

DEPARTMENT OF TRANSPORTATION
DIVISION OF PROJECT MANAGEMENT
P.O. BOX 942873, MS-28
SACRAMENTO, CA 94273-0001
PHONE (916) 416-7810
FAX (707) 937-3550
TTY 711
www.dot.ca.gov



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January 8, 2013

The Honorable Mark Leno
Chair, Joint Legislative Budget Committee
California State Senate
1020 N Street, Room 553
Sacramento, CA 95814

Dear Senator Leno:

I am pleased to submit the California Department of Transportation's (Caltrans) quarterly report on the *Project Resourcing and Schedule Management System*. This report is required under the provisions of Item 2660-492-0042 of the Budget Act of 2005. The provision states:

"Beginning July 1, 2005, the Department of Transportation shall provide to the Chairperson of the Joint Legislative Budget Committee copies of the monthly status and oversight reports submitted to the Department of Finance for the Project Resource and Scheduling Management Project on a quarterly basis."

The enclosed package contains three monthly reports that were submitted by the Independent Project Oversight Consultant to the California Department of Finance from July 1, 2012, through September 30, 2012, overlapping two months of the prior report as required by Agency for the new reporting period. These reports identify potential risks with significant probability of occurrence and impact. Caltrans is actively monitoring these risks and mitigating them as identified in Attachment A.

Distribution to the Legislature has been made by Caltrans pursuant to California Government Code section 9795. This report can be found at www.dot.ca.gov/reports.htm.

Sincerely,

A handwritten signature in black ink, appearing to read "Malcolm Dougherty".

Malcolm Dougherty
Director

Attachment

ATTACHMENT A

	Risk Title	Risk Mitigation Summary	Page
1	Risk R-9: Key Critical Resources have left or are leaving the project which may have an impact on decision making, problem solving and/or strategy setting.	The current PM has been permanently assigned to the project.	7 of 71
2	Risk R-6: Lack of performance and scalability planning may lead to issues with the Pilot or Rollout if not resolved quickly	The training environment will be migrated to a new server box so that resources are not competing with the development and testing environments. Caltrans has assigned resources to address network concerns that may be the root cause of the 3-second delay in the production environment. As Districts prepare for rollout, testing of the network traffic for each district will occur.	9 of 71
3	Risk R-5: Inadequate planning for data conversion may cause additional schedule delays and impact the quality of integration testing.	Caltrans and the Vendor have demonstrated successful conversion of project data and financial data from legacy systems and continue to revise the processes as necessary as minor adjustments are made to the system as part of the normal development process. Additionally, "Computer Associates" provided technical changes to the data load process that significantly shortened the duration of one of the main steps in the process.	10 of 71
4	Risk R-1: Lack of Effective Organizational Change Management or District Buy-in	District 4 has been engaged with cleaning their data for conversion readiness and has begun training. District 4 staff has shown enthusiasm about migrating to the PRSM system and is requesting post-training access to the system. Access to either production as "read only" or continued access to the training environment has been requested. This is a positive indication that customer buy-in exists.	11 of 71



EXECUTIVE SUMMARY

Overview:

The Project Resource and Schedule Management (PRSM) system will change the way Caltrans' Capital Projects are planned, managed and reported.

For the first time over 8,000 Caltrans personnel will be able to collaborate in one statewide system during the planning and implementation of their projects.

PRSM will replace Caltrans' outdated, existing project management tool to integrate planned project data with expenditures and timekeeping from other existing Caltrans Information Technology systems.

Science Applications International Corporation (SAIC) was awarded the contract to implement PRSM using a commercial off the shelf software product from Computer Associates called Clarity. The scope of this contract includes procurement, installation, configuration, testing and maintenance of the software, and associated development and delivery of various related user and system maintenance training.

A few key PRSM project benefits include the following:

- Real-time project collaboration, monitoring and cost control via a web browser.
- Ability to create project plans based on similar current or historical projects, or phases of a project.
- Integration of the project plan with the timekeeping system to ensure accurate labor charges.
- Ability to view statewide resource availability and estimate future workload.

Current Status:

The North Region (consisting of districts 1, 2, and 3 in Northern California) is currently in production with roll out to district 4 (Oakland) in progress.

Major Project Milestones:

1. Project Award Date:	3/5/09
2. Adaptation Phase Complete:	5/16/12
3. Pilot Phase Complete:	7/13/12
4. Phase-1 District Rollout Complete:	5/16/13
5. Phase-2 District Rollout Complete:	9/12/13
6. Statewide Rollout Acceptance:	9/30/13
7. State Closeout:	10/30/13
8. PIER Report	10/29/14

Quarterly PRSM Status Report to the Legislature



Project Resourcing & Schedule

Management System

Quarterly PRSM Status Report to the Legislature

July 1, 2012 – September 30, 2012



California Department of Transportation

Division of Project Management

Office of Statewide Project Management Improvement

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IPO Report for September 2012

Project Name: Project Resource Scheduling Management System (PRSM) **Assessment Date:** 09/01/2012 – 09/30/2012
Frequency: Monthly

Oversight Provider Information

Oversight Leader: Kim Colunga **Organization:** CA Technology Agency
Phone Number: 916-403-9635 **Email:** Kim.Colunga@state.ca.gov

Project Information

Project Number: 2660-160 **DEPARTMENT:** Department of Transportation
Criticality: High **Agency:** Business, Transportation & Housing
Last Approved Document/Date: SPR – 04/02/2012 **Total One-time Cost:** 26,947,129
Start Date: 06/07/2000 **End Date:** 05/24/2013
Project Manager: Steve Kawano **Organization:** Department of Transportation
Phone Number: 916-749-5675 **Email:** Steve_kawano@dot.ca.gov

Summary: Current Status – If multiple current phases, use section at end to assess the status of additional phases.

Project Phase: Rollout Phase I
Planned Start Date: April 18, 2012 **Planned End Date:** 11/20/2012
Actual Start Date: April 9, 2012

Schedule

Select the statement that most closely applies, measured against the last OCIO approved document.

Quarterly PRSM Status Report to the Legislature

Ahead-of-schedule:

One or more major tasks or milestones have been completed and approved early (> 5%).
All other major tasks and milestones completed and approved according to plan.

Behind Schedule

On-schedule:

All major tasks and milestones have been completed and approved according to plan.
(Within 5%)

Behind Schedule:

One or more major tasks or milestones are expected to be delayed. (> 5%)

Comments: Per the SPR approved on April 2, 2012, Phase I Rollout completion date is November 20, 2012. Phase I rollout includes Districts 1, 2, 3, 4, 8 & 12. The current schedule reflects a completion date for Phase I rollout to be February 22, 2013, which would make it 62 days behind schedule.

Several events that include power outages and data source issues delayed the conversion and validation activities of Districts 1, 2, & 3 data. Once the data became available to migrate, there were problems loading the data into production. Originally, migration of the data into production was a 3-day task. A missing step in the migration process, which is linking the data to existing projects, resulted in the task needing to extend to 6 days. In addition, when the data load began for Districts 1, 2 & 3 into production, the archiving files became full and the production environment had to be disabled. Rollout for Districts 1, 2 & 3 completed on September 25, 2012. Due to the unexpected events and unidentified tasks, this rollout completed 26 days behind schedule. The updated schedule reflects the additional tasks needed in future rollouts.

A black out period, scheduled for October 31, 2012 through January 9, 2013, can provide the project an opportunity to get back on schedule. This blackout period allows the business staff to gather data as needed for budgetary activities. As long as the data is extracted for the remainder of Phase I (Districts 4, 8 & 12) prior to the blackout period, the remainder of rollout activities can proceed without disrupting the gathering of data for budgetary activities. This will allow the project to commence Phase II rollout once the blackout period has ended with the intention of meeting the approved completed date for Phase II.

Quarterly PRSM Status Report to the Legislature

Complete Status	Milestones	Baseline Task ID#	Baseline Finish Date	Actual Finish Date
Previous Month – August 2012				
100%	Convert, Load & Validate District 1,2 & 3 Data	579	8/10/12	9/13/12
100%	District 1, 2, & 3 User Go Live Complete	590	8/17/12	9/25/12
0%	Prepare for Data Conversion – District 4	620	8/20/12	
Current Month – September 2012				
0%	Convert, Load & Validate District 4 Data in Stage	619	9/7/12	
0%	District 4 Go Live	630	9/14/12	
Next Month – October 2012				
0%	District 1, 2, & 3 Acceptance	591	10/3/12	
0%	District 1, 2 & 3 Rollout Evaluation Report	598	10/15/12	
0%	District 4 Acceptance	631	10/17/12	

Note: Based on schedule dated 9/25/12.

Resources (Level of Effort) Choose the statement that most closely applies.

Fewer Resources

Completion of one or more major tasks and/or acceptable products has required or is expected to require materially (>5%) fewer hours/staff than planned.

Within Resources

Within Resources

All major tasks have been completed and acceptable products created using the planned number of hours/staff (within 5%).

More Resources

Completion of major tasks and/or acceptable products has required or is expected to require materially (>5%) more hours/staff than planned.

Quarterly PRSM Status Report to the Legislature

Comments: The PRSM project manager left the PRSM project effective April 6, 2012. Since that time, the project has transitioned to two interim project managers. Caltrans has advertised for a permanent State employee to fill the PM position. Due to departmental directives, this position remains as a temporary assignment. The “acting” PM is also in the “acting” role of the Enterprise Technology Investment Division Chief. Although his staff is not providing direct oversight on the PRSM project, nor does he directly complete the CA-PMM report, there is some concern of the conflict that could occur with his staff providing some instances of oversight on the project, such as reviewing CA-PMM reports prior to submitting to CA Technology Agency.

Last month, the project had a Level II Helpdesk position vacancy, this position is crucial as the project enters rollout. As of September 17, 2012, this position was filled. It is recommended that monitoring of this section continue, as more resources may be needed as more Districts implement.

Vendor staffing appears to be low for purposes of data load activities. There is a concern that long hours and no back up could be a risk since the project could be left without the adequately skilled resource. Originally, 12 defects were scheduled to be included in the October 5 release, however, due to lack of resources, there will only be five. An additional release this month has not yet been scheduled. Caltrans PM and Project Director are addressing this concern with the vendor.

Resources (Budget/Cost) Choose the statement that most closely applies.

Less cost
The project is (>5%) under budget.

Within cost
The project is operating within budget.

Higher cost
Material budget increases (>5%) are likely.

Unable to Assess

Comments: Currently, the only information available to Oversight is in the CA-PMM report. It is anticipated that information will be available to Oversight for the next reporting period as the Contract Manager is currently out due to emergency medical leave.

Reporting Period: From September 1, 2000 through August 31, 2012		
	Last Approved Budget (\$)	Cumulative Actual Cost (\$)

Quarterly PRSM Status Report to the Legislature

One-Time IT Project Costs		
Staff (Salaries & Benefits)	10,023,182	9,282,457
Hardware Purchase		
Software Purchase/License	1,759,500	782,000
Telecommunications		
Contract Services - Software Customization	9,312,864	5,639,654
Contract Services - Project Management		
Contract Services - Project Oversight	893,310	899,142
Contract Services – Independent Verification and Validation (IV&V) Services	1,099,274	945,631
Contract Services - Other Contract Services	3,438,638	3,629,033
Data Center Services	6,750	6,750
Agency Facilities		
Other	413,611	128,510
Total One-Time IT Project Costs	26,947,129	21,616,177
Continuing IT Project Costs		
Staff (Salaries & Benefits)	341,232	
Hardware Lease/Maintenance		
Software Maintenance/Licenses	2,588,292	460,000
Telecommunications		
Contract Services		
Data Center Services	6,500,843	2,424,873
Agency Facilities		
Other		
Total Continuing IT Project Costs	9,430,367	2,884,873
TOTAL	36,377,496	24,198,050

Note: This information is from the CA-PMM report dated 9/10/12.

Support Contracts

The PRSM project uses contract resources for work that requires expertise, which is not readily available within state service. Following are the support contracts currently utilized:

Active Support Contracts					
Contract Type	Contractor	Term	Contract Encumbrance	Expended	Contract Balance
S/I Vendor	SAIC	05/25/2009 05/30/2014	13,200,656	Information Requested*	
IV&V	Infiniti	06/29/2012 06/28/2013	97,500	36,125	36,125

*The contract Manager is out on emergency medical leave.

Quarterly PRSM Status Report to the Legislature

Quality (Client Functionality) Choose the statement that most closely applies.

Adequately Defined

Required client functionality is adequately defined, and is being successfully built into the system, given the current project phase.

Adequately Defined

Inadequately Defined

One or more significant components of required client functionality are inadequately defined, or are not being successfully built into the system, given the current project phase.

Comments: TMS (the previous oversight vendor) reviewed the requirements, to-be use cases and workflows created for PRSM and found them to be quite thorough and inclusive of the underlying solution flow. In previous months, TMS reviewed the traceability spreadsheets in the project document library and found that there were many to-be use cases that were not traced to any associated test cases. TMS was concerned that this could be an indication of insufficient testing coverage. TMS provided this data to Caltrans and they have gone through the testing materials and completed the mapping.

The Technical As-Built Documentation (Deliverable #20) was delivered on September 5, 2012. The IV&V consultants independently reviewed this documentation. In addition, the project team members reviewed and accepted the deliverable.

Implementation Managers meet monthly via video conference. This positive approach keeps all districts involved in the statewide rollout. As districts implement PRSM they will continue to participate in the monthly forum where they can provide lessons learned for the remaining districts as they approach implementation.

Quality (Architecture/System Performance) Choose the statement that most closely applies.

Adequately Defined

The system technical architecture is adequately defined, and modeling, benchmarking and testing are being conducted (or are planned) appropriate to the current project phase.

Adequately Defined

Inadequately Defined

The system technical architecture is not adequately defined, or modeling, benchmarking and testing are not being conducted (or are planned) appropriate to the current project phase.

Quarterly PRSM Status Report to the Legislature

Comments: Pilot defects have been addressed with the release being deployed on September 1, 2012. Another release is scheduled for October 5, 2012 that includes the resolution of five defects. As of September 26, the defect count is as follows: Serious – 12; Critical – 1; Moderate – 30; Cosmetic – 6. These defects are prioritized and worked based severity levels.

The project has experienced performance issues in both the production and training environments. The training environment issues are resource constraints since Development, Testing and Training instances all reside on the same server box. An additional server is now installed that will solely host the training environment. To avoid interruption of training sessions, discussion for cutover of this new server is underway.

Although the production performance issues have reduced since pilot, a focus is now on mitigating all network issues. Caltrans and OTech have worked closely to identify and mitigate all of the performance issues.

There is an issue with the archiving architecture, in that the archiving files become full during the process of migrating data into production. A work around is in place at this time to turn off the archiving during the process. Caltrans is waiting for OTech to provide additional allocation for SANS storage. A project risk is open and reviewed weekly.

New Project Risks

List (in priority order) the most critical risks to completing the project within the approved schedule, budget and scope. See instructions for description of desired format. If more than five risks are to be included, copy and paste as needed.

There are no new risks identified during this reporting period.

Progress Toward Addressing Prior Risks

List the risks included in the *New Project Risks* section in previous IPORs. Risks are to remain reported in this section until they are closed or no longer critical, with an explanation of the resolution. See instructions for description of desired content. If more than five risks are to be included, copy and paste as needed.

Risk Identifier	R-9	Risk Statement: Key Critical Resources have left or are leaving the project which may have an impact on decision making, problem solving and/or strategy setting. Description: In the past several months, the initial PRSM project manager has left
Probability	High	
Impact	High	
Timeframe	Short	
Status	Open	
Project Risk No.		

		<p>Caltrans, a new interim manager was appointed in May. IPOC was told that a permanent position has been posted for this position, but based on State hiring timelines it could be several months before this position is filled. In addition, the project manager support (Brian Spray) contract terminates in August and there are no plans to keep him on board for a longer period. This poses a significant risk to the PRSM project by not having dedicated, permanent and knowledgeable staff in place for decision making, trouble-shooting and setting direction or escalating issues.</p> <p>Recommendation:</p> <ul style="list-style-type: none"> • Caltrans Management needs to appoint a permanent staff member in the position of PRSM project manager immediately – the transition in and out of the interim staff is causing disruption to the project team. • Extend the current project manager support staff throughout the remainder of the large pilot and at a minimum, through the first three production district rollouts. There needs to be continuity on the PRSM project and a central team member responsible for risk and issue management, schedule management and scope management. • With significant attrition on the project on both the Caltrans and SAIC teams as we approach Rollout, it may be necessary to revise the roles and responsibilities of the Project Management Plan and the organization/governance processes.
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9/30/12 – The Caltrans PM has an “acting” role, not only as the PRSM PM, but also as the Enterprise Technology Investment Division Chief. The Project Management Support Services contract award is outstanding.

8/31/12 – The permanent Project Management position has not been filled. The project management support contract has expired and the earliest date for the new contract award will be mid-September, leaving a minimum period of three weeks where the schedule management, risk management and issue management tasks will need to be performed by the “acting” Project Manager. This is coming at a time when the project is planning to rollout to District 4 while facing continuing network performance issues, conversion issues and after receiving less than favorable survey results from the large pilot. IPOC highly recommends filling these vacant positions immediately and creating a Staffing Management Plan for the rollout and Maintenance and Operations phases of the application.

7/31/12 –The advertisement for the PRSM PM position has not yet been filled, the position is still open and interviews have been cancelled. TMS is not aware of an approved extension for the PM Support Specialist position. Both of these positions are critical to the success of the future District rollouts and as recommended in June 2012, TMS recommends a continuity of resources for the first few district rollouts. In addition, the IPOC team rolls off in August 2012 as well, opening a risk on the project that lessons learned, corrective action and recommendations for process improvement may not be implemented into future rollout phases.

Quarterly PRSM Status Report to the Legislature

Risk Identifier	R-6	Risk Statement: Lack of performance and scalability planning may lead to issues with the Pilot or Rollout if not resolved quickly. Description: For performance testing, there is a lack of requirements and goals. There is also a lack of a test plan for scalability and performance, and a lack of performance test scripts created and executed. Recommendation: <ul style="list-style-type: none"> • Understand performance requirements – how many users will be on the system concurrently, what is the expected performance metrics for submitting data, what is the expected performance for running reports, what are the scalability requirements? • Take the current scheduling system, establish baseline for these performance requirements, and determine if they are meeting the goals. • If they are not meeting the goals, develop and execute test cases for performance.
Probability	Medium	
Impact	High	
Timeframe	Short	
Status	Open	
Project Risk No.		

9/30/12 – The training environment will be migrated to a new server box so that resources are not competing with the development and testing environments. Caltrans has assigned resources to address network concerns that may be the root cause of the 3-second delay in the production environment. As Districts prepare for rollout, testing of the network traffic for each district will occur.

8/31/12 – There are performance issues with both the training environment as well as production. Production is still experiencing a 3-second delay and the project is bounding production as needed. The training environments are experiencing some major performance, load issues, and need to be rebooted every two hours with a full data refresh each weekend. Even with rebooting the systems every two hours, there is still a long delay that is preventing some training sessions from taking place. The network issues have gone unresolved for many months. IPOC highly recommends that the project reconsider starting the rollout until the performance issues are mitigated.

7/31/12 – The main performance issue is with the response time. The project team and OTECH are looking at server configuration of hardware and load balancers. Ongoing reviews are occurring with OTECH and Caltrans HEAT desk capturing any calls from users. As per Caltrans, performance is much improved from what was experienced in small pilot and large pilot. A “Go” decision was provided on July 10, 2012 after completion of the Large Pilot. At this time, Caltrans does not believe that the on-going performance problems are significant enough to postpone rollout. There is no strategy for conducting performance testing and all performance testing is on hold until the issue with response time is resolved. Caltrans IT owns tools that can be used without cost to create simple scripts that can be used to generate load on click path from login to main navigation to project list page, for example. They have identified three open source tools that may be adequate for this type of testing. Until Caltrans is at a stable performance level, they are not planning to develop a strategic plan.

