

**DEPARTMENT OF TRANSPORTATION**

OFFICE OF THE DIRECTOR  
1120 N STREET  
P. O. BOX 942873  
SACRAMENTO, CA 94273-0001  
PHONE (916) 654-5266  
FAX (916) 654-6608  
TTY (916) 653-4086



*Flex your power!  
Be energy efficient!*

Senator Wesley Chesbro, Chairperson  
Joint Legislative Budget Committee  
State Capitol, Room 5100  
Sacramento, CA 95814

Dear Senator Chesbro:

The California Department of Transportation (Department) transmits the Progress Report on Project Resourcing and Schedule Management as mandated by Provision 1 of Item 2660-492 of the Budget Act of 2004.

In accordance with the above provision, the Department is to report on the progress of developing and implementing the Project Resourcing and Schedule Management System at the time the 2005-06 Governor's Budget is submitted to the Legislature. The report is to include, among other things, the revised project schedule, the activities completed to date, and the activities proposed to be funded by the 2005-06 Governor's Budget.

Sincerely,

A handwritten signature in blue ink that reads "Will Kempton".

WILL KEMPTON  
Director

Enclosure



## **Project Resourcing and Schedule Management**

**(State of California Information Technology Project 2660-160)**

# **Progress Report**

January 10, 2005



California Department of Transportation  
Division of Project Management  
Office of Project Management Systems Implementation  
1120 N Street, Mail Station 28  
Sacramento, CA 95814

## Contents

<b>What is PRSM?</b> .....	<b>1</b>
<b>Purpose of this Report</b> .....	<b>1</b>
<b>PRSM Activities to Date</b> .....	<b>2</b>
First Procurement 1999-2003 .....	2
Summary of Events .....	2
Cost of the First Procurement .....	2
Second Procurement 2004 - present .....	3
STAGE 1: Value Analysis .....	3
STAGE 2: Market Analysis .....	4
Cost of the Second Procurement through November 2004 .....	5
<b>Proposed Project Schedule</b> .....	<b>6</b>
Second Procurement (Continued) .....	6
STAGE 2: Market Analysis (Continued) .....	6
STAGE 3: Request for Binding Proposals (RFP) .....	6
Implementation .....	6
Post-Implementation Evaluation .....	7
<b>Activities proposed to be funded by the 2005-06 Budget</b> .....	<b>7</b>
Funding in 2004-05 .....	7
Funding in 2005-06 .....	7
<b>PRSM Schedule: Graphical Representation</b> .....	<b>8</b>

## **What is PRSM?**

PRSM is an acronym for “Project Resourcing and Schedule Management.” It is the first part of a three-part plan to modernize the financial management software in the Department of Transportation (Department). The three parts are:

- PRSM, which will enable the Department to effectively manage State employee time in its Capital Outlay Support (COS) program. This \$1.2 billion-per-year program funds environmental studies, design services, construction engineering and right-of-way acquisition services for State Highway projects. The Department employs more than 10,000 people in COS. State employee time charges make up most of the costs in this program. PRSM will be a Commercial-Off-The-Shelf (COTS) software system.
- A Construction Management System to replace the existing outdated system.
- A Financial Management System, using COTS enterprise resource planning software. This will replace the existing Transportation Accounting and Management System (TRAMS), which was implemented in 1982.

Most of the Department’s financial management software was written in the 1960s through 1980s. The focus at that time was on recovering Federal Funds and on correct payment of contractors. Since then, transportation financing has become far more complex. Many new Federal, State and Local funding programs have been added, each with its own rules. There has also been an increased attention to the management of the Department’s State employee and consultant resources. The Department has developed band-aid processes to address the new demands with the old software, but these are less than satisfactory.

### **Purpose of this Report**

This report responds to Provision 1 of Item 2660-492 of the Budget Act of 2004 (Chapter 208, Statutes of 2004). This provision reads:

At the time the 2005-06 Governor's Budget is submitted to the Legislature, the Department of Transportation shall report to the Chairperson of the Joint Legislative Budget Committee on the progress of developing and implementing the Project Resourcing and Schedule Management System. The report shall include, among other things, the revised project schedule, the activities completed to date, and the activities proposed to be funded by the 2005-06 Governor's Budget.

## **PRSM Activities to Date**

The Department is attempting for the second time to buy a PRSM software solution. The first attempt was abandoned in February 2003. The second attempt began in March 2004. The major events of both attempts are described below.

### ***First Procurement 1999-2003***

#### **Summary of Events**

In April 2000, the Department submitted a Feasibility Study Report for Project Resourcing and Schedule Management (PRSM) with an estimated project cost \$13.4 million. The Department began the procurement process in June of that year.

