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**FINANCE AND CIVIC DEVELOPMENT COMMITTEE**

*HIS WORSHIP, THE MAYOR  
AND COUNCILLORS*

**SUBJECT: 2010 - BUSINESS SYSTEMS REPLACEMENT PROJECT**

**RECOMMENDATIONS:**

1. THAT this report be received for information.
2. THAT a Capital Works reserve bylaw, in the amount of \$7,230,000 including GST be brought down to finance the 2010 Business Systems Replacement Program described in this report.

**REPORT**

The Finance and Civic Development Committee, at its meeting held on 2010 January 28, received and adopted the *attached* report providing Council with an update on the Business Systems Replacement Project and seeking funding approval for the 2010 Program.

Respectfully submitted,

Councillor D. Johnston  
Chair

Councillor N. Volkow  
Vice Chair

Councillor C. Jordan  
Member

Copied to:	City Manager Director Finance City Solicitor
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**TO:** CHAIR AND MEMBERS  
FINANCE AND CIVIC DEVELOPMENT  
COMMITTEE

**DATE:** 2010 January 19

**FROM:** DIRECTOR FINANCE

**FILE:** ERP  
*Reference:* ERP Update

**SUBJECT:** 2010 - BUSINESS SYSTEMS REPLACEMENT PROJECT

**PURPOSE:** To provide Council with an update on the Business System's Replacement Project and to request funding approval for the 2010 Program.

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**RECOMMENDATIONS:**

1. **THAT** this report be received for information, and
2. **THAT** a Capital Works reserve bylaw, in the amount of \$7,230,000 including GST be brought down to finance the 2010 Business Systems Replacement Program described in this report.

**REPORT**

**Background**

The integrated Enterprise Resource Planning (ERP) Project at the City of Burnaby is a business transformation project to modernize the City's business application systems and related business processes. ERP systems are based on the recognition that common business processes such as accounting, purchasing, and payroll affect multiple departments; by integrating such processes, the sharing of information is enabled to achieve efficiencies, accuracy and economies through a single source of data entry. Ultimately, over time, by utilizing enhanced functionality, an increased effectiveness in service delivery can be provided.

The ERP system will provide a business foundation for the delivery of the City's services for the foreseeable future. The conceptual model in **Figure 1** shows the evolutionary nature of the City's approach which builds upon the implementation of core business functionality as the foundation and then enables, through business process change, the transformation of the City's service delivery model.