Quarterly PRSM Status Report to the Legislature

Risk Identifier	R-5	<p>Risk Statement: Inadequate planning for data conversion may cause additional schedule delays and impact the quality of integration testing.</p> <p>Description: There have been unexpected problems with the dry-run data conversion process and for several of the Districts' pilot data; there has not been a successful dry run to date. This may cause additional schedule delays and impact the quality of integration testing. In addition, planning for conversion is behind schedule with the team continuing to document the implementation plan and the end-to-end Caltrans Conversion Process document.</p> <p>Recommendation:</p> <ul style="list-style-type: none"> • Reconcile discrete tasks listed in the go-forward plan with high-level tasks in the project schedule to ensure that all conversion activities are tracked and assigned. • Review of the current conversion metrics showing what has been successfully converted and what remains to be converted. • Include districts in conversion validation activities – no one knows their data better than they do. • In discussions with the project team, they have indicated that they would like to document, by District, where the source data is coming from, what pre-conversion activities or data cleanings have been done so far, what remains to be done, and results of testing. This will help the State identify which district is in the best position to move forward in Pilot. IPOC agrees and supports this approach.
Probability	Medium	
Impact	High	
Timeframe	Medium	
Status	Open	
Project Risk No.		

9/30/12 – Migration of Districts 1, 2 & 3 occurred 26 days behind schedule. All of the data migrated into production with the exception of some missing expenditures. An analysis is being conducted to determine the volume and impact of the missing expenditures. Migration of this data started on September 15, 2012 with an unsuccessful completion. The archiving files became full and the production environment needed to be suspended. At the same time, it was realized that there is a missing step in the loading process, which includes linking the data to existing projects. This missing step will double the time need to load the data into production. Tasks for the new process are included in the schedule for future rollouts. This risk will remain open and reassessed after the next rollout.

8/31/12 – The District 1, 2 & 3 rollout has been delayed due to data validation dependency issues, as well as the other technical mishaps (cable cut in building, power outage at OTECH, network issues, etc.). Due to the delay, the district 4 extract (which has a dependency on data from Districts 1, 2 & 3) is also delayed by about two weeks. The project seems to constantly be resolving conversion and validation problems. Once one problem is fixed, another issue emerges and they can't seem to achieve a stable execution of conversion and validations. With the project ready to being large-scale rollout, IPOC is concerned that the conversion scripts are not stable enough to start this phase.

Quarterly PRSM Status Report to the Legislature

7/31/12 – Integration testing has completed. Large pilot conversion completed without major incident and the north region conversion is in progress and on schedule. A “Go” decision was made in mid-July to proceed with rollout activities. The schedule was significantly re-work to add additional validation activities for conversion and rollout. Although not a popular recommendation, IPOC continues to recommend that the PRSM team actively work with each district on the district Readiness Checklist and validate that prior to implementation, all columns are ready for rollout. We continue to recommend that conversion results be maintained in a matrix so that is easy to determine trends and pro-actively address problems before they happen.

Risk Identifier	R-1	<p>Risk Statement: Lack of effective organizational change management or District buy-in for Pilot could lead to lack of acceptance of PRSM or to new PRSM processes.</p> <p>Description: One of the most significant challenges to the PRSM Project could be engaging and obtaining buy-in from district executives, management and staff. It is very important that District executives and management are knowledgeable about PRSM and the changes to their business processes and benefits of using PRSM. District staff, in addition to training, should be knowledgeable of the decisions and consequences of changing/standardizing business processes. Lack of engagement of District personnel at all levels could have a negative impact on overall PRSM system acceptance and usage.</p> <p>Recommendation:</p> <ul style="list-style-type: none"> • Assess the changes to the training program/plan proposed in the most recent implementation vendor change request in order to understand the impact on Organizational Change Management. Work with the Districts to help them understand the changes to the training program in order to gain organizational buy-in and confirm that the program is adequate to enable a successful rollout. • Consider hiring/extending additional consulting resources to assist with refining the organizational change management plan and to execute the plan. • Involve the end users in a more direct way and allow them to participate in the risk management process. This will allow the project team to obtain early buy-in and a stake in the project. Hold a risk identification session to identify the district concerns of the pilot activities and help define appropriate mitigation strategies to address the risks identified.
Probability	Medium	
Impact	Medium	
Timeframe	Medium	
Status	Open	
Project Risk No.		

Quarterly PRSM Status Report to the Legislature

		<ul style="list-style-type: none">• Analyze current methods of communication to determine if additional processes need put in place to get the districts to open up the channels for communicating risks and issues associated with pre-pilot, pilot and post pilot activities.• Engage the districts in reviewing business functionality and business processes.
<p>9/30/12 – District 4 has been engaged with cleaning their data for conversion readiness and has begun training. District 4 staff has shown enthusiasm about migrating to the PRSM system and is requesting post-training access to the system. Access to either production as “read only” or continued access to the training environment has been requested. This is a positive indication that customer buy-in exists. This risk will remain open through District 12 readiness to ensure that this positive response continues.</p> <p>8/31/12 – The large pilot survey results and comments validated that needs to be additional focus on the business process side of the PRSM implementation. Neither a tool without a process nor a process without a tool leads to a productive, efficient and accepted system. Survey participants stated that they don’t understand how their daily work fits into the puzzle of PRSM. The PRSM training is very focused on using the tool, however, additional attention needs to be placed on showing how the tool works within the district specific business processes and daily activities of the users.</p> <p>7/31/12 – Numerous activities have been taking place in the districts over the past few months to prepare them for rollout. For example, in District 4, Caltrans identified district PRSM subject matter experts (SMEs) and conducted team building activities, as well as delivered presentations and conducted weekly discussions to the district. Implementation Manager (IM) and SMEs were trained on PRSM changes and impacts, including time charging & task management. The team delivered one-week SME training in District 4, conducted meetings with District 4 IM and implementation team for District 4 PRSM readiness and rollout planning, and conducted two-week SME User sessions using sandbox in PRSM training environment for the SMEs.</p>		

Closed Risks

No risks were closed during this reporting period.

General Comments

The IPOC contract with TMS expired on 8/31/12. CA Technology Agency will now perform oversight on the PRSM project.

District 4 is the largest district to migrate and go live during Phase I rollout. District 4 has indicated that their data is clean and is ready for staging and validation. District 4 is eager to have access to the production environment as “read only” or continued access to the training environment for staff to maintain and practice skills learned during the training sessions. This demonstrates the willingness to utilize and buy-in from the District 4 staff of the new system.

Quarterly PRSM Status Report to the Legislature

District 4 has 614 projects to be migrated. To assist in mitigating any problems or issues with data conversion and/or migration, nine pilot projects will be migrated first. It is anticipated that this approach will be used with each district rollout. Using this pilot approach for each district provides readiness to ensure that a successful migration occurs.

CALTRANS - PRSM Project Oversight Review Checklist (September 2012)

Project Oversight Review Checklist: High Criticality Project

Practices and Products	Adequacy	Deficiency	Notes: Items Reviewed; Interviews Conducted; Demonstration
Planning and Tracking			
Have the business case, project goals, objectives, expected outcomes, key stakeholders, and sponsor(s) identified and documented?	✓		TMS reviewed the last approved SPR dated April 2012. TMS validated that the dates in the project schedule correspond to the new baselined dates (Baseline 1) as a result of the SPR approval for cost and schedule.
Has a detailed project plan with all activities (tasks), milestones, dates, and estimated hours by task loaded into CA-PMM Toolkit or other identified software? Are the lowest level tasks of a short duration with measurable outcomes?	✓		The project does use an MS Project schedule to track the work. Tasks, milestones dates and estimated hours are documented within the schedule and the tasks, for the most part, are represented as manageable, traceable items with durations less than 80 hours.
Is completion of planned tasks recorded within the CA-PMM Toolkit, Microsoft Project, or other identified software?	✓		Changed from Deficient to Adequate in February 2012. Caltrans revised the project schedule to account for the slight delay in rollout activities which has translated with a delay in the overall end date. TMS reviewed this schedule and found that almost all of the recommendations made in our one-time assessment report were mitigated in the new revision.
Are actual hours expended by task recorded at least monthly within the CA-PMM Toolkit or other identified software?		✓	As per the project team, PRSM budget information for each contract is accessed by using the PMO and CA-PMM monthly reports and the SPR. Each month, the project rolls each of the contract expenditures into the CA-PMM report for total project costs. Actual costs are reported, as are actual percent complete. However, hours by task are not tracked at either the State or the vendor level, so this category is Deficient as per the checklist requirements.
Are estimated hours to complete by task recorded at least monthly within the CA-PMM Toolkit or other identified software??	✓		As per Caltrans, this will be addressed with additional resource loading and reporting of actual start and finish data in future reporting periods. The project schedule is updated weekly and reviewed during the weekly project status meeting.
Is there a formal staffing plan, including a current organization chart, written roles and responsibilities, plans for staff acquisition, schedule for arrival and departure of specific staff, and staff training plans		✓	TMS has not been exposed to a formal staffing plan. We have reviewed the Project Organization Chart that documents the overall structure and high-level roles; however, a breakdown of specific staff on the vendor side and State side is not clear. Roles and responsibilities are defined within each project process plan (i.e. change management roles and responsibilities are defined within the Change Management Plan), however, TMS has not seen an overall

Quarterly PRSM Status Report to the Legislature

Practices and Products	Adequate	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
			<p>description of the general roles and responsibilities for the project team (vendor and State).</p> <p>With the attrition that is natural in the system integrator team as we start to get closer to rollout, and with the significant resource transitions that have occurred at the State level on the project, a Staffing Plan and strategy for transition become more critical to success. IPOC has recommended that the State develop a Staffing Plan for the remainder of the rollout activities to assist in planning resources for both the State and SAIC and to assist in the resolution of resource conflicts.</p>
Have project cost estimates, with supporting data for each cost category, been maintained?		✓	As per the project team, PRSM budget information for each contract is accessed by using the PMO and CA-PMM monthly reports and the SPR. Each month, the project rolls each of the contract expenditures into the CA-PMM report for total project costs. TMS has reviewed the cost tracking that the project includes within the CA-PMM and observes that the actual expenditures are summarized as total amount "to-date"; however, no estimated future costs or projections are included. TMS has also reviewed the PRSM Payment Milestone and Deliverables spreadsheet for SAIC vendor costs, including the updated costs for the August reporting period.
Are software size estimates developed and tracked?	NA	NA	
Are two or more estimation approaches used to refine estimates?	NA	NA	
Are independent reviews of estimates conducted?	NA	NA	
Are actual costs recorded and regularly compared to budgeted costs?	✓		Status changed from Deficient to Adequate in June 2012. The CA-PMM status report cost tracking summary shows various project categories, last approved SPR cost and cumulative actual costs for the total project, but not by month or fiscal year. The PRSM Payment Milestone and Deliverables spreadsheet shows actual costs incurred for vendor deliverables.
Is supporting data maintained for actual costs?	✓		Status changed from Deficient to Adequate in June 2012. The Microsoft Excel version of the CA-PMM status report shows comments notes for each new data entry for the cumulative actual costs and registers the amount of invoices paid to the various vendors and subtotals on Total of One-Time IT Project Costs, Total of Continuing Project Costs and Total Project Costs.
Is completion status of work plan activities, deliverables, and milestones recorded, compared to schedule and included in a written status reporting process?	✓		IPOC meets twice a month with the project team and other oversight entities to review project status and review schedule status, deliverables, milestones and key activities. The current schedule adequately tracks all major deliverables, milestones and activities.
Are key specification documents (e.g. contracts, requirement specifications and/or contract deliverables) and software products under formal configuration control, with items to be controlled and specific staff roles and responsibilities for configuration management identified in a configuration management plan?		✓	TMS has reviewed the Configuration Management Plan at a high level and found that there are some gaps in terms of the promotion process, specific roles and responsibilities for some of the configuration management tasks and a lack of configuration control for some of the project management process documentation. TMS is more concerned

Quarterly PRSM Status Report to the Legislature

Practices and Products	Adequacy	Deficiency	Notes: Items Reviewed; Interviews Conducted; Demonstration
<p>Are issues/problems and their resolution (including assignment of specific staff responsibility for issue resolution and specific deadlines for completion of resolution activities), formally tracked?</p>	✓		<p>with the execution of configuration management and the concern that the project is not following the drafted procedures defined in the plan. TMS is not aware of any planned changes or revisions to the current Configuration Management Plan.</p> <p>Status changed from Deficient to Adequate in April 2012.</p> <p>TMS has reviewed the <u>Issue Management Plan</u>. Formal risk and issue management processes were executed on the project from the time IPOC started in July 2011 through November 2011. At that time the risk and issue meetings were cancelled. The meetings resumed again in April 2012 and are being conducted in a very thorough manner according to best practices. Current issues and risks are reviewed and the team has added several new risks and issues to the log in the past month.</p>
<p>Is user satisfaction assessed at key project milestones?</p>	✓		<p>Through documentation review, it appears that users have been engaged in product reviews and training reviews and have participated in regular meetings to discuss organizational change management and pilot preparations. However, TMS reviewed the <u>Communication Management Plan</u> and observed that the plan does not address communication methods to and from the districts. District 3 was engaged in the small pilot and districts 1, 2, and 3 were engaged in the large pilot. User surveys were conducted for both the small and large pilots as well as user activity sessions were daily feedback was received.</p>
<p>Is planning in compliance with formal standards or a system development life cycle (SDLC) methodology?</p>		✓	<p>Compliance with PMBOK standards is not adequate for this phase of the project. Although this project does not contain a typical design and development cycle, there are requirements, configuration and testing that need to be tracked and managed in a similar way to that of a typical development project.</p> <p>TMS believes that a modified SDLC should have been adopted for the project that clearly identifies how validation of expected behavior will occur (i.e. description of the requirements management, configuration management and test management areas of the SDLC).</p> <p>Although the project is not in compliance with a formal standards or SDLC methodology, at this phase in the project IPOC does not see value in creating a document describing the methodology. However, TMS has observed that the project schedule and the approved strategy for realigning testing, pilot and conversion adopts a more tactical approach to validation of the product prior to the pilot phase. This alleviates many of the concerns of a non-standard SDLC. PRSM has reviewed the gaps in the traceability matrix to ensure proper testing coverage and has also held weekly review of testing metrics to understand the current progress being made and clearly defined entry and exit criteria. All of these are improvements to the previous process. At this point in the project, there are no further improvements to be made that would add value.</p>

Quarterly PRSM Status Report to the Legislature

Practices and Products	Adequate	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
Is there a formal enterprise architecture in place?	✓		The RFQI describes the target Caltrans enterprise environment.
Are project closeout activities performed, including a PIER, collection and archiving up-to-date project records and identification of lessons learned?	NA	NA	
Procurement			
Are appropriate procurement vehicles selected (e.g. CMAS, MSA, "alternative procurement") and their required processes followed?	✓		The final contract was signed by the Implementation Vendor on February 26, 2009. Caltrans received, reviewed and signed the contract on February 27, 2009. DGS Legal reviewed and signed the contract on March 5th, 2009.
Is a detailed written scope of work for all services included in solicitation documents?	✓		Detailed written scope of work is contained in the RFP.
Are detailed requirement specifications included in solicitation documents?	✓		Detailed requirement specifications are contained in the RFP. Requirements are also described in the RFQI and Value Analysis documents.
Is there material participation of outside expertise (e.g. DGS, Departmental specialists, consultants) in procurement planning and execution?	✓		Outside expertise and counsel has been sought from DOF, DGS, and consultants when appropriate.
For large-scale outsourcing, is qualified legal counsel obtained?	NA	NA	
Risk Management			
Is formal continuous risk management performed, including development of a written risk management plan, identification, analysis, mitigation and escalation of risks in accordance with the CA-PMI, and regular management team review of risks and mitigation progress performed?	✓		<p>Status changed from Deficient to Adequate in April 2012.</p> <p>TMS has reviewed the <u>Risk Management Plan</u> and it contains well documented processes and procedures that include Risk Identification, Risk Analysis, Risk Response Planning, Risk Monitoring and Control and Risk Communication. The plan does not address any formalized approach to risk identification (such as periodic brainstorming sessions, SEI risk identification checklists or the use of software tools). TMS has also observed risk management metrics are not included in this part of the risk planning or execution.</p> <p>Formal risk and issue management processes were executed on the project from the time IPOC started in July 2011 through November 2011. At that time the risk and issue meetings were cancelled. The meetings resumed again in April 2012 and are being conducted in a very thorough manner according to best practices. Current issues and risks are reviewed and the team has added several new risks and issues to the log in the last few reporting periods.</p>
Does the management team review risks and mitigation progress at least monthly?	✓		Status changed from Deficient to Adequate in April 2012. Formal risk and issue management processes were executed on the project from the time IPOC started in July 2011 through November

Quarterly PRSM Status Report to the Legislature

Practices and Products	Adequacy	Deficiency	Notes: Items Reviewed; Interviews Conducted; Demonstration
Are externally developed risk identification aids used, such as the SEI "Taxonomy Based Questionnaire"?	✓		<p>2011. At that time the risk and issue meetings were cancelled. The meetings resumed again in April 2012 and are being conducted in a very thorough manner according to best practices. Current issues and risks are reviewed and the team has added several new risks and issues to the log in the past month.</p> <p>Status changed from Deficient to Adequate in April 2012 The PRSM Risk Identification process describes how any stakeholder can submit a risk, defines the process for completing the "PRSM Risk Identification and Response Plan" and addresses how the initial risk is validated and assigned. An initial formal SEI-based assessment was conducted several years ago, and in April 2012 when the risk meetings resumed, another brainstorming session took place to identify new risks. The project stakeholders are frequently solicited for risk identification in the bi-monthly meetings.</p>
Communication			
Is there a written project communications plan?	✓		<p>The latest version of the finalized and approved Communications Plan is dated 6/22/2009. TMS has reviewed the <u>Communication Management Plan</u>, which has a very thorough list of Roles and Responsibilities defined and contains an organization chart showing the relationships of the major stakeholders on the project. However, TMS has observed that this organization chart is out of date and that the Roles and Responsibilities tend to focus mostly on the immediate project team, with very little reference to district communication. TMS is not aware of any planned changes or revisions to the current <u>Communication Management Plan</u>.</p>
Are regular written status reports prepared and provided to the project manager, department CIO (if applicable) and other key stakeholders?	✓		<p>Status changed from Deficient to Adequate in June 2012. TMS is aware that the project does formally report to CTA on a monthly basis.</p>
Are there written escalation policies for issues and risks?	✓		<p>Both the <u>Risk Management Plan</u> and the <u>Issue Management Plan</u> contain a risk escalation process.</p>
Is there regular stakeholder involvement in major project decisions, issue resolution and risk mitigation?	✓		<p>TMS is aware that monthly Implementation Meetings are held with select district stakeholders for the purpose of keeping the project and to project managers regularly updated on the status of the project and to receive their input. At the recommendation of the PRSM Project manager, TMS is not attending these meetings but is available to review status documentation or meeting minutes to determine the value-add in meeting stakeholder expectations about involvement in the deployment process. Large pilot user PM & TM training completed successfully and large pilot completed on June 29. Training facilities have all been reserved, trainee invitations sent, materials produced and trainers scheduled. Additional sessions for T4T and custom reporting are scheduled. The</p>

Quarterly PRSM Status Report to the Legislature

Practices and Products	Adequacy	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
System Engineering			
Are users involved throughout the project, especially in requirements specification and testing?	✓		Districts have been added to the monthly Implementation Manager's meetings, districts have stronger participation in validating the converted data and for discussing risks and issues on the project. A survey was sent to the districts in early August to determine rollout readiness and identify any corrective actions needed in rollout based on participation in small and large pilot. IPOC performed an assessment of this survey and provided recommendations to the project team for improvement in processes based on district responses.
Do users formally approve/sign-off on written specifications?	✓		Configuration requirements baseline, customizations and deleted requirement agreements were reviewed by Caltrans at regularly scheduled Checkpoint meetings and feedback was provided to the Implementation Vendor. Through documentation review, it appears that users have been engaged in product reviews and training reviews and have participated in regular meetings to discuss organizational change management and pilot preparations.
Is a formal system development life cycle (SDLC) methodology followed?	✓		The project schedule is categorized into high level summary tasks: program Milestones, Project Management, PRSM Adaptation Phase, Testing Phase, PRSM Pilot phase, PRSM Rollout, Statewide Rollout Acceptance and state Closeout.
Is a software product used to assist in managing requirements? Is the tracking of requirements traceability performed through all life cycle phases?	✓		Changed from Inadequate to Adequate in March 2012. TMS has reviewed spreadsheets of requirements but is unaware of any other tool that is currently being used to manage requirements. Traceability matrices do exist and have been reviewed at a high level by TMS. These traceability matrices are significantly out of date. TMS has also reviewed the traceability spreadsheets in the project document library and found that there are many to-be use cases that are not traced to any associated test cases. This could be an indication of insufficient testing coverage. TMS provided this data to Caltrans and they have gone through the testing materials to complete the mapping. A review of the approach Caltrans took for this exercise was reviewed by TMS and found to be consistent with our recommended mitigation. There are (12) Unknown mappings that could be out-of-the-box functionality that is not used by Caltrans, or an item that was removed or re-designed. There were (4) items that could not be traced and require some additional investigation. Based on the significant improvement in mapping completed by the PRSM team on filling the gaps of the No Match and Partial Match requirements, IPOC now finds this category Adequately Defined.
Do software engineering standards exist and are they followed?	✓		Engineering standards exist and are documented in the PRSM

