

February 26, 2014 2013-039.1

The Governor of California President pro Tempore of the Senate Speaker of the Assembly State Capitol Sacramento, California 95814

Dear Governor and Legislative Leaders:

This letter report provides an update on recent events related to the Financial Information System for California (FI\$Cal) project. Pursuant to Government Code, Section 15849.22(e), the California State Auditor (state auditor) is required to independently monitor the FI\$Cal project throughout its development, as deemed appropriate by the state auditor. FI\$Cal is a business transformation project for state government in the areas of budgeting, accounting, procurement, and cash management and is based on a commercial-off-the-shelf software package with minimal modifications. The independent monitoring includes, but is not limited to, monitoring the contracts for independent project oversight (IPO) and independent verification and validation (IV&V) services, assessing whether concerns about the project raised by the IPO and IV&V contractors are appropriately addressed by the FI\$Cal steering committee and the FI\$Cal project, and assessing whether the FI\$Cal project is progressing timely and within budget. We are required to report on the project's status at least annually and this is the 10th report we have issued since we began our monitoring in 2007, and our third report since the project began the design, development, and implementation (DDI) phase in June 2012. The project reported that FI\$Cal went live at the pre-wave departments on July 1, 2013, and the final wave of FI\$Cal has a scheduled go-live date of July 2017. We provide some key facts on FI\$Cal in the text box on the following page.

In our letter report, dated January 8, 2013, we provided updates on our oversight activities, the project's relatively inactive tracking of risks and issues since early 2012, its continuing challenges in recruiting and retaining staff, its schedule progress, and an update on the project's data conversion and change management activities. We also reported that the project approved the system integrator's proposed long-term schedule for the DDI phase in November 2012. Further, as discussed later, we issued a letter report in September 2013.

The project has made progress on the concerns we reported last January, specifically in the areas of risk management and project staffing. Both the IPO and IV&V have since reported that the project has reinvigorated its risk management practices, and they no longer report concerns over the project's tracking of risks and issues.

Moreover, the project has made substantial progress in reducing its staff vacancy rate. As of December 2013, the project reported that 38 of the project's 270 full-time authorized positions (14 percent) were vacant, which is an improvement from the 22 percent vacancy rate we previously reported as of November 2012. Many of these current vacancies are the result of FI\$Cal adding new positions since the beginning of fiscal year 2013–14. Although the project has not experienced any turnover in executive positions since January 2013, the IPO and IV&V reported that the project did not fill the testing manager position until November 2013—the

month when the project initiated testing activities for Wave 1. Our information technology (IT) expert indicates that filling this position at the time testing started, rather than earlier when test planning and preparation were being performed, left the testing effort without permanent leadership during a critical time and put the incoming testing manager at a disadvantage when starting in the position. Additionally, the system integrator continues to staff its team at a level higher than expected—144 actual positions instead of the 108 planned positions—with more than a third of its team performing DDI phase activities offshore in India without direct oversight from state staff. We discuss the implications of the work the system integrator performs offshore later in our letter report.

We previously reported that the project experienced delays with the procurement of data management services to assist the project with conversion of existing data to FI\$Cal. The project began procurement for these services in June 2011, but due to various delays, the contract for these services was not in place until

## **Key Facts**

- Total cost of project: \$672.6 million.
- Costs through November 2013: \$172.9 million.
- Five-wave deployment: During the design, development, and implementation phase, the project intends to deploy the Financial Information System for California in five waves, with more departments and functionality added with each wave.
- System integrator: Accenture plc is the project's selected systems integrator, with a \$226 million, five-year contract.
- Independent verification and validation (IV&V): Eclipse Solutions has been contracted to provide IV&V services.
- Independent project oversight (IPO): The California Department of Technology provides IPO services.
- Number of project staff: As of December 2013 there were 232 of the 270 authorized full-time positions filled.

Sources: Fifth Special Project Report, January 2014, and the December 2013 Independent Project Oversight Report, California Department of Technology.