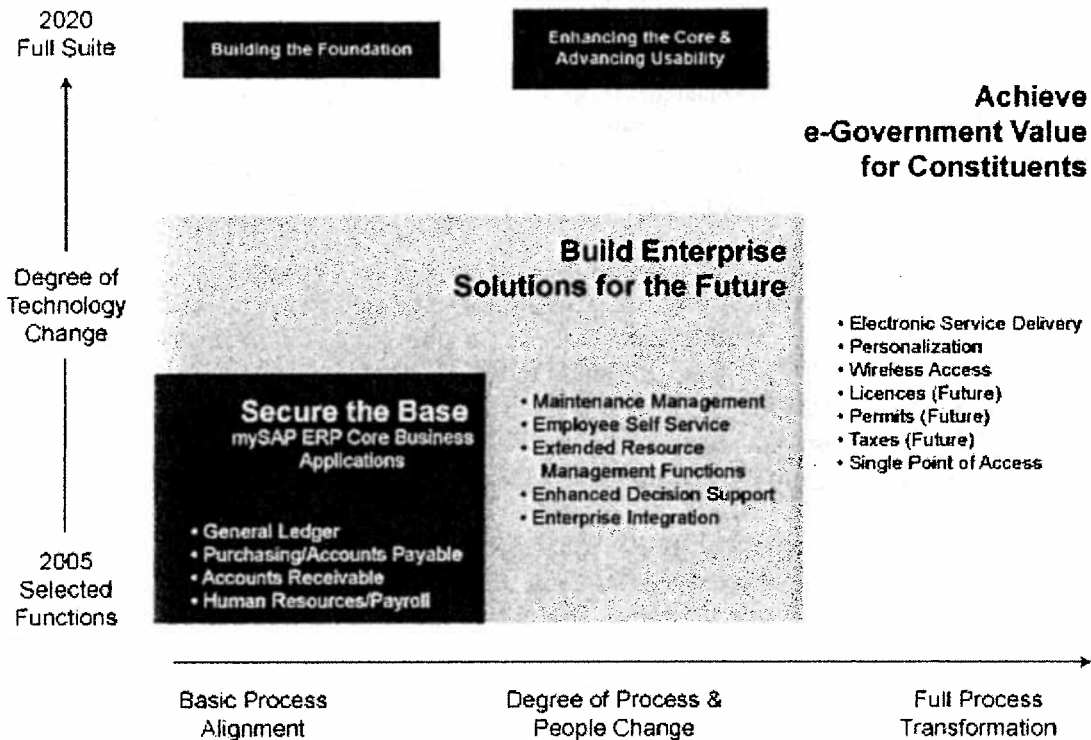


Figure 1: Evolutionary Nature of the City's Approach

The initial implementation in 2007 began by securing the foundation with the replacement of the City's two oldest custom-built core financial business systems: the 25 year old general accounting system and the 20 year old payroll system. These systems, and others like them, were reflective of the City's business environment which consisted of a mix of internally developed and off-the-shelf applications that exhibited limited connectivity and varying functionality. The result was a lack of system integration and real-time data. Disparate information systems resulted in redundant data entry and many manual procedures. Inconsistencies in data were prevalent and transparency of transactions wasn't possible. Although these systems had served the City well for many years they were beyond their useful life and in some cases presented a very significant risk to City operations.

The above diagram helps to illustrate that this change has two components: a major change in the City's business systems (technology) and a major change in processes and the way people do their work. It takes significant effort and dedication to carry out the transformation of both components and a lengthy period of time to "socialize" the new processes into the organization. It is an evolution which requires continuous review and evaluation while looking for opportunity for improvement.

The Executive Steering Committee (ESC) requested a review of the implementation process during 2007 asking staff to complete a survey of “lessons learned”. These were considered and two key initiatives were implemented.

In 2008, an ERP Working Committee (ERPWC) was created. This Committee includes operational managers from all City departments with the objective to strengthen participation, improve communication and ensure that the technology priorities for the coming years considered all of the City’s technology needs.

The ERP Working Committee makes recommendations to the Executive Steering Committee (ESC) regarding the priority and timing for development and release of new functionality. The ESC is made up of the City’s Management Committee plus the Chief Information Officer and Human Resources Director. The ESC, through the City Manager, provides overall strategic direction and priorities for the ERP Program. Each project has an identified Project Sponsor representing the major business stakeholder and a Project Manager responsible for project delivery. All enterprise (corporate) projects now follow this process.

The second initiative was developed in 2009 and focused on clarifying the corporate strategic direction of implementing an enterprise system. An SAP First Policy was developed and adopted by the ESC to clarify the corporate direction. The policy states:

*The City of Burnaby seeks to maximize its investment in SAP and the efficiencies gained from having adopted an integrated Enterprise Resource Planning solution. To that end, where a business process would benefit from automation and SAP provides a credible solution then SAP should be implemented.*

Progress has been significant with the replacement of the City’s main expenditure systems at the initial go-live in 2007 and during 2008. The setup of the technical environment was completed and several major applications were implemented in 2007 including the general accounting system, the purchasing system, the accounts payable system, the payroll and the human resource systems. During 2008, inventory systems for Purchasing and the Fire Departments, an internal Portal for the delivery of the City’s web technology, new integrated planning system for the operating budget and the development of a property database were added.

### **2009 Accomplishments**

During 2009 the City continued the replacement of its business systems and exploitation of the functionality inherent in an ERP system. Two projects, Asset Accounting and Project System, dominated the 2009 work program and resources during the year. These two applications were urgently required to meet legislated reporting changes. The following briefly outlines the scope of the work. Appendix B outlines other smaller but important work carried out during the year.

#### **Asset Accounting**

- The asset accounting module is in the process of being implemented as the solution to the legislated requirements coming out of the Province’s adoption of the Public Sector Accounting Board’s recommendation 3150. The recommendation requires that

government entities fully account for, track and amortize over time, the cost of all of its assets.