Quarterly PRSM Status Report to the Legislature

Practices and Products	Adequacy	Deficiency	Notes: Items Reviewed; Interviews Conducted; Demonstration
			<p>Configuration Management Plan. TMS has reviewed the Configuration Management Plan at a high-level and will complete a more in-depth assessment in the future.</p>
Does product defect tracking begin no later than requirements specifications?	✓		<p>As per the Adaptation Test Plan dated July 1, 2001, Test Team members document defects in iCenter's Test Tracker as they find them, starting at the Testing Phase. A process is defined for the Test Leads to review open iCenter Test track issues with PRSM team members and also identifies a process to identify, classify and resolve test anomalies. In addition, a document titled PRSM Anomaly Identification and Resolution Process Utilizing Test Tracker provides detailed instructions for how to use the defect tracker.</p>
Are formal code reviews conducted?	✓		<p>TMS is aware that the PRSM Project Team has performed formal configuration reviews to occur during checkpoints throughout the Adaptation Phase. TMS has not been exposed to any code review documentation or Checkpoint 4 review documentation.</p>
Are formal quality assurance procedures followed consistently?		✓	<p>TMS reviewed the Quality Management Plan and observed that it contains a high-level of detail for the review, analysis and approval of formal deliverable documentation from the vendor. However, TMS did find the overall process and procedure for non-deliverable quality management to be lacking. The Quality Management Plan contains a single-line reference to the Configuration Management, Change Control, Issue Management and Risk Management plans but does not discuss what activities are performed by the quality team to ensure these process areas are functioning efficiently, correctly and in accordance to the documented processes and procedures. There are some quality activities defined for requirements management, however, the frequency for when those activities take place, the tools used to perform the activities and the reporting vehicle for those activities are not defined.</p>
Do users sign-off on acceptance test results before a new system or changes are put into production?		✓	<p>Project has just started the Rollout Phase in July 2012. An Implementation Plan was completed late and a separate rollout schedule was developed and later integrated into the master schedule. At this point, TMS is unaware of any formal sign-off activities scheduled for rollout with the districts.</p>
Is the enterprise architecture plan adhered to?			<p>TMS is aware that Caltrans is in the process of creating a formal enterprise architecture plan. The PRSM technology solution was requested to be submitted as part of the study. However, TMS has not been exposed to the enterprise architecture plan.</p>
Are formal deliverable inspections performed, beginning with requirements specifications?	✓		<p>The PRSM Quality Management Plan contains a high-level of detail for the review, analysis and approval of formal deliverable documentation from the vendor. Upon review of the PRSM project schedule, it appears that formal deliverable inspections are conducted for critical milestones of the project.</p>
Are IV&V services obtained and used?	✓		<p>The IV&V Contract was approved and the IV&V Vendor</p>

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Practices and Products	Adequacy	Deficiency	Notes: Items Reviewed; Interviews Conducted; Demonstration
			began work in April 2008.

IPO Report for August 2012

Project Name: Caltrans Project Resource Scheduling Management (PRSM) System

Assessment Date: August 31, 2012

Frequency: Monthly

Oversight Provider Information

Oversight Leader: Cindy Blehm

Organization: Technology Management Solutions, Inc.

Phone Number: 916-591-1746

Email: cindyblehm@aol.com

Project Information

Project Number: 2660-160

Department: Transportation (Caltrans)

Criticality: High

Agency: Business, Transportation & Housing

Last Approved Document/Date: SPR (4/2/2012)

Total One-time Cost: \$26,947,129

Start Date: June 7, 2000

End Date: May 24, 2013

Project Manager: Steve Kawano (acting)

Organization: Caltrans

Phone Number: 916-749-5675

Email: steve_kawano@dot.ca.gov

Summary: Current Status

Project Phase: **PRSM Large Pilot Phase**

Planned Start Date: December 22, 2011

Planned End Date: August 29, 2012 (per approved SPR)

Actual Start Date: December 22, 2011

Forecasted End Date: July 12, 2012

Project Phase: **Post Pilot Deliverables**

Planned Start Date: No baseline date

Planned End Date: No baseline date

Actual Start Date: April 23, 2012

Forecasted End Date: September 17, 2012

Project Phase: **PRSM Rollout Phase**

Planned Start Date: April 18, 2012

Planned End Date: May 24, 2013 (per approved SPR)

Actual Start Date: April 9, 2012

Forecasted End Date: June 18, 2013

Schedule

Select the statement that most closely applies, measured against the last Finance approved document.

On-Schedule

Ahead-of-schedule:

One or more major tasks or milestones have been completed and approved early (> 5%).
All other major tasks and milestones completed and approved according to plan.

On-schedule:

All major tasks and milestones have been completed and approved according to plan.
(Within 5%)

Behind Schedule:

One or more major tasks or milestones are expected to be delayed. (> 5%)

Comments:

The SPR for PRSM was approved on April 2, 2012 which reset the baseline for the project. The project schedule is now tracking to Baseline 1. Pilot conversion tasks added detail and the project team has added more State and vendor resources for the rollout tasks. The project team has reworked the rollout schedule to redefine tasks, reevaluate the durations and timeframes and add resources to the tasks, however, the new schedule does not contain all the milestones and deliverables that exist in the old schedule. Work is underway to integrate these two schedules, however, in the interim, both schedules must be maintained. The current schedule shows completion of the end of the Adaptation Phase on May 16, which was (51) forty-one days later than the SPR baseline completion date of March 26, 2012. All adaption tasks are complete with the exception of the final payment point.

The current schedule shows the end of the Large Pilot on 07/12/2012 which is (48) days earlier than projected. However, this may be misleading because the activities that used to comprise the post pilot deliverable and close-out phase have since been moved out of the large pilot summary tasks and into their own task. Post Pilot activities are now scheduled to end on 09/17/2012 (almost a full month later than reported in July) and are made up of the evaluation activities for pilot, formal documentation and some preparation for rollout. Rollout activities started on 06/13/12 with the first district training (districts 1, 2, and 3), but the project has faced delays during rollout due to conversion issues, validation issues, network issues and power outages. The original go-live date according to baseline 1 was 8/17/12 and the new anticipated go-live date has been pushed to 9/10/12.

The project team is doing a commendable job of documenting in notes the reason for delays in all sub-tasks, and a go forward plan of getting the tasks back on track. The project team also provides documentation related to the revision of dependency dates that impact downstream milestones. Both of these activities are excellent schedule management practices.

Large pilot activities concluded on schedule after nine weeks and the large pilot team gave the GO decision to move to rollout activities. The Pilot Evaluation report (deliverable #15) was delivered and is in the two week review period. Deliverable #20 Technical As-Built Documentation has also been sent out for review. Both of these deliverables are dependencies for rollout activities.

Starting in April 2012, IPOC began tracking the baseline dates for each phase against the forecasted date in each IPOR and will continue to do so for each new reporting period. This data was based off the last revised schedule dated 08/21/2012.

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Phase	Baseline Task ID	Baseline Start	Baseline End	Forecast Start	Forecast End	Variance in end dates (in days)	% complete	Dates between baseline	Dates between forecast
Adaptation	28	4/11/2011	3/26/2012	4/11/2011	6/16/2012	-51	99%	0	-51
Small Pilot	None	12/2/2011	21-Mar	2-Dec	3/23/2012	-2	100%	0	-2
Large Pilot	None	12/22/2011	8/29/2012	12/22/2011	7/12/2012	48	100%	0	48
Post Pilot Deliverables	None			4/23/2012	9/17/2012		80%		
Rollout	515	4/18/2012	5/24/2013	4/9/2012	6/18/2013	25	13%	9	-3
Statewide Acceptance	874	5/8/2013	6/19/2013	5/8/2012	7/11/2013	22	0%	0	0
Overall	1	4/11/2011	7/19/2013	4/11/2011	8/12/2013	24	79%	0	0

NOTE: This was built on the 8/21/12 version of the project schedule provided by Caltrans

Resources (Level of Effort) Choose the statement that most closely applies.

Fewer Resources

Completion of one or more major tasks and / or acceptable products has required or is expected to require materially (>5%) fewer hours/staff than planned.

Within Resources

Within Resources

All major tasks have been completed and acceptable products created using the planned number of hours/staff (within 5%).

More Resources

Completion of major tasks and / or acceptable products has required or is expected to require materially (>5%) more hours/staff than planned.

Comments: Now that the project has completed the majority of the Large Pilot Phase and has entered the Rollout Phase, the resource needs are expected to change. The project is in the process of determining how to staff up the IT team for maintenance, operations and level 3 support. As per a verbal discussion with the PRSM Project manager, an estimated 2.5 FTE's are required to maintain PRSM and it is critical that this team comes on board quickly to leverage the Knowledge Transfer and education sessions the vendor will be providing during the final year of the contract. SAIC is scheduled to have two trainers teaching PM classes through rollout. There have been discussions of bringing a third online for overlapping session in D4 and some phase 2 rollout districts, but nothing has been solidified yet. Additionally, the vendor resources will be reduced to 1 training resource for one year, 2 technical resources for one year and 1 technical resource for 3 months. The tasks and responsibilities for these resources are not yet defined. TMS recommends that the specific task allocations and expectations should be set for these resources and the deliverables they will produce or milestones they are expected to achieve during that time (for example, there is no methodology or expectations defined for the Knowledge Transfer activities that SAIC is responsible for executing during rollout).

The project schedule has been revised to include updated rollout tasks, updated durations and timeframes and resources assigned to each task.

The PRSM project manager left the PRSM project effective April 6. Since that time, the project has transitioned to two interim project managers. Caltrans has advertised for a permanent State employee to fill the PM position, but the position has not yet been permanently filled. In addition, the Project Management Support Services contract has expired and although there is a requisition posted to renew this position, the award will not go out until mid-September. In addition to his previous responsibilities in IT, the interim Project Manager will now need to take over the schedule management, and risk and issue management activities on the project during the gap in services for the Project Management Support Services consultant. As the project enters the start of the official rollout phase, the timing of these open positions is a big risk to the project. IPOC opened up a risk in June 2012 related to these critical resource issues.

In addition, in this reporting period, the project team lost their dedicated IT Lead for PRSM which may ultimately impact the ability to push forward on resolving the performance issues and planning for transition. No replacement has been announced.

IPOC recommends that the project create a Staffing Management Plan for Rollout and Maintenance and Operations of the PRSM application. As SAIC transitions more responsibility to Caltrans, an

Quarterly PRSM Status Report to the Legislature

accurate understanding of staffing needs will be critical for a seamless transition.

Resources (Budget/Cost) Choose the statement that most closely applies.

Less cost
The project is (>5%) under budget.

Not Able to Assess

Within cost
The project is operating within budget.

Higher cost
Material budget increases (>5%) are likely.

Comments: The funding source for PRSM is the State Transportation Fund. TMS has reviewed the vendor deliverable tracking spreadsheet and the updated cumulative expenditures that the project has reported in the most current CA-PMM report for August 2012.

The totals for the CA-PMM status report for the June reporting period are included below. IPOC reviewed the CA-PMM status report for the July reporting period and it appears as if another project's data has been used – the cumulative totals and SPR4 totals are not consistent with what has been reported thus far. Total project approved costs remain at \$36,377,496 and the Cumulative Actual Cost to date remains at \$23,426,372. NOTE: These numbers are based on the latest approved SPR 4/2/12.

	SPR 4 Costs	Cumulative Actual Costs
Project Costs	\$36,377,496	\$23,426,372
One-Time	\$26,947,129	\$20,541,499
Continuing	\$9,430,367	\$2,884,873
Annual M&O	\$2,057,000	\$0

As per the Vendor Payment Point and Deliverables spreadsheet, SAIC has been paid \$8,324,850 (less holdback) of the \$13,200,656 contract.

	Budgeted	Invoiced
Planning	\$1,009,739	\$908,765
Adaptation	\$4,933,935	\$4,422,542
Pilot	\$2,807,271	\$2,073,543
Rollout	\$2,211,424	\$0
Maintenance	\$2,128,292	\$920,000
Unanticipated	\$109,995	\$0
TOTAL	\$13,200,656	\$8,324,850

In order to properly assess the cost for PRSM, TMS must be able to view the expended and projected monthly tracking expenditures and compare that to the economic analysis worksheet in the last approved SPR. To date, TMS has only been exposed to budgeted and actual costs, but has not observed forecasting of projected costs against SPR EACs. Because of this, TMS has stated that we are Unable to Assess the Resources (Budget/Cost) section.

Quality (Client Functionality) Choose the statement that most closely applies.

Adequately Defined

Required client functionality is adequately defined, and is being successfully built into the system, given the current project phase.

Adequately Defined

Inadequately Defined

One or more significant components of required client functionality are inadequately defined, or are not being successfully built into the system, given the current project phase.

Comments: TMS has reviewed the requirements and to-be use cases and workflows created for PRSM and found them to be quite thorough and inclusive of the underlying solution flow. In previous months, TMS reviewed the traceability spreadsheets in the project document library and found that there were many to-be use cases that are not traced to any associated test cases. IPOC was concerned that this could be an indication of insufficient testing coverage. TMS provided this data to Caltrans and they have gone through the testing materials to complete the mapping. A review of the approach Caltrans took for this exercise was reviewed by TMS and found to be consistent with our recommended mitigation. There are (12) Unknown mappings that could be out-of-the-box functionality that is not used by Caltrans, or an item that was removed or re-designed. There were (4) items that could not be traced and require some additional investigation. SAIC resources are working with Caltrans staff to determine how to resolve the unknown mappings that still exist, but this task is overdue by two months.

During the Small Pilot and Large Pilot, the PRSM team conducted twice daily user activity sessions that focused on utilizing PRSM functionality for specific use case scenarios. These user sessions were a huge success and allowed the PRSM team to adapt some of the PRSM flow and functionality to better fit the way the application will be used in the districts. Additionally, the team continues to work with District 4 (the second district scheduled for rollout) to work through early user activity sessions to prepare them for rollout.

The large pilot survey results did indicate that the PRSM application is difficult to use and that there is a lack of understanding of how to perform daily tasks. IPOC conducted a one-time assessment report on the large pilot survey results from the districts and has recommended to the project that the training materials be updated to include examples and exercises that address the district specific business processes and map how the users used to perform those tasks and how PRSM would be used to perform those same activities.

Quality (Architecture/System Performance) Choose the statement that most closely applies.

Adequately Defined

The system technical architecture is adequately defined, and modeling, benchmarking and testing are being conducted (or are planned) appropriate to the current project phase.

Inadequately Defined

Inadequately Defined

The system technical architecture is not adequately defined, or modeling, benchmarking and testing are not being conducted (or are planned) appropriate to the current project phase.

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Comments: TMS is aware that the Implementation Vendor has submitted a Configuration Management Plan, High Level Design, Test Plan and updated Architecture Diagram. The Production environment hardware has been configured and turned over to Caltrans. The project has completed the majority of the activities in the Large Pilot phase and declared a "Go" on July 10th for District Rollout. System and Regression Testing completed on June 29; however, some defects have been moved into the next monthly release. Several outstanding pilot defects were released with the first monthly defect release on July 1; the second release is scheduled for August 5 and will address the remaining pilot defects. The project team has prepared a summary of all testing results that includes all System Test cases, the status of each test case, the defects generated from each test case and the status of those defects.

Additionally, the project is still experiencing some network performance issues that will most likely affect the user experience, both in the training environments as well as in production. Response time between refresh is running at approximately 3 seconds. OTECH is actively working to mitigate the issue and feels confident that the issues will be resolved prior to roll-out. Until such time that the performance issues are resolved or IPOC has evidence that the response time and system availability are within the stated requirements, this category is defined as Inadequately defined. IPOC recommends that the project resolve these critical network performance issues prior to rolling out to district 4.

New Risks

IPOC has no new risks to report for this reporting period.

Progress Toward Addressing Prior Risks

Risk R-9: Key Critical Resources have left or are leaving the project which may have an impact on decision making, problem solving and/or strategy setting.

Original Risk Statement: In the past several months, the initial PRSM project manager has left Caltrans, a new interim PM was assigned in her place who served for six weeks. That interim PM was replaced with a new interim project manager in May. IPOC was told that a permanent position has been posted for this position, but based on State hiring timelines it could be several months before this position is filled. In addition, the project manager support (Brian Spray) contract terminates in August and there are no plans to keep him on board for a longer period. This poses a significant risk to the PRSM project by not having dedicated, permanent and knowledgeable staff in place for decision making, trouble-shooting and setting direction or escalating issues.

Probability: **Impact:** **Timeframe:**

Severity: **Opened:** **Status:**

IPOC Recommendations:

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- Caltrans Management needs to appoint a permanent staff member in the position of PRSM project manager immediately – the transition in and out of interim staff is causing disruption to the project team.

Status: The advertisement for the permanent position for PRSM Project Manager is still open. There have been several applicants including the current interim Project Manager. TMS recommends escalating the hiring of the new PM as soon as possible so that they will be involved in the Go/No-Go decision and the start of rollout. TMS continues to recommend placing continuity of service as a strong criteria when selecting the final candidate.

- Extend the current project manager support staff throughout the remainder of the large pilot and at a minimum, through the first three production district rollouts. There needs to be continuity on the PRSM project and a central team member responsible for risk and issue management, schedule management and scope management.

Status: TMS has been informed that the request for continuation has been submitted; however, the contract will not award until mid-September and the current Project Management Support hours have already expired. In the interim, the schedule update and management as well as risk and issue management work will need to be performed by the acting Project Manager, who is already performing multiple roles.

- With significant attrition on the project on both the Caltrans and SAIC teams as we approach Rollout, it may be necessary to revise the roles and responsibilities of the Project Management Plan and the organizational/governance processes.

Status: No updates to the Project Management Plan have been made.

- (NEW) With the Project entering Maintenance and Operations of the PRSM application and starting rollout to the remaining districts, a revised (or new) Staffing Management Plan is necessary to ensure the right resources are allocated to the remaining work.

Status:

08/31/12: The permanent Project Management position has not been filled. The project management support contract has expired and the earliest date for the new contract award will be mid-September, leaving a minimum period of three weeks where the schedule management, risk management and issue management tasks will need to be performed by the Acting Project Manager. This is coming at a time when the project is planning to rollout to district 4 while facing continuing network performance issues, conversion issues and after receiving less than favorable survey results from the large pilot. IPOC **highly** recommends filling these vacant positions immediately and creating a Staffing Management Plan for the rollout and Maintenance and Operations phase of the application.

07/31/12: The advertisement for the PRSM PM position has not yet been filled, the position is still open and interviews have been cancelled. TMS is not aware of an approved extension for the PM Support Specialist position. Both of these positions are critical to the success of the future District rollouts and as recommended in June 2012, TMS recommends a continuity of resources for the first few district rollouts. In addition, the IPOC team rolls off in August 2012 as well, opening a risk on the project that lessons learned, corrective action and recommendations for process improvement may not be implemented into future rollout phases.

06-30-12: The PRSM project has undergone significant changes in resources over the past year. Unfortunately, without extensive knowledge transfer documentation, the learning curve when bringing on a brand new resource takes time and the project loses productivity. As rollout approaches, it is very critical that the first five or six rollouts execute in a productive, seamless manner and that lessons learned be immediately applied to the remaining rollouts. There is no transition time in between each rollout, rather, while one district is loading the conversion files and validating the data, the next district has already starting the planning and preparatory activities for their district. Caltrans has stated that there is a blackout period/data freeze where these lessons may be applied between phase 1 and 2 rollouts. As of a result of this aggressive schedule, TMS is recommending continuity of resources for the first five to six district rollouts at a minimum when would take them through the end of this calendar year.

Risk R-6: Lack of performance and scalability planning may lead to issues with the Pilot or Rollout if not resolved quickly

Original Risk Statement: For performance testing, there is a lack of requirements and goals. There is also a lack of a test plan for scalability and performance, and a lack of performance test scripts created and executed.

Probability:

Medium

Impact:

High

Timeframe:

Short Term

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Severity: Opened: Status:

IPOC Recommendations:

- Understand performance requirements – how many users will be on the system concurrently, what is the expected performance metrics for submitting data, what is the expected performance for running reports, what are the scalability requirements?

