City of Portland

Public Safety Systems Revitalization Program

Fire Information Systems Re-Platform Project

Periodic QA Evaluation Report

For the Month of February 2013
Deliverable: FIS.C.4

V2.0 Final
3/13/2013

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Version	Date	Comments
V1.0	3/6/2013	For PSSRP Review
V1.1	3/8/2013	Minor corrections
V2.0	3/13/2013	Final Version incorporating comments from the Project Manager

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Summary of Project QA Progress and Status

The PSSRP Fire Information Systems (FIS) Re-Platform Project is to port the Portland Fire and Rescue's (PF&R's) FIS to a current and supported platform.

CASE Associates Inc. (CAI) was selected to perform the independent QA on the City of Portland PSSRP which includes the FIS Project. This is the fourth monthly FIS Periodic QA Evaluation Report intended to assess the health of the project, and provide independent observations (positive or negative) and recommendations for avoiding and/or responding to any future negative impacts.

Overall Project QA Status

Last month's report stated that "PSSRP and BTS took decisive steps to improve FIS Project Management. The PSSRP Project Manager left City service. BTS redefined their manager's role from Project Manager to Product Manager. Both groups also agreed that the new PSSRP Project Manager is to have full access to all project resources as well as control over the planning and execution processes."

However, the new planning processes are not yet complete and the Quality Focal Points (QFP) rated Alert and Attention remain as they were in the last report. Most QFP upgrades will depend on an effective planning process that results in a Replatform Plan and an accepted schedule.

In the past month, the Project Manager has been working with BTS and PF&R to develop the Replatform Plan for the project. Before that can be completed, the group must make some decisions that will impact the approach and the schedule. These decisions to be made are:

- When to add new tracking functionality to the Incident system.
- Whether to remove one system from the project scope to reduce development time and costs.
- Whether to deploy the system to the end users with a phased implementation or a 'big bang' approach.
- Which reports to include in the day-one release for the Personnel system.

The Project Manager expects to have these decisions made in early March 2013. After PF&R, BTS, and the PM make these decisions the PM can develop a Replatform Plan and develop the project schedule.

Once accepted, the Replatform Plan and the project schedule will improve the project health ratings in the next section.

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Overall Project Health

Overall Rating: Alert

The overall health of the project is based on the three main factors described in the table below:

Health Factor	Rating	Comments
Schedule	Alert	The project is proceeding without an accepted schedule. Without a schedule, the FIS project cannot: • Track and communicate progress • Validate that the budget will support the project • Validate that all the functionality can be delivered The project must develop a clear description of the project approach. This should be developed collectively with BTS, PF&R and PSSRP. Participants should include a system architect, developers, end users, trainers, testers, and deployment staff. The approach will include discussions of requirements, development, deployment (including phased deployments), testing, training, support, and retirement of the old system. The approach may include other sections. **Status 3/4/13 -** The PM is working with BTS and PF&R to develop the Replatform Plan for the project. Decisions to be made are: (1) When to add new tracking functionality to the Incident system, (2) Whether to remove one system from the project scope to reduce development time and costs, (3) Whether to deploy the system in a phased implementation or a big bang approach, (4) Which reports to deploy with the day-1 release of the Personnel system. After PF&R, BTS, and the PM make these decisions the PM can develop a Replatform Plan and develop the project schedule.
Budget	Alert	PSSRP received money for the FIS project. PSSRP does not expect additional funds for the project. The current timelines in the Work Breakdown Structure (WBS) indicate that the project will not be completed within the budget. The project should develop a formal approach document (Replatform Plan) for the project. Then the project can refine the WBS into a schedule. The schedule will be the major tool to validate the adequacy of the funds budgeted. The schedule will also be a primary tool for tracking progress. **Status 3/4/13 -** The new PM is planning with PF&R and the BTS development team. When they have a complete Replatform Plan and schedule, the project will be able to validate the budget needs against available funds.
Scope	Attention	The product scope is generally agreed to as the six FIS systems. The project is considering some enhancements. These enhancements should be finalized. **Status 3/4/13** – PF&R, BTS, and the PM are considering new enhancements to the Incident System. They are also considering dropping one of the six systems from the scope.

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Quality Focal Points Rated Alert

There are three findings in this QA report that CAI believes need immediate attention:

- **Project Schedule, QFP#3 Alert**

  The project must develop a clear description of the project approach. In January 2013 the project started referring to this as a Replatform Plan. This should be developed collectively with BTS, PF&R and PSSRP. Participants should include a system architect, developers, end users, trainers, testers, and deployment staff. The approach will include discussions of requirements, development, deployment (including phased deployments), testing, training, support, and retirement of the old system. The approach may include other sections. This document should be detailed enough to be used as input to the schedule.

  Status 3/4/13 - The PM is working with BTS and PF&R to develop the Replatform Plan for the project. Decisions to be made are: (1) When to add new tracking functionality to the Incident system, (2) Whether to remove one system from the project scope to reduce development time and costs, (3) Whether to deploy the system in a phased implementation or a big bang approach, (4) Which reports to include in the day-1 release of the Personnel system. After PF&R, BTS, and the PM make these decisions the PM can develop a Replatform Plan and develop the project schedule.

- **Project Resources, QFP#8 Alert**

  The project should refine the WBS into a schedule that indicates level of effort for the assigned resources at the task level. The schedule will be the major tool to validate the adequacy of the funds budgeted. The schedule will also validate whether the project has the correct skills in the correct quantity.

