without proper planning resulting in increased the costs and a higher chance of implementation failure.

Further, costs would increase because system administrators would have to support more interfaces. It would be extremely difficult to plan for and likely more costly to implement the technical infrastructure (e.g. hardware) necessary to support a system that would be built in a piecemeal fashion. Finally, implementation costs could be higher if subsequent department phases require customization.

Managed Services Models

A third option, though more theoretical than practical, is the use of a managed services model (Cloud Computing) for the FI\$Cal project infrastructure, software, and operating systems. In a traditional model, organizations procure each of these components on a pay-as-you-go basis, with components owned and maintained by the state. Under a managed services model, system integrators offer these components on demand and at a fixed rate.

An “Infrastructure as a Service Model” would enable on demand network access to a shared pool of computing resources (e.g. networks, servers, storage). This model would provide IT capacity under a just-in-time model and would provide flexibility for the system to ramp up or down as requirements became known or changed.

The “Software as a Service” is an application delivery model in which the state would pay to access and use software functionality over a network through a platform operated by the software system integrator. With this type of model, the state would pay only for the volume and functionality that has gone live. The fee structure is usually a combination of fixed fees and unit rates.

A maintenance and operations service model would provide a broad set of services for application maintenance, including defect resolution, patch and release updates for the ERP, configuration management, help desk support, disaster recovery, and capacity planning.

An implementation plan could include a scenario where a system integrator would set up the infrastructure, pay for the asset upfront and then provide the services to the state for a monthly or quarterly fee for a specified time. This approach would allow the state to pay a set-up fee, and then pay for service based on a metric (user, department, transaction, etc.) once the project is in full production.

A managed services model would shift the FI\$Cal vision from the development of a state-operated system to a shared solutions approach and would represent a significant change in project management and implementation. In addition, this alternative would require a new procurement.

Advantages

Indeterminate short term savings may theoretically be obtainable, yet overall project costs would likely be higher. The short-term savings would depend on the extent to which a managed services provider is able to meet the state's complex and vast business needs using a private rather than state-owned automated system.

Disadvantages

This option is likely more theoretical rather than practical for functionality as extensive as what the state would require. Cloud computing generally does not work fiscally or effectively for large and complicated systems, and at best likely can only be used for a small part of the overall system. The state would be locked into financial processes, reporting capabilities, security accesses, and update cycles with minimal flexibility to modify to something the state would prefer. For example, substantial problems arose for Amazon, when its cloud computing system shut down for an extended period of time, and its affiliates were unable to conduct business. Smaller components of the project may alternatively be more feasible for managed services, such as help desk or maintenance efforts.

Paying a vendor to provide full functionality of FI\$Cal (if possible) and assume the risks for such services would likely be much more costly than the planned project. To the extent that full functionality for all departments as planned cannot be obtained, full project benefits (efficiencies, improved services, potential savings, etc.) would be lost to some degree and current systemic inefficiencies would continue. Contracting out these services also may conflict with civil service requirements, which essentially limit the state's ability to outsource without just cause. The Project would have to justify that the managed services could not reasonably be provided by the state workforce. Given the existence of several ERP systems in the state, this may be a difficult threshold to meet.

Existing outdated state legacy systems may need to continue to be relied upon to some degree for historical data and contingency purposes. The previously documented problems with these systems (such as no vendor support, difficulty with hiring staff to patch any problems that arise, etc.) would continue. Prolonged transitional and change management efforts would be required for the state and system users including employees, vendors, and constituents.

Additionally, since these services are purchased and not owned by the state, the state would have less control of the timing of maintenance activities and the restoration of system failures, along with less control over how the state operates its financial activities. This could result in inopportune loss of system availability impacting the state's ability to complete its constitutional and statutory duties.

Cost Information

Indeterminate short term savings may theoretically be obtainable under this approach, yet overall project costs would be substantially higher. Since this model typically does not work for large scale projects such as FI\$Cal, continued state investment in antiquated legacy systems would be necessary. Therefore, it would likely increase the risk of, and replacement costs associated with, legacy system failure. In addition, the efficiencies and improved business processes expected from FI\$Cal would not likely be obtained if only limited services were effectively addressed through managed service models.