- The project has proven to be much more difficult than originally anticipated. Staff have gone through an extensive process to identify all of the assets, quantify them, research their history to complete the records required, cleanse the data from existing systems to standardize and complete missing information on individual assets and asset systems (water, sewer, roads, etc.), value the assets according to their year of purchase and set guidelines for asset capitalization.
- The process is not complete, as of year end 2009, but will be completed in 2010 and refined in subsequent years as more experience is gained in tracking purchases, maintenance, betterments, and disposals/decommissioning of city assets.
- The funds requested for 2010 include the completion of funding for work done in 2009 and the work required for completion in 2010.

**Project System – Project Management Tool and the City’s Capital Planning Tool**

- The Project System module was initially intended to replace the capital internal order system used by the City. The functionality provided within the module can be extended to project administration and control including resource scheduling and five year capital planning. The extension of this functionality was not budgeted in the 2009 component of the implementation project but was intended to be introduced to the operating departments in subsequent phases of the extension of the Project System module.
- Due to operational requirements, the Engineering department incorporated the additional functionality in the design and rollout of the Project System module to take advantage of the extended functions provided. The introduction of the additional functionality has increased the costs of the 2009 component of the Project System Project but has moved the City further ahead. The funds for the implementation of this module, requested in 2010, include the costs for the additional functionality.

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 From: Director Finance  
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**Recommended 2010 ERP Program**

**NOTE:** The costs indicated in the following table are for the 2010 component of those projects that are multi-year in duration. Where applicable the funding request for the 2011 component of these projects will be applied for as part of the 2011 budget process. For more detailed information see the attached report in Appendix A.

<b>Finance Initiatives</b>	<b>\$ 2,261,755</b>
Asset Management	\$ 499,600
Capital Project Accounting	\$ 133,650
Accounts Receivable Accounts Payable Revenue Structures Project	\$ 1,483,425
Harmonized Sales Tax IFRS Legislated Reporting Miscellaneous Finance Projects	\$ 145,080
<b>Property Initiatives</b>	<b>\$ 1,397,800</b>
Licence, Permits and Inspections	\$ 505,200
Rental Property Management Property Related Optimization	\$ 892,600
<b>Technology Infrastructure Initiatives</b>	<b>\$ 1,120,370</b>
Application and System Upgrades System Tools	\$ 932,470
Enterprise Reporting System	\$ 187,900
<b>Work Order Management Initiatives</b>	<b>\$ 388,345</b>
Building Infrastructure Maintenance Plant Maintenance for PRCS	\$ 388,345
<b>Human Resources &amp; Payroll Initiatives</b>	<b>\$ 296,660</b>
HR/Payroll Initiatives	\$ 296,660
<b>Procurement and Inventory Initiatives</b>	<b>\$ 245,285</b>
Material Management Projects	\$ 245,285
<b>Support &amp; Management</b>	<b>\$ 155,385</b>
Support & Management	\$ 155,385
Subtotal	<b>\$ 5,865,600</b>
Contingency @ 9%	\$ 527,900
Subtotal	<b>\$ 6,393,500</b>
Funds for increased functionality in 2009	\$ 316,030
Top up funding for the 2008 program	\$ 47,945
<b>TOTAL 2010 ERP PROGRAM</b>	<b>\$6,757,475</b>
GST	\$472,525
<b>BYLAW FUNDING REQUEST</b>	<b>\$ 7,230,000</b>

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**2010 Recommended Projects**

The 2010 ERP Program was developed with the goals of further adjusting the pace of functional rollout to ensure that the City can fully absorb the new processes while optimizing the efficiencies created by the implementation of an integrated system. The governance structure has been modified to provide individual Project Sponsors based on recommendations by the ERP Working Committee to the Executive Steering Committee. Going forward, individual projects will be independently funded, tracked and accounted for in the newly implemented Project System module, providing a greater degree of financial control and transparency.

As the 2009 Program was quite ambitious the priority for the 2010 Annual Program will be the completion of the work in progress approved under the 2009 Program. New work identified by the ERP Working Committee and approved by the Executive Steering Committee is also included in the 2010 Provisional Budget. The 2010 Program reflects corporate priorities, the capacity to undertake the work and the sequence under which work needs to be completed to support future initiatives.

For 2010, the ERP Capital Budget was developed within a cost envelope for the program that supports the strategic priorities. For 2011 the Capital Budget model will be by individual project.

