
State of California
Department of Technology
IT Project Oversight Framework
Project Status Reports – Preparation Instructions
SIMM Section 45F
December 2017

Table of Contents

PROJECT STATUS REPORT GENERAL INFORMATION	3
SECTION 1 – OVERALL EVALUATION	3
1.1 Key Information	3
1.2 Key Questions	3
1.3 Variance Table	4
1.4 Variance Detail Chart.....	11
1.5 Look Ahead View	11
SECTION 2 – COST REPORT	12
2.1 Cost Table	12
SECTION 3 – PROJECT STATUS	12
3.1 Required Content	12
3.2 Example Sprint Table	15
3.3 Example Product Burndown Chart.....	15

Project Status Report General Information

The Project Status Report (PSR) (see SIMM 45E) is designed to convey the overall status and progress of the Information Technology (IT) project to the California Department of Technology (CDT) and to all other interested parties within the state and local government or the public. In most respects, the PSR is focused on the primary metrics which indicate the health of an IT project.

The PSR format is designed to standardize high level metric reporting in Sections 1 & 2 while at the same time allowing a Project Manager/Director (PM) to use the project's operational tools and artifacts when reporting specific project status information in Section 3. This approach supports the utilization of various options to manage and deliver projects, including the use of various software development approaches and solutions ranging from custom development to configuration of a commercial product. References are made in these instructions and the template to an adaptive (e.g., Scrum) system development approach but these references should not be interpreted to limit the PM to only these metrics. If there are any questions about additional artifacts and references used by the PM for management of project scope, schedule, costs, quality, risks and issues, the PM should consult with the CDT Project Oversight manager. In general, the PM may include any artifacts or documentation with their submission that will be useful to the PSR reader to gauge the project's health.

The PSR must be submitted to CDT on a monthly basis by the fifth business day of each month for all reportable IT projects, and should reflect the status as of the end of the prior month. The policy references can be found in the State Administrative Manual (SAM) and Statewide Information Management Manual (SIMM). Specifically, reporting criteria is identified in the SAM section 4819.37 and the SIMM section 05A Required IT Reports and Activities provides the scheduled due dates.

The PSR is a companion piece to the CDT Independent Project Oversight Report (IPOR).

Section 1 – Overall Evaluation

1.1 Key Information

Provide the most current information to identify the project.

Project Name: The project name is the name indicated at the time of project approval.

Project Number: Use the CDT assigned project number at the time of project approval.

Reporting Period: The reporting period is the prior month (e.g., May 1 – May 31, 2017).

Most Recent Project Approval Document/Date: Reference the Feasibility Study Report, Stage 4 Project Readiness and Approval (S4PRA) or Special Project Report (SPR) for the most recent project approval document. Indicate the date of the approval of the referenced document.

1.2 Key Questions

The key questions are designed to give the reader a “point in time” perspective about the overall health of the project from the PM's perspective. The detail provided later in the report should support the PM's responses to these questions.

The PM must provide a “Yes” or “No” response to each question based upon their assessment of the objective and subjective evidence. If “No” is selected, the PM must also include a brief explanation that summarizes the reason for the response. The answers and short narrative will be detailed in the relevant section of the report. Keep in mind that the CDT oversight manager will also provide her/his own answers to these questions in the IPOR based upon their independent observation and assessment.

The answers provided to the key questions must relate to the baseline metrics of the most recent project approval document (e.g., S4PRA or SPR).

Total number of Stage 1 Business Analysis (S1BA) objectives: Provide a count of the objectives that were approved in the Project Approval Lifecycle (S1BA). If the project was approved using an FSR, use the business objectives included in the FSR.

Total number of S1BA objectives achieved to date: Provide a count of the approved S1BA objectives that have been achieved by the project as of the reporting period. The measure of “achievement” is based on the customer realizing or experiencing the promised value of the system.

Note: The response to this question may be zero “0” for many months, as objectives may not be achieved until after the actual system implementation or during post implementation monitoring. If this is the case, the PM may respond to this question with, “not yet due”. On the other hand, projects using an incremental approach to the deliver project scope tend to deliver business value early and more frequently. The adaptive development approach, with implementation of system functions occurring during scheduled production releases along with concurrent development activities, allows projects to accomplish the business objectives as development phases are completed. In this case, the objectives may be achieved throughout the duration of the project.