A New Procurement

All of the alternatives identified above would require a new procurement. If the state elects to change the policy direction on FI\$Cal and start over, some of the previous investment would be of limited value. Key efforts have included, but are not limited to, producing a feasibility study report and special project reports, establishing comprehensive functional and system requirements, awarding a total of \$4.2 million for initial Fit Gap planning payments to three vendors, building a broad coalition and advocacy consisting of constitutional partners, departments and various other stakeholders, establishing baseline accountability performance metrics through benchmarking, evaluating and negotiating bids, and developing foundational project management plans. Should the state elect a new approach, FI\$Cal could apply some of the existing work towards the new effort, such as the developing and refining requirements and presentations on existing state business processes. However, it is likely much of this work would have to be re-done to tailor it to a new Request for Proposal (RFP) which would generate significant additional costs. A new approach would also require the re-evaluation of project staffing, potentially leading to the loss of historical knowledge and expertise as existing staff find other positions.

It is also unclear whether the two-stage procurement and Fit Gap process would need to be repeated. The state could not simply ask for new proposals from the three Stage 1 contractors, but would need to conduct an open RFP. The Fit Gap process gave the three Stage 1 contractors extensive insight into the state's processes and needs. If a Fit Gap is not repeated for a new procurement, it is likely that the three Stage 1 contractors would have a distinct advantage over all other potential bidders. Potential state exposure to litigation may result.

The RFP provides that an award, if made, will be made within one hundred eighty (180) days after the scheduled date for contract award (May, 2012). Therefore, the current bids will expire in November, 2012. FI\$Cal notes that a delay in contract execution that results in the expiration of the bid would not only require a new procurement, but may also result in a lower quality product. This is because, as part of the RFP and negotiation activities, the state required the Stage 1 contractors to guarantee that the state would receive the bidder's "A" team, their most experienced, top level resources to work on FI\$Cal throughout the life of the project. If the state began a new procurement

process, it is likely that the Accenture's "A" team would be re-directed to other priority projects, potentially depriving the state of the best quality product.

Even a relatively minor delay in contract execution, while not requiring a new procurement, would result in schedule extension and potential increased costs because Accenture's proposal is based on a May 2012 start date.

The extensive activities that FI\$Cal has undertaken in this procurement over the last two years, including compiling over 3,000 pages of documentation on existing business processes, issuing multiple RFP addendums to provide additional requirements clarifications, providing 78 Fit Gap presentations with 72 confidential discussions, and answering over 2,000 contractor questions, are intended to produce the best value and best result for the state in procuring the FI\$Cal system. Consequently, a new procurement would require either repeating these efforts or conducting a traditional Public Contract Code Section 12100 procurement which would increase the state's risk exposure (including exposure to litigation as noted above). In addition to these carefully orchestrated procurement activities, the current implementation approach incorporates many aspects of the functional and department phasing alternatives discussed above.

CONCLUSION

The current vision for fully implementing FI\$Cal is built upon best practices established from ERP experts and other system developments. Underlying goals are to minimize risks, maximize value, and minimize costs to the extent possible for developing a fully integrated and modern financial system for the State of California. Examples include implementing the system through a waved approach (both functional and departmental waves), building increasing functionality over several years, and taking a holistic rather than piecemeal approach to develop the entire system concurrently with input from departments up front, regardless of their scheduled wave for implementation.

The state has been proactively working to minimize risks and avoid problems that others have experienced while implementing ERP systems, such as, but not limited to, taking the following steps:

- 1) Conducting a two-stage procurement process as discussed above. Stage-one of this approach helps the system integrator to better understand California's business processes and needs by providing the opportunity for the state and the system integrator to engage in extensive information sharing, and more thoroughly plan for implementation. This resulted in better proposals submitted by the system integrator during stage two of the process.
- 2) Requiring the system integrator to retain its "A" team on the project for the duration of the effort, to ensure that the system integrator and state develop a high quality system that performs as expected, and that changes to business processes and training for staff and users are properly managed.
- 3) Planning to adequately staff the project with both system integrator and state staff.
- 4) Establishing and maintaining appropriate executive support for the project through completion.