Status: This has been mitigated, but not to the level needed for the performance problems we are currently encountering. Additional expectations for application versus network performance should be documented and shared with the SAIC team and the Caltrans IT team.

- Take the current scheduling system and establish baseline for these performance requirements and determine if they are meeting the goals.

Status: To the best of IPOC's knowledge, this has not yet been done and is not planned..

- If they are not meeting the goals, develop and execute test cases for performance.

Status: This is planned for in the project schedule, but has fallen behind schedule due to environment issues.

Status:

08-31-12: There are performance issues with both the training environment as well as production. Production is still experiencing a 3 second delay and the project is bouncing production as needed. The training environments are experiencing some major performance and load issues and have to be rebooted every two hours with a full data refresh each weekend. Even with rebooting the systems every two hours, there is still a long delay that is preventing some training sessions from taking place. The network issues have gone unresolved for many months. IPOC highly recommends that the project reconsider starting the rollout until the performance issues are mitigated.

07-31-12: The main performance issue is with the response time. The project team and OTECH are looking at server configuration of HW and load balancers. Ongoing reviews are occurring with OTECH and Caltrans HEAT desk capturing any calls from users. As per Caltrans, performance is much improved from what was experienced in small pilot and large pilot. A "Go" decision was provided on July 10th after completion of the Large Pilot. At this time, Caltrans does not believe that the ongoing performance problems are significant enough to postpone rollout. There is no strategy for conducting performance testing and all performance testing is on hold until the issue with response time is resolved. Caltrans IT owns the Load Runner tool but does not have the expertise to write scripts. The project team is still looking into open source tools that can be used without cost to create simple scripts that can be used to generate load on click path from login to main navigation to project list page, for example. They have identified three open source tools that may be adequate for this type of testing. Until Caltrans is at a stable performance level, they are not planning to develop a strategic plan.

06-30-12: The project is still experience network performance issues that OTECH is actively working on. The performance degradation occurs primarily in the afternoons and is resulting in an approximate 3 second delay with each page refresh. Several other performance issues have taken a back seat to this main performance issue and this will become a critical decision factor in the July 10th Go/No-Go checkpoint for rollout.

Risk R-5: Inadequate planning for data conversion may cause additional schedule delays and impact the quality of integration testing.

Original Risk Statement: There have been unexpected problems with the dry-run data conversion process and for several of the Districts' pilot data, there has not been a successful dry-run to date. This may cause additional schedule delays and impact the quality of integration testing. In addition, planning for conversion is behind schedule with the team continuing to document the Implementation Plan and the end-to-end Caltrans Conversion Process document.

Probability: Impact: Timeframe:

Severity: Opened: Status:

IPOC Recommendations:

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- Reconcile discrete tasks listed in the go-forward plan with high level tasks in the project schedule to ensure that all conversion activities are tracked and assigned.

Status: This has been mitigated.

- Review of the current conversion metrics showing what has been successfully converted and what remains to be converted.

Status: IPOC reviewed the informal results that were available from the Small Pilot Conversion. No formal results were captured. IPOC has received some documented results of the large pilot, but has not observed documentation of the method used in capturing conversion results for the large pilot.

- Include districts in conversion validation activities – no one knows their data better than they do.

Status: Plan for Pilot and Implementation Plan had roles and responsibilities assigned for districts related to validation. IPOC reviewed the completed District readiness checklist and reviewed the small Pilot informal results that were completed by each district involved in the pilot. The checklist does a commendable job of highlighting the tasks that needs to be validated, the owner of the task (both HQ and District) and the follow-up actions. This Checklist was sent to IPOC as confirmation of conversion results being documented after the Small Pilot. However, IPOC did not observe that the checklist was actually used in the conversion process and it does not appear that the checklist was updated to complete many of the fields (target date, LOR and criticality).

- In discussions with the project team, they have indicated that they would like to document, by District, where the source data is coming from, what pre-conversion activities or data cleansing have been done so far, what remains to be done, and results of testing. This will help the State identify which district is in the best position to move forward in Pilot. IPOC agrees and supports this approach.

Status: To the best of IPOC's knowledge, this type of data has not been captured.

Status:

08-31-12: The District 1, 2, & 3 rollout has been delayed due to data validation dependency issues, as well as other technical mishaps (cable cut in building, power outage at OTECH, network issues, etc). Due to this delay, the district 4 extract (which has a dependency on data from Districts 1, 2 and 3) is also delayed by about two weeks. The project seems to constantly be resolving conversion and validation problems. Once one problem is fixed, another issue emerges and they can't seem to achieve a stable execution of conversion and validation. With the project ready to being large-scale rollout, IPOC is concerned that the conversion scripts are not stable enough to start this phase.

07-31-12: Integration testing has completed. Large pilot conversion completed w/o major incident and the north region conversion is in progress and on schedule. A "Go" decision was made in mid-July to proceed with rollout activities. The schedule was significantly re-worked to add additional validation activities for conversion and rollout. Although not a popular recommendation, IPOC continues to recommend that the PRSM team actively work with each district on the District Readiness Checklist and validate that prior to implementation, all columns are ready for rollout. We continue to recommend that conversion results be maintained in a matrix so that it is easy to determine trends and pro-actively address problems before they happen.

6-30-12: The large pilot concluded at the end of June and a Go/No-Go decision will be made on July 10th regarding the start of rollout. TMS believes the last four recommendations will help the project streamline the conversion process for each of the rollout districts and will enable the project to detect trends earlier which could lead to more expedient, pro-active mitigation of issues before they are exposed. We continue to recommend that the PRSM team actively work with each district on the District Readiness Checklist and validate that prior to implementation, all columns are ready for rollout. We continue to recommend that conversion results be maintained in a matrix so that it is easy to determine trends and pro-actively address problems before they happen.

Risk R-1: Lack of Effective Organizational Change Management or District Buy-in for Pilot could lead to lack of acceptance of PRSM or to new PRSM processes

Original Risk Statement: One of the most significant challenges to the PRSM Project could be engaging and obtaining buy-in from District executives, management and staff. It is very important that District executives and management are knowledgeable about PRSM and the changes to their business processes and benefits of using PRSM. District staff, in addition to training, should be knowledgeable of the decisions and consequences of changing / standardizing business

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processes. Lack of engagement of District personnel at all levels could have a negative impact on overall PRSM system acceptance and usage.

Probability: **Impact:** **Timeframe:**

Severity: **Opened:** **Status:**

IPOC Recommendations:

- Assess the changes to the training program/plan proposed in the most recent implementation vendor change request in order to understand the impact on Organizational Change Management. Work with the Districts to help them understand the changes to the training program in order to gain organizational buy-in and confirm that the program is adequate to enable a successful Roll Out.

Status: This has been mitigated.

- Consider hiring / extending additional consulting resources to assist with refining the Organizational Change Management Plan and to execute the plan.

Status: IPOC is not aware that any additional staffing has taken place to help with OCM development and activities.

- Involve the end users in a more direct way and allow them to participate in the risk management process. This will allow the project team to obtain early buy-in and a stake in the project. Hold a risk identification session to identify the district concerns of the pilot activities and help define appropriate mitigation strategies to address the risks identified.

Status: This has been mitigated. A series of four "roadshows" were completed prior to small pilot to present how PRSM would address key business processes at the district. Additionally, there have been two daily small pilot user sessions and a daily pilot review call.

- Analyze current methods of communication to determine if additional processes need put in place to get the districts to open up the channels for communicating risks and issues associated with pre-pilot, pilot and post pilot activities.

Status: This is being mitigated. There was a daily small pilot review and they are also conducting daily large pilot reviews

- Engage the districts in reviewing business functionality and business processes.

Status: For the past 6 months, TMS reported this recommendation as mitigated due to the districts participation in training for the six key functional areas and the business processes associated with them. However, based upon the results of the pilot and the user feedback from the training courses, TMS recommended in April that the training team incorporate more focused examples of how the districts will use PRSM to perform their daily job. The feedback received from the small pilot indicates that the training material deals more at a generic product level rather than specifically demonstrating how PRSM will be used day to day. For the May reporting period, IPOC observed that the training team did a commendable job of tracking user feedback and survey feedback and made the necessary modifications to the training material and associated handouts and FAQs. The proof that this was an effective exercise will be in the results of the user training surveys from future training efforts. In addition, as per Caltrans feedback, districts 1, 2 and 3 have been thoroughly engaged during pilot; and district 4 is scheduled for the second production rollout. Members of the training and implementation teams have started pre-rollout sessions and SME training in D4.

Status:

08-31-12: The large pilot survey results and comments validated that there needs to be additional focus on the business process side of the PRSM implementation. Neither a tool without a process or a process without a tool leads to a productive, efficient and accepted system. Survey participants stated that they don't understand how their daily work fits into the puzzle of PRSM. The PRSM training is very focused on using the tool, however, additional attention needs to be placed on showing how the tool works within the district specific business processes and daily activities of the users.

07-31-12: Numerous activities have been taking place in the districts over the past few months to prepare them for rollout. For example, in D4, Caltrans identified district PRSM Subject Matter Experts (SMEs) and conducted team building activities, as well as delivered presentations and conducted weekly discussions to the district. Implementation Manager (IM) and SMEs were trained on PRSM changes and impacts, including time charging & task management. The team delivered one-week SME training in D4, conducted meetings with D4 IM and implementation team for D4 PRSM readiness and roll-out planning, and conducted two-week SME User sessions using sandbox in PRSM training environment for the SMEs.

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6-30-12: TMS has not been provided the large pilot District Readiness Checklists to see if all the pre-rollout activities were completed and discussed during the 4-6 weeks prior to rollout. Some items in the District Readiness Checklists involve and analysis of the current business process to determine whether PRSM will generate any changes. TMS has been informed that District 4 training (scheduled for conversion loading 8/16/12) has already been actively engaged in pre-rollout discussions and SME training; however there has been no documentation for TMS to review during this reporting period.

Closed Risks

There were no risks closed for this reporting period.

General Comments

This report reflects the time period of July 1 – July 31. The PRSM project remains in Large Pilot Phase as it closes out pilot evaluation tasks and has started the Rollout Phase.

This General Comments section focuses on the project management processes. TMS has included the following project management process chart documenting TMS's assessment of each major area of project management on the PRSM project by a color code in the table below. Three month's worth of status is displayed.

- RED** = Unsatisfactory project management practices that present significant risk to the project.
- YELLOW** = Corrections to project management practices needed to reduce risks.
- GREEN** = Satisfactory project management practices are being followed.
- BLUE** = Assessment in progress.
- GRAY** = Closed – not applicable to the project in this phase

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Process Area	Last Month Rating	This Month Rating	SUMMARY OF ASSESSMENT	Recommendations for Improvement
General Project Management			<p><u>08/31/12:</u> The project is dealing with many open project management integration issues at the moment. There are continuing network performance issues, continuing conversion issues, delays in validation and training, on-going transition of maintenance and operations, imminent large-scale rollout of the application, a major revision of the schedule which is causing the team to work the old and new schedule in parallel until full integration can be achieved and in the middle of all these issues, the project management support contract has expired and a permanent replacement has not been named for the Project Management position. At this time, we are turning this rating yellow.</p> <p><u>07/31:</u> The project is in the process of determining how to staff up the IT team for maintenance, operations and level 3 support. Specific task allocations and expectations need to be set for these resources and the deliverables they will produce or milestones they are expected to achieve during that time (for example, there is no methodology or expectations defined for the</p>	<ul style="list-style-type: none"> • Appoint a permanent PRSM project manager. <u>Status:</u> The position has been posted but no award has been made. • Extend the current PM Support Staff through Large Pilot and at least through the first few district rollouts. <u>Status:</u> Hours on the support contract have expired. The new award will not be ready until mid-September • Set task allocations for resources and deliverables related to Maintenance and Operations activities. • Integrate the two schedules so that only one schedule is being maintained.

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Process Area	Last Month Rating	This Month Rating	SUMMARY OF ASSESSMENT	Recommendations for Improvement
			<p>Knowledge Transfer activities that SAIC is responsible for executing during rollout). No status on hiring a permanent State PM or extending the current PM Support staff.</p> <p><u>06/30:</u> Permanent PRSM PM position is still open. Several candidates have interviewed. PM Support staff position has been requested for extension but there appear to be funding issues. TMS continues to recommend continuity of knowledge during rollout for both of these positions.</p>	
<p>Planning and Tracking (Work Plan)</p>			<p><u>08-31-12:</u> The project is still maintaining two schedules. The revised schedule contained more detailed and accurate scope for the remaining milestones of the project as well as resource loaded tasks. However, the new schedule has not incorporated all the old milestones and deliverables and therefore, the team is maintaining two schedules. This has become problematic in that the Project Management Support contract has expired and schedule maintenance and upkeep will fall on the already overloaded Acting Project Manager. As a result, we are turning this rating back to yellow until the schedules are integrated and maintained consistently.</p> <p><u>07-30:</u> Status moved to Green. SAIC resources have been leveled and resources were added to the activities in the Rollout phase. SCH Finding 5 is now closed.</p> <p><u>06-30:</u> The rollout schedule is currently being updated by the project team to redefine tasks, adjust durations and apply resources to each task. The team is targeting this new schedule to be complete at the end of July or beginning of August. TMS observes that as rollout commences, the number of staff for SAIC will diminish to 3 resources for one year and 1 additional resource for 3 months. It's imperative that the PRSM schedule assign these resources to discrete tasks to ensure productivity and efficiency in their technical support.</p>	<ul style="list-style-type: none"> SCH Finding 5: TMS recommends that the project level the current workplan such that all resources listed in the schedule are allocated at a reasonable level. <u>Status:</u> SAIC resources have been leveled and resources were added to the activities in the Rollout phase. This finding is now closed.
<p>Quality Management</p>			<p><u>08-31:</u> Quality metrics are still not maintained, however, the project is doing a good job of keeping up with all the conversion results. The third monthly release of defects will go out on Sept 7th and will contain 10-12 defect fixes. There is no on-going cadence to review the open defects, track numbers of new defects against the mitigation of the backlog, etc.</p> <p><u>07-30:</u> Conversion statistics from the large pilot were not documented or available for review. The project team has prepared a summary of all testing results that includes all System Test cases, the status of each test case, the defects</p>	<ul style="list-style-type: none"> PM Finding 2: The quality management metrics collected, tracked and analyzed on a regular basis should be expanded to include more process areas and detail that would allow trends and potential issues and risks to be identified. TMS recommends concentrating on testing and requirements metrics first. <u>Status:</u> No update on this recommendation. TMS recommends that testing and conversion statistics be

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Process Area	Last Month Rating	This Month Rating	SUMMARY OF ASSESSMENT	Recommendations for Improvement
			<p>generated from each test case and the status of those defects.</p> <p><u>06-30:</u> The PRSM team will deliver the testing results for regression/system testing in the first week in July. These results should contain the full set of tests run, the success of each test, the defects generated from each test and the status of those defects.</p>	<p>provided to the oversight teams on a regular basis for reporting progress against milestones. <u>Status:</u> Testing statistics were provided for System Testing and regression testing. Formal conversion metrics have not been provided.</p>
<p>Requirements Management</p>			<p><u>08-31-12:</u> No change in status.</p> <p><u>07-30:</u> No change in status.</p> <p><u>6-30:</u> IPOC re-sent the list of 12 unknown mapping areas to the PRSM project team as requested in order for them to analyze the unmapped areas and provide guidance on how to address them.</p>	<ul style="list-style-type: none"> Traceability through the project life cycle should be an on-going activity that is performed with some level of regularity to ensure that all changes are incorporated into the project consistently. The RTM should be updated as a result of the exit-phase sessions for Phases 1-4. <u>Status:</u> SAIC is scheduled to complete an updated traceability. As of the end of July, this has not been completed. TMS would recommend a review of the gaps in the traceability matrix to ensure proper testing coverage, weekly review of testing metrics to understand the current progress being made and clearly defined exit criteria as the project enters the pilot phase. If there are no plans to directly terrace requirements to Test Cases, then the traceability matrix should state the approach for traceability and clearly define how the mapping of test cases to FEATS is satisfactory to the customer. <u>Status:</u> There are (12) Unknown mappings that could be out-of-the-box functionality that is not used by Caltrans, or an item that was removed or re-designed. There were (4) items that could not be traced and require some additional investigation. As per Caltrans, an SAIC resource familiar with requirements has re-joined the team and may be able to help in this review.
<p>Risk Management</p>			<p><u>08-31:</u> Issue management continues to work as defined. However, with the project management support contract expiring, there is a concern that bi-weekly risk and issue meetings will be postponed.</p> <p><u>07-31:</u> The risk management process is working as documented.</p>	<ul style="list-style-type: none"> All previous recommendations have been mitigated.

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Process Area	Last Month Rating	This Month Rating	SUMMARY OF ASSESSMENT	Recommendations for Improvement
			<p><u>06-30:</u> No change in status.</p>	
<p>Issue Management</p>			<p><u>08-31:</u> Risk management continues to work as defined. However, with the project management support contract expiring, there is a concern that bi-weekly risk and issue meetings will be postponed.</p> <p><u>07-31:</u> The issue management process is working as documented.</p> <p><u>06-30:</u> No change in status.</p>	<ul style="list-style-type: none"> • All previous issue recommendations have been mitigated.
<p>Communication Management</p>			<p><u>08-31:</u> The survey results showed that communication with the districts still needs improvement. Users have confusion about their roles in PRSM, questions about business processes that have not been defined and skepticism about a system that does not appear ready for rollout.</p> <p><u>07-31:</u> Status has turned yellow this month. Although communication with the districts is an ongoing process, IPOC expected to observe an increase in the frequency and depth of communications to the districts prior to the start of the rollout preparation and training activities. The Rollout Plan, which documents the roles and responsibilities of the HQ team, Implementation team and system integrator, ran two months late and just recently completed. Since the content in this plan may drive roles and responsibilities and changes in task assignments in the project schedule, it is imperative that it is integrated into the master schedule as soon as possible.</p> <p><u>06-30:</u> Communication with the districts is ongoing. In June, the project held a Regional District Support walkthrough of the help desk process, what has changed and the issues encountered. Cambria is doing some change management training for district 4 in preparation for their conversion scheduled in August. Both the April and May status reports were sent to TMS for review, but neither has been formally posted on the CTA website.</p>	<ul style="list-style-type: none"> • Complete the integration of the Rollout Plan activities into the master schedule and define the roles and responsibilities and activities required for rollout. <u>Status:</u> The schedule integration is still not complete. Roles and Responsibilities have not been defined for rollout.

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Process Area	Last Month Rating	This Month Rating	SUMMARY OF ASSESSMENT	Recommendations for Improvement
<p>End-User Training</p>			<p><u>08/31:</u> The large pilot survey results indicate that there are improvements that need to be made to the training environment, materials and content. Users need practical examples of how to apply PRSM to their daily tasks, and several asked for cheat sheets, user manuals and reference material to use after the training. This rating has turned yellow this month due to the feedback from the survey results and the fact that the districts involved in the large pilot have been exposed to PRSM for a considerable period of time, yet still had issues with the training program. The remaining districts have not had the exposure to the application that districts 1, 2 and 3 have had and therefore, the training curriculum needs to be considerably revamped to ensure that users with very little prior exposure will absorb the content of the training sessions well enough to be able to execute immediately. As a result, IPOC has turned this category from Green to Yellow.</p> <p><u>07/31:</u> Deliverable 13 – System Admin training manual – is running two months late. The first System Admin training class is scheduled for 07/31. SME training for D4, D8 and D12 has been completed. Train the Trainer material has been developed and the classes are scheduled to start on 08/03. Implementation Team training for the weekly webinars was scheduled in late June and end in early August, but the schedule shows 0% complete. D1, D2 and D3 end user training is scheduled for mid-August.</p> <p><u>6/30:</u> As rollout commences, the end user task manager training will be performed by Caltrans and SAIC will continue to provide the PM Training. All training materials have been updated based on lessons learned from the pilots.</p>	<ul style="list-style-type: none"> • Training Plan: Roles and Responsibilities do not include a definition of needed skills and knowledge for each staff member. • Training Plan: Post Implementation Training and Knowledge Transfer activities are not defined. • Execution: Advanced Implementation Team Training • Student counts for preparation of training materials are over two years old and may require verification prior to production rollout training. • Overlapping the first two district training sessions may pose a risk to the project without any slack in between to make adjustments.