This question is important because the PM and the project as a whole should never lose sight of the original objectives that justified the investment for this project.

1.3 Variance Table

This section reports on the time, scope, and resource metrics that provides a high level view of the “health” of each area. The variance is calculated against the information included in the project’s approval documents. The project approval document must be considered the “baseline” for these metrics. Therefore, if the baseline requires a change, the project must submit an SPR. Refer to SAM 4819.36 and 4945 for additional information.

Enter the variance value into the appropriate column for each project element listed below. Please describe the actions you plan to take for those items marked as “Caution” or “Significant Variance.”
Note: The variance must be a numeric value (e.g., 8.5%).

For any variances noted by “Caution,” the action required will likely involve remediation efforts within the project’s scope of control and should be noted in the “Comments and Action Required” column.

For variances noted by “Significant Variance,” the action required should involve discussions and coordinated remediation with CDT, California Department of Finance (DOF), Agency/state entity leadership, and others as applicable and should be noted in the “Comments and Action Required” column.

Schedule Variance: This metric shows the difference between the planned and the projected end date for the project. Regardless of the software development methodology being used, the amount of time planned and actual time spent on the delivery of a project is important to the project team, department, stakeholders, control agencies, and authorizing entities. Project end dates that will exceed the dates previously approved by CDT may ultimately affect project cost and the availability of planned functions and features within the approved project scope.

In predictive development projects (e.g., those utilizing “waterfall” methodology), all necessary tasks to complete the work should be incorporated into a detailed project schedule at the work breakdown structure level with defined milestones for completion of work associated with primary business needs and/or associated with the critical path calculation.

For adaptive development projects (e.g., those utilizing “agile” methodology), the project schedule will include tasks and milestones associated with:

- Key project management activities – project planning, acquisitions, training, organizational change management, etc.
- Start and end points of each sprint
- Releases identified on the product roadmap. Release dates of functions and features (which represent tested and accepted code of one or more sprints) will be among the milestones of a project utilizing adaptive development methodologies

Below is an example on how the schedule variance is calculated and potential notation needed in the “Comments and Action Required” section:

- ◆ Schedule start date is 7/1/2017 and the end date is 12/1/2018, for a total of 17 months. Based on the actual projected timelines, the end date is changing to 3/1/2019, for a three (3) month delay. The variance is calculated as follows:

Schedule variance (3 months) divided by planned schedule (17 months) = .17647 multiplied by 100 = 17.67% (or 18%)

This level of schedule variance will be recorded in the “Significant Variance >10%” column of the table.

It is important to remember that per SAM section 4819.36, a schedule variance over 10% may require an SPR submission. This will depend on whether or not the project can make an appropriate adjustment that successfully remediates the schedule variance. The PM must address this issue in the “Comments and Action Required” column.

“Critical Path” Note: Best practices for medium, large, and/or complex projects include the use of a critical path calculation in schedule/time management with the expectation that all work will be completed on time. With the effective use of a good scheduling tool, the critical path can be initially identified and tracked on a day-to-day basis and makes it possible to project the impact of delays in completing tasks or milestones on the total schedule. This is essential information to determine a project’s estimated completion date and should be an applied practice for all reportable IT projects.

Milestones Variance: This metric recognizes the incremental progress in completing essential work within the approved schedule. The *Project Management Body of Knowledge* defines a milestone as “a significant point or event in a project, program, or portfolio.” Milestones should:

- Be developed and managed according to a defined schedule management plan
- Correspond to key dates identified in the project charter and phases and deliverables identified in the work breakdown structure
- Establish the start and end dates of the set of activities or bodies of work that must be done to complete the project scope within the approved schedule

The Milestones variance in the Variance Table provides insight about the incremental progress of work completed within the context of the approved project schedule. State IT projects that are classified as reportable are expected to have multiple milestones planned in the project schedule. The number will depend on the work to be done and the total duration of the project.

The Milestones variance provides a snapshot view of milestones planned to end during the reporting period. The Milestones variance is the percentage of difference between a milestone’s planned end date and the milestone’s actual or projected end date.