- 5) Utilizing a hybrid approach to implementation that minimizes the disadvantages of strict functional phasing or departmental phasing approaches. Functionality is added quickly, in one or 2 waves, to minimize multiple rounds of change and running of parallel processes and systems. In addition, departments are phased in quickly enough to gain the benefits of a statewide system, but in groups of manageable size and complexity to receive adequate support in the transition.

Since FI\$Cal's origination several years ago, the state has extensively analyzed and considered alternatives for most effectively and efficiently meeting California's complex financial business needs. Policy and fiscal matters associated with the project have been deliberated extensively through the feasibility study report, several Special Project Reports, legislative reports and hearings, enabling legislation, and the budget process. These extensive and collaborative efforts have identified FI\$Cal as the best solution for replacing the state's outdated and disparate financial management infrastructure.

Utilizing the methodical and comprehensive two-stage procurement process authorized in law, the Stage 1 contractors worked collaboratively with FI\$Cal to discuss and gain more extensive knowledge of the state's business needs. Bidders used this information to submit more thoughtful proposals better suited to California's specific needs. The outcome of this deliberative effort for a project of this size and complexity is added value, lower costs, and reduced risks for the state.

The proposed FI\$Cal solution, coupled with related business process reengineering, will provide the state with a modern, efficient, flexible, integrated, and transparent technology that best serves California's business needs for both the government and the citizenry now and in the future. The State of California should not delay investing in its financial management infrastructure today to achieve benefits that were desperately needed yesterday.

Appendix A: Funding Plan

Financing and Funding Strategy

The Financial Information System for California (FI\$Cal) is a business transformation project that will enable the state to integrate into a single system its accounting, budgeting, cash management, and procurement and contracting operations. It will enable the state to eliminate hundreds of independent legacy systems and department-specific applications that now support these internal business operations of the state. FI\$Cal will provide the state with a centralized, integrated system for fiscal information that employs standardized data definitions and modernized data management processes. FI\$Cal will use a commercial-off-the-shelf (COTS) enterprise resource planning (ERP) tool to achieve this integration of the state's financial management activities.

This report addresses the financing and funding needs of the FI\$Cal Project (Project), including cost recovery via cost allocation. For the purposes of this document:

“Financing” means the method of paying the one-time development costs of the Project, whether on a pay-as-you-go (cash) basis or through a financial structure that allows development costs to be spread out and paid over a period of time.

“Funding” refers to the annual costs of the Project, including development costs and yearly operations and maintenance (O&M) costs, whether through pay-as-you-go or annual debt service payments associated with spreading out the development costs over time.

Background

The Project completed Special Project Report (SPR) 2 in November 2007 and provided estimated project costs of approximately \$1.6 billion. Also included within SPR 2 was a proposed plan for financing the development costs and funding the ongoing project costs as follows:

- Project development costs would be financed by the sale of government securities. The financing plan consisted of two (2) parts – the short term financing needs would be met through the sale of bond anticipation notes (BANs) and long term financing needs would be met through the sale of Certificates of Participation (COPs).
- Ongoing Project costs would be recovered by charging those costs to state departments. The funding plan proposed an allocation of Project costs based on actual usage of the system determined by transactional data. This direct cost allocation methodology would be applied once the system was fully implemented and the data was available. As an interim cost allocation plan, Project costs would be indirectly allocated based on the percentage that each participating department's operating budget represents of the total state budget.

In November 2009, the Project approach was modified through SPR 3, allowing the Project to conduct a two-stage procurement. The new procurement strategy provided the time and ability for the bidders to have a dialogue with the state to gain a thorough understanding of the Project's business and technical requirements. This effort resulted in an increase in the accuracy of their proposals and a decrease in final contract costs. At the conclusion of the evaluation and selection process, total System Integrator (SI) contract costs were determined to be \$213.1 million, resulting in total Project costs of \$616.8 million, a reduction of roughly \$1.0 billion from the amount estimated in SPR 2.