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Process Area	Last Month Rating	Thjs Month Rating	SUMMARY OF ASSESSMENT	Recommendations for Improvement
<p>Data Conversion and Load</p>			<p><u>08-31</u>: The project continues to face on-going issues with conversion and validation. Once one problem is fixed another surfaces. Many of these issues are district specific and can be expected to continue through the rollout process, however, IPOC recommends that the project consider adjusting the rollout schedule to perform a "mini-pilot" of each district prior to the scheduled implementation to allow the team an advanced opportunity to work with the districts schedules and iron out district specific issues without causing a delay to the overall rollout schedule.</p> <p><u>07-31</u>: Rollout conversion activities have started, but were dependent on the completion of the Rollout Plan which ran late. The loading of D1, D2 and D3 files started on 07/13 and is scheduled to end on 08/15, but the schedule currently shows 0% complete and 5 days was added to the total duration.</p> <p><u>06-30</u>: Conversion activities appear on track with no outstanding issues. IPOC continues to recommend a trending chart to be leveraged during the rollouts.</p>	<ul style="list-style-type: none"> • Provide test measurements and metrics to oversight for review. <u>Status</u>: IPOC has asked the project team to provide these performance measures, but it does not appear that formal conversion results were captured for large pilot.

Quarterly PRSM Status Report to the Legislature

Process Area	Last Month Rating	This Month Rating	SUMMARY OF ASSESSMENT	Recommendations for Improvement
<p>Maintenance and Operations</p>			<p><u>08/31</u>: The project has reported that the transition effort is speeding up and that the intent is to complete transition earlier than planned. In order to accomplish this, Caltrans needs to ensure they have the staff available for maintenance and operations and IPOC has suggested they develop a Staffing Management plan to identify roles and responsibilities and estimated number of staff to support M&O and rollout efforts.</p> <p><u>07/31</u>: As per Caltrans, there is an effort underway to integrate SAIC staff with IT to help them come up to speed on what they will eventually be doing. Some of the activities that have taken place and that are underway are as follows:</p> <ul style="list-style-type: none"> • One-on-one mentoring sessions on Security Administration – managing the security model. • Transition Presentations provided on Clarity Configuration, Business Objects Reporting, PRSM Architecture, and Process Monitoring • Daily Processes and Jobs Monitoring task has been taught to Caltrans IT and they are within a week of picking up the effort in time for Roll-Out • System Administration discussions on how Caltrans will divide IT, HQ PM, and District responsibilities will lead to tailored sessions with appropriate staff <p>Caltrans IT continues to focus on identifying opportunities to streamline the processes to enable this transition to be completed in an efficient and timely manner. This will aid the project and customers, during their adoption of the new PRSM application. Based on the activities that have started and are planned, IPOC has moved this status from Yellow to Green.</p> <p><u>06/30</u>: Some basic PRSM training courses have been given to SAIC IT Staff in preparation for the transition, however, the formal Classroom training sessions mentioned in the Go Forward plan have not yet been scheduled or delivered. TMS prepared a one-time assessment report on the Transition Readiness from both a rollout and vendor exit perspective. The main concerns seen were the lack of a staffing plan or clear description of what the 3.5 SAIC resources assigned during rollout will be doing or what the approach and methodology of Knowledge Transfer will be. Until some clarity is provided in terms of rollout roles and responsibilities, TMS will keep this item yellow.</p>	<ul style="list-style-type: none"> • Develop a Staffing Management Plan to identify the Roles and Responsibilities necessary for Maintenance and Operations as well as rollout.

Quarterly PRSM Status Report to the Legislature

Process Area	Last Month Rating	This Month Rating	SUMMARY OF ASSESSMENT	Recommendations for Improvement
Performance			<p><u>08/31</u>: There are performance issues in production as well as the training environment. Both of these issues pose considerable risk to rolling out PRSM on a large-scale to the remaining districts. If the project cannot resolve the network and system load performance issues, IPOC recommends postponing rollout.</p> <p><u>07/31</u>: The main performance issue is with the response time. The project team and OTECH are looking at server configuration of HW and load balancers. Ongoing reviews are occurring with OTECH and Caltrans HEAT desk capturing any calls from users. As per Caltrans, performance is much improved from what was experienced in small pilot and large pilot. A "Go" decision was provided on July 10th after completion of the Large Pilot. At this time, Caltrans does not believe that the on-going performance problems are significant enough to postpone rollout. There is no strategy for conducting performance testing. Caltrans IT owns the Load Runner tool but does not have the expertise to write scripts. The project team is still looking into scriptable load testing tools. Until Caltrans is at a stable performance level, they are not planning to develop a strategic plan.</p> <p><u>06/30</u>: There was no initial performance production baseline captured. Minimal performance testing was performed prior to small pilot, there is an absence of a plan to document the minimal requirements or expectations for performance testing, and performance response time continues to be an issue in large pilot. Based on this assessment, IPOC has assessed this category as Yellow. Caltrans has requested that IPOC present the project team with minimum expectations for performance metrics. IPOC is aware that the response issue they are experiencing are the result of network issues at OTECH. Application performance has been tested acceptable by bypassing the OTECH firewall and loading the application via VPN. The resolution of this issue is out of Caltrans' hands and with OTECH. The issue has been escalated to the CT CIO and OTECH director level. No application load testing can be performed until network issue is resolved.</p>	<ul style="list-style-type: none"> • Capture performance expectations and/or requirements for performance testing. • Submit a CR for SAIC to perform adequate performance testing or procure a tool for Caltrans IT to perform the performance testing – prior to the start of rollout. • Capture an initial production performance baseline.

CALTRANS - PRSM Project Oversight Review Checklist (August 2012)

Project Oversight Review Checklist: High Criticality Project

This checklist is an assessment for the Large Pilot Phase and Rollout phases.

Practices and Products	Adequate	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
Planning and Tracking			
Have the business case, project goals, objectives, expected outcomes, key stakeholders, and sponsor(s) identified and documented?	X		TMS has reviewed the last approved SPR dated April 2012. TMS has validated that the dates in the project schedule correspond to the new baselined dates (Baseline 1) as a result of the SPR approval for cost and schedule.
Has a detailed project plan with all activities (tasks), milestones, dates, and estimated hours by task loaded into project management (PM) software? Are the lowest level tasks of a short duration with measurable outcomes?	X		The project does use a MS Project schedule to track the work. Tasks, milestones dates and estimated hours are documented within the schedule and the tasks, for the most part, are represented as manageable, trackable items with durations less than 80 hours.
Is completion of planned tasks recorded within the PM software?	X		Changed from Deficient to Adequate in February 2012. Caltrans has revised the project schedule to account for the slight delay in rollout activities which has translated with a delay in the overall end date. TMS has reviewed this schedule and found that almost all of the recommendations made in our one-time assessment report were mitigated in the new revision.
Are actual hours expended by task recorded at least monthly within PM software?		X	As per the project team, PRSM budget information for each contract is accessed by using the PMO and CA-PMO monthly reports and the SPR. Each month, the project rolls each of the contract expenditures into the CA-PMO report for total project costs. Actual costs are reported, as are actual percent complete. However, hours by task are not tracked at either the State or the vendor level, so this category is Deficient as per the checklist requirements. As per Caltrans, this will be addressed with additional resource loading and reporting of actual start and finish data in future reporting periods.
Are estimated hours to complete by task recorded at least monthly within PM software?	X		Status changed from Deficient to Adequate in March 2012. TMS reviews all updates to the project schedule when distributed. The last project schedule reviewed was dated August 21 and has been baselined to include all SPR dates. IPOC no longer participates in the meetings to gather project status as this is now conducted internally without oversight; however, IPOC has received updates to the schedule several times in this reporting period and is kept up to date with changes as they occur.
Is there a formal staffing plan, including a current organization chart, written roles and responsibilities, plans for staff acquisition, schedule for arrival		X	TMS has not been exposed to a formal staffing plan. We have reviewed the <u>Project Organization Chart</u> that documents the overall structure and high-level roles;

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Practices and Products	Adequate	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
and departure of specific staff, and staff training plans			<p>however, a breakdown of specific staff on the vendor side and State side is not clear. Roles and responsibilities are defined within each project process plan (i.e. change management roles and responsibilities are defined within the Change Management Plan), however, TMS has not seen an overall description of the general roles and responsibilities for the project team (vendor and State).</p> <p>With the attrition that is natural in the system integrator team as we start to get closer to rollout, and with the significant resource transitions that have occurred at the State level on the project, a Staffing Plan and strategy for transition becomes more critical to success. IPOC has recommended that the State develop a Staffing Plan for the remainder of the rollout activities to assist in planning resources for both the State and SAIC and to assist in the resolution of resource conflicts.</p>
Have project cost estimates, with supporting data for each cost category, been maintained?		X	<p>As per the project team, PRSM budget information for each contract is accessed by using the PMO and CA-PMM monthly reports and the SPR. Each month, the project rolls each of the contract expenditures into the CA-PMM report for total project costs. TMS has reviewed the cost tracking that the project includes within the CA-PMM and observes that the actual expenditures are summarized as total amount "to-date"; however, not estimated future costs or projections are included. TMS has also reviewed the <u>PRSM Payment Milestone and Deliverables spreadsheet</u> for SAIC vendor costs, including the updated costs for the August reporting period.</p>
Are software size estimates developed and tracked?	N/A	N/A	This item is not applicable.
Are two or more estimation approaches used to refine estimates?	N/A	N/A	This item is not applicable.
Are independent reviews of estimates conducted?	N/A	N/A	This item is not applicable.
Are actual costs recorded and regularly compared to budgeted costs?	X		<p>Status changed from Deficient to Adequate in June 2012.</p> <p>The CA-PMM status report cost tracking summary shows various project categories, last approved SPR cost and cumulative actual costs for the total project, but not by month or fiscal year. The <u>PRSM Payment Milestone and Deliverables spreadsheet</u> shows actual costs incurred for vendor deliverables.</p>
Is supporting data maintained for actual costs?	X		<p>Status changed from Deficient to Adequate in June 2012.</p> <p>The Microsoft Excel version of the CA-PMM status report shows comments notes for each new data entry for the cumulative actual costs and registers the amount of invoices paid to the various vendors and subtotals on Total of One-Time IT Project Costs, Total of Continuing Project Costs and Total Project Costs.</p>
Is completion status of work plan activities, deliverables, and milestones recorded, compared to schedule and included in a written status reporting process?	X		<p>IPOC meets twice a month with the project team and other oversight entities to review project status and review schedule status, deliverables, milestones and key activities. The current schedule adequately tracks all major deliverables, milestones and activities. TMS has also reviewed the most current CA-PMM report submitted</p>

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Practices and Products	Adequate	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
<p>Are key specification documents (e.g. contracts, requirement specifications and/or contract deliverables) and software products under formal configuration control, with items to be controlled and specific staff roles and responsibilities for configuration management identified in a configuration management plan?</p>	X	X	<p>by the project which tracks work plan activities, major milestones and compares planned to actual.</p> <p>TMS has reviewed the <u>Configuration Management Plan</u> at a high level and found that there are some gaps in terms of the promotion process, specific roles and responsibilities for some of the configuration management tasks and a lack of configuration control for some of the project management process documentation. TMS is more concerned with the execution of configuration management and the concern that the project is not following the drafted procedures defined in the plan. TMS is not aware of any planned changes or revisions to the current Configuration Management Plan.</p>
<p>Are issues/problems and their resolution (including assignment of specific staff responsibility for issue resolution and specific deadlines for completion of resolution activities), formally tracked?</p>	X		<p>Status changed from <u>Deficient to Adequate</u> in April 2012.</p> <p>TMS has reviewed the <u>Issue Management Plan</u>. Formal risk and issue management processes were executed on the project from the time IPOC started in July 2011 through November 2011. At that time the risk and issue meetings were cancelled. The meetings resumed again in April 2012 and are being conducted in a very thorough manner according to best practices. Current issues and risks are reviewed and the team has added several new risks and issues to the log in the past month.</p>
<p>Is user satisfaction assessed at key project milestones?</p>	X		<p>Through documentation review, it appears that users have been engaged in product reviews and training reviews and have participated in regular meetings to discuss organizational change management and pilot preparations. However, TMS reviewed the <u>Communication Management Plan</u> and observed that the plan does not address communication methods to and from the districts. District 3 was engaged in the small pilot and districts 1, 2, and 3 were engaged in the large pilot. User surveys were conducted for both the small and large pilots as well as user activity sessions were daily feedback was received.</p>
<p>Is planning in compliance with formal standards or a system development life-cycle (SDLC) methodology?</p>		X	<p>Compliance with PMBOK standards is not adequate for this phase of the project. Although this project does not contain a typical design and development cycle, there are requirements, configuration and testing that need to be tracked and managed in a similar way to that of a typical development project.</p> <p>TMS believes that a modified SDLC should have been adopted for the project that clearly identifies how validation of expected behavior will occur (i.e. description of the requirements management, configuration management and test management areas of the SDLC).</p> <p>Although the project is not in compliance with a formal standards or SDLC methodology, at this phase in the project IPOC does <u>not</u> see value in creating a document describing the methodology. However, TMS has observed that the project schedule and the approved strategy for realigning testing, pilot and conversion adopts a more tactical approach to validation of the product prior to the pilot phase. This alleviates many of the concerns of a non-standard SDLC. PRSM has reviewed the gaps in the traceability matrix to ensure proper testing coverage and has also held weekly review of testing metrics to understand the current progress being made and clearly defined entry and exit criteria. All of these are improvements to the previous process. At this point in the project, there are no</p>

Quarterly PRSM Status Report to the Legislature

Practices and Products	Adequate	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
Is there formal enterprise architecture in place?	X		further improvements to be made that would add value. The RFQI describes the target Caltrans enterprise environment.
Are project closeout activities performed, including a PIER, collection and archiving up-to-date project records and identification of lessons learned?	N/A	N/A	Project is in the Rollout Phase – this is not applicable in this phase.
Procurement			
Are appropriate procurement vehicles selected (e.g. CMAS, MSA, “alternative procurement”) and their required processes followed?	X		The final contract was signed by the Implementation Vendor on February 26, 2009. Caltrans received, reviewed and signed the contract on February 27, 2009. DGS Legal reviewed and signed the contract on March 5th, 2009.
Is a detailed written scope of work for all services included in solicitation documents?	X		Detailed written scope of work is contained in the RFP.
Are detailed requirement specifications included in solicitation documents?	X		Detailed requirement specifications are contained in the RFP. Requirements are also described in the RFQI and Value Analysis documents.
Is there material participation of outside expertise (e.g. DGS, Departmental specialists, consultants) in procurement planning and execution?	X		Outside expertise and counsel has been sought from DOF, DGS, and consultants when appropriate.
For large-scale outsourcing, is qualified legal counsel obtained?	N/A	N/A	The project does not involve outsourcing as currently defined.
Risk Management			
Is formal continuous risk management performed, including development of a written risk management plan, identification, analysis, mitigation and escalation of risks in accordance with DOF/TOSU Guidelines, and regular management team review of risks and mitigation progress performed?	X		Status changed from Deficient to Adequate in April 2012 TMS has reviewed the Risk Management Plan and it contains well documented processes and procedures that include Risk Identification, Risk Analysis, Risk Response Planning, Risk Monitoring and Control and Risk Communication. The plan does not address any formalized approach to risk identification (such as periodic brainstorming sessions, SEI risk identification checklists or the use of software tools). TMS has also observed risk management metrics are not included in this part of the risk planning or execution. Formal risk and issue management processes were executed on the project from the time IPOC started in July 2011 through November 2011. At that time the risk and issue meetings were cancelled. The meetings resumed again in April 2012 and are being conducted in a very thorough manner according to best practices. Current issues and risks are reviewed and the team has added several new risks and issues to the log in the last few reporting periods.
Does the management team review risks and mitigation progress at least monthly?	X		Status changed from Deficient to Adequate in April 2012 Formal risk and issue management processes were executed on the project from the time IPOC started in July 2011 through November 2011. At that time the risk and

Quarterly PRSM Status Report to the Legislature

Practices and Products	Adequate	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
Are externally developed risk identification aids used, such as the SEI Taxonomy Based Questionnaire?	X		<p>issue meetings were cancelled. The meetings resumed again in April 2012 and are being conducted in a very thorough manner according to best practices. Current issues and risks are reviewed and the team has added several new risks and issues to the log in the past month.</p> <p>Status changed from Deficient to Adequate in April 2012</p> <p>The PRSM Risk Identification process describes how any stakeholder can submit a risk, defines the process for completing the "PRSM Risk Identification and Response Plan" and addresses how the initial risk is validated and assigned. An initial formal SEI-based assessment was conducted several years ago, and in April 2012 when the risk meetings resumed, another brainstorming session took place to identify new risks. The project stakeholders are frequently solicited for risk identification in the bi-monthly meetings.</p>
Communication			
Is there a written project communications plan?	X		<p>The latest version of the finalized and approved Communications Plan is dated 6/22/2009. TMS has reviewed the <u>Communication Management Plan</u>, which has a very thorough list of Roles and Responsibilities defined and contains an organization chart showing the relationships of the major stakeholders on the project. However, TMS has observed that this organization chart is out of date and that the Roles and Responsibilities tend to focus mostly on the immediate project team, with very little reference to district communication. TMS is not aware of any planned changes or revisions to the current Communication Management Plan.</p> <p>Status changed from Deficient to Adequate in June 2012.</p> <p>TMS is aware that the project does formally report to CTA on a monthly basis and TMS has reviewed the most current CTA status report from July 2012.</p>
Are regular written status reports prepared and provided to the project manager, department CIO (if applicable) and other key stakeholders?	X		<p>Both the Risk Management Plan and the Issue Management Plan contain a risk escalation process.</p> <p>TMS is aware that monthly Implementation Meetings are held with select district stakeholders for the purpose of keeping the District project managers regularly updated on the status of the project and to receive their input. At the recommendation of the PRSM Project manager, TMS is not attending these meetings but is available to review status documentation or meeting minutes to determine the value-add in meeting stakeholder expectations about involvement in the deployment process.</p> <p>Large pilot user PM & TM training completed successfully and large pilot completed on June 29. Training facilities have all be reserved, trainee invitations sent, materials produced and trainers scheduled. Additional sessions for T4T and custom reporting are scheduled. The Go/No-go decision for transition from large pilot to rollout was held on July 9th with a GO decision. Districts are not engaged in risk identification, issue identification or risk mitigation activities.</p>
Are there written escalation policies for issues and risks?	X		
Is there regular stakeholder involvement in major project decisions, issue resolution and risk mitigation?	X		

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Practices and Products	Adequate	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
System Engineering			
Are users involved throughout the project, especially in requirements specification and testing?	X		Districts have been added to the monthly Implementation Manager's meetings, districts have stronger participation in validating the converted data and for discussing risks and issues on the project. A survey was sent to the districts in early August to determine rollout readiness and identify any corrective actions needed in rollout based on participation in small and large pilot. IPOC performed an assessment of this survey and provided recommendations to the project team for improvement in processes based on district responses.
Do users formally approve/sign-off on written specifications?	X		Configuration requirements baseline, customizations and deleted requirement agreements were reviewed by Caltrans at regularly scheduled Checkpoint meetings and feedback was provided to the Implementation Vendor. Through documentation review, it appears that users have been engaged in product reviews and training reviews and have participated in regular meetings to discuss organizational change management and pilot preparations.
Is a formal SDLC methodology followed?	X		The project schedule is categorized into high level summary tasks: program Milestones, Project Management, PRSM Adaptation Phase, Testing Phase, PRSM Pilot Phase, PRSM Rollout, Statewide Rollout Acceptance and state Closeout.
Is a software product used to assist in managing requirements? Is there tracking of requirements traceability through all life-cycle phases?	X		Changed from Inadequate to Adequate in March 2012. TMS has reviewed spreadsheets of requirements but is unaware of any other tool that is currently being used to manage requirements. Traceability matrices do exist and have been reviewed at a high level by TMS. These traceability matrices are significantly out of date. TMS has also reviewed the traceability spreadsheets in the project document library and found that there are many to-be use cases that are not traced to any associated test cases. This could be an indication of insufficient testing coverage. TMS provided this data to Caltrans and they have gone through the testing materials to complete the mapping. A review of the approach Caltrans took for this exercise was reviewed by TMS and found to be consistent with our recommended mitigation. There are (12) Unknown mappings that could be out-of-the-box functionality that is not used by Caltrans, or an item that was removed or re-designed. There were (4) items that could not be traced and require some additional investigation. Based on the significant improvement in mapping completed by the PRSM team on filling the gaps of the No Match and Partial Match requirements, IPOC now finds this category Adequately Defined.
Do software engineering standards exist and are they followed?	X		Engineering standards exist and are documented in the PRSM Configuration Management Plan. TMS has reviewed the Configuration Management Plan at a high-level and will complete a more in-depth assessment in the future.
Does product defect tracking begin no later than requirements specifications?	X		As per the Adaptation Test Plan dated July 1, 2001, Test Team members document defects in iCenter's Test Tracker as they find them, starting at the Testing Phase. A process is defined for the Test Leads to review open iCenter Test track issues with PRSM team members and also identifies a process to identify, classify and resolve test anomalies. In addition, a document titled PRSM Anomaly Identification and

Quarterly PRSM Status Report to the Legislature

Practices and Products	Adequate	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
Resolution Process Utilizing Test Tracker provides detailed instructions for how to use the defect tracker.			
Are formal code reviews conducted?	X		TMS is aware that the PRSM Project Team has performed formal configuration reviews to occur during checkpoints throughout the Adaptation Phase. TMS has not been exposed to any code review documentation or Checkpoint 4 review documentation.
Are formal quality assurance procedures followed consistently?		X	TMS reviewed the Quality Management Plan and observed that it contains a high-level of detail for the review, analysis and approval of formal deliverable documentation from the vendor. However, TMS did find the overall process and procedure for non-deliverable quality management to be lacking. The Quality Management Plan contains a single-line reference to the Configuration Management, Change Control, Issue Management and Risk Management plans but does not discuss what activities are performed by the quality team to ensure these process areas are functioning efficiently, correctly and in accordance to the documented processes and procedures. There are some quality activities defined for requirements management, however, the frequency for when those activities take place, the tools used to perform the activities and the reporting vehicle for those activities are not defined.
Do users sign-off on acceptance test results before a new system or changes are put into production?		X	Project has just started the Rollout Phase in July 2012. An Implementation Plan was completed late and a separate rollout schedule was developed and later integrated into the master schedule. At this point, TMS is unaware of any formal sign-off activities scheduled for rollout with the districts.
Is the enterprise architecture plan adhered to?	N/A	N/A	TMS is aware that Caltrans is in the process of creating a formal enterprise architecture plan. The PRSM technology solution was requested to be submitted as part of the study. However, TMS has not been exposed to the enterprise architecture plan.
Are formal deliverable inspections performed, beginning with requirements specifications?	X		The PRSM Quality Management Plan contains a high-level of detail for the review, analysis and approval of formal deliverable documentation from the vendor. Upon review of the PRSM project schedule, it appears that formal deliverable inspections are conducted for critical milestones of the project.
Are IV&V services obtained and used?	X		The IV&V Contract was approved and the IV&V Vendor began work in April 2008.