  Status 3/4/13 – When the project has a complete Replatform Plan and schedule, the project will be able to validate the resource need against the available resources. (See **Status 3/4/13** for QFP#3 above).

- **Budget Planning and Tracking, QFP#10 Alert**

  The project should refine the WBS into a schedule. The schedule will be the major tool to validate the adequacy of the funds budgeted. The schedule will also be a primary tool for tracking progress.

  Status 2/5/13 –When the project has a complete Replatform Plan and schedule, the project will be able to validate the budget needs against the available funds. (See **Status 3/4/13** for QFP#3 above).

Quality Focal Points Rated Attention

There are eight findings in this QA report that CAI believes need attention:

- **Meeting Milestones, QFP#1 Attention**

  The project should take a collaborative planning approach and refine the current Work Breakdown Structure (WBS) into a project schedule.

  Status 3/4/13 – The PM is working with BTS and PF&R to develop the approach for the project. Decisions to be made are: (1) When to add new tracking functionality to the Incident system, (2) Whether to remove one system from the project scope to reduce development time and costs, (3) Whether to deploy the system in a phased implementation or a big bang approach, (4) Which reports to include in the day-1 release of the Personnel system. Once PF&R, BTS, and the PM make these

decisions the PM can develop a Replatform Plan and develop the project schedule, including Milestones.

- **Requirements Management, QFP#2 Attention**

  The project should define future approved enhancements to be included in the requirements document.

  Status 3/4/13 – BTS has an established Change Control process that the PM will apply to the FIS project. BTS will modify the existing Incident system to incorporate new data fields. The project will incorporate those new fields when they replatform the Incidents system. The project will accept only mandated changes. None are anticipated.

- **Communications, QFP#4 Attention**

  The project should refine the WBS into a schedule. The schedule will be used as the primary tool to detect problems or schedule slippage. Then the Project Manager can communicate progress to stakeholders.

  Status 3/4/13 – The new PM is planning with PF&R and the BTS development team. When they have a Replatform Plan and a schedule, they will be able to communicate progress against the plan.

- **Risk and Issue Management, QFP#5 Attention**

  The project should define an effective escalation process for issues and risks.

  Status 3/4/13 – The new PM has not yet had time to address this QFP. The PM will include and enhanced Risk and Issue Management section in an updated Project Management Plan (PMP).

- **Project Organization and Leadership, QFP#7 Attention**

  Status 3/4/13 – The PM now has the authority to monitor and direct project resources. PF&R, BTS, and PSSRP are working collaboratively to define the project and eventually develop a project approach and schedule.

- **Project/Quality Management and Reporting, QFP#9 Attention**

  The project should finalize the planning documents that will have an impact on the schedule. Then the project should finalize a schedule that can be used as a basis for progress reporting.

  Status 3/4/13 – Recent personnel changes give more authority and responsibility to the Project Manager. The Project Manager should complete the QMP, the PMP, and the Replatform Plan. These will all have significant input to the project schedule. The new PM is planning with PF&R and the BTS development team. When they have a complete Replatform Plan and schedule, the project will be able to report progress against the plan and schedule.

- **Scope and Change Control, QFP#11 Attention**

  The project should finalize the product scope.

  Status 3/4/13 – The Sponsor directed that the Incident system be changed to include roughly 50-60 new fields. The project does not yet know what reporting or other processing is included. The PM is directing that the project use the established BTS Change Control process to track, analyze and estimate these changes.

- **Roles, Responsibilities and Communications, QFP#12 Attention**

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The project should redefine roles and responsibilities to identify a Project Manager with the access to all project staff and artifacts. The PM should also have responsibility for schedule development.

Status 3/4/13 - Clarity of roles and communications remain improved. BTS and PSSRP are still working out responsibility for some planning documents.

Definition of Risk Factors:

Stable - The Quality Focal Point is stable and not currently impacting the project.

CAI may include a **Suggestion** in a QFP rated as Stable. CAI rated the QFP as stable because it is not impacting the project at this time. The suggested action is a preventive measure to keep the QFP stable.

Attention - The Quality Focal Point needs some improvement so it won't impact the project.

CAI includes a **Recommendation** for every QFP rated Attention. The recommended action is a corrective measure to improve the QFP so it won't impact the project.

Alert - The Quality Focal Point is impacting the project and needs immediate attention.

CAI includes a **Recommendation** for every QFP rated Alert. The recommended action is a corrective measure to improve the QFP that is currently impacting the project.

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Quality Focal Point Summary Chart

Quality Focal Point	Impact	Prior as of: 1/2/13	Prior as of: 2/6/13	Current as of: 3/6/13
1. Meeting Milestones	High	Attention	Attention	Attention
Quality Planning	**Impact**	**Prior as of: 1/2/12**	**Current as of: 2/6/13**	**Current as of: 3/6/13**
2. Requirements Management	Low	Attention	Attention	Attention
3. Project Schedule	High	Alert	Alert	Alert
4. Communications	Medium	Attention	Attention	Attention
5. Risk and Issue Management	Low	Attention	Attention	Attention
6. Tech. Transition and Business Proc. Re-engr'g	Low	Stable	Stable	Stable
Quality Assurance / Quality Control	**Impact**	**Prior as of: 1/2/12**	**Prior as of: 2/6/13**	**Current as of: 3/6/13**
7. Project Organization and Leadership	High	Alert	Attention	Attention
8. Project Resources	High	Alert	Alert	Alert
9. Project/Quality Management and Reporting	Medium	Attention	Attention	Attention
10. Budget Planning and Tracking	High	Alert	Alert	Alert
11. Scope and Change Control	Low	Attention	Attention	Attention
12. Roles, Responsibilities and Communications	High	Attention	Attention	Attention
13. IT Architecture	Low	NR[1]	NR	Stable
14. Project Library and Configuration Management	Low	NR	NR	NR
System Delivery	**Impact**	**Prior as of: 1/2/12**	**Prior as of: 2/6/13**	**Current as of: 3/6/13**
15. System Design Process	Medium	NR	NR	Stable
16. Data Conversion/Migration	Medium	NR	NR	Stable
17. Configuration/Construction	High	NR	NR	Stable
18. Testing (Functional, Capacity, Performance)	High	NR	NR	Stable
19. Training	Medium	Stable	Stable	Stable
20. Implementation Process	High	NR	NR	NR
21. Deployment Process	High	NR	NR	NR