The priorities previously set by the Executive Steering Committee, and adhered to in this plan, are:

- |                  |   |
|------------------|---|
| Sustainment      | Ensure the system operates as intended while building staff knowledge to decrease reliance on external resources. |
| Optimization     | Address any outstanding system issues and streamline existing functionality                                       |
| Work-in-Progress | Prioritize work that is currently underway  |
| New initiatives  | New opportunities and functionality   |

**Financing**

This request is for a Capital Reserves bylaw in the amount of \$7,230,000 to provide funding for the 2010 Program. This includes expenditures and contingency of \$6,757,475 and GST \$472,525. The 2010 Program has been provided for in the 2010 Provisional Budget.



Director Finance  
Rick Earle

Enclosure: Appendix A, Appendix B

To: Finance and Civic Development Committee  
 From: Director Finance  
 Re: Business Systems Replacement Project Update 2010  
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<b>ERP PROGRAM FOR 2010</b>		<b>COST</b>
		<b>TOTAL \$6,757,475</b>
<b>Finance Initiatives</b>		<b>\$2,261,755</b>
<b>Asset Management</b>	<p>Completion of the Asset Management implementation which accommodates the new financial reporting requirements to report on Tangible Capital Assets as prescribed by the Public Sector Accounting Board (PSAB). The project which affects most City Departments is a work in progress nearing completion. In 2010 all assets will be loaded into the asset module to facilitate year end reporting. Integration to the City's GIS system will complete the implementation.</p> <p>Benefits include:</p> <ul style="list-style-type: none"> <li>• Integrated business processes across City Departments providing common master asset data that will facilitate full life cycle management of the City's capital assets</li> <li>• Allocation and management of capital expenditures and funding for the creation and replacement of capital infrastructure</li> <li>• Integration with the City's GIS system to provide both asset data and visual representation of the location of the City's asset infrastructure.</li> </ul>	\$ 499,600
<b>Capital Project Accounting</b>	<p>This project was implemented in July 2009, to support the Capital Budget process and a phased roll-out schedule is in place with a completion date in the first quarter 2010. The project provides:</p> <ul style="list-style-type: none"> <li>• Centralized master data for capital projects and budget planning</li> <li>• Consolidated data for reporting on projects</li> <li>• Linking the capital projects to the Asset Counting system</li> </ul>	\$ 133,650
<b>Accounts Receivable</b> <b>Account Payable</b> <b>Revenue Structures Project</b>	<p>This implementation will build the foundation for managing, accounting and auditing the City's revenue systems.</p> <p>The first revenue generating system to use this foundation will be the Property Management System for commercial and residential property rentals owned by the City. The next major system to follow will be the Licence, Inspection and Permits System. The Property Management System is a work in progress and is scheduled to complete in 2010 and be stabilized in the first quarter of 2011. The Licence, Inspection and Permits System is scheduled to being in 2010.</p> <p>Benefits will include:</p> <ul style="list-style-type: none"> <li>• Customer self-service, for example the opportunity to receive and pay for services online</li> <li>• A single customer account where all invoices and payments for all city services are consolidated enabling a customer to pay all outstanding bills with one cheque or on-line through the portal.</li> <li>• Fully integrated to the City's general ledger system the Accounts Receivable system providing greater audit control, consistent data and enhanced reporting capability. By having all payments, regardless of how they are made recorded in one place will reduce reconciliations and provide better cash security.</li> <li>• Enhanced revenue information will better support the cash investment process providing the opportunity for more cash to be invested for the best terms available.</li> </ul>	\$1,483,425



