

EBS Lessons

Learned

From Concept to Go-Live:
Lessons Learned from Implementing
an Enterprise Business Solution (EBS)
in the City of Portland

April 2010

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Table of Contents

Executive Summary	1
Project Milestones and Structure	
First time period	3
Second time period	7
Third time period	9
Recommendations	
First time period	11
Implementation Strategies Worth Repeating	11
Strategies that Needed More Focus	13
Second time period	16
Implementation Strategies Worth Repeating	16
Strategies that Continued to Need More Focus	19
Strategies to Address New Challenges	21
Third time period	24
Implementation Strategies Worth Repeating	24
Strategies that Continued to Need More Focus	27
Strategies to Address New Challenges	28
Future	29
Appendix A	
Organizational Chart	31

EBS Lessons Learned

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Executive Summary

One of the final deliverables from the Enterprise Business Solution (EBS) Project is a summary report on lessons learned. After reviewing other reports documenting lessons learned from large scale public sector technology/business projects, it is clear that they have much in common in terms of recommendations to over-communicate expectations, maintain a strong governance structure, agree upon decision-making criteria, manage to results, etc.

In that sense, no new ground will be covered in this report. In addition, the challenges for local government in implementing projects similar to this one are also well documented. A summary from an information technology commentator regarding another city's implementation said this:

The client didn't understand the full scope and extent of the undertaking. The consultant supplied inadequate resources, project governance and oversight, all of which substantially caused the failure.

This could have been the summary of this report if the project had concluded in the spring of 2008. However, the project did not conclude on that note. City leadership regrouped, brought in new resources and pushed ahead to the successful implementation of a new financial and purchasing system and a new time and payroll system.

The fact that the system was implemented, despite the substantial challenges in information technology project management, business process changes and standardizing decentralized functions in a local government – became the final lesson learned.

Report Format

To document the lessons learned in the City's SAP implementation, it was necessary to organize the lessons chronologically in three different time periods:

- First time period November 2006 – May 2008: Project kickoff, work with first consultant integrator and transition from first consultant to second consultant integrator
- Second time period May 2008 – December 2008: Implementation of Phase 1 financial system (FILO) go-live and preparations for Phase 2 human resources (HCM) go-live

- Third time period December 2008 – October 2009: Implementation of Phase 2 HCM go-live to HCM stabilization
- Future: Lessons applicable to future projects

There are two main reasons for this: Some approaches were changed from one consultant integrator to another, and some challenges remained throughout the project. In addition, some lessons learned are simply reflective of the unique group of personnel or circumstances that were encountered at the time but are not instructive for future work. Others are useful to reflect on for future modules and projects, and those are the perspectives shared in the chapter titled Future.

In addition, although the lessons were compiled after the project's completion, they are written and provided in this report in the form of recommendations for future work. As referenced in the introduction, providing a chronology of events and circumstances unique to this project is not applicable to the challenges faced in the ongoing operation or in future projects. Distilling these lessons into recommendations that can apply to the future is more useful.

Report Perspective

In order to gather perspectives to share in this report, interviews were conducted with most of the members of the EBS staff. In addition, focus groups were conducted with the various governance committees for EBS (Executive Steering Committee, Project Advisory Committee and the Change Management Team).

However, the final review of the perspectives was conducted by the City's Chief Administrative Officer who served as Project Sponsor for roughly half of the first time period described in this document and served as the overall Executive Sponsor for the remaining time periods. The process of collecting ideas offered from many difference sources is likely to produce results that are at times conflicting. Having the CAO as the final perspective for the report proved useful and more helpful to readers not familiar with the specifics of the project.

Project Milestones and Structure – First time period

First time period November 2006 – May 2008 (preceded by project planning history) Project kickoff, work with first consultant integrator and transition from first integrator to second consultant integrator

In August 2004, following a technology needs assessment and recommendation by the Government Finance Officers Association (GFOA), the City Council passed Resolution No. 36246, directing the Office of Management and Finance to take the necessary steps to acquire and implement an Enterprise Resource Planning (ERP) system to replace the City's then 16-year-old financial system (IBIS).

In the technology needs assessment report, GFOA stated: "The City of Portland has a very solid business case for replacing its existing administrative management systems. Both of GFOA's evaluations have provided significant data and analysis to support the City's desire to proceed with the process of procuring and implementing a state-of-the-art financial and human resources management system that:

- replaces the various standalone and home-grown solutions with a single, integrated system for the core administrative functions,
- enhances executive analysis and decision making capabilities, and
- establishes the foundation for a comprehensive and inclusive electronic government strategy."

Part of the technology needs assessment included a shadow system inventory which revealed that the City had more than 380 shadow systems in use by the bureaus. Although the systems included in the inventory varied from complex software applications to individual spreadsheets, this still underscored the need for adoption of an integrated ERP software solution that could provide technology standardization. Other key business drivers identified by GFOA and the City during the evaluation of the current system included:

- the need to replace aging technology with a system that would support current and future technology
- improvement of efficiency and effectiveness of City operations
- the need to put a new system in place before staff experts retire
- creation of a single data repository to ensure accurate information, and
- improved access to information and stronger decision support capabilities.

A request for proposals for systems integration services was issued in February 2005. In July 2005, the Accenture consulting firm was selected to perform a business needs assessment for the City, identify and recommend leading practice business process changes, conduct benchmarking, and assist the City in selecting ERP system software. At this point, the project was described as having two phases: ERP system selection and ERP implementation.

The kick off for the City's EBS project was held in July 2005 and introduced the governance structure and team structure as well as the goals of the project. (In late 2006, the project title was changed to Enterprise Business Solution Project, keeping the same EBS acronym.)

The EBS project governance included an Executive Sponsor to provide executive oversight and City Council communications, a Project Sponsor to provide overall responsibility for the project and a Project Manager responsible for daily management of the implementation. Governance committees consisted of an Executive Steering Committee (ESC) responsible for advising on policy matters and ensuring that key business and contractual decisions are made in a timely fashion and a Project Advisory Committee (PAC) responsible for making recommendations and participating in business and contractual decisions. The Executive Sponsor chaired the ESC and the Project Sponsor chaired the PAC. The City also contracted with a quality assurance (QA) firm to provide oversight on project issues and status. In addition, a Change Management Team with one representative from each bureau was assembled to assist with communication and readiness needs within the bureaus. See organization chart in Appendix A.