Financing

The Project has, throughout its planning and procurement phases, made considerations as to whether development costs of FISCAL should be financed. As provided in SPR 2, the Project anticipated the sale of BANs and COPs to finance the estimated \$1.6 billion in total project costs. The large decrease in total project costs provides the opportunity to re-assess the financing alternatives available to the Project, what the fiscal impacts may be, and whether the use of a debt instrument is still an appropriate option for FISCAL.

Pay-As-You-Go

Funding the project with pay-as-you-go is the least expensive alternative, avoiding the interest and fees associated with financing. Pay-as-you-go represents the most straightforward approach for the state as it only requires annual appropriations and is not reliant on the estimating of interest costs to determine final Project costs. More importantly, pay-as-you-go does not add to the state's annual debt service costs and preserves the Legislature's authority to modify the Project's funding without damaging the state's credit rating and credibility, as it would with a financing approach. The pay-as-you-go approach is consistent with Government Code § 15849.26(d) which states the Legislature's intent for Project costs to be paid for by appropriations rather than by the issuance of bonds, notes or certificates.

Applying the pay-as-you-go methodology to Project implementation costs, including the first year of O&M, will produce the following fiscal year breakdown:

Year	Project Implementation Costs⁸/Appropriation
2012-13	\$88,978,046
2013-14	\$84,596,627
2014-15	\$101,908,979
2015-16	\$130,014,604
2016-17	\$84,194,295
2017-18	\$32,519,267
Total	\$522,211,818

Other Considerations

The Project has analyzed two (2) financing methodologies. One important note when considering financing is the potential that more than two-thirds (2/3) of the Project implementation costs may not be capitalized. The application of Governmental Accounting Standards Board (GASB) Statement 51 (Accounting and Financial Reporting for Intangible Assets) allows only those costs directly related to the application development to be capitalized and, hence, financed.

- Because of these restrictions, System Integrator contract costs associated with Business Process Reengineering, Training, Project Management, and O&M are not capitalized in the scenarios presented in this document.
- State staffing costs associated with the work efforts included in the bullet above also could not be financed. In addition, the Office of State Audits and Evaluations (OSAE) has recommended that the most accurate method of determining capitalizable state staff costs is through a time reporting method. The Project would need to develop a detailed time reporting methodology for capturing this information that could be utilized throughout the implementation. Accurate time reporting will be critical if state costs are to be capitalized and must be done in a manner that does not jeopardize federal reimbursements for the system.

Vendor Financing

Vendor financing was analyzed and considered to pay for Project implementation costs. However, less than one third (1/3) of Project implementation costs would be eligible for financing and would only include SI financeable costs since the vendor is unlikely to be

⁸ Total project costs for the purposes of this plan will differ from the total project cost provided in the Economic Analysis Worksheet (EAW) of SPR 4. The EAW covers prior year costs, from FY 2005-2006 through FY 2017-2018. This financing and funding strategy covers only system development costs and one (1) year of operations and maintenance, from FY 2012-2013 through 2017-2018.

willing to finance state staffing costs. Further, the associated interest and fees would not be eligible for federal reimbursement. The inability to finance a large portion of Project implementation costs and the increased costs associated with financing diminishes any value gained with vendor financing.

Utilization of the vendor financing alternative would require legislation to provide the statutory authority for the Project to finance the implementation costs. The terms of the financing would also require strong “subject to appropriation” language which may be perceived by the market to indicate that the state may not be fully financially committed to this effort. Depending on how the vendor financed the costs, should an appropriation not be made, and depending on the reason for non-appropriation, the state could be in a position that may compel it to continue paying the Project costs rather than default on the financial obligation, regardless of Project or performance issues. This would be most problematic if the vendor had entered into some form of its own public financing with the state’s contract as the collateral.