Using the project schedule (from the project approval documents), the PM will determine the number of days between the planned end date and actual or projected end date of a milestone. Using the difference, divide the difference between the planned and actual duration to calculate the variance percentage. If more than one milestone was due to start or end during the reporting period, their individual sums of days should be added together in a combined numerator and combined denominator for all milestones prior to calculating the final variance value. Four examples follow:

- a. One milestone was estimated to begin on 1/3/2017 and end on 10/31/2017 (in the reporting period 10/1 – 10/31/17). The actual start date was five days late (1/9/2017) but was completed on 10/30/17. The variance is calculated as:
 - ◆ $10/30/17$ (actual) – $10/31/17$ (estimated) = -1 day
 - ◆ Completed one (1) day early = Completed as planned; 0% variance
- b. One milestone was estimated to begin 10/1/2017 and end on 10/31/2017 (in the reporting period 10/1 – 10/31/17). This milestone started five days late and (as of the reporting period) is expected to be completed 10 days late (or 11/10/2017). To calculate the variance:
 - ◆ Step 1 – Estimated timeframe to complete the milestone:
 $10/31/17 - 10/1/17 = 30$ days total
 - ◆ Step 2 – Actual timeframe to complete the milestone:
 $11/10/17 - *10/1/17 = 40$ days total
 - (*Note: When the milestone tasks begin late, use the estimated start to determine the actual variance)
 - ◆ Step 3 – Subtract the actual days from the estimated days:
 $40 - 30 = 10$ Days late
 - ◆ Step 4 – Divide the actual days late by the estimated days:
 10 (days late) divided by 30 (days estimated) = .33 or 33% variance

c. Two milestones started in the prior month and were expected to end during the reporting month. One started five days late; the other seven days late. The first milestone ended seven days late and the second was four days late. The variance of the two end dates is 11 days. The total duration of the first milestone was 15 days and the second milestone was 20 days. To calculate the combined variance, use the steps described above:

- ◆ Estimated:
Milestone 1 – 15 days total
Milestone 2 – 20 days total
Total estimated days: 35 days
- ◆ Actual:
Milestone 1 – 22 days
Milestone 2 – 24 days (actual)
Total actual days: 46 days
- ◆ Difference:
 $46 \text{ (actual)} - 35 \text{ (estimated)} = 11 \text{ days}$
- ◆ Variance Calculation:
 $11 \text{ (days late)} \text{ divided by } 35 \text{ (days estimated)} = .314 \text{ or } 31\%$

d. Two milestones were planned to start in the reporting month. The first was planned to complete in 90 days but started 10 days late and as of the reporting period it is expected to complete 10 days late. The second was planned to complete in 120 days. It started on time but is now expected to complete 15 days late (1/23/18).

- ◆ Estimated
Milestone 1 – 90 days total (estimated)
Milestone 2 – 120 days total (estimated)
Total estimated days: 210 days
- ◆ Actual
Milestone 1 – 100 days total (actual)
Milestone 2 – 135 days total (actual)
Total actual days: 235 days
- ◆ Difference
 $235 \text{ (actual)} - 210 \text{ (estimated)} = 25 \text{ days late}$
- ◆ Variance Calculation:
 $25 \text{ (days late)} \text{ divided by } 210 \text{ (days estimated)} = .119 \text{ or } 12\%$

Deliverables Variance: This metric establishes the state and stage of satisfactory completion of planned deliverables. The variance to be measured is the difference between when the deliverables were due and when they were completed **and fully accepted**. This variance is calculated for all deliverables that were due for completion during the reporting period.

PMBOK defines a deliverable as any unique and verifiable product, result, or capability to perform a service that is required to be produced to complete a process, phase, or project. A deliverable can be a report, a document, a software product, a server upgrade, or any other building block of the overall

project. Deliverables are defined in the project's scope description, work breakdown structure, and often, in a contract Statement of Work for vendors. While all deliverables should be included in the project schedule, this report should focus on major deliverables that provide the reader insight about the incremental progress on work completed within the context of the schedule. Major Deliverables may correspond to milestones. Milestones include artifacts, documents, or reports related to such items as:

- Requirements baseline
- Design documentation
- Sprint plan
- Test Phase complete
- Go Live report
- Release complete
- Production Warranty complete
- Penetration Test results

As with the milestones above, each deliverable is a count of one. The date due is measured against the date it is fully accepted. The acceptance must be executed by someone who was not responsible for the creation or completion of the deliverable. If a contractor is responsible for completion of the deliverable, the state will identify either in the contract and/or the project plan the individual(s) who are responsible for approval of deliverables – typically the state's contract manager or project manager. If there is no contractor involved and the state project or development staff are creating and completing deliverables, then a representative from the program or business users and/or a leader in the IT organization who is not part of the project should be designated as responsible for review and acceptance of project deliverables. Incomplete or inaccurate deliverables should not be accepted. Partial acceptance or acceptance with conditions may not be counted as fully completed for purposes of this variance table.