The EBS project leadership organized the project team into five separate teams; each team had City and consultant staff resources:

- Project Management Office (PMO), responsible for overall project management.
- Technical (Tech), responsible for all technology-related activities and design.
- Finance/Purchasing (FILO), responsible for developing business system requirements and system testing.
- Human Resources/Payroll (HCM), responsible for developing business system requirements and system testing.
- Change Management (OCM), responsible for bureau readiness, communications and training.

The goals for the project were:

- Implement the new system on time, and on budget.
- Eliminate, to the extent possible, duplicative and opaque shadow systems that hinder data integrity and productivity.
- Rely on best practices that are embedded in Tier 1 ERP systems, conforming operations to those best practices.
- Minimize customization.
- Implement a system platform that focuses on City-wide needs, but supports the specialized business requirements of individual bureaus.

The work began with a benchmarking study to establish a baseline measure of process and functional performance; compare the City's performance to "World Class" and "Median" organizations; identify process improvements and potential cost differences associated with the implementation of best business practices; and identify targets of opportunity to sharpen the focus of the implementation. Accenture focused on the City's finance, human resources and payroll, and procurement process, with bureaus taking part in surveys, data collection and workshops in August and September of 2005. The benchmarking study compared the City of Portland's data with data collected from other comparable public and private agencies.

The benchmarking study results presented to the governance committees showed:

- The City's finance costs as a percentage of revenue was higher than average at 1.92 percent.
- Segmented payroll and time collection processes impact the process costs – at \$257 per employee, this is higher than average.

- The City's total procurement cost is \$7.8 million annually or 2.52 percent of spend – which is higher than average.
- The current procurement applications have the ability to exchange information electronically but it is not used in all bureaus.

In early 2006, the EBS team visited four governments – Clark County, Washington; Oakland, California; Washoe County, Nevada; and Sacramento County, California to evaluate different ERP software modules and solutions. Following a comprehensive solicitation process, SAP was chosen as the software to replace the City's IBIS system, and, after reviewing RFPs for implementation services, Ariston Consulting was selected in October 2006 for system implementation and integration as well as change management.

Several staffing changes within the City impacted the EBS project in the fall of 2006. Tim Grewe, then the City's CAO and the project's original Executive Sponsor, retired. Ken Rust was appointed interim CAO and the project's new Executive Sponsor, and Jennifer Sims was appointed interim CFO and the Project Sponsor with day-to-day project responsibilities. Bruce Theurer was hired in December of 2006 as the project manager.

The project timeline was set for 14 months with a go-live date for the finance functions in the fall of 2007 and the human resource functions January 1, 2008. The aggressive timeline recommended by Ariston was tailored to deliver quick completion of both the finance and human resource functions, quicker return on personnel to their bureaus, and less money spent on consultants.

The initial project scope included two tracks – Finance & Logistics (FILO) and Human Capital Management (HCM) – and the following modules:

Finance & Logistics (FILO)

- General Ledger
- Budget Control
- Purchasing/Contracts
- Accounts Payable
- Fixed Assets
- Project Accounting
- Grants Management
- Accounts Receivable/Cash Receipt
- Cost Allocations and Indirect Charges
- Workflow for Finance/Procurement

Human Capital Management (HCM)

- Payroll
- Benefits
- Time Management
- Personnel Cost Planning
- Human Resources Management

- Organizational Management
- Manager Self Service
- Employee Self Service
- Workflow for Human Resources/Payroll
- Recruitment

The PAC completed sign-off of the FILO and HCM blueprint documents in the spring of 2007. The blueprint documents represented a four-month-long process to document the City's business process and outline the major changes between current IBIS-support processes and future SAP-supported processes.

In August 2007, the ESC made the decision to reset the timeline for both the finance and human resource tracks. Previously set with different go-live dates, it was decided the tracks would be merged into a single effort with all functionality going live on January 24, 2008. This extension was said to provide more time to complete development and testing work to ensure a successful implementation.

In the fall of 2007, the project leadership realized that the City was not on track for a January 2008 go-live. In December 2007, the ESC decided again to extend the timeline of the project. In January 2008, the Executive Sponsor convened the project team to review the status of the project and suggest strategies for moving forward. While work on the system continued, the project leadership, with the ESC and the PAC, reassessed the status and scope of the project.

The project sponsor and project manager convened regular meetings with the City's six large bureaus – Transportation, Environmental Services, Parks, Police, Water, and Fire – referred to by the project as 6-PAC since the meetings were with the bureau sponsors/PAC members. The purpose of these meetings was to stay in close communication with City leaders in bureaus most highly impacted by the change to the new system and to resolve issues related to implementation. These meetings also confirmed that the bureaus also assessed that the City was not on track for its go-live date.

Even as the project was being reassessed, the team continued work on developing and testing interfaces and on identifying tasks needed for bureaus to adopt new business processes. Process education sessions were developed to provide detailed information on specific business processes and roles to help bureaus to identify the organization impacts of the new processes. The team also began work on the crosswalk between IBIS financial data and SAP financial data.

In February 2008, representatives from SAP came to Portland and met with the project leadership team to assess the project's current and projected status. In April 2008 project leadership announced that primary management of the project would be transitioned from the initial consultant integrator, Ariston, to the second consultant integrator, SAP Public Services.

Project Milestones and Structure – Second time period

Second time period May 2008 – December 2008

Implementation of Phase 1 FILO go-live and preparations for Phase 2 HCM go-live

In May 2008, City Council authorized a contract for SAP Public Services; extended the contract for Pacific Consulting Group for quality assurance services; and authorized revenue bonds for continued funding of the EBS project. The project was on a new course with a phased implementation approach allowing the team to focus on one area at a time to ensure a successful go-live; a new consulting team from SAP Public Services; and revised target go-live dates of November 2008 for finance functions (FILO) and April 2009 for human resource functions (HCM), giving the team time to thoroughly evaluate and test the City's complex time and payroll practices.