In May 2002, the Department submitted a Special Project Report (SPR) reflecting an increased cost. The total project cost is now \$26.1 million. Some of the increased costs are attributed to a lack of competition (there was only one finalist vendor), increased vendor rates, increased COTS software cost, a requirement for new hardware, and a longer time required for development.

Due to the increased costs and sole finalist, the Department of Finance (Finance) asked the Department to perform a value analysis, a market analysis and produce an updated SPR. The Department was instructed to submit a work plan for this effort to Finance, including a detailed task schedule and any additional costs required for these activities, before expending additional resources on the PRSM project. Over the next several months, the Department and Finance negotiated the details of the workplan. In November 2003, the Department submitted a revised work plan. The plan proposes a three-stage procurement:

- STAGE 1: A Value Analysis
- STAGE 2: A Market Analysis
- STAGE 3: A Request for Binding Proposals

#### **Cost of the First Procurement**

The Department spent \$3,061,655 on the first procurement.

## ***Second Procurement 2004 - present***

### **STAGE 1: Value Analysis**

March 17, 2004: Finance gives approval for the Department to carry out an eight-step Value Analysis. The Department shall not proceed with any work beyond these eight steps without written approval from Finance. The required steps are:

- STEP 1: Establish a cross-functional Evaluation Team consisting of key business personnel from headquarters and the districts.
- STEP 2: Hire an Independent Project Oversight Consultant (IPOC) to monitor and ensure a sound and objective Value Analysis process.
- STEP 3: Review the objectives and functional requirements listed in the FSR in the light of any subsequent changes to the Department's business processes since the FSR was published.
- STEP 4: Modify any objectives and functional requirements as required by the Department's current business processes and fully document the business justification for any such changes.
- STEP 5: Assign a weighted value to each revised objective indicating the objective's relative importance.
- STEP 6: Assign a weighted value to each requirement indicating the requirement's relative importance.
- STEP 7: Identify all functional requirements that are necessary to ensure project success and therefore constitute a minimum set of requirements needed to address PRSM's key objectives.
- STEP 8: Identify opportunities for a phased implementation of PRSM functionality.

July 12, 2004: After completing the eight-step Value Analysis, the Department submits a Value Analysis Report to Finance. The report describes the Department's actions in each of the eight steps. The principal elements of the report are:

- PRSM no longer needs to include a timesheet. When the PRSM FSR was written, in 2000, the Department used an electronic timesheet that had been developed by its own staff. That timesheet, Time Reporting System (TRS) was housed on IBM mainframe computers and written in IBM's REXX software. When the PRSM FSR was written, the Department had

plans to introduce a browser-based system for timekeeping, licensing, certification and workers compensation. This system is now called "Staff Central." The Department expected that PRSM would be completed before Staff Central. The PRSM FSR therefore included the replacement of TRS with a modern browser-based timesheet.

The timekeeping element of Staff Central was completed in December 2002. It uses Peoplesoft human resources software. As Staff Central now precedes PRSM, PRSM will modify the Staff Central timesheet rather than replace TRS.

- The Department proposes a three-phase implementation of PRSM (Step 8 of the Value Analysis).

**IMPLEMENTATION PHASE 1:** Download actual costs to a browser-accessible database. This part of PRSM can start immediately. It will be required no matter which COTS product is selected for PRSM. At present, project managers are unable to obtain timely, reliable and official expenditure data. Making this data readily available will yield an immediate and significant benefit. As an example, this PRSM Progress Report, written in January 2005, includes expenditures only through November 30, 2004 because later data is not readily available. Obtaining the expenditure data for this report required several days of effort by one of the few people in the Department who know how to extract such information from the TRAMS expenditure files. With PRSM Phase 1, such data will be readily available to all project managers within hours of it being recorded in TRAMS. It will also not require extraordinary knowledge to obtain the data.

**IMPLEMENTATION PHASE 2:** Replace the Department's existing project management system with a more accessible COTS scheduling tool and compare the planned work from the scheduling tool against the actual work reported in Implementation Phase 1.

**IMPLEMENTATION PHASE 3:** Establish an interface between the PRSM scheduling tool (Implementation Phase 2) and the Peoplesoft timekeeping system to ensure work is correctly entered on time records and to notify the appropriate managers if unplanned charges are made to projects.

## **STAGE 2: Market Analysis**

August 30, 2004: Finance gives approval for the Department to carry out a Market Analysis. The Department shall not proceed with any work beyond this analysis without written approval from Finance. With assistance from the Department of General Services (DGS), the Department is to meet four requirements:

- **REQUIREMENT 1:** Develop a Request for Qualifying Information (RFQI) document identifying the minimum essential requirements as well as additional desired functionality for

a PRSM solution. The RFQI will provide vendors with the opportunity to identify the availability, suitability and estimated costs of PRSM solutions in the marketplace.