[1] "NR" indicates Not Rated for this report.

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Quality Focal Points

1	Milestones **Project milestones are being met on schedule.** The Milestone QFP assesses the scheduled completion of interim and major project milestones and their impact on overall project completion. **Risk Level** Stable / Attention / Alert
1.1	Are project milestones being met so far? **Finding:** The project WBS is not elaborated into an accepted schedule. The schedule should contain the Milestones. Without a project schedule, CAI cannot verify that the project is progressing as planned.
1.2	Is there sufficient time (with appropriate slack) to complete the project before the committed completion date? **Finding:** The current WBS is not yet refined into an agreed-to schedule. The final schedule will represent a committed completion date. However, the WBS, as presented in October 2012 does not fit within the budget.

Recommendation: For the project to reliably track its progress against milestones, the project should take a collaborative planning approach and refine the current Work Breakdown Structure (WBS) into a project schedule. A refined project schedule should contain tasks to complete the project objectives within the budget.

Status 2/5/13 – The new PM is developing a Replatform Plan and a new schedule.

Status 3/4/13 – The PM is working with BTS and PF&R to develop the approach for the project. Decisions to be made are: (1) When to add new tracking functionality to the Incident system, (2) Whether to remove one system from the project scope to reduce development time and costs, (3) Whether to deploy the system in a phased implementation or a big bang approach, (4) Which reports to include in the day-1 release of the Personnel system. After PF&R, BTS, and the PM make these decisions the PM can develop a Replatform Plan and develop the project schedule, including Milestones.

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2	Requirements Management **The Requirements Management process is appropriate and thorough.** **Risk Level** Stable / Attention / Alert
2.1	Are the System and Business Requirements understood and confirmed? **Finding:** Partially – The original list of FIS systems to be replatformed may change. One of the systems may be removed from the project scope. There is no formal requirements document that explicitly states the functional requirements or the system enhancements. PF&R, BTS, and the PM are evaluating whether to drop the FIRES2000 system from the list. Also, the Incidents system will require new data tracking and possibly reporting functions before it is replatformed. The impact of these changes has not yet been analyzed.
2.2	Are requirements traceable to design? **Finding:** TBD – The design document is not yet developed.
2.3	Are requirement change impacts understood and documented? **Finding:** TBD - The project requires an accepted schedule as a tool to analyze impacts of change.
2.4	Are test conditions defined to validate requirements compliance? **Finding:** TBD – The Test Cases are not yet developed.

Recommendation: The project should define future approved enhancements to be included in the requirements document. (Some used the term "stub out the architecture.") The users cite expectations that should be verified.

In future reports CAI will monitor the Requirements Management process and verify that future enhancements are included in project documentation.

Status 2/5/13 – The new PM is planning with PF&R and the BTS development team. This should give the PM better control over the requirements for the new systems.

Status 3/4/13 – BTS has an established Change Control process that the PM will apply to the FIS project. The new data tracking and reporting requests for the Incident system will go through this process.

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3	Project Schedule **The project is appropriately planned.** The Planning QFP provides an assessment of project planning, scope definition, scheduling and external dependencies. **Risk Level** Stable / Attention / Alert
3.1	Are all appropriate tasks identified in the work breakdown structure (WBS) and/or schedule? **Finding:** No – The WBS includes developer tasks and some PF&R tasks. It does not include integration with project management tasks and other end user tasks.
3.2	Are dependencies among tasks identified, including decision dependencies? **Finding:** No – The WBS as of January 2013 identified the developer tasks. Task dependencies are at a high level. The dependencies are not explained in task notes and do not keep the system development in a predetermined order.
3.3	Has a schedule been established and is it reasonable based on resources (budget), productivity assumptions and dependencies? **Finding:** No – The WBS as currently defined is not achievable with the current project budget.
3.4	Is the schedule clear and detailed enough to monitor progress? **Finding:** No – The WBS includes developer tasks for each system but it does not assign individual resources to the tasks. The WBS does not integrate project management activities or enough end user activities.
3.5	Is the schedule used to track progress and updated on a regular basis? **Finding:** No – The WBS is not yet refined to a schedule. The WBS does not reflect progress status on tasks started, in progress, or completed. The most recent iteration of the WBS was delivered in January 2013.
3.6	Are external project dependencies identified in the schedule? **Finding:** N/A
3.7	Are appropriate interim and major milestones defined? **Finding:** No – The WBS contains tasks for development. The new schedule will contain milestones.
3.8	Has the schedule been reviewed, approved and signed off by the project Stakeholders? **Finding:** No – The WBS has not yet been refined to a schedule.
3.9	Is there an appropriate process for updating the project schedule with actuals and tracking project progress? **Findings:** No – The development team reports progress but it cannot be confirmed because there is no formal schedule against which to compare progress.
3.10	Is the schedule reasonable to manage the project? **Finding**: No – The WBS should be refined to a schedule that includes task dependencies, resources and effort.