In order to meet the new timeline and go-live dates, the project scope was scaled back and redefined. The two phases would now include:

Phase 1 – FILO financial functionality

- Accounts Payable (AP)
- Accounts Receivable (AR)
- Cash Management (CM)
- Controlling (CO)
- Fixed Assets (FA)
- Funds Management (FM)
- General Ledger (GL)
- Grants (GM)
- Projects (PS)
- Materials Management (MM)

Phase 2 – HCM human resource functionality

- Personnel Administration (PA)
- Payroll (PY)
- Time Management (TM)
- Organizational Management (OM)
- Benefits (BN)

Other functions, including web-based recruitment (called e-Recruitment), additional benefits functionality, employee self-entry of timekeeping data (called Employee Self Service, or ESS) and a supervisory portal to allow access to timekeeping and personnel data for direct reports (called Manager Self Services, or MSS) were taken out of scope and were now considered post go-live options.

The project team and the bureaus were now on a six-month march to the FILO go-live date of November 26, 2008. The PAC was reduced in size to provide increased involvement by the members and a focus on those bureaus most highly impacted by the change. The new direction required a larger role for the PAC to assume responsibility for their bureau's ability to conduct City business throughout the changes in business processes and systems.

A blueprint review process brought the new SAP Public Services consulting team up to speed with the City's business processes and how the system had been designed. For FILO functionality, the team proposed a review and validation of the original blueprint. For HCM functionality, this involved a complete redesign and development work in areas that were impacted by time administration and payroll. The blueprint review process included a session and review with the PAC as the final step in the blueprinting review process.

A new plan was developed and presented to the PAC describing milestone dates for integration testing, identifying employees and their new roles within SAP, interfaces testing, cutover and conversion activities, and preparation and delivery of end user training.

The City also initiated a super user program to develop employees within the City's business units who would have knowledge and practice within the new system. The plan was to have these employees – the super users – available to provide in-person help and assistance to their fellow employees as they learn to use the new system and processes. Super users previewed training materials, delivered training and were given access to a FILO system sandbox (a training and testing environment) where they could test processes and get hands on experience in the system.

In addition to FILO activities in preparation for go-live in November, the team worked on a redesign of the HCM functionality. Blueprint design and review sessions were held with the City's subject matter experts and the PAC.

Three rounds of integration testing were completed prior to conversion testing on the system, and bureaus worked with the project team to validate system data and complete cutover activities. The City went live with FILO functionality in SAP on November 26, 2008, with HCM functionality set to go-live in March 2009.

For FILO go-live, the EBS team developed an extensive post go-live support plan that included support centers and daily calls for super users, team members, change agents and bureau sponsors. Call-ins addressed specific user issues as well as issues related to bureau operations and processes. In addition, EBS team members provided in-person embedded support in central bureaus to provide one-on-one support.

Project Milestones and Structure – Third time period

Third time period December 2008 – October 2009

Implementation of Phase 2 HCM go-live to HCM stabilization

As a wrap up to the FILO support for this post-go-live stabilization period, support centers and periodic call-ins continued through January 2009, then transitioned to FILO end user support groups in February. End user support groups were created and held monthly meetings; this gave attendees an opportunity to demonstrate tips, tricks and traps, share knowledge and experiences, and network with employees from other bureaus.

The EBS team completed two integration testing cycles for the HCM functionality before working with bureau timekeeping staff to conduct the first full payroll parallel testing of the system in January 2009. The full payroll parallel test required bureau staff to enter all required time data for a specific time period into both the legacy system (IBIS) and the new system (SAP). Bureau staff compared and evaluated the results, and documented any key differences on an issues log. Bureau and project staff then documented the resolution of reported issues. Due to the key role that timekeepers would play in the payroll testing and data validation, the project began conducting weekly meetings for timekeepers in December 2008 to review tasks, actions and due dates, as well as provide regular updates to timekeepers on project progress.

In January 2009, the ESC and PAC made the decision to pilot SAP's Employee Self Service (ESS) functionality for employee time entry. Three bureaus – Water, Environmental Services and Transportation – piloted the functionality with a small group of employees to determine the feasibility and best practices recommendations for rolling out the functionality city wide.

In March 2009, the ESC and PAC decided to reset the HCM go-live date on recommendation from the Project Sponsor. The Project Sponsor reached this recommendation after conducting a series of meetings with individual bureau directors and top managers; these meetings concluded that the leaders did not see that the City was ready to go-live in April. Bureaus noted there were system issues reported during payroll parallel testing that were still unresolved, processes that were still undefined and interfaces that still needed final testing and approval. Bureaus also said that employees needed a dry run of the new time collection process as well as additional training and practice to ensure the accuracy of paychecks.

Prior to the decision, the Mayor had convened a Citizen Review Board to review the project's progress, review options for go-live and make a recommendation. The Citizen Review Board, the ESC and the PAC agreed that a three-month extension was necessary in order to resolve issues from the first two payroll parallel cycles, complete an additional payroll parallel test cycle, and provide additional training and practice for employees. The new go-live date for HCM was set for June 18, 2009, with the first paychecks generated from the SAP system on July 2.

In order to closely track individual bureau tasks and provide a progress report, the bureau readiness dashboard used for FILO was updated for HCM to include issue resolution, timekeeper readiness, testing, business processes, data conversion, interfaces and go-live support. Bureaus reported their status weekly on each area as either completed/on track, some risk or high risk.

The new dashboard was refined to help bureaus communicate their readiness status more effectively to the project.

Issues were tracked on a consolidated issues log that was reviewed at each ESC and PAC meeting. The log was also posted and updated regularly on the project website so that bureaus were able to track issues and their resolution. Ten bureaus, those with complicated time entry scenarios and issues in the first two payroll parallel cycles, participated in a third payroll parallel cycle which was completed in April. Validation and issue resolution of the final payroll parallel cycle was completed in May.

In early June, the ESC and PAC met to review the project status and recommend a go or no go decision for HCM. They determined that bureau readiness dashboards indicated bureaus were ready, all critical issues on the consolidated issues log had been resolved, and the system went live on its scheduled date of June 18, 2009.