August 2013. The IPO reported that the project used staff from the system integrator to mitigate the impact of these delayed services. At this time, the data management vendor is assisting several Wave 1 departments and the project is in the process of determining the best way to use its services for Wave 2.

# Because of Changes to Its Implementation Approach, the Project Recently Released Its Fifth Special Project Report

The project released its fifth special project report (fifth SPR) on January 8, 2014, to revise information in prior SPRs regarding FI\$Cal's costs, schedule, and implementation approach. According to the fifth SPR, the project determined that a change in the implementation approach was necessary to decrease project risk and increase the probability of success in each FI\$Cal wave. This change results in a 12-month extension of the project schedule and an increased cost of \$56 million. Specifically, although it has no impact on Wave 1, the fifth SPR states that based on the project's experience to date, the amount of functionality and complexity in Wave 2 along with the number of department deployments planned were too risky to accomplish in a single wave and the fifth SPR proposes to focus rolling out control agency functions in separate waves. As the Table on the following page shows, the fifth SPR changes the implementation approach by shifting control agency functions of the State Controller's Office and the State Treasurer's Office from Wave 2 to Wave 3. The fifth SPR indicates this change is to allow dedicated focus on the California Department of General Services' role as the control agency over statewide procurement implementation during Wave 2. The Table also shows that the fifth SPR shifts to Wave 4 the 23 departments previously planned for implementation in Wave 2 and Wave 3.

Table Changes to the Financial Information System for California as a Result of the Fifth Special Project Report

	FOURTH SPECIAL PROJECT REPORT (SPR)*			FIFTH SPR		
	NUMBER OF DEPARTMENTS <sup>†</sup>	FUNCTIONALITY	GO-LIVE DATE	NUMBER OF DEPARTMENTS	FUNCTIONALITY	GO-LIVE DATE
Pre-Wave	5 (Subset of Wave 1 departments)	<ul><li> Chart of accounts</li><li> Master vendor file</li><li> Requisition to purchase order</li></ul>	April 1, 2013	Pre-wave went live July 1, 2013		
Wave 1	14	<ul> <li>Department-level accounting, budget, cash management, and procurement.</li> <li>California Department of Finance budget control agency functions.</li> <li>The Financial Information System for California (FI\$Cal) becomes the budget system of record.</li> </ul>	July 1, 2014	No changes to Wave 1		
Wave 2	10 Also, Wave 1 departments receive Wave 2 functionality	<ul> <li>California Department of General Services (General Services), State Controller's Office (Controller's Office), and State Treasurer's Office (Treasurer's Office) control agency functions.</li> <li>FI\$Cal becomes the general ledger book of record, procurement system of record, and is used for cash management control functions.</li> </ul>	July 1, 2015	<ul> <li>General Services</li> <li>50 contracted fiscal services departments</li> <li>California Department of Consumer Affairs (procurement only)</li> <li>2 other departments</li> </ul>	<ul> <li>General Services' control agency functions.</li> <li>FI\$Cal becomes the procurement system of record.</li> </ul>	July 1, 2015
Wave 3	13	None	January 1, 2016	Controller's Office     Treasurer's Office	<ul> <li>Controller's Office and Treasurer's Office control agency functions.</li> <li>FI\$Cal becomes the general ledger book of record and is used for cash management control functions.</li> </ul>	July 1, 2016
Wave 4	45 (all remaining departments)	Public transparency Web site established.	July 1, 2016	<b>68</b> (all remaining departments)	Public transparency Web site established.	July 1, 2017
Total project cost		\$616.8 million		\$672.6 million		
Accenture contract amount		\$213.1 million		\$226 million		

contract amount 13,000 15,000 **End users** 

Sources: Fourth and Fifth Special Project Reports, March 2012 and January 2014, respectively.

<sup>\*</sup> As modified by subsequent change requests.

<sup>†</sup> The department counts have changed from the Fourth SPR to the Fifth SPR as a result of the governor's reorganization and changes to the way departments are classified.