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3	Project Schedule
	The project is appropriately planned. The Planning QFP provides an assessment of project planning, scope definition, scheduling and external dependencies.
	Risk Level Stable / Attention / Alert

Recommendation: The WBS should be refined to a schedule that includes task dependencies, resources and effort. Scheduling assumptions should be collaboratively reviewed and accepted. The schedule should be supported by the project budget.

The project must develop a clear description of the project approach. This should be a developed collectively with BTS, PF&R and PSSRP. Participants should include a system architect, developers, end users, trainers, testers, and deployment staff. The approach should include discussions of requirements, development, deployment (including phased deployments), testing, training, support, and retirement of the old system. The approach may include other sections. This document should be detailed enough to be used as input to the schedule.

Status 2/5/13 – PSSRP and BTS made personnel changes and committed to a more collaborative project. The PM is working on the Replatform Plan and the refined schedule. They are not yet complete.

Status 3/4/13 – The PM is working with BTS and PF&R to develop the approach for the project. Decisions to be made are: (1) When to add new tracking functionality to the Incident system, (2) Whether to remove one system from the project scope to reduce development time and costs, (3) Whether to deploy the system in a phased implementation or a big bang approach, (4) Which reports to include in the day-1 release of the Personnel system. After PF&R, BTS, and the PM make these decisions the PM can develop a Replatform Plan and develop the project schedule, including Milestones.

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4	Communications **The project communications are effective and adequately controlled.** Assessment of the Communications QFP examines the project status reporting and communication processes for task completion and budget. **Risk Level** Stable / Attention / Alert
4.1	Have communications been planned, identified and documented? **Finding:** Yes – The Project Management Plan (PMP) contains a brief Communication Plan.
4.2	Is the Communications Plan being followed? **Finding:** Yes, though the Organizational Change Management Plan (OCMP) is being updated and may change the communications.
4.3	Does the project receive appropriate and timely executive and project sponsor attention? **Finding:** Yes
4.4	Is project status being monitored and accurately reported in enough detail and with enough frequency to ensure early detection of problems or schedule slippage? **Finding:** No – An early indicator of schedule slippage would entail comparing current progress against an approved schedule. The WBS is not yet refined to a schedule. The project develops activity-oriented status reporting. But this cannot be used to detect schedule slippage.

Recommendation: The project should refine the WBS into a schedule. The schedule should be used as the primary tool to detect problems or schedule slippage. Then the Project Manager can communicate progress to stakeholders.

Status 2/5/13, 3/4/13 – The new PM is planning with PF&R and the BTS development team. When they have a Replatform Plan and a schedule, they will be able to communicate progress against the plan.

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5	Risk and Issue Management **Project risks are identified and appropriately managed.** The Risk Management QFP provides an assessment of the risk identification, mitigation strategy and contingency planning for high probability and/or high impact risks. It also assesses the continuing validity of high impact assumptions. **Risk Level** Stable / Attention / Alert
5.1	Are project risks and issues identified and categorized as to likelihood and impact? **Finding:** Partially – The Project Manager has a Risk list and also identifies critical risks in the project status reports. The PM has been adding to the list and reporting it via the weekly Status Report.
5.2	Are appropriate risk and issue mitigation strategies in place with appropriate monitoring measures? **Finding**: No – The project faces significant risks and issues. For instance, the project is proceeding without an accepted schedule or a Replatform Plan. The PM and other managers have not been able to resolve these issues and risks. The PMP does not describe an effective escalation process nor does it have enough detail as to the relative roles and responsibilities for the managers on the project.
5.3	For high probability or high impact risks, are contingency plans developed in case the risk mitigation strategy fails? **Finding**: Partially – The most recent Issues/Risk log does not contain plans for mitigation and contingency. The PM's status reports contain several risks. The status report lists mitigations. It does not include contingencies.
5.4	Are ongoing risk identification, assessment and management processes in place and operating effectively? **Finding**: Partially – The Project Manager restarted maintaining the Issues/Risks log in December.
5.5	Have project assumptions been verified & appropriate monitoring measures been put in place to ensure failed assumptions do not become risks? **Finding**: TBD - There are no assumptions in the PMP or Charter. The team is not far enough along in the planning process to document scheduling assumptions. Risk and Issue Management will be more effective when the project develops a Replatform Plan.
Recommendation: The project should define an effective escalation process for issues and risks. **Status 2/5/13, 3/4/13 –** The new PM has not yet had time to address this QFP.	
Recommendation: The Issues/Risks management process should include mitigation and contingency activities. **Status 2/5/13, 3/4/13 –** The new PM has not yet had time to address this QFP. The PM will include and enhanced Risk and Issue Management section in an updated Project Management Plan (PMP).	