The post go-live support plan for HCM was similar to that of FILO in terms of super user development, daily Agent and Sponsor check in meetings, an electronic method of reporting issues as trouble tickets and daily team meetings to track the status of issue resolution. In addition, project-staffed mandatory support centers were scheduled so that timekeepers and other bureau employees could do their initial data entry in the system with assistance from project staff. A process for reporting and resolving paycheck errors was developed and communicated to bureaus and employees.

Recommendations: First time period November 2006 – May 2008

Project kickoff, work with first consultant integrator and transition from first integrator to second integrator

Implementation Strategies Worth Repeating

Create governance committees that represent all major business areas.

When the EBS Project was established, several governance committees and communication channels were created:

- An Executive Steering Committee of bureau directors was charged with making funding and strategic decisions for EBS.
- A Project Advisory Committee was comprised of deputy directors or finance managers from almost all City bureaus and was charged with making operational recommendations for EBS. The members were also Bureau Sponsors charged with the responsibility for their bureau's readiness efforts.
- A Change Management Team was comprised of finance/business operations managers or supervisors from all City bureaus. This team was the primary communications conduit for readiness activities. The members were also Bureau Change Agents charged with the responsibility for their bureau's readiness efforts.

Create and support communication channels throughout the project – from the elected official level to the bureau operational level of the organization.

The Chief Administrative Officer and the Chief Financial Officer, who served as the Project Sponsor, routinely briefed the City Council on the progress of the project and strategies to mitigate challenges. This created a foundation for City Council understanding of the challenges and support for subsequent strategies to address them.

Contract with an outside firm to provide quality assurance services for the project; support them with access to the governance committees and communication networks.

The City hired an outside firm with public sector technology experience to provide quality assurance services for the project. Quality assurance services are a widely accepted best practice for large-scale technology or business process projects; they provide City leadership with a third-party assessment of the status of the project as well as the risks and issues that need to be resolved. The same principals stayed with the project through the timeline and scope re-sets and reported monthly to the Executive Steering Committee. They also issued in-depth readiness assessments for five major bureaus prior to each go-live decision.

Select project manager with ERP experience.

In December 2006, the City hired a project manager for EBS who had experience in SAP implementations. The size and the scope of ERP (SAP) implementations all require adherence to a specific methodology for successful installment; hiring someone early in the process with experience managing ERP projects and in that methodology is a key success factor.

Implement improvements to business processes and practices as much as possible prior to the implementing a Citywide system.

The City changed its accounting period financial reporting from 13 accounting periods each fiscal year to 12 accounting periods to correspond to calendar months, thus instituting a financial best practice. The City documented its financial, purchasing and human resources processes during the blueprinting phase of implementation and documented its bargaining unit contract interpretations in relation to time and payroll processing in greater detail than had previously been accomplished. Although different SAP consultants had different recommendations, the City ultimately decided that employees reporting time to timekeepers would remain with timekeepers and employees self-reporting time into a computer system would remain with employee self-entry. Although other challenges remained in purchasing and contract management processes, it was the right call to make these decisions prior to configuration and the communication of business processes.

Recommendations: First time period November 2006 – May 2008

Strategies that Needed More Focus

Carefully estimate the project costs, including in-kind City costs and an adequate contingency based on level of complexity.

The initial project budget failed to include the City costs (facilities, technology services, on-loan staffing, etc.). This meant that the initial project budget of \$14 million did not include about \$7 to \$10 million of anticipated costs. In addition, the project contingency should have been larger given other agencies' experience with ERP installations and the level of complexity in implementing a payroll system in a highly decentralized City environment. The first firm that the City hired to select the software, Accenture, recommended a much more limited implementation scope with a focus on core functionality; they estimated the cost at \$38 million. Although the City's competitive solicitation process for integration services resulted in proposals to do more at less cost, this did not prove to be true.

Conduct due diligence in selecting a consulting firm as the system integrator, including the firm's project management experience and overall financial strength.

The City conducted an extensive selection process with site visits and reference checks. However, the deliberate selection process still resulted in a poor choice. The City should have focused more on the integrator's apparent lack of experience being the prime integrator in a large implementation and in the firm's lack of a project management experience.

Closely manage the project's scope of work, deliverables and risk factors; rigorously question the tradeoffs among cost, timeline and scope.

The City tracked the contract deliverables but did not have adequate indicators or measures in place to assess whether the firm was on track to meet the overall project timeline. The City should have questioned the firm's ability to deliver the project deliverables and weighed the pros/cons of changing consultants earlier in the project timeline. The City and its consultant engaged bureaus in what they wanted in the system rather than fully educating them on what the system could deliver in a standard package and more manageable scope. The City should have questioned the firm's ability to deliver on such a broad scope without adding to the timeline or budget. The project also suffered from scope creep – the term used to describe how related tasks and projects can be added to an initial project scope of work and can cause it to collapse under its own weight. In addition, reducing the scope of work and re-setting the expectations of customers later proved to be painful.

Select the best people for the job.

Staff assigned to represent the City's interest and produce the deliverables required on the City side of the scope of work needed to have the knowledge, interest and experience to get the job done. No one had or could be expected to have SAP implementation experience but the City needed to select people for every position who understood business processes, how technology can support business processes and how to deliver products in a tight timeframe. In addition, the project leadership should have discussed an agreed upon exit strategy for removing or changing City staff in a timely manner. Consulting staff also needed to have the knowledge and

experience to get the job done. These staff would be expected to have SAP implementation experience applicable to the City's project. The project leadership should have agreed upon criteria for selecting and retaining consulting staff, particularly given the complexities of the City's business processes and multiple systems.

Create a large enough sounding board with other agencies with enterprise system implementation experience.

A small group of representatives from other agencies that had already implemented SAP can provide in-depth perspectives but a larger group gives more ability to find others who have different experiences, challenges and strategies. The City leadership did meet regularly with a sounding board but expanding that group later on proved very useful in uncovering more recommendations on consulting approaches and best practices.

Engage in more nimble decision-making.

When changes did need to be made – whether to scope or to staffing – the deliberative communication process took time and the problems did not get better on their own. Some problems continually raised by customers or by staff could have been addressed more quickly. One example raised many times by the quality assurance firm was the request from the PAC governance committee to have agendas and materials pertinent to the meeting discussion distributed in advance of the meeting. This would have required agenda content decisions to be made two to three days earlier – a relatively simple task to improve customer service.