IPO Report for July 2012

Project Name: Caltrans Project Resource Scheduling Management (PRSM) System

Assessment Date: July 31, 2012

Frequency: Monthly

Oversight Provider Information

Oversight Leader: Cindy Blehm

Organization: Technology Management Solutions, Inc.

Phone Number: 916-591-1746

Email: cindyblehm@aol.com

Project Information

Project Number: 2660-160

Department: Transportation (Caltrans)

Criticality: High

Agency: Business, Transportation & Housing

Last Approved Document/Date: SPR (4/2/2012)

Total One-time Cost: \$26,947,129

Start Date: June 7, 2000

End Date: May 24, 2013

Project Manager: Steve Kawano (acting)

Organization: Caltrans

Phone Number: 916-749-5675

Email: steve_kawano@dot.ca.gov

Summary: Current Status

Project Phase: **PRSM Large Pilot Phase**

Planned Start Date: December 22, 2011

Planned End Date: August 29, 2012 (per approved SPR)

Actual Start Date: December 22, 2011

Forecasted End Date: July 12, 2012

Project Phase: **Post Pilot Deliverables**

Planned Start Date: No baseline date

Planned End Date: No baseline date

Actual Start Date: April 23, 2012

Forecasted End Date: August 20, 2012

Project Phase: **PRSM Rollout Phase**

Planned Start Date: April 18, 2012

Planned End Date: May 24, 2013 (per approved SPR)

Actual Start Date: April 9, 2012

Forecasted End Date: May 27, 2013

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Schedule

Select the statement that most closely applies, measured against the last **Finance approved** document.

Ahead-of-schedule:

One or more major tasks or milestones have been completed and approved early (> 5%).
All other major tasks and milestones completed and approved according to plan.

On-Schedule

On-schedule:

All major tasks and milestones have been completed and approved according to plan.
(Within 5%)

Behind Schedule:

One or more major tasks or milestones are expected to be delayed. (> 5%)

Comments:

The SPR for PRSM was approved on April 2, 2012 which reset the baseline for the project. The project schedule is now tracking to Baseline 1. Pilot conversion tasks added detail and the project team has added more State and vendor resources for the rollout tasks. The project team is currently reworking the rollout schedule to redefine tasks, reevaluate the durations and timeframes and add resources to the tasks. The current schedule shows completion of the end of the Adaptation Phase on May 16, which was (51) forty-one days later than the SPR baseline completion date of March 26, 2012. All adaption tasks are complete with the exception of the final payment point.

The current schedule shows the end of the Large Pilot on 07/12/2012 which is (48) days earlier than projected. However, this may be misleading because the activities that used to comprise the post pilot deliverable and close-pout phase have since been moved out of the large pilot summary tasks and into their own task. Post Pilot activities are scheduled to end on 08/20/2012 and are made up of the evaluation activities for pilot, formal documentation and some preparation for rollout. Rollout activities started on 06/13/12 with the first district training (districts 1, 2, and 3) starting on 07/23/2012 and project data extract (districts 1, 2, and 3) scheduled to start on 7/13/12. As of the 07/26/12 project schedule, Statewide Acceptance and the Overall Project Completion are running a few days late due to Pilot evaluation tasks and some rollout tasks pushing out.

The project team is doing a commendable job of documenting in notes the reason for delays in all sub-tasks, and a go forward plan of getting the tasks back on track. The project team also provides documentation related to the revision of dependency dates that impact downstream milestones. Both of these activities are excellent schedule management practices.

Large pilot activities concluded on schedule after nine weeks and the large pilot team gave the GO decision to move to rollout activities. Pilot Evaluation tasks are running late for deliverable #15, Pilot Evaluation Report and deliverable #20 Technical As-Built Documentation, both dependencies for rollout activities. Rollout activities were running slightly late and the District 1, 2 and 3 Rollout Plan was submitted and the review completed by Caltrans on 07/26, with State acceptance on 07/27.

Starting in April 2012, IPOC began tracking the baseline dates for each phase against the forecasted date in each IPOR and will continue to do so for each new reporting period. This data was based off the last revised schedule dated 07/26/2012.

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Phase	Baseline Task ID	Baseline Start	Baseline End	Forecast Start	Forecast End	Variance in end dates (in days)	% Complete	Dates between Baseline	Dates between Forecast
Adaptation	28	4/11/2011	3/26/2012	4/11/2011	5/16/2012	-51	99%	0	-51
Small Pilot	None	12/2/2011	3/21/2012	12/2/2011	3/23/2012	-2	100%	0	-2
Large Pilot	None	12/22/2011	8/29/2012	12/22/2011	7/12/2012	48	100%	0	48
Post Pilot Deliverables	None			4/23/2012	8/20/2012		57%		
Rollout	515	4/18/2012	5/24/2013	4/9/2012	5/27/2013	6	10%	9	-3
Statewide Acceptance	874	5/8/2013	6/19/2013	5/8/2013	6/19/2013	0	0%	0	0
Overall	1	4/11/2011	7/19/2013	4/11/2011	7/19/2013	0	77%	0	0

Note: This was built on the 07/26/2012 version of the project schedule provided by Caltrans

Resources (Level of Effort) Choose the statement that most closely applies.

Fewer Resources

Completion of one or more major tasks and / or acceptable products has required or is expected to require materially (>5%) fewer hours/staff than planned.

Within Resources

Within Resources

All major tasks have been completed and acceptable products created using the planned number of hours/staff (within 5%).

More Resources

Completion of major tasks and / or acceptable products has required or is expected to require materially (>5%) more hours/staff than planned.

Comments: Now that the project has completed the majority of the Large Pilot Phase and has entered the Rollout Phase, the resource needs are expected to change. The project is in the process of determining how to staff up the IT team for maintenance, operations and level 3 support. An estimated 2.5 FTE's are required to maintain PRSM and it is critical that this team comes on board quickly to leverage the Knowledge Transfer and education sessions the vendor will be providing during the final year of the contract. SAIC is scheduled to have two trainers teaching PM classes through rollout. There have been discussions of bringing a third online for overlapping session in D4 and some phase 2 rollout districts, but nothing has been solidified yet. Additionally, the vendor resources will be reduced to 1 training resource for one year, 2 technical resources for one year and 1 technical resource for 3 months. The tasks and responsibilities for these resources are not yet defined. TMS recommends that the specific task allocations and expectations should be set for these resources and the deliverables they will produce or milestones they are expected to achieve during that time (for example, there is no methodology or expectations defined for the Knowledge Transfer activities that SAIC is responsible for executing during rollout).

The project schedule has been revised to include updated rollout tasks, updated durations and timeframes and resources assigned to each task.

The PRSM project manager left the PRSM project effective April 6. Since that time, the project has transitioned to two interim project managers. Caltrans has advertised for a permanent State employee to fill the PM position. In addition, there are no plans to extend the current project management support services contract past August 2012. IPOC opened up a risk in June 2012 related to these critical resource issues.

In addition, in this reporting period, the project team lost their dedicated IT Lead for PRSM which may ultimately impact the ability to push forward on resolving the performance issues and planning for transition.

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Resources (Budget/Cost) Choose the statement that most closely applies.

- Less cost**
The project is (>5%) under budget.
- Not Able to Assess**
- Within cost**
The project is operating within budget.
- Higher cost**
Material budget increases (>5%) are likely.

Comments: The funding source for PRSM is the State Transportation Fund. TMS has reviewed the vendor deliverable tracking spreadsheet and the updated cumulative expenditures that the project has reported in the most current CA-PMM report for June 2012.

As per the CA-PMM status report for the May reporting period, the total project approved costs were \$36,377,496 and the Cumulative Actual Cost to date is \$23,143,711. NOTE: These numbers are based on the latest approved SPR4.

	SPR 4 Costs	Cumulative Actual Costs
Project Costs	\$36,377,496	\$23,426,372
One-Time	\$26,947,129	\$20,541,499
Continuing	\$9,430,367	\$2,884,873
Annual M&O	\$2,057,000	\$0

As per the Vendor Payment Point and Deliverables spreadsheet, SAIC has been paid \$6,918,762 (less holdback) of the \$13,200,056 contract.

	Budgeted	Invoiced
Planning	\$1,009,739	\$908,765
Adaptation	\$4,933,935	\$4,422,542
Pilot	\$2,807,271	\$1,587,455
Rollout	\$2,211,424	\$0
Maintenance	\$2,128,292	\$0
Unanticipated	\$109,995	\$0
TOTAL	\$13,200,056	\$6,918,762

In order to properly assess the cost for PRSM, TMS must be able to view the expended and projected monthly tracking expenditures and compare that to the economic analysis worksheet in the last approved SPR. To date, TMS has only been exposed to budgeted and actual costs, but has not observed forecasting of projected costs against SPR EACs. Because of this, TMS has stated that we are Unable to Assess the Resources (Budget/Cost) section.

Quality (Client Functionality) Choose the statement that most closely applies.

- Adequately Defined**
Required client functionality is adequately defined, and is being successfully built into the system, given the current project phase.
- Inadequately Defined**
One or more significant components of required client functionality are inadequately defined, or are not being successfully built into the system, given the current project phase.

Comments: TMS has reviewed the requirements and to-be use cases and workflows created for PRSM and found them to be quite thorough and inclusive of the underlying solution flow. In previous months, TMS reviewed the traceability spreadsheets in the project document library and found that there were many to-be use cases that are not traced to any associated test cases. IPOC was concerned that this could be an indication of insufficient testing coverage. TMS provided this data to Caltrans and they have gone through the testing materials to complete the mapping. A

review of the approach Caltrans took for this exercise was reviewed by TMS and found to be consistent with our recommended mitigation. There are (12) Unknown mappings that could be out-of-the-box functionality that is not used by Caltrans, or an item that was removed or re-designed. There were (4) items that could not be traced and require some additional investigation. SAIC resources are working with Caltrans staff to determine how to resolve the unknown mappings that still exist. Based on the significant improvement in mapping completed by the PRSM team on filling the gaps of the No Match and Partial Match requirements, IPOC now finds this category Adequately Defined.

During the Small Pilot and Large Pilot, the PRSM team conducted twice daily user activity sessions that focused on utilizing PRSM functionality for specific use case scenarios. These user sessions were a huge success and allowed the PRSM team to adapt some of the PRSM flow and functionality to better fit the way the application will be used in the districts. Additionally, the team continues to work with District 4 (the second district scheduled for rollout) to work through early user activity sessions to prepare them for rollout.

Quality (Architecture/System Performance) Choose the statement that most closely applies.

Adequately Defined

The system technical architecture is adequately defined, and modeling, benchmarking and testing are being conducted (or are planned) appropriate to the current project phase.

Inadequately Defined

Inadequately Defined

The system technical architecture is not adequately defined, or modeling, benchmarking and testing are not being conducted (or are planned) appropriate to the current project phase.

Comments: TMS is aware that the Implementation Vendor has submitted a Configuration Management Plan, High Level Design, Test Plan and updated Architecture Diagram. The Production environment hardware has been configured and turned over to Caltrans. The project has completed the majority of the activities in the Large Pilot phase and declared a "Go" on July 10th for District Rollout. System and Regression Testing completed on June 29; however, some defects have been moved into the next monthly release. Several outstanding pilot defect were released with the first monthly defect release on July 1; the second release is scheduled for August 5 and will address the remaining pilot defects. The project team has prepared a summary of all testing results that includes all System Test cases, the status of each test case, the defects generated from each test case and the status of those defects.

Additionally, the project is still experiencing some network performance issues that will most likely affect the user experience. Response time between refresh is running at approximately 3 seconds. OTECH is actively working to mitigate the issue and feels confident that the issues will be resolved prior to roll-out. Until such time that the performance issues are resolved or IPOC has evidence that the response time and system availability are within the stated requirements, this category is defined as Inadequately defined.

New Risks

IPOC has no new risks to report for this reporting period.

Progress Toward Addressing Prior Risks

Risk R-9: Key Critical Resources have left or are leaving the project which may have an impact on decision making, problem solving and/or strategy setting.

Original Risk Statement: In the past several months, the initial PRSM project manager has left Caltrans, a new interim PM was assigned in her place who served for six weeks. That interim PM was replaced with a new interim project manager in May. IPOC was told that a permanent position has been posted for this position, but based on State hiring timelines it could be several months before this position is filled. In addition, the project manager support (Brian Spray) contract terminates in August and there are no plans to keep him on board for a longer period. This poses a significant risk to the PRSM project by not having dedicated, permanent and knowledgeable staff in place for decision making, trouble-shooting and setting direction or escalating issues.

Probability: **Impact:** **Timeframe:**
Severity: **Opened:** **Status:**

IPOC Recommendations:

- Caltrans Management needs to appoint a permanent staff member in the position of PRSM project manager immediately – the transition in and out of interim staff is causing disruption to the project team.

Status: The advertisement for the permanent position for PRSM Project Manager is still open. There have been several applicants including the current interim Project Manager. TMS recommends escalating the hiring of the

new PM as soon as possible so that they will be involved in the Go/No-Go decision and the start of rollout. TMS continues to recommend placing continuity of service as a strong criteria when selecting the final candidate.

- Extend the current project manager support staff throughout the remainder of the large pilot and at a minimum, through the first three production district rollouts. There needs to be continuity on the PRSM project and a central team member responsible for risk and issue management, schedule management and scope management.

Status: TMS has been informed that the request for continuation has been submitted; however, there are funding issues that may affect the ability to renew. Currently, the PM Support position will expire at the end of September.

- With significant attrition on the project on both the Caltrans and SAIC teams as we approach Rollout, it may be necessary to revise the roles and responsibilities of the Project Management Plan and the organizational/governance processes.

Status: No update.

Status:

07/31/12: The advertisement for the PRSM PM position has not yet been filled, the position is still open and interviews have been cancelled. TMS is not aware of an approved extension for the PM Support Specialist position. Both of these positions are critical to the success of the future District rollouts and as recommended in June 2012, TMS recommends a continuity of resources for the first few district rollouts. In addition, the IPOC team rolls off in August 2012 as well, opening a risk on the project that lessons learned, corrective action and recommendations for process improvement may not be implemented into future rollout phases.

06-30-12: The PRSM project has undergone significant changes in resources over the past year. Unfortunately, without extensive knowledge transfer documentation, the learning curve when bringing on a brand new resource takes time and the project loses productivity. As rollout approaches, it is very critical that the first five or six rollouts execute in a productive, seamless manner and that lessons learned be immediately applied to the remaining rollouts. There is no transition time in between each rollout, rather, while one district is loading the conversion files and validating the data, the next district has already starting the planning and preparatory activities for their district. Caltrans has stated that there is a blackout period/data freeze where these lessons may be applied between phase 1 and 2 rollouts. As of a result of this aggressive schedule, TMS is recommending continuity of resources for the first five to six district rollouts at a minimum when would take them through the end of this calendar year.

Risk R-6: Lack of performance and scalability planning may lead to issues with the Pilot or Rollout if not resolved quickly

Original Risk Statement: For performance testing, there is a lack of requirements and goals. There is also a lack of a test plan for scalability and performance, and a lack of performance test scripts created and executed.

Probability: **Impact:** **Timeframe:**

Severity: **Opened:** **Status:**

IPOC Recommendations:

- Understand performance requirements – how many users will be on the system concurrently, what is the expected performance metrics for submitting data, what is the expected performance for running reports, what are the scalability requirements?

Status: This has been mitigated, but not to the level needed for the performance problems we are currently encountering. Additional expectations for application versus network performance should be documented and shared with the SAIC team and the Caltrans IT team.

- Take the current scheduling system and establish baseline for these performance requirements and determine if they are meeting the goals.

Status: To the best of IPOC's knowledge, this has not yet been done and is not planned..

- If they are not meeting the goals, develop and execute test cases for performance.

Status: This is planned for in the project schedule, but has fallen behind schedule due to environment issues.

Status:

07-31-12: The main performance issue is with the response time. The project team and OTECH are looking at server configuration of HW and load balancers. Ongoing reviews are occurring with OTECH and Caltrans HEAT desk capturing any calls from users. As per Caltrans, performance is much improved from what was experienced in small pilot and large pilot. A "Go" decision was provided on July 10th after completion of the Large Pilot. At this time, Caltrans does not believe that the on-going performance problems are significant enough to postpone rollout. There is no strategy for conducting performance testing and all performance testing is on hold until the issue with response time is resolved. Caltrans IT owns the Load Runner tool but does not have the expertise to write scripts. The project team is still looking into open source tools that can be used without cost to create simple scripts that can be used to generate load on click path from login to main navigation to project list page, for example. They have identified three open source tools that may be adequate for this type of testing. Until Caltrans is at a stable performance level, they are not planning to develop a strategic plan.

06-30-12: The project is still experience network performance issues that OTECH is actively working on. The performance degradation occurs primarily in the afternoons and is resulting in an approximate 3 second delay with each page refresh. Several other performance issues have taken a back seat to this main performance issue and this will become a critical decision factor in the July 10th Go/No-Go checkpoint for rollout.

05-31-12: In conversations with the PRSM team, there was no initial production performance baseline captured. Although IPOC has requested that performance test scripts be created, the Caltrans IT team believes that "although test scripts help determine valid functionality, they will offer little to help resolve performance response times. Production response comparison to non-production systems is absolutely 'apples to oranges' - test scripts won't help remedy the difference." Regardless of whether or not performance test scripts are developed, the fact remains that minimal performance testing was performed prior to small pilot, there is an absence of a plan to document the minimal requirements or expectations for performance testing, and performance response time continues to be an issue in large pilot.

Risk R-5: Inadequate planning for data conversion may cause additional schedule delays and impact the quality of integration testing.

Original Risk Statement: There have been unexpected problems with the dry-run data conversion process and for several of the Districts' pilot data, there has not been a successful dry-run to date. This may cause additional schedule delays and impact the quality of integration testing. In addition, planning for conversion is behind schedule with the team continuing to document the Implementation Plan and the end-to-end Caltrans Conversion Process document.

Probability: **Impact:** **Timeframe:**
Severity: **Opened:** **Status:**

IPOC Recommendations:

- Reconcile discrete tasks listed in the go-forward plan with high level tasks in the project schedule to ensure that all conversion activities are tracked and assigned.