The deliverable variance in the PSR is a snapshot view of the deliverables that were planned for approval during the reporting period. The deliverable variance will count the number of days difference between planned and actual or projected approval divided by the total number of days were allotted for completion of that deliverable. If more than one deliverable was planned for approval during the reporting period, the sum of the planned and actual or projected days and total time planned will be used to calculate the percentage variance. Three examples follow:

- a. One deliverable was accepted as fully approved five days later than the planned date. The planned number of days to complete this deliverable was 30 days. To calculate the variance, divide five days by 30 days, which equals .1666 or 17% variance.
- b. One deliverable was planned for approval in the reporting month but was returned for correction and as of the end of the reporting month remained outstanding. It is 15 days late as of the end of the month and the PM expects that it will be completed in another 10 days, for combined total of 25 days late. This deliverable was planned for completion in 60 days. To calculate the variance, divide 25 days by 60 days, which equals .41666 or 42% variance.

Note: This deliverable will be counted again in all subsequent PSRs until it is fully approved.

- ◆ Two deliverables started in the prior month and were expected to end during the reporting month. The first deliverable approved acceptance date was seven days late and the second was four days late, for a combined totals of 11 days late. The total duration of the first deliverable was 15 days and the second deliverable was 20 days, for a combined planned duration of 35 days. To calculate the variance, divide 11 days by 35 days, which equals .3142 or 31% variance.

Resources Variance: This metric measures the difference between the planned deployment of human resources and the actual workforce dedicated to the project, up to and including the end of the reporting period. Contractor resources and state resources are counted together for this purpose. This metric counts the number of resources (vendor and state staff) regardless of a particular role. Elsewhere in the report, the PM has an opportunity to report on impacts, risks, and issues caused by the lack of capacity and/or capabilities of the project's current workforce.

In the Resources row of the Variance Table, the PM will show the difference between planned resources to actual resources (as of the end of the reporting period). This difference will be represented as a percentage of planned versus actual resources for the reporting period. Each individual represented in the project plan or schedule will be counted as one – regardless of whether or not the individual was planned for full or part time work on the project.

The variance calculation subtracts the actual resources from the planned resources. The difference is then divided by the planned resources to represent as a percentage. For example:

- ◆ In June, the project's planned resources were 30 and as of the end of the month there were only 20 resources deployed, for a difference of 10. To calculate the variance, divide the difference (10) by the planned (30), which is .333 or 33% variance.

This metric does not disclose the impacts this variance may have on the overall project; therefore, the PM is expected to provide additional information concerning the impacts in the Variance Detail Chart and elsewhere in the report where applicable. The PSR should explain the reasons for the variance (e.g., hiring timeframes for multiple positions at the beginning of a project, attrition due to project duration). The Resource Variance metric should be looked at over a period of months for trends that show either that resources are generally adequate or that the resource shortfall is continuing or growing over time and therefore likely to impact the overall success of the project.

One Time Cost (Planning and Project) Variance: This metric measures the difference between the approved project cost (i.e., the cost baseline or the project budget) and the actual project cost up to and including the end of the reporting period. This metric only considers the costs for the current and past fiscal years through the reporting period. Future fiscal year costs will not be used to calculate this variance metric. This provides the opportunity to clearly show how the actual costs are trending and will be a reasonable representation of cost factors that are within the control and influence of the project leadership team during the year.

The Alternative 1 Project Tab of the Financial Analysis Worksheets (FAWs) contain the approved one time cost (or cost baseline) for calculating the cost variance and should be imported for the applicable reporting period into section 2.1 Cost Table of the PSR. **Note:** If using the FAWs dated August 2017 or later, you may import the cost information from the Executive Cost Summary tab for approved one-time project costs. Use the total values from section 2.1 Cost Table to calculate the cost variance metric for the Variance Table in section 1.3 of the PSR.