Create a project plan – thorough enough to be meaningful but not so detailed as to be burdensome to maintain – and stick to it.

The EBS project was continually plagued by the inability or unwillingness to create a project plan with timelines and deliverables and routinely report out key dependencies in the schedule. As a result, the teams within the project team often lacked a complete understanding of how the deliverables inter-related and bureau customers were routinely frustrated by not knowing what deadlines would affect them until the work was due.

Standardize business processes and consolidate bargaining before starting the project to simplify implementation.

The City did not standardize its business processes, particularly timekeeping practices and contract interpretations related to pay practices, before starting implementation. In fact the City discovered in the course of the project that there were far more variations in use throughout the City than previously documented in the original project blueprint. The City did begin a consolidated bargaining process where all labor unions bargain at the same time for 2010. If this had been accomplished prior to blueprinting with knowledge of standard SAP functionality, the scope of the work for the implementation of the new time and payroll system could have been much simpler.

If the project timeline is re-set, wisely invest that time in the most strategic activities for all City and consulting staff.

The City put the original go-live plans on hold in early 2008 in order to re-assess the project, resolve issues with the first consultant integrator, re-do the scope of work and contract with the new integrator firm. To the extent possible given these priorities, this re-set time could have

been used to work with key bureaus on their business processes for SAP and could have been used to identify super users and give them more exposure to blueprinting, training materials and SAP transactions.

Ensure that Bureau Sponsors and Bureau Change Agents are given communications and assignments that fit their responsibilities.

For this time period, project leads communicated directly with identified subject matter experts within bureaus but did not include Change Agents in those communications. This made it impossible for the Sponsors and Agents – with primary responsibility for bureau readiness – to track and manage assignments within their bureaus and to actively confirm whether the proposed business process changes were accurate or complete. They were also not able to verify that the bureau subject matter expert contacted was the most knowledgeable; they were not able to re-assign the work if the person contacted was unavailable; and they were not able to identify policy issues to forward to the executive level within their bureau.

Recommendations: Second time period May 2008 - December 2008

Implementation of Phase 1 FILO go-live and preparations for Phase 2 HCM go-live

Implementation Strategies Worth Repeating

Structure greater involvement from governance committees and create strategic supplemental communication channels.

Based on feedback from bureaus, the project leadership began conducting monthly individual meetings with the Bureau Sponsors/Project Advisory Committee members for the six largest bureaus: police, fire, environmental services, water, parks and transportation. These became known as the “6-PAC” meetings. Project leadership also met weekly with the bureau directors in the Office of Management and Finance; most of the bureau directors serve as business process owners for the SAP implementation. The OMF bureau directors represented finance, human resources, purchasing, technology services, revenue and business operations. These OMF “check-point” meetings were a valuable tool for the business process owners to iron out key strategies and approaches before the CAO and project leadership met with the Executive Steering Committee. In May 2008, the project leadership also reduced the size of the Project Advisory Committee from 26 to 16 members; the smaller group size allowed for more comments and issues to be raised by individual members. The Change Management Team also became more focused on project deliverables related to bureau readiness activities and on coordinating their issues and agendas with the PAC. The bureaus themselves reported their readiness on several key go-live criteria on a red/yellow/green dashboard report. Dashboard reports were due weekly in the two months before each go-live date and were reported at the weekly PAC meetings. Both the PAC and the ESC met more frequently leading up to go-live and weighed in substantively on the go-live decisions. The ESC was very engaged in supporting the adherence to the reduced scope and making recommendations regarding the SAP road map and the budget. The ESC and the PAC held joint meetings to thoroughly discuss remaining implementation issues prior to the go-live decision.

Narrow down the scope and stick to it.

When the project was re-set with a new integrator firm, it also came with a new contract scope of work that did not include all of the feature sets that were previously agreed upon. The process of turning down requests to add features that were previously part of scope produced painful conversations with bureau customers, but in the end it was necessary to achieve go-live with the system. A positive outcome of this process was that project leaders were by now very reluctant to allow customers or process owners to sweep up projects related to the implementation but not necessary to critical path deliverables into the scope of the project.

If changing integrator consultants, scope or leadership, maximize the investment made during the initial project work.

Too often in projects that are re-set or change leadership, project leaders reject the work that had been done previously and start over. Unfortunately, this puts the project even further behind.

City leaders made a good decision to salvage all of the work that had been done during the initial part of the project that could be retained, and carefully agreeing on a scope of work with the new consulting firm on what new work needed to be done.

Practice strict adherence to completing scope; report on percentage completion for key deliverables on weekly or daily basis as required.

The FILO consultant lead, in particular, practiced rigorous adherence to the agreed upon scope of work and rigorous adherence to reporting out percentage completion on key deliverables. This focus on those deliverables necessary for project success – critical path – along with the recognition that other work would need to be postponed or re-assigned to achieve it was a key success factor for the City's first go-live.

Supplement the project team with strategic resources, particularly to resolve time and payroll issues.

The new consulting team strongly recommended having at least one command staff member from the Police Bureau and one from the Fire Bureau join the project team to ensure close collaboration with bureaus that have complex bargaining unit agreements and strong union communications. One sergeant from the Police Bureau and one nonsworn member of the Fire Bureau joined the project team and were invaluable at providing day-to-day insights and communications between their home bureaus and the project team. In addition, the Bureau of Human Resources' Labor Relations team hired a retired Site Team manager to be the labor relations resource for the project, charged with documenting the bargaining unit contract interpretations and how that applied to SAP configuration for the time and payroll system. The spreadsheets that documented the requirements became the definitive source document for the team as well as for the ongoing Human Resources Labor Relations team.

Explain SAP implementation steps to the customers in ways they can understand and take action.

Consulting and City staff routinely briefed the PAC on the cutover plan and data owner responsibilities without fully explaining at first what those terms and activities meant to bureau business operations. Cutover plan worksheets were developed for each bureau that identified bureau staff by name, the tasks required and the due dates. These worksheets, that also included a manager's checklist of actions, went a long way to answering specific bureau questions.