Status: This has been mitigated.

- Review of the current conversion metrics showing what has been successfully converted and what remains to be converted.

Status: IPOC reviewed the informal results that were available from the Small Pilot Conversion. No formal results were captured. IPOC has received some documented results of the large pilot, but has not observed documentation of the method used in capturing conversion results for the large pilot.

- Include districts in conversion validation activities – no one knows their data better than they do.

Status: Plan for Pilot and Implementation Plan had roles and responsibilities assigned for districts related to validation. IPOC reviewed the completed District readiness checklist and reviewed the small Pilot informal results that were completed by each district involved in the pilot. The checklist does a commendable job of highlighting the tasks that needs to be validated, the owner of the task (both HQ and District) and the follow-up actions. This Checklist was sent to IPOC as confirmation of conversion results being documented after the Small Pilot. However, IPOC did not observe that the checklist was actually used in the conversion process and it does not appear that the checklist was updated to complete many of the fields (target date, LOR and criticality).

- In discussions with the project team, they have indicated that they would like to document, by District, where the source data is coming from, what pre-conversion activities or data cleansing have been done so far, what remains to be done, and results of testing. This will help the State identify which district is in the best position to move forward in Pilot. IPOC agrees and supports this approach.

Status: To the best of IPOC's knowledge, this type of data has not been captured.

Status:

07-31-12: Integration testing has completed. Large pilot conversion completed w/o major incident and the north region conversion is in progress and on schedule. A "Go" decision was made in mid-July to proceed with rollout activities. The schedule was significantly re-worked to add additional validation activities for conversion and rollout. Although not a popular recommendation, IPOC continues to recommend that the PRSM team actively work with each district on the District Readiness Checklist and validate that prior to implementation, all columns are ready for rollout. We continue to recommend that conversion results be maintained in a matrix so that it is easy to determine trends and pro-actively address problems before they happen.

6-30-12: The large pilot concluded at the end of June and a Go/No-Go decision will be made on July 10th regarding the start of rollout. TMS believes the last four recommendations will help the project streamline the conversion process for each of the rollout districts and will enable the project to detect trends earlier which could lead to more expedient, pro-active mitigation of issues before they are exposed. We continue to recommend that the PRSM team actively work with each district on the District Readiness Checklist and validate that prior to implementation, all columns are ready for rollout. We continue to recommend that conversion results be maintained in a matrix so that it is easy to determine trends and pro-actively address problems before they happen.

05-31-12: Interface initialization post conversion for EFIS Project Expenditures completed in mid-May. Deliverable 10 – data Initialization Report for Pilot Data Load – was received by SAIC and is under review by Caltrans. A new series of tasks were added to the large pilot activities that include gathering metric data on data conversion timing and disk utilization, transactional timing, server performance and database performance.

Risk R-1: Lack of Effective Organizational Change Management or District Buy-in for Pilot could lead to lack of acceptance of PRSM or to new PRSM processes

Original Risk Statement: One of the most significant challenges to the PRSM Project could be engaging and obtaining buy-in from District executives, management and staff. It is very important that District executives and management are knowledgeable about PRSM and the changes to their business processes and benefits of using PRSM. District staff, in addition to training, should be knowledgeable of the decisions and consequences of changing / standardizing business processes. Lack of engagement of District personnel at all levels could have a negative impact on overall PRSM system acceptance and usage.

Probability: **Impact:** **Timeframe:**
Severity: **Opened:** **Status:**

IPOC Recommendations:

- Assess the changes to the training program/plan proposed in the most recent implementation vendor change request in order to understand the impact on Organizational Change Management. Work with the Districts to help them understand the changes to the training program in order to gain organizational buy-in and confirm that the program is adequate to enable a successful Roll Out.

Status: This has been mitigated.

- Consider hiring / extending additional consulting resources to assist with refining the Organizational Change Management Plan and to execute the plan.

Status: IPOC is not aware that any additional staffing has taken place to help with OCM development and activities.

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- Involve the end users in a more direct way and allow them to participate in the risk management process. This will allow the project team to obtain early buy-in and a stake in the project. Hold a risk identification session to identify the district concerns of the pilot activities and help define appropriate mitigation strategies to address the risks identified.

Status: This has been mitigated. A series of four "roadshows" were completed prior to small pilot to present how PRSM would address key business processes at the district. Additionally, there have been two daily small pilot user sessions and a daily pilot review call.

- Analyze current methods of communication to determine if additional processes need put in place to get the districts to open up the channels for communicating risks and issues associated with pre-pilot, pilot and post pilot activities.

Status: This is being mitigated. There was a daily small pilot review and they are also conducting daily large pilot reviews

- Engage the districts in reviewing business functionality and business processes.

Status: For the past 6 months, TMS reported this recommendation as mitigated due to the districts participation in training for the six key functional areas and the business processes associated with them. However, based upon the results of the pilot and the user feedback from the training courses, TMS recommended in April that the training team incorporate more focused examples of how the districts will use PRSM to perform their daily job. The feedback received from the small pilot indicates that the training material deals more at a generic product level rather than specifically demonstrating how PRSM will be used day to day. For the May reporting period, IPOC observed that the training team did a commendable job of tracking user feedback and survey feedback and made the necessary modifications to the training material and associated handouts and FAQs. The proof that this was an effective exercise will be in the results of the user training surveys from future training efforts. In addition, as per Caltrans feedback, districts 1, 2 and 3 have been thoroughly engaged during pilot; and district 4 is scheduled for the second production rollout. Members of the training and implementation teams have started pre-rollout sessions and SME training in D4.

Status:

07-31-12: Numerous activities have been taking place in the districts over the past few months to prepare them for rollout. For example, in D4, Caltrans identified district PRSM Subject Matter Experts (SMEs) and conducted team building activities, as well as delivered presentations and conducted weekly discussions to the district. Implementation Manager (IM) and SMEs were trained on PRSM changes and impacts, including time charging & task management. The team delivered one-week SME training in D4, conducted meetings with D4 IM and implementation team for D4 PRSM readiness and rollout planning, and conducted two-week SME User sessions using sandbox in PRSM training environment for the SMEs.

6-30-12: TMS has not been provided the large pilot District Readiness Checklists to see if all the pre-rollout activities were completed and discussed during the 4-6 weeks prior to rollout. Some items in the District Readiness Checklists involve and analysis of the current business process to determine whether PRSM will generate any changes. TMS has been informed that District 4 training (scheduled for conversion loading 8/16/12) has already been actively engaged in pre-rollout discussions and SME training; however there has been no documentation for TMS to review during this reporting period.

05-31-12: For the month of May, TMS focused on the PRSM Training Assessment and review of the PRSM Training Plan and associated training material and sessions as their One-Time Assessment review. SME, T4T and Sys Admin Training is due to be completed for large pilot over the next few months, as well as Advanced Implementation Team Training and updates to the existing PRSM Training Plan.

Closed Risks

There were no risks closed for this reporting period.

General Comments

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This report reflects the time period of July 1 – July 31. The PRSM project remains in Large Pilot Phase as it closes out pilot evaluation tasks and has started the Rollout Phase.

This General Comments section focuses on the project management processes. TMS has included the following project management process chart documenting TMS's assessment of each major area of project management on the PRSM project by a color code in the table below. Three month's worth of status is displayed.

- RED** = Unsatisfactory project management practices that present significant risk to the project.
- YELLOW** = Corrections to project management practices needed to reduce risks.
- GREEN** = Satisfactory project management practices are being followed.
- BLUE** = Assessment in progress.
- GRAY** = Closed – not applicable to the project in this phase

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Process Area	Last Month Rating	This Month Rating	SUMMARY OF ASSESSMENT	Recommendations for Improvement
General Project Management			<p>07/31: The project is in the process of determining how to staff up the IT team for maintenance, operations and level 3 support. Specific task allocations and expectations need to be set for these resources and the deliverables they will produce or milestones they are expected to achieve during that time (for example, there is no methodology or expectations defined for the Knowledge Transfer activities that SAIC is responsible for executing during rollout). No status on hiring a permanent State PM or extending the current PM Support staff.</p> <p>06/30: Permanent PRSM PM position is still open. Several candidates have interviewed. PM Support staff position has been requested for extension but there appear to be funding issues. TMS continues to recommend continuity of knowledge during rollout for both of these positions.</p> <p>05/31: The project has suffered from the loss of a key critical position in the past two months, and may suffer the loss of another position in the coming months. In April, the permanent PRSM PM left the department and was replaced with an interim PM. This PM was in place for only one month and was replaced with a second interim PM. Although this is not a permanent position, IPOC is aware that the State has posted the vacant position and is beginning the hiring process. In addition, IPOC has learned that the current project management support staff contract is not being extended and will terminate before the end of the large pilot. The project has just gotten back on track with consistently applying risk, issue, schedule and scope management processes and these resource transitions could put this structure in jeopardy. As a result of the resource flux, IPOC will continue to monitor this area to ensure that project management practices do not slip as a result of resource transition. IPOC has also opened up a new risk, Risk 9.</p>	<ul style="list-style-type: none"> • Appoint a permanent PRSM project manager. Status: The position has been posted but no award has been made. • Extend the current PM Support Staff through Large Pilot and at least through the first few district rollouts. Status: IPOC is unaware if any progress has been made to extend this position through rollout. • Set task allocations for resources and deliverables related to Maintenance and Operations activities.
Planning and Tracking (Work Plan)			<p>07-30: Status moved to Green. SAIC resources have been leveled and resources were added to the activities in the Rollout phase. SCH Finding 5 is now closed.</p>	<ul style="list-style-type: none"> • SCH Finding 5: TMS recommends that the project level the current workplan such that all resources listed in the

Process Area	Last Month Rating	This Month Rating	SUMMARY OF ASSESSMENT	Recommendations for Improvement
			<p><u>06-30:</u> The rollout schedule is currently being updated by the project team to redefine tasks, adjust durations and apply resources to each task. The team is targeting this new schedule to be complete at the end of July or beginning of August. TMS observes that as rollout commences, the number of staff for SAIC will diminish to 3 resources for one year and 1 additional resource for 3 months. It's imperative that the PRSM schedule assign these resources to discrete tasks to ensure productivity and efficiency in their technical support.</p> <p><u>05-31:</u> Although the project schedule continues to be updated on a regular basis and notes are added for significant changes or delays, the issues with over-allocation of resources and missing resources is still present in the project schedule. As a result, IPOC is turning this from Green to Yellow.</p>	<p>schedule are allocated at a reasonable level. Status: SAIC resources have been leveled and resources were added to the activities in the Rollout phase. This finding is now closed.</p>
<p>Quality Management</p>			<p><u>07-30:</u> Conversion statistics from the large pilot were not documented or available for review. The project team has prepared a summary of all testing results that includes all System Test cases, the status of each test case, the defects generated from each test case and the status of those defects.</p> <p><u>06-30:</u> The PRSM team will deliver the testing results for regression/system testing in the first week in July. These results should contain the full set of tests run, the success of each test, the defects generated from each test and the status of those defects.</p> <p><u>05-31:</u> IPOC will continue to work with the PRSM team to encourage them to gather more formal conversion and training metrics in the large pilot and the rollout phase.</p>	<ul style="list-style-type: none"> PM Finding 2: The quality management metrics collected, tracked and analyzed on a regular basis should be expanded to include more process areas and detail that would allow trends and potential issues and risks to be identified. TMS recommends concentrating on testing and requirements metrics first. Status: No update on this recommendation. TMS recommends that testing and conversion statistics be provided to the oversight teams on a regular basis for reporting progress against milestones. Status: Testing statistics were provided for System Testing and regression testing. Formal conversion metrics have not been provided.
<p>Requirements Management</p>			<p><u>07-30:</u> No change in status.</p> <p><u>6-30:</u> IPOC re-sent the list of 12 unknown mapping areas to the PRSM project team as requested in order for them to analyze the unmapped areas and provide guidance on how to address them.</p> <p><u>05-31:</u> No status change. IPOC will work with the PRSM Team to determine their level of acceptance for remediating the traceability if the 12 unknown mapping areas. If the project team agrees to accept the risk, IPOC will close out the recommendation.</p>	<ul style="list-style-type: none"> Traceability through the project life cycle should be an on-going activity that is performed with some level of regularity to ensure that all changes are incorporated into the project consistently. The RTM should be updated as a result of the exit-phase sessions for Phases 1-4. Status: SAIC is scheduled to complete an updated traceability. As of the end of July, this has not been completed. TMS would recommend a review of the gaps in the traceability matrix to ensure proper testing coverage, weekly review of testing metrics to understand the current

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Process Area	Last Month Rating	This Month Rating	SUMMARY OF ASSESSMENT	Recommendations for Improvement
				<p>progress being made and clearly defined exit criteria as the project enters the pilot phase. If there are no plans to directly terrace requirements to Test Cases, then the traceability matrix should state the approach for traceability and clearly define how the mapping of test cases to FEATS is satisfactory to the customer. <u>Status:</u> There are (12) Unknown mappings that could be out-of-the-box functionality that is not used by Caltrans, or an item that was removed or re-designed. There were (4) items that could not be traced and require some additional investigation. As per Caltrans, an SAIC resource familiar with requirements has re-joined the team and may be able to help in this review.</p>
Risk Management			<p><u>07-31:</u> The risk management process is working as documented. <u>06-30:</u> No change in status. <u>05-31:</u> The risk management process is working as documented.</p>	<ul style="list-style-type: none"> • All previous recommendations have been mitigated.
Issue Management			<p><u>07-31:</u> The issue management process is working as documented. <u>06-30:</u> No change in status. <u>05-31:</u> The risk management process is working as documented.</p>	<ul style="list-style-type: none"> • All previous issue recommendations have been mitigated.
Communication Management			<p><u>07-31:</u> Status has turned yellow this month. Although communication with the districts is an on-going process, IPOC expected to observe an increase in the frequency and depth of communications to the districts prior to the start of the rollout preparation and training activities. The Rollout Plan, which documents the roles and responsibilities of the HQ team, Implementation team and system integrator, ran two months late and and just recently completed. Since the content in this plan may drive roles and responsibilities and changes in task assignments in the project schedule, it is imperative that it is integrated into the master schedule as soon as possible. <u>06-30:</u> Communication with the districts is on-going. In June, the project held a Regional District Support walkthrough of the help desk process, what has changed and the issues encountered. Cambria is doing some change management training for district 4 in preparation for their conversion scheduled in August. Both the April and May status reports were sent to TMS for review,</p>	<ul style="list-style-type: none"> • Complete the integration of the Rollout Plan activities into the master schedule and define the roles and responsibilities and activities required for rollout.

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Process Area	Last Month Rating	This Month Rating	SUMMARY OF ASSESSMENT	Recommendations for Improvement
			<p>but neither has been formally posted on the CTA website.</p> <p><u>05/31:</u> IPOC is not aware of a PRSM Nuggets of Information being generated for the last two months, nor was their evidence of a Project Status report (PSR) being submitted for either the February or April reporting periods to CTA. IPOC wants to ensure that the districts are as actively involved in the large pilot activities as they were for the small pilot and that continued communication is distributed to the right audiences.</p>	
<p>End-User Training</p>			<p><u>07/31:</u> Deliverable 13 – System Admin training manual – is running two months late. The first System Admin training class is scheduled for 07/31. SME training for D4, D8 and D12 has been completed. Train the Trainer material has been developed and the classes are scheduled to start on 08/03. Impelmentation Team training for the weekly webinars was scheduled in late June and end in early August, but the schedule shows 0% complete. D1, D2 and D3 end user training is scheduled for mid-August.</p> <p><u>6/30:</u> As rollout commences, the end user task manager training will be performed by Caltrans and SAIC will continue to provide the PM Training. All training materials have been updated based on lessons learned from the pilots.</p> <p><u>05/31:</u> To date, the PRSM team has conducted the following training sessions: Adaptation Implementation Phase Training (November 2011), Small Pilot Training (February 2012), Deliverable 13 part 1 - training materials have been completed, and Large Pilot Training Sessions (March/April 2012). PRSM Training sessions yet to be completed include:</p> <ul style="list-style-type: none"> • District rollout training materials • District rollout training sessions • Custom reporting training • System admin training • Train the trainer sessions • Remaining SME sessions learned. 	<ul style="list-style-type: none"> • Training Plan: Roles and Responsibilities do not include a definition of needed skills and knowledge for each staff member. • Training Plan: Post Implementation Training and Knowledge Transfer activities are not defined. • Execution: Advanced Implementation Team Training • Student counts for preparation of training materials are over two years old and may require verification prior to production rollout training. • Overlapping the first two district training sessions may pose a risk to the project without any slack in between to make adjustments.

Quarterly PRSM Status Report to the Legislature

Process Area	Last Month Rating	This Month Rating	SUMMARY OF ASSESSMENT	Recommendations for Improvement
<p>Data Conversion and Load</p>			<p><u>07-31:</u> Rollout conversion activities have started, but were dependent on the completion of the Rollout Plan which ran late. The loading of D1, D2 and D3 files started on 07/13 and is scheduled to end on 08/15, but the schedule currently shows 0% complete and 5 days was added to the total duration.</p> <p><u>06-30:</u> Conversion activities appear on track with no outstanding issues. IPOC continues to recommend a trending chart to be leveraged during the rollouts.</p> <p><u>05/31:</u> Additional validation activities were added for conversion in the large pilot schedule tasks, as well as documentation of actual results.</p> <p><u>04/30:</u> Conversion activities for the small pilot were successful. Several issues were caught and immediately mitigated. Overall, the activities were conducted on time and with very little fallout. IPOC continues to recommend that metrics be maintained, especially as the project begins consistently rolling out to each district so that trends can be detected and leveraged for the next rollout.</p>	<ul style="list-style-type: none"> • Provide test measurements and metrics to oversight for review. <u>Status:</u> IPOC has asked the project team to provide these performance measures, but it does not appear that formal conversion results were captured for large pilot.

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<p>Maintenance and Operations</p>			<p>07/31: As per Caltrans, there is an effort underway to integrate SAIC staff with IT to help them come up to speed on what they will eventually be doing. Some of the activities that have taken place and that are underway are as follows:</p> <ul style="list-style-type: none"> • One-on-one mentoring sessions on Security Administration – managing the security model. • Transition Presentations provided on Clarity Configuration, Business Objects Reporting, PRSM Architecture, and Process Monitoring • Daily Processes and Jobs Monitoring task has been taught to Caltrans IT and they are within a week of picking up the effort in time for Roll-Out • System Administration discussions on how Caltrans will divide IT, HQ PM, and District responsibilities will lead to tailored sessions with appropriate staff <p>Caltrans IT continues to focus on identifying opportunities to streamline the processes to enable this transition to be completed in an efficient and timely manner. This will aid the project and customers, during their adoption of the new PRSM application. Based on the activities that have started and are planned, IPOC has moved this status from Yellow to Green.</p> <p>06/30: Some basic PRSM training courses have been given to SAIC IT Staff in preparation for the transition, however, the formal Classroom training sessions mentioned in the Go Forward plan have not yet been scheduled or delivered. TMS prepared a one-time assessment report on the Transition Readiness from both a rollout and vendor exit perspective. The main concerns seen were the lack of a staffing plan or clear description of what the 3.5 SAIC resources assigned during rollout will be doing or what the approach and methodology of Knowledge Transfer will be. Until some clarity is provided in terms of rollout roles and responsibilities, TMS will keep this item yellow.</p> <p>05/31: The PRSM team is planning for transition activities and has asked SAIC to begin the knowledge transfer training and transition effort. Classes and staff have been identified. There appears to be an assumption that SAIC is not contractually obligated to provide support for defects after the completion of the Adaptation phase – IPOC is requesting a copy of the SAIC contract and will investigate this as part of a One-Time Assessment report in June.</p>	<ul style="list-style-type: none"> •

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<p>Large Pilot Readiness</p>			<p><u>07/31:</u> Large pilot conversion activities are completed and only pilot evaluation tasks remain open. Additional validation activities were executed. IPOC conducted a one-time assessment on the large pilot evaluation and found that the pilot was a success with few issues to mitigate. This category will be no longer be reported on in future reports.</p> <p><u>06/30:</u> Large pilot preparation activities have completed and all conversion activities have started. SME and system admin training is in progress. Additional validation activities were added for the large pilot schedule tasks, as well as documentation of actual results. This category is now assessed Green.</p> <p><u>05/31:</u> Large pilot preparation and conversion activities have started and will last for 6 weeks. There will be far more concurrent users in the large pilot and the environment will change to the production environment. As a result, the team is hoping to be able to assess and mitigate all the open performance issues. IPOC continues to recommend active use of the checklist prior to the start of the Large pilot implementation.</p>	<ul style="list-style-type: none"> • PLT Finding 1: An Entry Criteria Pilot Readiness Checklist should be developed from the District Perspective. <u>Status:</u> This was used for the small pilot but three of the columns were not filled out. IPOC continues to recommend actively working with the district and reviewing this checklist on weekly basis leading up to implementation. Based on documented results from the large pilot, this was not used. • PLT Finding 3: Tactical processes and procedures for extracting lessons learned and assessing common problems mitigated during level one support should be included in any pilot documentation. <u>Status:</u> IPOC was pleased to see the Lessons Learned activity included in the schedule table; however, there needs to be an associated methodology to accompany the task. The process for defining the metrics to collect, determine who, how and when the data will be collected, and how the data will be analyzed needs to be defined. IPOC has reviewed the lessons learned from the large pilot and needs to understand what actions will be taken for corrective action as a result prior to rollout.