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6	Technical Transition and Business Process Re-Engineering **The Technical Transition is adequately planned.** This QFP assesses the preparation for managing and conducting the technical transition. **Business Process Re-engineering is adequately planned.** This QFP assesses the preparation for managing and conducting the business transition. **Technical Transition Risk Level** Stable / Attention / Alert **Business Process Re-Engineering Risk Level** Stable / Attention / Alert N/A
6.1T	Has the Technical Transition Plan been defined? **Finding:** In Progress – This Plan is part of the Replatform Plan. The BTS Project Manager was responsible for this plan. The PSSRP PM will take responsibility for developing this document.
6.2T	Has the Technical Transition Plan been reviewed and approved? **Finding:** No
6.3T	Has the architecture been assessed relative to the City's architecture? **Finding:** Yes- the project is using the current City's architecture
6.4T	Are there appropriate resources to implement the Technical Transition Plan? **Finding:** TBD – The plan is not yet fully developed.
6.5B	Has the Business Process Re-engineering Plan been defined? **Finding:** N/A to this project.
6.6B	Has the Business Process Re-engineering Plan been reviewed and approved? **Finding:** N/A to this project
6.7B	Has the COTS vendor's workflow been assessed relative to changes from the City's "as-is" processes? **Finding:** N/A to this project
6.8B	Are there appropriate resources to implement the Plan? **Finding: TBD**

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7	Project Organization and Leadership **The project is appropriately organized.** The Organization QFP assesses the breadth and depth of the project's organization and the commitment to the project within the organization. This determines if the project's organizational structure can manage both tactical and strategic project issues. **Risk Level** Stable / Attention / Alert
7.1	The Steering Committee is comprised of executive decision-makers and is functioning? **Finding:** Yes - The Executive Steering Committee (ESC) meets regularly. The Governance, including the Executive Steering Committee was redefined in August 2012. At the January ESC meeting, members expressed concern about the lack of clear tasks for the ESC. A new member, the BTS CTO, offered to initiate a task to identify decisions expected of the ESC.
7.2	Executive Sponsors have been designated? **Finding:** Yes – The sponsor is designated in the Governance document.
7.3	Project Management roles and responsibilities with lines of authority and accountability have been defined, assigned and agreed upon? **Finding**: In Progress – In January PSSRP and BTS agreed to personnel changes. The previous PSSRP PM left the City. The BTS PM's role has changed from project manager to product manager and will be much less involved in the project planning and execution. PSSRP assigned a PM from the Radio project. This new PM now has authority to manage and plan the project and direct resources.
7.4	Executive management is committed to the project. **Finding:** Yes – PF&R, PSSRP, and BTS management are all committed to the project.
7.5	Functional management and staff are committed to the project. **Finding**: Yes – The PF&R, PSSRP, and BTS staff are assigned and working on the project.
7.6	Are other Stakeholders/users committed to the project? **Finding**: Yes
7.7	Are there appropriate resources to implement the Change Management Plan? **Finding:** Yes – Because this is a replatform project, organizational change will be minimal.

Recommendation: Prior Periodic Reviews contained the following:

a) The project should define a single person that can approve scope change.
b) The project should define a single Project Manager that is responsible for all project deliverables. The Project Manager should have access to all project staff, develop the schedule, and manage the staff on its project-related activities. The other managers assigned to the project should be cooperative with the Project Manager.
c) Communications and Issue resolution processes, including escalation need clear definitions.

Status 2/5/13 – PSSRP and BTS made personnel changes and committed to a more collaborative project. The PM is working on the Replatform Plan and the refined schedule. They are not yet complete. However, since the project has improved morale, the team is working in a more collaborative mode, and the PM is working on the necessary plans: This QFP is upgraded to "Attention" from "Alert."

Status 3/4/13 – The PM now has the authority to monitor and direct project resources. PF&R, BTS, and PSSRP are working collaboratively to define the project and eventually develop a project approach and schedule.

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8	Project Resources **The project is appropriately resourced.** The Resources Quality Focal Point assesses three resource components: The capacity and skill set of the assigned project staff, supporting tools and facilities, and budget or financial resources. **Risk Level** Stable / Attention / Alert
8.1	Is the level of effort estimated planned for each project deliverable at an appropriate activity level; and, is it reasonable? **Finding:** No – The project does not have an accepted schedule. The level of effort should be contained in a project schedule.
8.2	Are appropriate staff resources (skill set and quantity) available and assigned to complete the project? **Finding:** Yes – It appears that the staff skills are appropriate. This will be reassessed when the WBS is refined to an accepted schedule.
8.3	Are appropriate staff support resources (skill and quantity) available and assigned to provide on-going operations support? **Finding:** Yes – The staff that builds the product will remain in a support role.
8.4	Are appropriate tools and other necessary facilities available and effectively utilized? **Finding:** Yes
8.5	Is the Budget (financial resources) sufficient to support the Project? **Finding:** No – Based on current timelines and current burn rates, the budget does not support this project to completion. The project is using approximately $50,000/month. The current budget will be exhausted early in 2014. The timelines in the WBS extends to mid-2015. This will be reassessed when the WBS is refined to an accepted schedule.

Recommendation: The project should refine the WBS into a schedule that indicates level of effort for the assigned resources at the task level. The schedule should be the major tool to validate the adequacy of funds budgeted. The schedule should also validate whether the project has the correct skills in the correct quantity.

Status 2/5/13 – The new PM is planning with PF&R and the BTS development team. When they have a complete Replatform Plan and schedule, the project will be able to validate the resource need against the available resources.

Status 3/4/13 – The PM is working with BTS and PF&R to develop the approach for the project. Decisions to be made are: (1) When to add new tracking functionality to the Incident system, (2) Whether to remove one system from the project scope to reduce development time and costs, (3) Whether to deploy the system in a phased implementation or a big bang approach, (4) Which reports to include in the day-1 release of the Personnel system. After PF&R, BTS, and the PM make these decisions the PM can develop a Replatform Plan and develop the project schedule, to validate the level of project resources.