Conduct before-and-after educational sessions on key business practices as much as possible.

During the re-set of the project in the spring of 2008, the project team dedicated resources to researching and preparing process education sessions for bureaus on the purchasing process, complete with handouts that described as is/to be business processes. These were known as the procure-to-pay sessions and were well received by customer bureaus.

Create a support plan for go-live with elements that support the City's daily operations; focus the City's attention on the support plan to be sure it is well executed.

The EBS support plan was first planned and executed for the FILO go-live in November 2008 and then again for HCM in June 2009. While there were some additional elements added for HCM based on lessons learned, such as mandatory support sessions at go-live in order to gain

access to the system, most of the elements in the first plan were well communicated and executed. Those elements included development of super users located throughout the City as the first line of support, an accessible system to report trouble tickets and track their resolution, daily call-ins with the super users and the project team on issue resolution, daily call-ins with Sponsors and Agents on issue resolution, scheduled as well as ad hoc training and support sessions to address system or business process proficiency issues, and development of supplemental training materials and job aids. These communication tools – the Tuesday updates with a summary of due dates, telephone check in meetings and support centers – are now part of the vocabulary of the City and are referred to as good examples of how to explain new concepts and requirements to City staff.

Recommendations: Second time period May 2008 - December 2008

Strategies that Continued to Need More Focus

Carefully estimate the project costs, including in-kind City costs and an adequate contingency based on level of complexity.

The updated project budget provided a much better estimate of the City costs but as the project was extended it did not factor in backfill staffing for the City staff loaned to the EBS project or any additional staff required for stabilization. The contingency budget for both FILO and HCM was exhausted for FILO go-live and stabilization and the contingency for HCM needed to be supplemented. This was in part because the City had more reliance on consultants for configuration and testing than originally anticipated.

Create a project plan – thorough enough to be meaningful but not so detailed as to be burdensome to maintain – and stick to it.

The EBS project continued to be criticized for not communicating a Citywide project plan with timelines and deliverables that allowed bureaus to see when tasks were due ahead of time and where their response was needed on a specific issue.

Contain the project scope: Document and confirm requirements before beginning configuration work.

Project leaders learned that it is better to confirm the requirements – and trust but verify assumptions about business processes – than to begin configuration work on a solution that may not actually be needed or may be much more costly to maintain than a simpler workaround. Project leaders did learn the project management mantra not to “spend a dollar on a dime” – in other words, do not build a \$100 solution when a \$10 solution will work. (The corollary is to avoid spending \$100 in order to save \$10. This arises when work units propose complex software solutions to complete tasks that currently do not cost that much in staff time to accomplish.)

Contain the project scope: Understand the scope of the work before committing.

Project leadership learned that it is never advisable to reply to a customer that something is an “easy fix” without first gathering all of the requirements and technical details. Since SAP is an integrated system, a fix that seems easy for payroll may be problematic for financial postings or for the technical schema.

Rigorously track and manage project risks and issues.

Project leadership could have more effectively managed and resolved risks and issues through the formal tracking mechanisms that were developed. The project-level issues log was designed to document issues that could not be resolved by a single project team yet frequently the person who reported the issue was re-assigned the resolution of the issue – without improving its overall chance of resolution. Project leadership should have assigned a greater level of joint responsibility among all project leaders for issue resolution.

Complete needed work on the City side with the cleanest and simplest solutions possible.

The City committed in the contract scope of work to complete a crosswalk from the legacy financial system (IBIS center codes) to the new SAP financial system (cost centers and funded programs). The lack of progress toward the completion of the crosswalk became a continuing source of frustration for both City and consultant leadership once the project was underway with a six-month march toward go-live. Part of the problem in completion was the complexity of the crosswalk itself. Before undertaking a major City requirement for project completion, the City should have explored all possible simplifications of the task.

Involve all parts of the project team in blueprinting, project planning and major issues resolution.

Project leadership learned that since SAP is an integrated system, all components of the project team – FILO, HCM, Change Management, Technical and the Project Management Office – needed to be involved in key project decisions and policy issue resolution. When this did not occur, the team did not fully understand the degree of system integration and interdependencies. Externally, this resulted in customers who experienced unintended consequences with payroll and finance; internally, this resulted in teams not understanding that their activities or bureau deadlines overlapped or conflicted with another team's tasks.

Recommendations: Second time period May 2008 - December 2008

Strategies to Address New Challenges

If changing to a management style that more rigorously contains scope creep, over-communicate expectations and do not underestimate the resistance to change.

Although the new project management approach to limit scope and stick to it was necessary for go-live, project leaders underestimated how this change would hinder customer satisfaction. The City should have over-communicated that this “new sheriff in town” would have to take a tough stance on scope to get the City to go-live.

Close issues raised by Quality Assurance.

Some issues raised by the third-party quality assurance (QA) firm were simply raised over and over again in their monthly reports without satisfactory resolution. It was not clear to City leaders outside the project if the method QA proposed to resolve an issue was rejected by project leadership as not being desirable or feasible, or if there was simply a lack of follow through. The City should have determined an agreed upon method for closing issues raised through this process.

Conduct project-led blueprinting, followed by bureau-led blueprinting; conduct project-led training, followed by bureau-led training.

The City has decentralized business processes unique to each of the business groups. Project-led blueprinting defined an overall as is/to be business process, but did not adequately help individual bureaus see the differences and plan for them. Project-led training did provide the basics in SAP terminology, uses and transactions but did not define the workflow that each bureau would use in approving a purchase or a personnel action. The project leadership should have defined a scope of work for bureaus that included those tasks. This also would have required more participants – super users – to be involved in blueprinting so they could better describe the work needed to their own bureau managers.

Ensure business process owners begin documenting key processes after blueprinting but before training and support centers are underway.

Project leaders and business process owners learned that once users begin using new processes they need more than the standard SAP transaction steps documented for reference – they need to see the new process steps. This created a need to develop some forms and processes in real-time during go-live support. Customers would have been better served if this need had been identified beforehand and some of the work was underway. This also would have resulted in having key staff in human resources, accounting, purchasing and payroll involved with the project team throughout blueprinting, super user development, testing and training so they were better prepared for the handoff of responsibilities.