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<b>Finance Initiatives</b>		<b>\$2,261,755</b>
	In the light of the revenue related project there is a need to review the current treatment of revenue so that it is transitioned correctly. This will impact the Financial Ledger and Management Accounting processes to incorporate revenue processing in to the accounting structures.	
<b>Harmonized Sales Tax</b>	Legislated transactional processing changes from Provincial and General sales tax to Harmonized Sales Tax (HST) and associated revenue reporting requirements.	\$ 145,080
<b>IFRS Legislated Reporting</b>	Assessment of the impacts to proposed legislation for reporting on capital tangible assets that may be brought in under International Financial Reporting Standards (IFRS).	
<b>Miscellaneous Finance Projects</b>	Optimization of the Finance accounting processes. Address outstanding issues and streamlining existing functionality.	
<b>Property Initiatives</b>		<b>\$1,397,800</b>
<b>Licence, Permits and Inspections</b>	<p>This project supports the business processing of licences, inspections and permits. Customer records and business processes affect many departments including Building, Planning, Engineering, Fire and Finance. The current systems are disparate and obsolete. This project is planned to be implemented in phases over a two year period completing in 2011.</p> <p>Benefits include:</p> <ul style="list-style-type: none"> <li>• The opportunity to consolidate a number of disparate systems providing a comprehensive view of common data and information.</li> <li>• Online processing of service requests and related payments. This information will flow through the Accounts Receivable module in SAP enabling a customer to pay for several services at one time, providing for one-stop shopping for City services.</li> <li>• A “customer focused” view of information to make it easier and improve service levels for the citizen</li> </ul>	\$ 505,200
<b>Rental Property Management</b>	Allows for the processing of acquisition of properties and the tenanting of the 250 City owners commercial, residential and water lots properties etc, Includes the tracking of administration activities, maintenance cost and revenue processing through the Accounts Receivable system.	\$ 892,600
<b>Property Related Optimization</b>	<p>Benefits:</p> <ul style="list-style-type: none"> <li>• Management of the costs and revenue of the rental units in a single system.</li> <li>• Contract management of the rental agreements.</li> <li>• Integration of the revenue process for rental units with the financial systems.</li> </ul> <p>Optimization of the accounting processes for property related assets including the integration of these assets with the Geographic Information System (GIS), capital projects and asset maintenance. Address outstanding issues and streamlining existing functionality.</p>	

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<b>Technology Infrastructure Initiatives</b>		<b>\$1,120,370</b>
<p><b>Application and System Upgrades</b></p> <p><b>System Tools</b></p>	<p>Technical and functional upgrades to support the evolution of the systems to maintain the currency of the system, introduce corrective vendor supplied patches and meet legislated payroll tax changes.</p> <p>Benefits:</p> <ul style="list-style-type: none"> <li>Upgrade of the SAP system to enable system enhancements to be provided across all modules in use. These upgrades are included in the City's licence agreement and are one of the benefits of the SAP system. SAP is a leader in research and development that facilitates utilization of ongoing enhancements to update and keep the City's technology investment current.</li> </ul> <p>Introduction of tools to support the City's investment by providing improved visibility and change control for projects, enabling process improvements through system upgrades which increase system stability and introducing new functionality that can be leveraged by City Departments.</p> <p>Benefits:</p> <ul style="list-style-type: none"> <li>Implementation of Solution Manager software to manage the documentation of the business process changes that accompany each implementation, facilitating the storage of testing scenarios and scripts in relationship to a specific project. This tool also provides functions to analyze and monitor the SAP system landscape through the use of diagnostic tools for monitoring the system to help maintain response times. It provides issues management in a service desk used to identify and help analyse technical issues as implementations progress, reducing risks and disruption. Upgrades process and documents all changes for review.</li> </ul>	\$ 932,470
<b>Enterprise Reporting System</b>	<p>Involves the creation of user-friendly departmental reports that providing information to for budget control, planning and purchase and spend analysis. The project includes the gathering of departmental requirements and the roll-out of the SAP Business Objects product to delivery these requirements through online reporting using the SAP Portal. This real time delivery provides significant capability for the analysis and presentation of information across the organization.</p>	\$ 187,900
<b>Work Order Management Initiatives</b>		<b>\$ 388,345</b>
<p><b>Building Infrastructure Maintenance</b></p> <p><b>Plant Maintenance for PRCS</b></p>	<p>Work order management projects are planned to support the Parks business processes enabling the capture of information regarding horticulture and forestry managed by the Parks Department</p> <p>Move the maintenance management of the City's buildings from the Hansen system to SAP.</p> <p>Benefits:</p> <ul style="list-style-type: none"> <li>Allow all departments to have access to information in one system improving reporting and consistency of the data.</li> <li>Integrate the maintenance of assets with the reporting on the acquisition of tangible capital asset.</li> </ul>	\$ 388,345