If the project was approved by the FSR process, use the Economic Analysis Workbook (EAW) of the FSR or most recently approved SPR as the baseline cost to calculate the cost variance.

The one time cost variance metric is calculated by dividing the total dollars spent or encumbered since the beginning of work (for project planning activities and for actual project execution costs) up to the end of the reporting period by the approved cost for the same period from the PSR section 2.1 Cost Table

Below are three examples on how the one time cost variance is calculated:

- a. As of the reporting period, the project has five months of work covered by the approved project budget. The project budget for this period is \$50,000. As of the reporting period, the project has spent only \$35,000. The variance value in this case is \$15,000. Divide \$15,000 by \$50,000, which equals .3 or 30% variance. This value would be placed in the Significant Variance > 10% column. The value is significant because the project's lower than expected expenses may indicate that there is a problem which prevents progress. The reason for the lower than expected costs to date should be explained in PSR section 2.1 Cost Table.
- b. The project is approved for a total of 30 months (10 months for planning and 20 months for execution). As of the reporting period, the project has 17 months of approved cost to account for, which totaled \$3.5 million. As of the reporting period, the project has spent \$3.6 million. To calculate the variance, subtract the actual amount spent (\$3.6 million) from the approved amount (\$3.5 million), for a difference of \$100,000. Divide the difference (\$100,000) by the approved budget (\$3.5 million), which equals .02857 or 2.9% variance. This value would be indicated in the "On Plan <5%" column.
- c. The project is approved for a total of 30 months – 10 months for planning and 20 months for execution. As of the reporting period, the project has 17 months of approved cost to account for, which totaled \$3.5 million. As of the reporting period, the project has spent \$4 million. To calculate the variance, subtract the actual amount spent (\$4 million) from the approved amount (\$3.5 million), for a difference of \$500,000. Divide the difference (\$500,000) by the approved budget (\$3.5 million), which equals .14285 or 14% variance. This value would be placed in the "Significant Variance >10%" column.

Note: In this instance (per SAM section 4819.36), a cost variance of 10% or more may require an SPR submission if the total project costs are expected to deviate by that amount or more. The PM will need to determine if this is the case and if an SPR will be needed. If so, this would be noted in the "Action Required" column.

Future Operations IT Staff and OE&E Cost Variance: This metric measures the difference between the approved future operations cost baseline and the actual future operations cost up to and including the end of the reporting period. This metric only considers costs for the current and past fiscal years through the reporting period. Future fiscal year costs will not be used in calculating this variance metric.

The Alternative 1 Future Ops Tab of the FAWs contains the approved future operations cost (or cost baseline) for calculating the cost variance and should be imported for the applicable reporting period into section 2.1 Cost Table of the PSR. **Note:** If using the FAWs dated August 2017 or later, you may import the cost information from the Executive Cost Summary tab for approved future operations costs. Use the total values from section 2.1 Cost Table to calculate the cost variance metric for the Variance Table in section 1.3 of the PSR.

If the project was approved by the FSR process, use the EAW of the FSR or most recently approved SPR as the baseline cost to calculate the cost variance. **Note:** use only the IT costs – not the program costs for this variance calculation.

For projects using a predictive (e.g., waterfall) development methodology, future operations costs might not be incurred until the system is fully implemented. If future operations costs have not been incurred as of the applicable reporting period, the future operations costs row of Variance Table can be marked "not applicable" in the Action Required column.

For adaptive development methodologies (e.g. agile), implementation of system capabilities may be concurrent with the development work and therefore future cost of operations may occur as soon as users begin to use the new system capabilities. When this is the case, the PM must have an appropriate process for tracking costs for the project and for future operations separately.

Except for the complexity of capturing and attributing costs separately, the variance calculation is the same as described above for the Project Cost Variance. The PM will populate the Future Operations Cost detail into section 2.1 Cost Table of the PSR with the detail from the FAWs. This detail will be the sum of all the prior and current fiscal years to date, as the approved baseline. The PM will also provide the detail of the cumulative actual future operations costs in the table. As above, baseline minus actual equals the variance. The variance total is then divided by the total of the approved baseline costs and multiplied by 100 to obtain the variance percentage, which is recorded in the appropriate column of the Variance Table (section 1.3 of the PSR template).