Use scenarios in educational sessions with customers; this includes blueprinting, training and process education.

The project had some good examples of this – the procure-to-pay process education sessions and the FILO 101 for timekeepers – but more was needed to really help Sponsors and Agents understand the concepts and explain it within their own bureaus.

Do not underestimate the level of focus and support needed for business processes that occur after the initial SAP transaction.

Attention and focus for the go-live of the financial system was on properly conducting the financial transactions and maintaining the City’s ability to manage contracts and pay vendors to keep business on track. The City needed to have greater focus on the budgeting and financial analysis needs of the individual bureaus; most of the larger bureaus had considerable difficulty over the six to eight months after go-live to produce reports to meet their own budgeting requirements.

Do not underestimate the level of discomfort in changing source documentation from a static legacy system to real-time self-generated reporting.

City managers were used to receiving a paper copy of budgets and actual spending each accounting period from the legacy system. They may not have been as timely, accessible and detailed as SAP reports but they were considered the source document. With SAP, individual budget managers and analysts were required to select their own cost centers, time frames and report variants in order to produce their own reports. The City and project leadership underestimated the level of discomfort that business units had in ensuring that they were “doing this right” in order to adequately know what they spent and what funds they had remaining. The project and the business process owner for budgeting should have worked together to conduct support centers and provide more guidance and direction across the City.

Smaller agencies with fewer staff will have difficulty avoiding role conflicts in processing financial transactions.

The implementation of SAP drove the adoption of business processes considered best practices – having separate individuals responsible for requesting goods and services, receiving goods and services, buying and approving payments. This was consistent with practices in many of the larger bureaus, and they had little difficulty in implementing them. But the City has several smaller bureaus and offices that are considered standalone. Those offices – with four, or six or eight staff people – had difficulty implementing these financial controls and in the case of an absence of a key staff member could not process transactions without relying on assistance from others outside of their office who were not familiar with the transactions or their funding sources.

Conduct before-and-after educational sessions on key business practices as much as possible.

Brief presentations, complete with takeaway handouts, to explain high level key concepts and terminology executives and project managers would have assisted bureaus in understanding the SAP structure. Bureau managers made some decisions regarding their financial structure or data conversion that created problems at go-live. Some of these could have been averted with a better understanding of the ramifications of those decisions.

Manage the project from the outset with the goal of building City staff proficiency in SAP.

Project staff training was conducted too early in the project and staff lacked adequate context to make the training more meaningful. The decision to conduct training prior to the heavy project deliverable deadline made sense in terms of deadline planning but not in terms of how useful the training would be. In addition, knowledge transfer between consultants and City staff was uneven, and consultant turnover made the situation worse as new consultants had to figure out another's configuration in order to fix errors and City staff had to get new consultants up to speed.

Select ongoing City staff members after project stabilization.

Although recruiting and hiring staff members for the ongoing support team well before go-live dates gave employees more certainty about their plans post go-live, project leadership would have benefited from the additional time to evaluate performance in relationship to ongoing team responsibilities. Post go-live, project leadership could have observed staff resolving go-live issues and working with customers – this would have helped them make the best staff selections.

Adhere to strict transport and change control protocols.

Never allow anyone to configure directly into the quality assurance or production environments of the system. Stick to strict protocols for testing and communicating configuration changes in advance of moving the changes into production. Ensure that changes that require customer communications are preceded by the agreed upon customer communication.

Recommendations: Third time period December 2008 – October 2009

Implementation of Phase 2 HCM go-live to HCM stabilization

Implementation Strategies Worth Repeating

Maintain and support governance committees.

The Executive Steering Committee, the Project Advisory Committee, the 6-PAC, the OMF checkpoint group and the Change Management Team all met regularly and, leading up to go-live, more often to work through the issues and tasks required.

Gather supplemental advisory perspectives as needed.

The Mayor's Office created an advisory panel of representatives from other agencies with similar implementation experiences to share perspectives during critical go-live recommendation discussions. Project leadership continued to meet regularly with local agency representatives with SAP implementation experience to share ideas and approaches. Both were useful, particularly for the go-live decision on the new payroll system.

Thoroughly consider the City's capacity to implement multiple new tasks at go-live when deciding on the employee self-entry of timekeeping data.

The second integrator consulting firm strongly recommended that the City go-live with only timekeepers entering time in the new system, and gradually bring employees into employee self-entry. Bureaus that had been using an electronic time system strongly recommended that the City go-live with employee entry. This issue was one of the most thoroughly discussed and debated. In the end the governance committees reached agreement to go-live with a pilot group of employees from three bureaus using self-entry. Given the benefit of hindsight about the level of effort needed to support a new time and payroll system in general, this is widely viewed as the right decision at the right time. The pilot was successful and the City continues to add employees to self-entry.

Make strategic use of time in a project re-set; prioritize those tasks that resolve system issues and strengthen bureau readiness; document them in a detailed project plan.

When it was clear that the HCM go-live date of April 2009 would not be successfully met, project leadership showed bureau leaders alternatives for a one-, two- and three-month extension in terms of activities and risks so they could make an informed recommendation. The City agreed to a three-month extension, primarily due to the desire to conduct a third payroll parallel test and to start the system at the beginning of a tax quarter. The tasks for April through June were well defined, well tracked and well executed by both the project and bureau staff – resulting in a unanimous recommendation for go-live by the Executive Steering Committee.

Create mechanisms to engage end users when relatively large numbers of end users will soon be responsible for critical, time-sensitive tasks.

In December 2008, the project began conducting weekly timekeeper meetings that were held through the go-live date. The City had almost 300 employees role mapped to the role of timekeeper and all employees required training. In addition, timekeepers were responsible for payroll parallel entry, testing and data validation for conversion. Keeping a core group of timekeepers informed on the progress of the project and taking time to answer their questions in a group setting provided a valuable foundation for them for go-live support. The City could have also benefited by transferring ownership of the timekeeper meetings to the business process owner, the Bureau of Human Resources, earlier in the process and could have benefited by creating a similar communication model for bureau personnel administrators.

Make go-live support sessions mandatory for end users.