As a result of the changes, the project reported it will benefit from additional time to execute the project's testing of statewide control functions and gain user acceptance. According to the fifth SPR, the departments will benefit from more time to design and implement their internal change management activities. Both the IPO and IV&V have indicated that the change to the implementation approach should reduce the project's overall risk. Our IT expert concurs.

## Concerns With the Fifth SPR

Despite the oversight entities' and our IT expert's belief that the fifth SPR reduces the project's overall risk, there are several areas of concern that we bring to the Legislature's attention. The primary concern is the risk that the size of Wave 4 may be too large. As a result of the changes, Wave 4 has ballooned to include 68 departments from the previous number of 45. Some of the departments included in Wave 4 are listed in the text box. Our IT expert believes that including so many departments in a single wave may overwhelm the project's resources. In fact, as a condition of approving the fifth SPR, the California Department of Technology (CalTech) has required the project to provide in January 2015 an assessment of the resources needed for Wave 4 and an implementation plan and schedule for the Wave 4 departments. At that time, the project may determine that it has insufficient resources and time to accomplish Wave 4 implementation, which could necessitate extending the project's timeline. If this extension were to occur, full implementation of FI\$Cal will

## Selected departments included in Wave 4

- · California Highway Patrol
- California Department of Developmental Services
- · California Department of Education
- California Department of Health Care Services
- · California Department of Human Resources
- California Department of Parks and Recreation
- California Department of Public Health
- California Department of Social Services
- · California Department of Technology
- California Department of Veterans Affairs
- Employment Development Department
- Franchise Tax Board
- Secretary of State

Source: Fifth Special Project Report, January 2014.

be delayed beyond July 2017 and the project's cost will increase.

Other concerns with the fifth SPR include that, because it extends the project for a year, the cost for department subject matter experts working on the project will increase. However, as we have previously reported, the project does not require departments to track this cost. Because this cost could be substantial, we previously recommended that the Legislature require the project to track it. Additionally, although the SPR indicates that the changes will allow for additional knowledge transfer opportunities for state staff, the IV&V has been reporting the project's failure to capitalize on knowledge transfer opportunities, which we discuss later in this letter report.

## State Auditor's Monitoring and Project Oversight Activities

We continue to attend monthly oversight meetings, quarterly steering committee meetings, and steering committee executive working group (working group) meetings. Further, we issued a letter report in September 2013 informing the Legislature of significant concerns

related to the IPO's activities and the project's lack of transparency in holding closed steering committee and working group meetings. We have not noted any closed steering committee or working group meetings since September 2013. In October 2013, to address our concern that the IPO function was not sufficiently staffed for a project of this size, CalTech added a second individual to the IPO function on a part-time basis. However, this individual left CalTech in November 2013. According to the IPO, CalTech plans to soon add another analyst to the project, but instead of being solely dedicated to oversight of FI\$Cal, both IPO analysts will now also be responsible for the oversight of projects at six other state entities.¹ While these state entities currently have minimal projects ongoing, we are concerned that this additional responsibility will take away some of their attention from FI\$Cal, which is currently one of the State's largest and most complex IT projects. Experience on the project to date suggests one full-time IPO has been insufficient for the project and has resulted in lapses in oversight when there is staff turnover. Additionally, we observed that the IPO has substantially addressed our concerns regarding weaknesses in its oversight of the project's schedule and budget.

We continue to track concerns and recommendations raised by the IPO and IV&V. Although the project has taken actions to address many of the IPO's project management concerns, it has been slower to implement certain technical recommendations that the IV&V consultant has raised. For example, several of the IV&V's concerns related to the State's skills and ability to independently maintain FI\$Cal after implementation have remained open for most of 2013. We discuss these concerns in more detail later in this letter report.

## The Project Does Not Use Spending as a Metric to Measure Progress in Completing FI\$Cal

The project does not consistently compare expenditures with its spending plan as a metric to measure progress in the completion of FI\$Cal. While we observe that the project's

reports to the steering committee and executive working group present metrics related to schedule and quality, we note much less attention given to the project's cost. For example, these reports provide only general information on the project's overall costs to date and provide no discussion of variances between actual and planned expenditures during fiscal year 2013–14.