1.4 Variance Detail Chart

The Variance Detail Chart reflects information as of the reporting period – the prior month. This is more detailed information than the Section 1.3 Variance Table and should provide the reader with insight of specific details that the PM is monitoring and/or managing. While this information will not always completely match the variance rating, it should not contradict the rating and should be useful as a companion piece.

All “Yes” responses should include the cause and impact (if known) and action planned or taken, as follows:

Cause: The “Cause” is the best known root cause of a “variance to plan” event. The PM can notate that it is unknown if a technical evaluation is warranted. Otherwise, the PM should provide their best judgement as to the cause.

Impact: Provide a short description on how this variance will impact the overall project goals and/or success.

Action Planned and/or Taken: Provide a brief description of action that is planned or has been taken to remediate or mitigate the variance indicated.

1.5 Look Ahead View

The Look Ahead View identifies potential variances to the key metric baselines used in project approval. The PM should be looking ahead to identify potential issues or “ice bergs” as soon as they begin to materialize. This area is used to identify those potential variances.

All “Yes” responses should include the potential impact, if known and action that is planned or has been taken, as follows:

Impact: Provide a short description on how this variance will impact the overall project goals and/or success.

Action Required: Provide a brief description on action required to remediate or mitigate the variance indicated.

Section 2 – Cost Report

2.1 Cost Table

This is a comparison of the actual to the approved costs for the project. The most recently approved project costs by CDT and DOF are the “approved project costs”. Use the Executive Cost Summary Tab of the FAWs (or if applicable, the EAWs from the approved FSR) of the most recent PAL or SPR for the Last Approved Budget amounts.

For the respective reporting period, enter the cumulative actual costs expended as of that date. Add comments, as needed, to explain positive or negative variances to the approved budget.

Section 3 – Project Status

3.1 Required Content

CDT requires the information on project status outlined in Section 3 but does not specify what format this information will be presented. But the artifacts provided in the PSR submission should be those that are typically used in the standard practice of project management as applicable for the selected software development methodology for the purpose of tracking and communicating project progress. Ideally, the information required in this section is already detailed in operational documents or reports leveraged by the Project team, Steering Committee, or Executive Sponsor. These documents or reports can be provided to CDT without additional development by the PM as long as the information requested below is clearly identifiable and covers the same (or nearly the same) period as the PSR.

Current Status/Accomplishments/Key Information: High level information about the state, stage, and progress of the project. In addition to accomplishments and key information, this section may highlight any areas of achievement or escalation.

Schedule Management: Remember that the baseline dates that were used in the most recent project approval document are the project’s baseline data and the reference point for schedule variances. Most items below are self-explanatory; however, additional information is provided for some schedule and scope items, as follows:

Predictive (e.g. waterfall) Development Projects:

Milestone report: An extract of the status of the project’s major milestones from the tool being used to manage the project schedule, which must include:

- Milestone name
- Baseline start date
- Planned start date
- Actual start date
- Completion status (“% Complete” is most common but “Not Started, On Track, Late” are sometimes used)
- Baseline finish date
- Target finish date
- Actual finish date
- Variance

Adaptive (e.g. agile) Development Projects:

Completed Sprints – Number of sprints completed in support of the respective release.

Completed Releases – Number of releases completed in support of the project.

Stories or story points – Total number in the backlog at the end of the prior month & total number in the backlog as of the end of the reporting month.

Velocity tracking document: Velocity is a measure of the amount of work a team has completed on average for all prior sprints. It is a key metric in Scrum software development methodology. Velocity is calculated at the end of the sprint by totaling the “story points” for all fully completed user stories to date divided by the number of sprints completed to date. The result is an average completion rate over the course of multiple sprints. This is useful for projecting the future amount of work that can be completed. If a project has multiple concurrent development teams, a velocity tracking document must be provided for each team. For additional information, see 3.2 Example Sprint Table graphic below.

Product burndown: The Product Burndown chart shows both the total amount of work planned to be completed and the completion of work over the course of time as measured by sprints. It also shows if work is added to or subtracted from the product backlog. For additional information, see 3.3 Example Project Burndown Chart graphic below.