Bond Financing

The Project recognized the issuance of tax-exempt bonds as a possible way of financing development costs. Tax-exempt bonds could be issued to obtain funding from the private capital markets. However, only roughly one half (1/2) of Project implementation costs may be eligible for financing and the associated interest and fees would not be eligible for federal reimbursement. Obligations start as soon as bonds are sold, with interest accruing immediately. Bond financing requires time to process an offering and is likely not available for FY 2012-2013 as the project will need immediate cash availability to keep the schedule on track. The state would most likely have to use pay-as-you-go to fund the first year of implementation while a financing plan is completed.

The terms of bond financing would also require the same “subject to appropriation” language and carries the same risks as in vendor financing should the Legislature choose for any reason to not make an appropriation. If the state does not make its debt service payment, it would likely be seen as if the state defaulted on its financial obligation, thereby having a potential negative impact on the state’s credit rating. Again, in the event of non-performance or project issues, the state would be in the unfortunate situation of comparing the impact to its long-term credit rating against the short-term cost of continuing to pay for something that was not performing.

Comparison of the Financing Methods

A quantitative comparison of the financing methods is provided below. Considered in each scenario are:

- Costs are amortized over 15 years.
- Debt service payments are made annually.
- SI contract costs associated with Business Process Reengineering, Training,

Project Management, and O&M are not eligible to be capitalized.

- For purposes of this comparison, it is estimated that approximately two thirds (2/3) of Project staff on the Business Team and the Technology Team will be involved in system development activities. These exclude costs for those activities that are not eligible to be capitalized (as identified above for the SI). If one of the financing alternatives is utilized, an accurate time reporting methodology would need to be implemented to ascertain the actual percentage of time attributable to development activities.

Interest rates are point in time estimates. Actual interest costs would be determined by the market at the time of financing. The chart below compares pay-as-you-go to vendor and bond financing and uses the following assumptions:

- The interest rate used in the vendor financing scenario is 5.00%. This is a conservative estimate based on available rates at the time of this document.
- As provided by the State Treasurer’s Office, the going market rate for bond financing is approximately 3.75% to 4.25%. The Project is taking a conservative approach and is applying 4.25% to this scenario.

	Interest Rate	Costs Eligible for Financing	Interest	Project Implementation Cost
Pay-As-You-Go	0.0%	None	\$0	\$522,211,818
Vendor Financing	5.00%	SI Contract	\$73,185,992	\$595,397,810
Bond Financing	4.25%	SI Contract and state staff	\$68,904,998	\$591,116,816

Funding - Cost Allocation

The Project will incur annual costs related to system development and O&M, regardless of the financing method selected. All organizational entities within the Executive Branch will be required to use FISCAL. Existing law provides authority for the Project to allocate these costs to departments.

The most accurate and equitable way of allocating costs of an information technology (IT) system, such as FISCAL, is to charge each department for its fair share based on system usage. This would involve a direct cost allocation methodology based on the number of transactions performed by each department. Allocations based on statistically valid departmental transaction data would ensure that the methodology is equitable in its application. However, this information will not be available until the system has been fully implemented statewide. As such, this direct cost allocation methodology would only be applied to O&M costs after full implementation. All costs incurred during implementation will be allocated using an interim methodology.

Interim Cost Allocation Plan

Until such time that transactional data is available to apply a direct cost allocation methodology, Project implementation costs will be indirectly allocated to the funds that support departments' state operations. This methodology assumes that the Project costs should be allocated to all state funds, excluding Exempt departments, since FI\$Cal will provide beneficial use to all state departments. The amount of the charge to each fund will be in proportion to the amount of appropriation from each fund as a percentage of total state operations appropriations for the fiscal year of the charge.

To illustrate the allocation of Project implementation costs, past year expenditures for fiscal years 2007-08 to 2010-11 and totals from the 2011-12 Budget Act are used as a basis of estimate to calculate the funding split for Project implementation costs.