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9	Project & Quality Management and Reporting **The project is appropriately managed and quality controlled.** Assessment of the Project Management, Quality Assurance and Quality Control Processes and Plans. Are the Plans in place and followed to ensure project deliverables meet requirements and are accomplished on time and within budget? **Risk Level** Stable / Attention / Alert
9.1	Have formal Project Management (PMP) and Quality Management Plans (QMP) been developed? **Finding:** In Progress - The BTS Manager had been assigned to the Quality Management Plan. The new Project Manager will now complete this document. The new PM is updating the PMP. The BTS Manager had been assigned to the Replatform Plan to describe the approach to analysis, development, testing, deployment, and support for the new products. The new Project Manager will now complete this document. The Business Liaison is developing an Organizational Change Management Plan (OCMP). The OCMP will describe PF&R activities in development, testing and training. These plans are not yet final.
9.2	Are the Plans being followed? **Finding:** Some aspects of the draft plan are being followed. The project developed a detailed Work Breakdown Structure for the systems. Staff is assigned and is developing the first of six systems. However, the project is proceeding without an accepted schedule. This QFP will be reassessed when final plans are available.
9.3	Have appropriate metrics and processes been put in place to successfully manage the project? **Finding:** No - Quality metrics are not defined.
9.4	Have objective quality metrics been put in place for project deliverables? **Finding:** No - Quality Gates have not been defined for the development process.
9.5	Are Project Progress and Deliverables measured against the metrics? **Finding:** No - The QMP has not been developed.
9.6	Are the results of the metric measurements reported to the appropriate sponsor, users, and other stakeholders? **Finding:** TBD
9.7	Are appropriate corrective actions put in place when measurements are not acceptable? **Finding:** TBD
9.8	Are status reports prepared and accurately tracking all project tasks? **Finding:** No – The project prepares some activity-based reports. But they cannot be compared to an accepted schedule. The schedule should be used as a basis for tracking progress. See 4.4 – status reporting

Recommendation: The Project Manager should have the necessary authority and should finalize the PMP, QMP, OCMP, and Replatform Plan. These will all have significant input to the project schedule.

Status 2/5/13, 3/4/13 – Recent personnel changes give more authority and responsibility to the Project Manager. The Project Manager should complete the QMP, the PMP, and the Replatform Plan. These will provide significant input to the project schedule.

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9	Project & Quality Management and Reporting
	The project is appropriately managed and quality controlled. Assessment of the Project Management, Quality Assurance and Quality Control Processes and Plans. Are the Plans in place and followed to ensure project deliverables meet requirements and are accomplished on time and within budget?
	Risk Level Stable / Attention / Alert

Recommendation: The project should refine the WBS into a schedule. The schedule should be a primary tool for tracking and reporting progress.

Status 2/5/13 – The new PM is planning with PF&R and the BTS development team. When they have a complete Replatform Plan and schedule, the project will be able to report progress against the plan and schedule.

Status 3/4/13 – The PM is working with BTS and PF&R to develop the approach for the project. Decisions to be made are: (1)When to add new tracking functionality to the Incident system, (2) Possibly removing one system from the project scope to reduce development time and costs, (3)Phased implementation vs. a big bang approach, (4)The list of go-live reports for the Personnel system. After PF&R, BTS, and the PM make these decisions the PM can develop a Project Approach narrative and develop the project schedule, including Milestones.

10	Budget Planning and Tracking
	The project budget is appropriately planned, managed and tracked. Assessment of the Project Budget Planning and Tracking Processes. Are the Plans in place and followed to ensure project deliverables meet requirements and are accomplished on time and within budget?
	Risk Level Stable / Attention / Alert
10.1	Do the Project Manager and the Project Sponsor meet on a regular basis? **Finding:** Yes
10.2	Is the Budget thoroughly planned and Budget to Actuals reported in a timely manner? **Finding:** No – Based on current timelines and current burn rates, the budget does not support this project to completion. This will be reassessed when the WBS is refined to an accepted schedule.
10.3	Are the appropriate funds budgeted in order to conduct required activities and complete and support the project? **Finding:** No – Based on current timelines and current burn rates, the budget does not support this project to completion. This will be reassessed when the WBS is refined to an accepted schedule.
10.4	Does the Project Manager maintain a tracking report of expenditure? **Finding:** Yes- Expenses are tracked at a high level.

Recommendation: The project should develop a formal approach document for the project. Then the project can refine the WBS into a schedule. The schedule should be the major tool to validate the adequacy of funds budgeted. The schedule should also be a primary tool for tracking progress.

Status 2/5/13, 3/4/13 – The new PM is planning with PF&R and the BTS development team. When they have a complete Replatform Plan and schedule, the project will be able to validate the budget needs against available funds.

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11	Scope and Change Control **The project scope is appropriately controlled.** Scope and Change Control assesses the implementation and adherence to change requests. **Risk Level** Stable / Attention / Alert
11.1	Is Scope being adhered to? Note: Changes in scope usually impact budget. **Finding:** Partially - The product scope has been limited to a replatform of the FIS systems. The users have identified other enhancements for the product.
11.2	Are change requests appropriately identified, escalated, and resolved in a timely manner? **Finding:** No – The project identified some enhancements to the product that may be included in the final product. These have not been finalized.
11.3	Are change requests effectively recognized, analyzed for impact, and approved prior to inclusion in the project scope? **Finding:** Partially – The project is considering some enhancements. These enhancements should be finalized.

Recommendation: The project should finalize the product scope.

Status 2/5/13 – The new PM is planning with PF&R and the BTS development team. This should give the PM better control over the requirements for the new systems.