Process Area	Last Month Rating	This Month Rating	SUMMARY OF ASSESSMENT	Recommendations for Improvement
Performance			<p><u>07/31:</u> The main performance issue is with the response time. The project team and OTECH are looking at server configuration of HW and load balancers. Ongoing reviews are occurring with OTECH and Caltrans HEAT desk capturing any calls from users. As per Caltrans, performance is much improved from what was experienced in small pilot and large pilot. A "Go" decision was provided on July10th after completion of the Large Pilot. At this time, Caltrans does not believe that the on-going performance problems are significant enough to postpone rollout. There is no strategy for conducting performance testing. Caltrans IT owns the Load Runner tool but does not have the expertise to write scripts. The project team is still looking into scriptable load testing tools. Until Caltrans is at a stable performance level, they are not planning to develop a strategic plan.</p> <p><u>06/30:</u> There was no initial performance production baseline captured. Minimal performance testing was performed prior to small pilot, there is an absence of a plan to document the minimal requirements or expectations for performance testing, and performance response time continues to be an issue in large pilot. Based on this assessment, IPOC has assessed this category as Yellow. Caltrans has requested that IPOC present the project team with minimum expectations for performance metrics. IPOC is aware that the response issue they are experiencing are the result of network issues at OTECH. Application performance has been tested acceptable by bypassing the OTECH firewall and loading the application via VPN. The resolution of this issue is out of Caltrans' hands and with OTECH. The issue has been escalated to the CT CIO and OTECH director level. No application load testing can be performed until network issue is resolved.</p> <p><u>05/31:</u> Performance and scalability issues continue to be a significant risk for production readiness. PRSM is experiencing problems with network connectivity, sticky sessions and the performance of user reports. Each of these areas will need to be mitigated prior to rollout.</p>	<ul style="list-style-type: none"> • Capture performance expectations and/or requirements for performance testing. • Submit a CR for SAIC to perform adequate performance testing or procure a tool for Caltrans IT to perform the performance testing – prior to the start of rollout. • Capture an initial production performance baseline.

CALTRANS - PRSM Project Oversight Review Checklist (July 2012)

Project Oversight Review Checklist: High Criticality Project

This checklist is an assessment for the Adaptation Phase, Small Pilot Phase and Large Pilot Phase.

Practices and Products	Adequate	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
Planning and Tracking			
Have the business case, project goals, objectives, expected outcomes, key stakeholders, and sponsor(s) identified and documented?	X		TMS has reviewed the last approved SPR dated April 2012. TMS has validated that the dates in the project schedule correspond to the new baselined dates (Baseline 1) as a result of the SPR approval for cost and schedule.
Has a detailed project plan with all activities (tasks), milestones, dates, and estimated hours by task loaded into project management (PM) software? Are the lowest level tasks of a short duration with measurable outcomes?	X		The project does use a MS Project schedule to track the work. Tasks, milestones dates and estimated hours are documented within the schedule and the tasks, for the most part, are represented as manageable, trackable items with durations less than 80 hours.
Is completion of planned tasks recorded within the PM software?	X		Changed from Deficient to Adequate in February 2012. Caltrans has revised the project schedule to account for the slight delay in rollout activities which has translated with a delay in the overall end date. TMS has reviewed this schedule and found that almost all of the recommendations made in our one-time assessment report were mitigated in the new revision.
Are actual hours expended by task recorded at least monthly within PM software?		X	As per the project team, PRSM budget information for each contract is accessed by using the PMO and CA-PMM monthly reports and the SPR. Each month, the project rolls each of the contract expenditures into the CA-PMM report for total project costs. Actual costs are reported, as are actual percent complete. However, hours by task are not tracked at either the State or the vendor level, so this category is Deficient as per the checklist requirements.
Are estimated hours to complete by task recorded at least monthly within PM software?	X		As per Caltrans, this will be addressed with additional resource loading and reporting of actual start and finish data in future reporting periods.
Is there a formal staffing plan, including a current organization chart, written roles and responsibilities, plans for staff acquisition, schedule for arrival and departure of specific staff, and staff training plans		X	Status changed from Deficient to Adequate in March 2012. TMS reviews all updates to the project schedule when distributed. The last project schedule reviewed was dated July 18 and has been baselined to include all SPR dates. IPOC no longer participates in the meetings to gather project status as this is now conducted internally without oversight; however, IPOC has received updates to the schedule several times in this reporting period and is kept up to date with changes as they occur.
			TMS has not been exposed to a formal staffing plan. We have reviewed the <u>Project Organization Chart</u> that documents the overall structure and high-level roles; however, a breakdown of specific staff on the vendor side and State side is not clear. Roles and responsibilities are defined within each project process plan (i.e. change

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Practices and Products	Adequate	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
			<p>management roles and responsibilities are defined within the Change Management Plan), however, TMS has not seen an overall description of the general roles and responsibilities for the project team (vendor and State).</p> <p>With the attrition that is natural in the system integrator team as we start to get closer to rollout, and with the significant resource transitions that have occurred at the State level on the project, a Staffing Plan and strategy for transition becomes more critical to success.</p>
<p>Have project cost estimates, with supporting data for each cost category, been maintained?</p>		X	<p>As per the project team, PRSM budget information for each contract is accessed by using the PMO and CA-PMM monthly reports and the SPR. Each month, the project rolls each of the contract expenditures into the CA-PMM report for total project costs. TMS has reviewed the cost tracking that the project includes within the CA-PMM and observes that the actual expenditures are summarized as total amount "to-date"; however, not estimated future costs or projections are included. TMS has also reviewed the PRSM Payment Milestone and Deliverables spreadsheet for SAIC vendor costs, including the updated costs for the July reporting period.</p>
<p>Are software size estimates developed and tracked?</p>	N/A	N/A	<p>This item is not applicable.</p>
<p>Are two or more estimation approaches used to refine estimates?</p>	N/A	N/A	<p>This item is not applicable.</p>
<p>Are independent reviews of estimates conducted?</p>	N/A	N/A	<p>This item is not applicable.</p>
<p>Are actual costs recorded and regularly compared to budgeted costs?</p>	X		<p>Status changed from Deficient to Adequate in June 2012. The CA-PMM status report cost tracking summary shows various project categories, last approved SPR cost and cumulative actual costs for the total project, but not by month or fiscal year. The PRSM Payment Milestone and Deliverables spreadsheet shows actual costs incurred for vendor deliverables.</p>
<p>Is supporting data maintained for actual costs?</p>	X		<p>Status changed from Deficient to Adequate in June 2012. The Microsoft Excel version of the CA-PMM status report shows comments notes for each new data entry for the cumulative actual costs and registers the amount of invoices paid to the various vendors and subtotals on Total of One-Time IT Project Costs, Total of Continuing Project Costs and Total Project Costs.</p>
<p>Is completion status of work plan activities, deliverables, and milestones recorded, compared to schedule and included in a written status reporting process?</p>	X		<p>IPOC meets twice a month with the project team and other oversight entities to review project status and review schedule status, deliverables, milestones and key activities. The current schedule adequately tracks all major deliverables, milestones and activities. TMS has also reviewed the most current CA-PMM report submitted by the project which tracks work plan activities, major milestones and compares planned to actual.</p>
<p>Are key specification documents (e.g. contracts, requirement specifications</p>		X	<p>TMS has reviewed the Configuration Management Plan at a high level and found that</p>

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Practices and Products	Adequate	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
and/or contract deliverables) and software products under formal configuration control, with items to be controlled and specific staff roles and responsibilities for configuration management identified in a configuration management plan?			there are some gaps in terms of the promotion process, specific roles and responsibilities for some of the configuration management tasks and a lack of configuration control for some of the project management process documentation. TMS is more concerned with the execution of configuration management and the concern that the project is not following the drafted procedures defined in the plan. TMS is not aware of any planned changes or revisions to the current Configuration Management Plan.
Are issues/problems and their resolution (including assignment of specific staff responsibility for issue resolution and specific deadlines for completion of resolution activities), formally tracked?	X		Status changed from Deficient to Adequate in April 2012. TMS has reviewed the <u>Issue Management Plan</u> . Formal risk and issue management processes were executed on the project from the time IPOC started in July 2011 through November 2011. At that time the risk and issue meetings were cancelled. The meetings resumed again in April 2012 and are being conducted in a very thorough manner according to best practices. Current issues and risks are reviewed and the team has added several new risks and issues to the log in the past month.
Is user satisfaction assessed at key project milestones?	X		Through documentation review, it appears that users have been engaged in product reviews and training reviews and have participated in regular meetings to discuss organizational change management and pilot preparations. However, TMS reviewed the <u>Communication Management Plan</u> and observed that the plan does not address communication methods to and from the districts. District 3 was engaged in the small pilot and districts 1, 2, & 3 were engaged in the large pilot. User surveys were conducted for both the small and large pilots as well as user activity sessions were daily feedback was received.
Is planning in compliance with formal standards or a system development life-cycle (SDLC) methodology?		X	Compliance with PMBOK standards is not adequate for this phase of the project. Although this project does not contain a typical design and development cycle, there are requirements, configuration and testing that need to be tracked and managed in a similar way to that of a typical development project. TMS believes that a modified SDLC should have been adopted for the project that clearly identifies how validation of expected behavior will occur (i.e. description of the requirements management, configuration management and test management areas of the SDLC). Although the project is not in compliance with a formal standards or SDLC methodology, at this phase in the project IPOC does not see value in creating a document describing the methodology. However, TMS has observed that the project schedule and the approved strategy for realigning testing, pilot and conversion adopts a more tactical approach to validation of the product prior to the pilot phase. This alleviates many of the concerns of a non-standard SDLC. PRSM has reviewed the gaps in the traceability matrix to ensure proper testing coverage and has also held weekly review of testing metrics to understand the current progress being made and clearly defined entry and exit criteria. All of these are improvements to the previous process. At this point in the project, there are no further improvements to be made that would add value.
Is there formal enterprise architecture in place?	X		The RFQI describes the target Caltrans enterprise environment.

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Practices and Products		Adequate	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
Are project closeout activities performed, including a PIER, collection and archiving up-to-date project records and identification of lessons learned?		N/A	N/A	Project is in the Rollout Phase – this is not applicable in this phase.
Procurement				
Are appropriate procurement vehicles selected (e.g. CMAS, MSA, “alternative procurement”) and their required processes followed?	X			The final contract was signed by the Implementation Vendor on February 26, 2009. Caltrans received, reviewed and signed the contract on February 27, 2009. DGS Legal reviewed and signed the contract on March 5th, 2009.
Is a detailed written scope of work for all services included in solicitation documents?	X			Detailed written scope of work is contained in the RFP.
Are detailed requirement specifications included in solicitation documents?	X			Detailed requirement specifications are contained in the RFP. Requirements are also described in the RFQI and Value Analysis documents.
Is there material participation of outside expertise (e.g. DGS, Departmental specialists, consultants) in procurement planning and execution?	X			Outside expertise and counsel has been sought from DOF, DGS, and consultants when appropriate.
For large-scale outsourcing, is qualified legal counsel obtained?	N/A		N/A	The project does not involve outsourcing as currently defined.
Risk Management				
Is formal continuous risk management performed, including development of a written risk management plan, identification, analysis, mitigation and escalation of risks in accordance with DOF/TOSU Guidelines, and regular management team review of risks and mitigation progress performed?	X			Status changed from Deficient to Adequate in April 2012 TMS has reviewed the Risk Management Plan and it contains well documented processes and procedures that include Risk Identification, Risk Analysis, Risk Response Planning, Risk Monitoring and Control and Risk Communication. The plan does not address any formalized approach to risk identification (such as periodic brainstorming sessions, SEI risk identification checklists or the use of software tools). TMS has also observed risk management metrics are not included in this part of the risk planning or execution. Formal risk and issue management processes were executed on the project from the time IPOC started in July 2011 through November 2011. At that time the risk and issue meetings were cancelled. The meetings resumed again in April 2012 and are being conducted in a very thorough manner according to best practices. Current issues and risks are reviewed and the team has added several new risks and issues to the log in the last few reporting periods.
Does the management team review risks and mitigation progress at least monthly?	X			Status changed from Deficient to Adequate in April 2012 Formal risk and issue management processes were executed on the project from the time IPOC started in July 2011 through November 2011. At that time the risk and issue meetings were cancelled. The meetings resumed again in April 2012 and are

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Practices and Products	Adequate	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
			being conducted in a very thorough manner according to best practices. Current issues and risks are reviewed and the team has added several new risks and issues to the log in the past month.
Are externally developed risk identification aids used, such as the SEI Taxonomy Based Questionnaire?	X		Status changed from Deficient to Adequate in April 2012 The PRSM Risk Identification process describes how any stakeholder can submit a risk, defines the process for completing the "PRSM Risk Identification and Response Plan" and addresses how the initial risk is validated and assigned. An initial formal SEI-based assessment was conducted several years ago, and in April 2012 when the risk meetings resumed, another brainstorming session took place to identify new risks. The project stakeholders are frequently solicited for risk identification in the bi-monthly meetings.
Communication			
Is there a written project communications plan?	X		The latest version of the finalized and approved Communications Plan is dated 6/22/2009. TMS has reviewed the Communication Management Plan, which has a very thorough list of Roles and Responsibilities defined and contains an organization chart showing the relationships of the major stakeholders on the project. However, TMS has observed that this organization chart is out of date and that the Roles and Responsibilities tend to focus mostly on the immediate project team, with very little reference to district communication. TMS is not aware of any planned changes or revisions to the current Communication Management Plan.
Are regular written status reports prepared and provided to the project manager, department CIO (if applicable) and other key stakeholders?	X		Status changed from Deficient to Adequate in June 2012. TMS is aware that the project does formally report to CTA on a monthly basis and TMS has reviewed the most current CTA status report from June 2012.
Are there written escalation policies for issues and risks?	X		Both the Risk Management Plan and the Issue Management Plan contain a risk escalation process.
Is there regular stakeholder involvement in major project decisions, issue resolution and risk mitigation?	X		TMS is aware that monthly Implementation Meetings are held with select district stakeholders for the purpose of keeping the District project managers regularly updated on the status of the project and to receive their input. At the recommendation of the PRSM Project manager, TMS is not attending these meetings but is available to review status documentation or meeting minutes to determine the value-add in meeting stakeholder expectations about involvement in the deployment process. A series of four "roadshows" were completed prior to small pilot to present how PRSM would address key business processes at the district. Additionally, there have been two daily small pilot user sessions and a daily pilot review call. Large pilot user PM & TM training completed successfully and large pilot completed on June 29. Training facilities have all be reserved, trainee invitations sent, materials produced and trainers scheduled. Additional sessions for T4T and custom reporting are scheduled. The Go/No-go decision for transition from large pilot to rollout was held on July 9 th with a GO decision.

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Practices and Products	Adequate	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
System Engineering			
Are users involved throughout the project, especially in requirements specification and testing?	X		Districts have been added to the monthly Implementation Manager's meetings, districts have stronger participation in validating the converted data and for discussing risks and issues on the project. A survey is being sent to the districts in early August to determine rollout readiness and identify any corrective actions needed in rollout based on participation in small and large pilot.
Do users formally approve/sign-off on written specifications?	X		Configuration requirements baseline, customizations and deleted requirement agreements were reviewed by Caltrans at regularly scheduled Checkpoint meetings and feedback was provided to the Implementation Vendor. Through documentation review, it appears that users have been engaged in product reviews and training reviews and have participated in regular meetings to discuss organizational change management and pilot preparations.
Is a formal SDLC methodology followed?	X		The project schedule is categorized into high level summary tasks: program Milestones, Project Management, PRSM Adaptation Phase, Testing Phase, PRSM Pilot phase, PRSM Rollout, Statewide Rollout Acceptance and state Closeout.
Is a software product used to assist in managing requirements? Is there tracking of requirements traceability through all life-cycle phases?	X		Changed from Inadequate to Adequate in March 2012. TMS has reviewed spreadsheets of requirements but is unaware of any other tool that is currently being used to manage requirements. Traceability matrices do exist and have been reviewed at a high level by TMS. These traceability matrices are significantly out of date. TMS has also reviewed the traceability spreadsheets in the project document library and found that there are many to-be use cases that are not traced to any associated test cases. This could be an indication of insufficient testing coverage. TMS provided this data to Caltrans and they have gone through the testing materials to complete the mapping. A review of the approach Caltrans took for this exercise was reviewed by TMS and found to be consistent with our recommended mitigation. There are (12) Unknown mappings that could be out-of-the-box functionality that is not used by Caltrans, or an item that was removed or re-designed. There were (4) items that could not be traced and require some additional investigation. Based on the significant improvement in mapping completed by the PRSM team on filling the gaps of the No Match and Partial Match requirements, IPOC now finds this category Adequately Defined.
Do software engineering standards exist and are they followed?	X		Engineering standards exist and are documented in the PRSM Configuration Management Plan. TMS has reviewed the Configuration Management Plan at a high-level and will complete a more in-depth assessment in the future.
Does product defect tracking begin no later than requirements specifications?	X		As per the Adaptation Test Plan dated July 1, 2001, Test Team members document defects in iCenter's Test Tracker as they find them, starting at the Testing Phase. A process is defined for the Test Leads to review open iCenter Test track issues with PRSM team members and also identifies a process to identify, classify and resolve test anomalies. In addition, a document titled PRSM Anomaly Identification and Resolution Process Utilizing Test Tracker provides detailed instructions for how to

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Practices and Products	Adequate	Deficient	Notes: Items Reviewed; Interviews Conducted; Demonstration
Are formal code reviews conducted?	X		<p>use the defect tracker.</p> <p>TMS is aware that the PRSM Project Team has performed formal configuration reviews to occur during checkpoints throughout the Adaptation Phase. TMS has not been exposed to any code review documentation or Checkpoint 4 review documentation.</p>
Are formal quality assurance procedures followed consistently?	X	X	<p>TMS reviewed the <u>Quality Management Plan</u> and observed that it contains a high-level of detail for the review, analysis and approval of formal deliverable documentation from the vendor. However, TMS did find the overall process and procedure for non-deliverable quality management to be lacking. The Quality Management Plan contains a single-line reference to the Configuration Management, Change Control, Issue Management and Risk Management plans but does not discuss what activities are performed by the quality team to ensure these process areas are functioning efficiently, correctly and in accordance to the documented processes and procedures. There are some quality activities defined for requirements management, however, the frequency for when those activities take place, the tools used to perform the activities and the reporting vehicle for those activities are not defined.</p>
Do users sign-off on acceptance test results before a new system or changes are put into production?		X	<p>Project has just started the Rollout Phase in July 2012. An Implementation Plan is scheduled for completion but is running late. There is a disconnect in communication between roles and responsibilities and the narrative needed to define the activities in the Implementation Plan between Headquarters, the Implementation Team and the System Integrator. At this point in the project, with rollout activities started and the first district less than a month away, the Implementation Plan should have been finalized and completed.</p>
Is the enterprise architecture plan adhered to?	N/A	N/A	<p>TMS is aware that Caltrans is in the process of creating a formal enterprise architecture plan. The PRSM technology solution was requested to be submitted as part of the study. However, TMS has not been exposed to the enterprise architecture plan and will need to work with the project team to gain access for this document.</p>
Are formal deliverable inspections performed, beginning with requirements specifications?	X		<p>The PRSM Quality Management Plan contains a high-level of detail for the review, analysis and approval of formal deliverable documentation from the vendor. Upon review of the PRSM project schedule, it appears that formal deliverable inspections are conducted for critical milestones of the project.</p>
Are IV&V services obtained and used?	X		<p>The IV&V Contract was approved and the IV&V Vendor began work in April 2008.</p>