Fund	2007-08	2008-09	2009-10	2010-11	2011-12	Total	Average	% of Total
General	18,338	18,933	17,088	19,852	20,499	94,710	18,942	47.11%
Special and Non-Governmental	16,505	15,280	14,622	15,698	18,101	80,206	16,041	39.90%
Federal	4,615	6,087	6,973	4,516	3,934	26,125	5,225	12.99%
Total	39,458	40,300	38,683	40,066	42,534	201,041	40,208	100.00%

(Note: Numbers are shown in millions)

The historical distribution of state operations costs to fund sources yields an approximate allocation of state budget costs of 47.11% General Fund, 39.90% special and non-governmental funds and 12.99% federal funds. However, this fund split cannot be applied to FI\$Cal costs at this time because, while federal programs benefit, they can only be charged for Project development costs once the software programs are implemented and in use by federally funded programs. This requires the state to carry the federal share of costs until system success can be demonstrated. It is possible that some general and administrative costs and overhead may be eligible for federal reimbursement. However, any approval of federal reimbursement is subject to negotiation with the federal Department of Health and Human Services (DHHS), which the Project will undertake. In the meantime, the Project proposes that the federal share be allocated to the General Fund total during the development stage of the Project, pending future federal reimbursement. The reallocation of federal costs yields a funding split of 60.10% General Fund and 39.90% special and non-governmental funds.

To further delineate the proposed funding split, each special and non-governmental fund will be indirectly charged its share of costs based on its percent to total for all special and non-governmental funds. For example, if Special Fund A has a budget of \$1 million and the total budget for all special and non-governmental funds is \$100 million, Special Fund A will be charged 1% of those project costs allocable to special

and non-governmental funds (i.e., 39.90% of Project implementation costs). Special and non-governmental funds that cannot be charged its share of costs due to limitations of its governing statutory or constitutional authority will have its share of costs redistributed amongst all other eligible special and non-governmental funds.

This interim cost allocation methodology is consistent with that initially utilized by the State Controller’s Office’s 21st Century Project (MyCalPAYS), the state’s other large ERP implementation project in the area of human resources.

As part of the annual budget process, this cost allocation methodology will be reviewed and updated as needed to ensure that the fair share of costs are equitably distributed.

Applying the Interim Cost Allocation Methodology

Applying the interim cost allocation methodology to the pay-as-you-go option produces a General Fund/special and non-governmental fund/federal fund split of Project implementation costs as follows:

Year	Appropriation	Fund Split (47.11/39.90/12.99)		
		General	Special and Non-Governmental	Federal
2012-2013	\$88,978,046	\$41,917,557	\$35,502,241	\$11,558,248
2013-2014	\$84,596,627	\$39,853,471	\$33,754,054	\$10,989,102
2014-2015	\$101,908,979	\$48,009,320	\$40,661,683	\$13,237,976
2015-2016	\$130,014,604	\$61,249,880	\$51,875,827	\$16,888,897
2016-2017	\$84,194,295	\$39,663,932	\$33,593,524	\$10,936,839
2017-2018	\$32,519,267	\$15,319,827	\$12,975,187	\$4,224,253
Totals	\$522,211,818	\$246,013,987	\$208,362,516	\$67,835,315

With the restrictions on federal reimbursement for development costs and other costs subject to DHHS approval, the federal share of costs will initially be covered by the General Fund and the costs are distributed as follows:

Year	Appropriation	Fund Split (47.11/39.90/12.99)		
		General	Special and Non-Governmental	Federal
2012-2013	\$88,978,046	\$53,475,805	\$35,502,241	\$0
2013-2014	\$84,596,627	\$50,842,573	\$33,754,054	\$0
2014-2015	\$101,908,979	\$61,247,296	\$40,661,683	\$0
2015-2016	\$130,014,604	\$78,138,777	\$51,875,827	\$0
2016-2017	\$84,194,295	\$50,600,771	\$33,593,524	\$0
2017-2018	\$32,519,267	\$19,544,080	\$12,975,187	\$0
Totals	\$522,211,818	\$313,849,302	\$208,362,516	\$0

Conclusion

FI\$Cal recommends the pay-as-you-go alternative.