For the go-live of the financial system, several support sessions were organized and conducted on an as needed basis. For the go-live of the payroll system, the consultants strongly recommended mandatory support sessions in order for end users to receive access to the role. Although this was a logistics challenge due to the number of timekeepers, many bureau managers commented afterward that this was the right decision.

Deliver specific, action-able recommendations to management to enhance proficiency in the new system.

During the testing phases of the payroll system it became clear that many issues reported to the project as system errors were actually user errors. The project issued recommendations to bureau managers on specific strategies that they could evaluate and implement for their individual work teams in order to improve proficiency in the new system. After go-live, it does not matter to employees if the problem in their paycheck is a system error or a data entry error – it is still an error – so the project and the City leadership needed to work together to reduce both types of errors.

Conduct full payroll parallel tests for a new payroll system – not just to identify and fix system issues but also to allow end users to gain proficiency in the new system.

The consulting firm recommended conducting a series of two full payroll parallel tests where City staff perform dual entry of time data in the legacy system and in SAP, compare the results and report issues. Project staff then worked with City staff to document issue resolution. These were valuable tests to conduct, not just because they identified system issues (in some cases requirements that were missed in blueprinting) but also because it allowed end users to gain proficiency in the new system. Bureaus who involved the most number of timekeepers in the testing gained the most from it.

Conduct before-and-after educational sessions on key business practices as much as possible.

The project held educational sessions for an overview of the new organizational management and personnel administration modules that included a review of the current terminology and new SAP terminology. These were held in a classroom setting, not a computer lab. Managers who attended gave the sessions high marks in helping them understand the new structure and terminology. The project also held FILO 101 for timekeeper presentations with scenario

examples that were well received. The idea for FILO 101 briefings for non-finance staff was borrowed from some internal training conducted within the Bureau of Environmental Services.

Recommendations: Third time period December 2008 – October 2009

Strategies that Continued to Need More Focus

Do not underestimate the extent of non-standardization within bureaus and within the City.

The payroll parallel testing and reported issues identified that bureaus did not apply time and payroll rules consistently throughout the City, and some bureaus did not apply time and payroll rules consistently within their own bureaus. In general, the level of differences in interpretation in bargaining unit agreements and human resources administrative rules was larger than anyone in project or City leadership anticipated.

Engage business process owners early in project decision making.

Engaged business process owners for timekeeping, payroll, financial transactions, budgeting and purchasing is key to a successful system implementation. Project leadership learned that these business process owners need to be part of testing, training and project decisions in order to take on ownership after go-live. The City should have looked for additional ways for business process owners to be involved, including approving roles, approving access guidelines, providing super users and participating in testing.

Balance flexibility v. standardization; avoid compromising training standards.

A citywide system requires standard business processes – and customers are most satisfied with processes that are customized to their business needs. Project leaders learned how often these two concepts conflict in the implementation of a new system. The project did allow some bureaus to opt out of standard training in exchange for conducting their own internal training. At go-live, these work groups experienced more difficulty in error resolution and understanding business processes. A better approach would have been to require standard citywide training followed by specific bureau training.

Recommendations: Third time period December 2008 – October 2009

Strategies to Address New Challenges

Ensure that the project leadership's assessment of project status is substantially similar to the customers' assessment of project status.

The most challenging segment of implementation for bureau and project staff occurred in February and March 2009. Bureau timekeeping staffs were heavily involved in system testing and readiness activities and in both areas bureaus were reporting that things were not on track for an April go-live date. Project leadership was reluctant to publicly acknowledge this status as they did not want to lose staff momentum to push ahead on needed work. However, this disconnect led to a perception among customers that the project leadership was either not aware of the correct status or was not candid with them. Both perceptions led to increasing conflict until all parties came together to agree on a new go-live date.

The system is integrated; the staff work effort needs to be integrated as well.

SAP is a highly integrated system and this remains one of the biggest system benefits. However, the staff work effort needs to be as well integrated or it can lead to unintended consequences. For example, project staff learned that a configuration change in time or personnel administration has an immediate effect on payroll and then a subsequent effect on financial postings. In addition, bureau staff learned that a retroactive time or personnel administration entry will change assumptions used by financial staff in their projections.

Recommendations: Future Recommended strategies for City leadership in ongoing operations and preparation for future projects

Communicate with confident candor.

It is necessary to communicate and over-communicate in order to manage the work plan and expectations. It is also necessary to acknowledge mistakes and challenges, and the strategies that will be used to overcome them.

Manage expectations in a City known for its process.

Governance committees need to be prepared to make decisions to get results, even in a City known for its process and involvement requirements.

Manage a balance between flexibility v. standardization.

Question whether the request for a custom approach and flexibility is really in the best interest of the City's taxpayers: Do not implement a \$100 solution to a \$10 problem. Do not reduce training requirements for access to roles that can process transactions, and do not waive training requirements for individuals. The resulting inconsistencies and incorrect transactions will result in the perception of system errors that are really due to user errors.

Become an expert on the legacy system and business requirements.

The more the project and City leadership understand how big the job is, the better prepared they will be for the work of getting that job done on time and within budget.

Plan six months ahead.

It is easy, and sometimes practical, in the rush toward go-live to simply focus on getting the system live. However, go-live is only the beginning of determining how to conduct break/fix changes in a production environment, how to install postponed upgrades, how to determine criteria for approving new functionality, and how to determine criteria for approving requests to implement improvements to the current system.

Continue to improve business processes.

A few months after go-live, all necessary business within the City was being conducted – vendors were being paid accurately and on time, employees are being paid accurately and on time. However, City leaders need to continue to focus on ways the system can go beyond the basic transactions and work for the business needs. In addition, many bureaus continue to maintain time consuming processes outside of SAP that may no longer be necessary. Leaders need to continue to conduct internal assessments to refine business processes.

Keep solutions simple and standard.

Examine business process solutions as well as technical solutions. Complex configuration solutions are hard to develop, maintain, understand and fix if they break – and they are usually more expensive.

Remind leadership of why this had to be done.

Stepping up to make changes – no matter how necessary – will result in criticism. Continue to remind City leadership of why the change was necessary and the need to work collaboratively to achieve the desired result.

Appendix A



Working Copy of the Project Organization Chart
Updated:04/16/09