According to the IPO, key metrics for measuring progress of the development of an IT project are listed in the text box. These metrics include meeting schedule dates and milestones, as well as quality metrics, such as the number of times a project deliverable is reviewed before it is accepted by the project. However, the level of expenditure is a very visible metric that stakeholders, such as the Legislature, use to

## Key Metrics for the Development of an Information Technology Project

**Schedule**—is the project meeting key milestones in the approved schedule.

**Quality**—is the project meeting requirements set out for it, including the quality of the product.

**Resources**—are staffing and project spending within the approved levels.

**Scope**—has the project scope stayed within the defined requirements.

Source: The December 2013 Independent Project Oversight Report, California Department of Technology.

In addition to FIsCal, the two IPO analysts will also be responsible for oversight of projects for the following state entities: Legislature, Governor's Office, Governor's Office of Business and Economic Development, Governor's Office of Planning and Research, Governor's Office of Emergency Services, and California Department of Finance.

gauge the progress of a project. Our IT expert notes it is a customary and reasonable practice for private sector projects to monitor costs on a monthly basis. However, in his experience, few state departments do so.

During 2013 the project provided a graphic each quarter to the steering committee to show actual expenditures compared to a spending plan, but without any narrative to explain the variances. Recently, the project decided to no longer present this information because it believed the comparison was not meaningful. According to the project director, the project does not measure progress based on expenditures, but rather on the achievement of milestones, meeting schedule dates, and measuring the progress of the system integrator's deliverables. Moreover, the project does not see the value of tracking expenditures against a spending plan on a regular basis. Going forward, the project will prepare a quarterly forecast of expenditures against its appropriation to estimate how FI\$Cal's actual expenditures will compare against the budget by the end of the fiscal year. This forecast was a requirement that CalTech placed on the project as a condition of approving the fifth SPR. Until the project produces the first quarterly forecast and the IPO has the opportunity to review it, we are unable to determine whether it provides more value than the graphic the project previously furnished. The project's February 2014 annual report to the Legislature (2014) annual report) included an analysis of the project's expected spending for fiscal year 2013-14, which forecasted the project would under spend its \$85 million appropriation by \$7 million. Although the project attempted to explain the reasons for the under spending, the only indicated causes were staff vacancies and projected expenditures being less than budgeted. Moreover, the project showed that it had only spent \$15.5 million of its appropriation halfway through the fiscal year (about 20 percent of its forecasted spending), with no explanation of how it would spend the remainder of its appropriation for the fiscal year.

In a January 2014 briefing with legislative staff, the project reported saving \$24 million over the past two fiscal years. In response to our request, the project's analysis of this savings shows that there were variances between estimated and actual expenditures in each cost category and it provided a brief explanation of the variance related to each one. We believe this type of analysis would be a useful starting point for any future analysis the project provides to the steering committee with each quarterly forecast.

## The Project Is Behind Schedule in Implementing FI\$Cal's Budgeting Function

Although the IPO reports that the project has completed many key tasks on time, it is behind schedule in implementing FI\$Cal's budgeting function. The budgeting function includes activities related to developing the State's budget and monitoring expenditures against budget appropriations and it will replace the current process the State uses to prepare the governor's budget and legislative budget documents. According to the project's fourth SPR, the project initially planned to implement the budgeting function for some departments in Wave 1, but the project did not plan for FI\$Cal to become the budget system of record for the State or to replace the California Department of Finance's (Finance) existing budget systems until Wave 2. However, in July 2012 the steering committee approved a change request to move these activities from Wave 2 to Wave 1 to allow Finance to be the focus of Wave 1, which will make FI\$Cal the State's budget system of record when Wave 1 is implemented on July 1, 2014.