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<b>Human Resources &amp; Payroll Initiatives</b>		<b>\$ 296,660</b>
<b>HR/Payroll Initiatives</b>	<p>A series of projects to improve a variety of human resource and payroll processing activities.</p> <ul style="list-style-type: none"> <li>Automation of the business process for third party remittances from payroll to organizations such as Canada Revenue Agency, WCB</li> <li>Development and delivery training to expand the system knowledge base in the Payroll Department</li> <li>New reports</li> <li>Automated forms processing to streamline input and provide access to information</li> <li>Improved tracking for organizational structure and reporting relationships</li> </ul>	\$ 296,660
<b>Procurement and Inventory Initiatives</b>		<b>\$ 245,285</b>
<b>Material Management Projects</b>	<p>A series of smaller projects to continue with the automation of a variety of purchasing and inventory business processes:</p> <ul style="list-style-type: none"> <li>Bar Codes/RFID tags to improve accuracy and speed of processing of materials and supplies</li> <li>Expansion of the materials reservation to reduce material quantities on hand and facilitate the provision of service by providing just in time material delivery</li> <li>Automate Purchase Orders for repeat vendors</li> <li>Expand internet online ordering and invoice processing to additional vendors based on successful model developed with Grand and Toy</li> </ul>	\$ 245,285
<b>Support &amp; Management</b>		<b>\$ 155,385</b>
<b>Support &amp; Management</b>	<ul style="list-style-type: none"> <li>Overhead costs to manage, administer and support the ERP Program of projects for 2010.</li> </ul>	\$ 155,385
Subtotal		\$ 5,865,600
Contingency @ 9%		\$ 527,900
Subtotal		\$ 6,393,500
Funds for increased functionality in 2009		\$ 316,030
Top up funding for the 2008 program		\$ 47,945
<b>TOTAL 2010 ERP PROGRAM</b>		<b>\$6,757,475</b>

To: Finance and Civic Development Committee  
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**ERP 2009 Accomplishments**

The following is a brief summary of the work completed and underway in 2009:

<p><b>Finance Initiatives</b></p> <ul style="list-style-type: none"> <li>• Funds management data integration with the financial accounting</li> <li>• Enhancement to batch processing of revenue for revenue projects</li> <li>• Structuring of the City's Business Partner data (customers, vendors and other stakeholders) for imminent revenue and property projects</li> <li>• Operating budget enhancements</li> <li>• Initiation of the Accounts Receivables (Public Sector Cash &amp; Disbursements) project which continues in 2010</li> <li>• The asset accounting module as the solution to the legislated requirements coming out of the Province's adoption of the Public Sector Accounting Board's recommendation 3150. The recommendation requires that government entities fully account for, track and amortize over time, the cost of all of its assets. This project concludes in 2010.</li> <li>• The Project System module to replace the legacy Capital budgeting system used by the City. This project concludes in 2010.</li> </ul>
<p><b>Property Initiatives</b></p> <ul style="list-style-type: none"> <li>• Property related information – alignment with Asset Accounting (legislated) requirements and automated interface to the Land Titles Office and BC Assessments Authority</li> <li>• Documentation of the requirements to support the replacement of the Licence, Inspection and Permits system</li> </ul>
<p><b>Technology Infrastructure &amp; Reporting Initiatives</b></p> <ul style="list-style-type: none"> <li>• Technical system upgrade to facilitate the latest system improvements and meet legislated payroll tax changes</li> <li>• Commissioned the infrastructure to provide enhanced reporting capabilities</li> <li>• Initiated standard departmental reports and prepared for corporate budget to actual reporting</li> </ul>
<p><b>Work Order Management Initiatives</b></p> <ul style="list-style-type: none"> <li>• Maintenance tracking for Park Trails and the incorporation of this in to the design of the City's assets</li> <li>• Maintenance scheduling for the City's pool vehicles</li> </ul>
<p><b>Human Resources &amp; Payroll Initiatives</b></p> <ul style="list-style-type: none"> <li>• Preparations for the automation of Third Party Remittance processing from Payroll via the Accounts Payable system</li> <li>• Automated benefit payment processing to Pacific Blue Cross by means of an interface</li> <li>• First part of the development and delivery of in-depth payroll training with the remainder to be completed in 2010</li> </ul>
<p><b>Procurement and Inventory Initiatives</b></p> <ul style="list-style-type: none"> <li>• Inventory reservation process</li> <li>• Providing security for confidential contracts</li> <li>• First part of the desk top procurement capability for employees with several job functions</li> <li>• Specifications for the automation of a fuel system interface to the accounting and material management system</li> </ul>
<p><b>Support &amp; Management</b></p> <ul style="list-style-type: none"> <li>• Commissioned the infrastructure to provide enhanced reporting capabilities</li> <li>• Initiated standard departmental reports and prepared for corporate budget to actual reporting</li> </ul>