Status 3/4/13 – The Sponsor directed that the Incident system be changed to include roughly 50-60 new fields. The project does not yet know what reporting or other processing is included. The PM is directing that the project use the established BTS Change Control process to track, analyze and estimate these changes.

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12	Roles and Responsibilities and Communications **The project is staffed with appropriate roles and responsibilities. Communications are effective.** Assessment of the project status reporting and communication. **Risk Level** Stable / Attention / Alert
12.1	Has a formal Communications Plan been developed? **Finding:** Yes - The Communication Plan is contained in the FIS Project Mgt Plan. Additional communications will be in the Organizational Change Management Plan and the Replatform Plan.
12.2	Is the Communications Plan being executed? **Finding:** Yes – The PM will have better data to report when the WBS is refined into a schedule.
12.3	Are communications identified in the plan and produced by the Project effective? **Finding:** No – Communications will be more effective when the PM is reporting project performance compared to the approved schedule.
12.4	Are the external project communication dependencies included in project status reporting? **Finding:** N/A
12.5	Are the project roles and responsibilities documented and understood by all parties? **Finding:** Partially – The recent personnel and process changes have improved clarity of roles and responsibilities. BTS and PSSRP are still working out the responsibility for some of the planning documents. CAI's Baseline Evaluation included recommendations regarding project management: The project should define a single Project Manager that is responsible for all project deliverables.

Recommendation: The project should redefine roles and responsibilities to identify a Project Manager with the access to all project staff and artifacts. The PM should also have responsibility for schedule development.

Status 2/5/13 – The recent personnel and process changes have improved clarity of roles and responsibilities. The PM now has access to all project resources, including the BTS developers. The PM is responsible for developing a Replatform Plan and the schedule. These are in process. When the project is communicating progress against an accepted plan and schedule, this QFP will be upgraded to "Stable."
Status 3/4/13- Clarity of roles and communications remain improved. BTS and PSSRP are still working out the responsibility for some of the planning documents.

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13	IT Architecture **The project adheres to architecture standards.** Verification that the Project conforms to IT Architecture standards. **Risk Level** Stable / Attention / Alert
13.1	The computing environment supports connectivity, portability, scalability, and interoperability. **Finding:** Yes – The .NET architecture is a standard architecture that will improve connectivity, portability, scalability, and interoperability.
13.2	The Project supports the Architecture Framework? **Finding:** Yes - The .NET architecture is a standard architecture that will improve connectivity, portability, scalability, and interoperability.
13.3	The Project supports the Architecture Framework strategic objectives? **Finding:** Yes – With the new architecture, PF&R will eventually be able to implement their Mobile applications.

14	Project Library and Configuration Management **The project has an appropriate Project Library in place to support Project Management and a Configuration Management Process in place to support System Delivery.** **Risk Level** Stable / Attention / Alert NOT ASSESSED IN THIS REPORT
14.1	A Secure library has been defined? **Finding:**
14.2	Procedures are documented for configuring and maintaining the library? **Finding:**
14.3	Procedures are documented for checking items in and out of the library? **Finding**:
14.4	There are contractor controls and monitoring in place. **Finding:**
14.5	There are procedures for reviewing changes to items in the library? **Finding**:

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SYSTEM DELIVERY - Quality Focal Points

15	System Design Process **The system design process is appropriate and thorough.** **Risk Level** Stable / Attention / Alert
15.1	Are specifications/designs in agreement with the system/business requirements? **Finding:** Yes – The project does not have formal system design specifications. They are using the current systems as the design specifications for the replatformed system. The developers of the new system are very familiar with the existing systems. There are some enhancements to finalize, including database improvements and additional functionality for the Incident system. The PM is actively addressing those.
15.2	Are the application specifications reasonable and acceptable? **Finding:** Yes - The existing system is a very detailed system specification for this project. However, it is too specific to be used as input to testing. The lack of a typical application specification means that the Test Plan will need to identify another source of test case for the software.
15.3	Is the system architecture reasonable and acceptable? **Finding:** Yes – The .NET architecture is a standard architecture that supports the system and business requirements.
15.4	Are the Interface specifications reasonable and acceptable? **Finding:** Yes – The new .NET system will use essentially the same format as the current system, while incorporating common features available on the new platform.

16	Data Conversion and Migration **The data conversion and migration process is appropriate for migrating data to the new system** **Risk Level** Stable / Attention / Alert
16.1	Are the Data Conversion/Migration Strategy and Plans reasonable? **Finding:** Yes – The project is writing a new User Interface only. That is to say that the project is not creating a new database. Therefore, there may be no data conversion. It is possible that the project may decide to improve the database as part of the project. In that case, the project will evaluate the impact on the budget and schedule.
16.2	Do the plans include data cleanup, testing, and user acceptance criteria **Finding:** N/A
16.3	Is the Data Migration complete? **Finding:** N/A
16.4	Has the converted/migrated data been tested to verify they function according to the specifications? **Finding:**

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17	Configuration and Construction Process **The configuration and development of the new system are appropriate.** **Risk Level** Stable Attention Alert
17.1	The configuration specifications have been verified to meet project requirements. **Finding:** Yes – The configuration specifications have been verified by several proof of concept and demonstration versions.
17.2	The Development Methodology is appropriate and is followed. **Finding:** Yes – The System Architect is leading the development effort and the team is following the methodology.