Number of Change Requests: Number of change requests to the approved baseline (i.e., those generated by missed or new requirements or scope). This count will be the number of change requests approved during the month. If the approved changes will require a contract amendment, report the associated number as a subset of the count of those approved.

Support Contracts Table: This is a companion piece to the Cost Table to assist with understanding the primary drivers of project cost. It is also used to identify upcoming contract end dates which may signify the completion of certain work efforts or that may necessitate starting a re-procurement. The PM may supply a Support Contracts Table with more detail if that is what is routinely used by the PM. The following information should be included:

- Purpose
- Supplier name
- Term
- Total contract amount
- Amount expended
- Contract start date
- Contract expiration date

Risk Register: Provide the Project Risk tracking artifact that is currently being used. The PM should include all risks. Risks may be sorted by status groups (i.e. “open”, “closed”, etc.).

Issue Log: Provide the Project Issue tracking artifact that is currently being used. The PM should include all issues. Issues may be sorted by status groups (i.e. “open”, “closed”, etc.).

Quality: The PM should identify the approach used to monitor quality and continuous improvement.

Customer satisfaction: Describe the approach and results for ensuring customer satisfaction during the reporting period. In most cases, this will relate to an objective captured in the S1BA. Customer satisfaction is expected to be a significant component of the planning process. The outcome of planning will be to establish the approach for achieving demonstrable customer satisfaction and the strategy for communication and validation with the identified stakeholders. The format is not prescribed in the PSR but this topic should be closely monitored by the project Steering Committee and the Executive Sponsor as a key metric for project success.

Continuous improvement: Describe the approach and results for continuous improvement during the reporting period. This will be captured in one of the PM's planning documents and may be extracted into a suitable format for the PSR. Continuous Improvement for PSR purposes will be from the perspective of either the user or the program or both. The approach should include how the opportunity or necessity of system improvements will be identified, vetted, resourced, and implemented. The results should provide summary counts of improvements sorted by relevant categories. As with the customer satisfaction information, the format for continuous improvement is not prescribed in the PSR; however, this topic should be closely monitored by the project Steering Committee and the Executive Sponsor as it relates to project scope, cost, and the ultimate definition of project completion.

Test results: Provide summary information that describes the progress towards development completion and its validation or the configuration that meets the business requirements without error or defects. The testing phases referenced should include, at a minimum, system test and user acceptance tests.

Technical debt: This is a percentage (%) of the user stories that could not be completed during the sprint due to insufficient up front definitions, errors in coding or configuration, unanticipated dependencies, or last minute specification changes. For the PSR, only report on defects that affect the functions and features of the user stories related to the “definition of done” – in other words, defects that impede the delivery of the business requirements. While the project will also be concerned with technical imperfections in coding or configuration approaches and documentation, these types of defects are not needed in this section of the report. However, if technical defects cause significant denigration of system performance or data corruption, this should be reflected in the issue log.

Resources: Provide planned and actual state and contractor resources. This information should align with the information provided in the Variance Table. While most state projects will have on-going vacancy rates, these rates should not be growing month over month. Keep in mind that vacancies will have an immediate adverse impact to adaptive projects which depend upon stable and fully resourced teams. If project resources are insufficient in numbers or capabilities, the PM should be reporting these observations as risks or issues. Specific risks and issues pertaining to vendor performance, capacity, or capability should also be described here.

3.2 Example Sprint Table

To calculate velocity, sum the total completed story points and divide by the number of iterations completed.

Iteration	Start	Finish	# Story Points Committed	# Story Points Completed	Velocity
Sprint 1	8/4/2016	8/22/2016	100	80	$(80)/1 = 80$
Sprint 2	8/30/2016	9/14/2016	110	90	$(80+90)/2 = 85$
Sprint 3	9/21/2016	10/5/2016	100	100	$(80+90+100)/3 = 90$

Note: Projects using hours to estimate level of effort instead of story points may report the hours planned and completed to calculate the velocity.

3.3 Example Product Burndown Chart

This example represents the count of story points at the end of each sprint. The declining count of the burndown chart is either a result of removed stories or completed stories. New or removed stories occur from the decisions made with the concurrence of the Product Owner in a process referred to as “backlog grooming.” By recognizing removed stories discretely, the Product Burndown Chart can show the trend of success toward completing all required work.