In its October 2013 working group report, the project indicated that activities related to building the budget functionality had taken longer than planned and were affecting future testing activities. The working group report indicated that if all the elements of the budgeting function are not built by mid-February 2014, some functionality may not be tested or available when Wave 1 is implemented in July 2014.

In its recent reports, the IV&V has raised various technical problems with the budgeting functionality. Although the primary software for FI\$Cal is a commercial-off-the-shelf product with minimal modifications; the software for the budgeting function is a separate product that requires significant configuration. In October 2013 the IV&V consultant noted that the budgeting function was experiencing instability issues, which it primarily attributed to the system integrator improperly performing installation tasks. The IV&V indicated that the nature of the errors encountered suggests that the system integrator may have been learning the software for the budget function while building it. In November 2013 the IV&V raised concerns with the general quality and ultimate usability of the preliminary technical design documents that the system integrator was providing, which could make it more difficult for the State to maintain the budgeting functionality after its implementation. These quality issues included using screenshots for documentation, which are difficult to update when changes occur. Finally, in December 2013 the IV&V reported delays in mock data conversion and interface testing, which it indicated could result in fewer opportunities to validate these activities before the July 1, 2014, go-live date. These issues are an indication of the technical challenges the project is facing with development of the budgeting functionality that it needs to overcome in order to implement all elements of this functionality by the go-live date.

Further, the IPO indicated in December 2013 that the budget functionality was significantly behind schedule and that certain functions may not be ready by the July 1, 2014, go-live date. These functions include the Governor's Budget publication system, policy decision support, Legislative Counsel Bureau functionality, and over 40 other potential technical and business process challenges. The IPO indicated the project will be severely challenged in implementing these functions if it is unable to address the issues with these functions by early 2014. Furthermore, the IPO notes that the project schedule does not reflect the status of these functions because they are classified as "off-cycle" and are not incorporated into the schedule until a change request has been submitted and approved. Finally, although the project acknowledges in the 2014 annual report that there are some delays with the budgeting function, it indicates that FI\$Cal is on schedule despite the IPO's reporting that the budgeting function is significantly behind schedule and at risk of not being implemented on the July 1, 2014, go-live date.

The project believes that despite these issues, the core budgetary functionality will be implemented by the go-live date. Specifically, the project indicated that functions related to accounting processes, such as appropriation and commitment control, need to be implemented by July 1, 2014, but budget preparation functions do not. The steering committee discussed concerns with the budgeting functionality during its January 2014 meeting. At that time the project indicated that the core elements of the budgeting functionality would be implemented on July 1, 2014, and other elements could be implemented in subsequent months.

## The Project Is Missing Knowledge Transfer Opportunities, Which Could Result in Dependence on a Vendor to Maintain FISCal

Several IV&V findings raise concerns that the State may face significant difficulty maintaining FI\$Cal after implementation without a vendor's assistance. As noted in the fourth SPR, the project intended that the system integrator will provide extensive training to state staff so that they are fully prepared to maintain FI\$Cal after its implementation. For example, the fourth SPR stated that the project intended to have the system integrator's staff work closely with state staff to, among other benefits, facilitate rapid learning, provide for the prompt resolution of issues, and early knowledge transfer in preparation of maintaining FI\$Cal. However, the IV&V reports caution that only a small percentage of organizations are successful with their plans to assume operations and maintenance responsibilities of an IT system following implementation, and a majority of organizations ultimately sign long-term operation and maintenance contracts with a vendor—either the system integrator or another consulting company—due to lack of system documentation, training, and knowledge transfer.

The IV&V has identified several significant concerns that unfortunately may inhibit the project's ability to realize its vision: the system integrator is not always providing sufficient documentation regarding how it has configured the software for FI\$Cal, state staff have repeatedly missed opportunities to work alongside system integrator staff, and state staff are unable to work directly with about one-third of the system integrator staff that are working offshore. According to the project, the contract with the system integrator does not restrict it from locating staff offshore. The IV&V indicates that organizations that are successfully able to maintain an IT system after implementation have acquired in-depth system documentation, as well as trained staff, and that it would be very difficult for state staff to learn, maintain, and upgrade the software at the end of the project with the limited documentation that the system integrator has been providing.