- REQUIREMENT 2: Develop an RFQI scoring document to evaluate the vendor responses.
- REQUIREMENT 3: Develop a list of qualified vendors that will be invited to participate in future PRSM procurement, pending the requisite approval to conduct a PRSM procurement effort.
- REQUIREMENT 4: Document the results in a Market Analysis Report.

October 23, 2004: After an internal review, the Department submits a proposed RFQI and scoring document to DGS. Over the following two months, this is revised several times to detail and clarify the requirements and processes to ensure that the procurement will withstand any possible bidder protests.

**Cost of the Second Procurement through November 2004**

Through November 30, 2004, the Department had spent \$517,186 on the second procurement. This is made up as follows:

Description	Consultant costs	State Employee Labor	Other Operating Expenses	Total
Independent Project Oversight	\$91,864	\$29,636		\$121,500
PRSM Value Analysis		\$114,223	\$1,959	\$116,182
Communication Planning, Reporting and Distribution of Information		\$78,073		\$78,073
PRSM Market Analysis		\$71,446	\$2	\$71,448
Documenting Business Processes		\$66,286		\$66,286
Risk Response Planning and Management		\$44,855		\$44,855
Scope, Cost & Schedule Planning and Management		\$12,429		\$12,429
Development and Revision of PRSM Charter		\$1,331		\$1,331
Other Costs		\$3,578	\$1,504	\$5,082
<b>Total</b>	<b>\$91,864</b>	<b>\$421,857</b>	<b>\$3,465</b>	<b>\$517,186</b>

## **Proposed Project Schedule**

A graphical representation of the schedule is in Appendix A.

### ***Second Procurement (Continued)***

#### **STAGE 2: Market Analysis (Continued)**

December 31, 2004: DGS advertises the RFQI in the State Contracts Register. This completes Requirements 1 and 2 of the Market Analysis.

February 4, 2005: Vendors submit their Qualifying Information to DGS. This includes their estimates of cost for potential solutions. Estimates are provided as a range - an optimistic (lowest credible) cost and a pessimistic (highest credible) cost.

February 7 to April 4, 2005: The Department evaluates the qualifying information, interviews vendors' existing clients and conducts scripted demonstrations of each product. Vendors demonstrate that their products can perform as claimed. The Department reports its findings to DGS, and DGS tells vendors whether they have been "short-listed" to proceed to Stage 3 of the procurement process. This completes Requirement 3 of the Market Analysis.

By April 22, 2005: The Department submits a Market Analysis Report to Finance. This completes Requirement 4 of the Market Analysis.

#### **STAGE 3: Request for Binding Proposals (RFP)**

By June 17, 2005: Finance gives written approval to proceed with Stage 3.

By July 29, 2005: The Department submits a proposed RFP to DGS.

By September 12, 2005: DGS sends RFP to firms that were short-listed in Stage 2.

By October 28, 2005: Vendors submit binding proposals.

By November 14, 2005: The Department evaluates the proposals and submits results to DGS.

By December 7, 2005: The Department submits a Special Project Report to Finance.

### ***Implementation***

By February 8, 2006: Finance gives approval to award a contract.

By February 24, 2006: DGS awards a contract.

By June 12, 2006: PRSM software “pilot” begins in the Department’s District 7 (Los Angeles).

By September 4, 2006: After fixing any problems found in the pilot, PRSM is implemented sequentially in the remaining Districts.

By May 11, 2007: Implementation is complete.

### ***Post-Implementation Evaluation***

By November 11, 2008: Post-Implementation Evaluation Report is complete.

## **Activities proposed to be funded by the 2005-06 Budget**

### ***Funding in 2004-05***

Item 2660-492 (2) of the Budget Act of 2004 provided one-time funding of \$7,057,000 for PRSM, provided that it was liquidated by June 30, 2005.

The schedule proposes that the PRSM contract be awarded by February 24, 2006. Based on this schedule, the one-time funding in Item 2660-492 (2) will neither be encumbered nor liquidated by June 30, 2005. It will revert to the State Highway Account.

### ***Funding in 2005-06***

The vendor’s submittals on January 28, 2005, will include a range of cost estimates for possible solutions. Once these estimates are known, it will be possible to develop a more complete funding strategy for PRSM. It is anticipated that the Department will request the reappropriation of the \$7,057,000 for Fiscal Year 2005-06 during the Finance Letter process or May Revision.

### PRSM Schedule: Graphical Representation