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18	Testing (Functional, Capacity, and Performance) **The project is appropriately tested.** Appropriate functional, capacity and performance acceptance testing processes and plans are in place. **Risk Level** Stable / Attention / Alert
18.1	Has a formal Test Management Plan been developed? **Finding:** No – The PM and PF&R will develop the test plan and test cases. Both must be completed in time to plan for Personnel System testing.
18.2	Is the Plan being followed? **Finding:** N/A
18.3	Do the documented functional specifications meet the business needs? **Finding:** Partially - The current systems are being used as the system specifications. But the Test Manager will not have a typical set of functional specifications from which to develop test cases.
18.4	Are the business users involved in establishing the functional acceptance testing scope and standards? **Finding:** Yes – PF&R and the PM are both developing the Test Plan and test cases.
18.5	Are the functional acceptance test processes appropriate and are results monitored and tracked? **Finding:** TBD
18.6	Do the capacity and performance specifications match operational needs? **Finding:** TBD
18.7	Are the capacity and performance acceptance test processes appropriate and are results monitored and tracked? **Finding:** TBD
18.8	Is comprehensive end-to-end functional, capacity and performance acceptance testing planned and performed for all software and hardware? **Finding:** TBD
18.9	Are infrastructure conditions (down to the computing hardware level) that may affect the application being considered, tested and resolved? **Finding:** TBD
18.10	Was a defect log maintained and effective corrective actions taken? **Finding:** TBD
Suggestion: Coding the Personnel system is expected to complete at the end of April. In order to keep this QFP as stable, the project will need a Test Plan to explain how the project will address various types of testing. The plan will include the logistics of testing, such as place, timing, equipment used, staff to conduct testing. It will also detail the defect reporting/triage/resolution cycles. The plan will explain how the test cases are developed. PF&R and the PM will collaborate on this document.	

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19	Training **The project staff and system users are appropriately trained in a timely manner.** Assessment of training plans and materials. **Risk Level** Stable / Attention / Alert
19.1	Has formal Training Plan been developed? **Finding:** In Progress – PF&R is developing the OCMP which includes a high-level training plan. The formal training plan will be developed later.
20.2	Are the Plans being followed? **Finding:** TBD

20	Implementation Process **The new system has been successfully moved into the production environment.** **Risk Level** Stable / Attention / Alert NOT APPLICABLE AT THIS TIME
20.1	The installation specification is complete and reasonable. **Finding:** TBD – BTS, PF&R, and the PM are finalizing decisions that will impact system implementation.
21.2	The training plans and the new Business Processes (workflows and procedures) are complete and acceptable. **Finding:**
21.3	The actual training was acceptable. **Finding:**
21.4	System documentation is complete and acceptable. **Finding:**
21.5	The implementation acceptance criteria have been met. **Finding:**

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21	Deployment Process **The new system has been successfully deployed.** **Risk Level** Stable / Attention / Alert — NOT APPLICABLE AT THIS TIME
21.1	Deployment Plans are complete and reasonable. **Finding:** TBD – BTS, PF&R, and the PM are finalizing decisions that will impact system deployment.
22.2	Training City staff was complete and acceptable. **Finding:**
22.3	User documentation is complete and acceptable. **Finding:**
22.4	Deployment acceptance criteria have been met. **Finding:**

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Purpose and Methodology

CASE Associates Inc. (CAI) started its current QA effort for the City's Public Safety Systems Revitalization Program (PSSRP) in September, 2012. This Periodic QA Evaluation Report is delivered monthly as specified in the Quality Assurance Management Plan (QAMP).

Purpose of the Monthly Report

With this report, CAI provides independent observations about the PSSRP Fire Information Systems Re-Platform project. Included with the observations are recommendations and suggestions for avoiding and/or responding to any negative impacts.

Methodology

CAI Consultants use the following methodology each month to prepare this report:

1. Review project documents and deliverables. The documents that are reviewed are listed in the Documents Reviewed section of the Monthly QA Status Report (separate deliverable).
    a. Project Manager's weekly status reports
    b. Development teams status reports
    c. Issues and Risk logs
    d. Charter and other initiating documents
    e. The Project Management Plan (PMP) and other associated plans
    f. The Work Breakdown Structure and Project Schedule
2. Attend meetings and conduct interviews. The Interviews Conducted and Meetings Attended are reported in the Documents Reviewed section of the Monthly QA Status Report (separate deliverable).
    a. Weekly Project Managers' meeting
    b. Monthly PAC meetings
    c. Meetings as needed with the Project Manager, Project Office Manager (POM)
    d. Meetings with other project participants as needed
3. Based on CAI's informed judgment and the documents and evidence reviewed, meetings attended, and interviews conducted, CAI comes to an independent, unbiased opinion of the status of the project and the health of the project. When CAI determines that the project status needs improvement, CAI develops recommendations and includes them in this report.

CAI's knowledge and experience is based upon the following:

1. Project Management Institute, "Project Management Body of Knowledge" (PMBOK). We guide and mentor our clients in applying project management and quality assurance methodologies.
2. Total Quality Management concepts and the Institute of Internal Auditors Process Audit Standards.
3. The Control Objectives for Information and Related Technology (CobiT) standards developed by the Information Systems Audit and Control Foundation for use in Information Technology audits.
4. The tenets of software management, including the functions of Quality Assurance (QA) (Per IEEE-Std 730) and Independent Verification and Validation (IV&V), that is found in Managing the Software Process by Watts Humphrey.
5. The processes described in CAI's Business/System Process Improvement Project, and further documented in the article The Process of Managing System Transitions by David Sharon of CASE Associates Inc. Mr. Sharon's article is based on his personal experiences in managing complex transition projects and documents and recommends a road map for a successful project Quality Assurance and Risk Management experience.