However, state staff have missed opportunities to work alongside and participate with system integrator staff as they perform activities to develop FI\$Cal. For example, the IV&V noted that the system integrator performed significant configuration activities in October 2013 outside of normal work hours and thus state staff often were not present to observe or participate in these activities. According to the IV&V, the lack of state staff involvement in the planning and preparation for Wave 1 technical test activities will make it more difficult for the State to facilitate a gradual transfer of maintenance duties from the system integrator to state staff. In December 2013 the IV&V again reported that state staff continued to miss knowledge transfer opportunities, stating that some staff are not directly involved in planning, preparation, and execution tasks for Wave 1 technical test activities. Finally, the system integrator's staff working on the budgeting function—which requires significant configuration—are located offshore. Consequently, project staff are unable to directly participate in knowledge transfer activities on the offshore work and the project is limited in its ability to timely detect errors, omissions, and inconsistencies in the configuration of the budgeting software. Although the IV&V reported that state staff are actively involved in reviewing technical design documentation for the budgeting function, the IV&V believes that the increased volume of work that offshore developers are performing has exacerbated the knowledge transfer problems. Moreover, the IV&V notes that some of these activities are one-time knowledge transfer opportunities.

Our IT expert notes that because of these missed opportunities, state staff have been unable to observe key aspects of configuration of the core system as it occurs and gain context for what configuration decisions must be made, how they are made, why they are made, and how they are implemented. Deferring knowledge transfer to later FI\$Cal waves, after much of the configuration is complete, denies staff the opportunity to gain information in context as the work is being performed. Involving state staff earlier would better ensure staff gained and applied knowledge and expertise over time and would improve the State's ability to monitor the system integrator's work. Nevertheless, in its 2014 annual report, the project asserts that it has identified knowledge transfer activities and is closely monitoring state staff participation in those activities. However, the project did not mention the ongoing concerns that the IV&V has raised with state staff missing significant knowledge transfer opportunities during 2013.

Finally, another important aspect to help the State achieve its goal to maintain the system after implementation is to minimize customization of the off-the-shelf software used for the FI\$Cal application. To the project's credit, both the IPO and IV&V report that the project has minimized the number of customizations by actively challenging the need for any that are proposed. Further, after the IPO pointed out that it was not tracking customizations, the project created a tracking tool for this purpose in October 2013. By minimizing customizations, the project helps make it easier to maintain FI\$Cal and to apply any software upgrades.

## Status of Legislative Recommendations From April 2012

In our April 2012 letter report we made three recommendations for the Legislature to consider related to the tracking of costs for subject matter expert staff located in state departments, monitoring the projected benefits of FI\$Cal, and reporting the cost and reasons for any significant and unanticipated customizations that the project makes to the FI\$Cal software. The text box lists these recommendations. We are unaware of any legislative action to address our recommendations, however, we believe they are still valid.

We will continue to monitor and report on these topics in addition to others that come to our attention, at a minimum, before January 10 each year.

Elaine M. Howle

Respectfully submitted,

## Recommendations for the Legislature to Consider

- To ensure that the cost to implement the Financial Information System for California (FI\$Cal) accurately reflects the effort needed, the Legislature should require the project to track the cost of department subject matter expert staff and include this cost in the total cost for FI\$Cal.
- To monitor the benefits that FI\$Cal is projected to provide based on the Hackett study, the Legislature should require the project to track projected benefits as they are achieved and to report annually on the total benefits achieved, any changes in total projected benefits, and actual project benefits as compared to actual and projected FI\$Cal costs.
- The Legislature should require the project to report annually on the cost and reasons for any significant customizations it makes to the software that were not anticipated at the onset of FI\$Cal implementation.

Source: California State Auditor's letter report 2012-039, April 2012.

ELAINE M. HOWLE, CPA

State Auditor