CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

MGWB Committee Agenda: 3/10/04 Item __
COUNCIL AGENDA: 3-23-04 Item 3.3

Memorandum

TO: Making Government Work Better Committee

FROM: Wandzia Grycz
Scott P. Johnson
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SUBJECT: UPDATE ON CUSP PROJECT

DATE: March 3, 2004

Approved | Date

RECOMMENDATION

It is recommended that the Making Government Work Better Committee accept this update on the CUSP project and refer the report to the City Council to provide further direction to staff on moving forward with the CUSP project; an integrated utility billing, customer service and performance monitoring system.

BACKGROUND

This report provides a brief background on the direction given to staff by the Council and outlines alterative options considered given the City's current budgetary environment. .
In December of 2001, the Council approved a recommendation made by the departments of Environmental Services, Finance and Information Technology and directed staff to develop a Request for Proposal (RFP) and apply the City Competition Policy for the procurement of an integrated **C**ustomer Relationship Management (CRM), **U**tility Billing **S**ystem (UBS), and **P**artner Relationship Management (PRM) system, given the project name CUSP.

On May 27, 2003, Council approved an RFP document for CUSP Phase 1, which integrates Customer Service, Utility Billing, and Hauler Contract Management systems for the Integrated Waste Management Program, Municipal Water System, and the City's Customer Service Call Center.

Due to the existing budgetary constraints, staff determined it was necessary to review alternative options for consideration as part of the process prior to making a recommendation to the City Council. Several alternative options were considered, each of which included an analysis of the related risks, benefits and Return on Investment (ROI).

ANALYSIS

This section of the report is divided into several subsections that provide (1) an overview of the business need for an integrated system solution, (2) the alternative options considered and (3) a Return on Investment (ROI) analysis for each option.

Business Need for an **Integrated System Solution**

Representatives from the departments of Finance, Environmental Services, Information Technology and the City Manager's Office developed programmatic goals derived from City Council direction given in December 2001 to address billing, customer service and hauler contract monitoring. As a means to achieve these goals, staff from the respective departments outlined system requirements and developed business process studies that resulted in a roadmap for the first phase of this project to address the most immediate needs. Listed below is a summary of the identified needs related to the three main elements (customer service, utility billing, and hauler contract management) of the project.

Customer Service – Recycle Plus and Municipal Water are currently using "legacy systems" (that is, systems using languages, hardware and operating systems, and techniques employed much earlier than current technology) that were developed in-house, are highly customized and lack functionality to serve customers' inquiries or to allow streamlined changes to services. Inherent limitations in the older technology of these systems result in hours of staff time spent on customer information retrieval, often from many Access and Excel spreadsheets or free text within the system. Call backs are frequent and many calls are lost due to long waits.

Utility Billing – Since the City's Recycle Plus program began in 1993, the City has been billing its customers using a system (Socrates) developed in-house. Municipal Water is using a system installed in the 1980's that is no longer supported by the original vendor. This situation has put the City at great risk since no maintenance agreements are in place with vendors to support these billing systems with annual billings of approximately $170 million. CUSP would allow the City to bill for multiple services by utilizing a consolidated bill resulting in efficiency savings and reduced costs for printing and mailing. Phase I of CUSP also includes the opportunity to include bill calculations and billing for the City's sewer and storm fees. The bill calculation for these services is currently done on one of the City's legacy systems (VAX) which needs to be phased out by the time of the move to the New Civic Center.

Hauler Contract Management - Effective July 2002, Recycle Plus contracts require a Service Contract and Work Order solution that is fully integrated with the billing system to monitor hauler performance, calculate administrative charges, and achieve seamless data transfer with partners such as our haulers and landfills. Existing interim solutions are limited in their efficiency, capability, and capacity and often result in inaccurate data and poor customer service.

It should be noted that the CUSP RFP also included eGovernment aspects of customer service and billing as well as requirements to ensure the system's ability to incorporate other City billing and Customer Service needs. In addition, per Council direction, the RFP also includes a requirement that the proposed system allow customers the opportunity to designate a voluntary contribution to the Healthy Neighborhood Venture Fund (HNVF).

Alternative Options Considered

As previously directed by the Council in approving the CUSP RFP document, the CUSP Steering Committee and Project Team reviewed and analyzed options one and two below. In addition, as mentioned earlier in this report, two other options were reviewed and analyzed due to the City's budgetary environment.

1) Proceed with CUSP
2) Outsource Technology
3) Extend Existing Technology: Plan B
4) Maintain the Status Quo (Do nothing)

Proceed with CUSP - Option 1
Option one assumes that the City would proceed with CUSP as previously directed by the Council, complete the RFP evaluation process, and bring a recommended vendor solution to the City Council for consideration and approval to negotiate a contract. .

Outsourcing Technology - Option 2
The RFP also requested vendors to provide outsourcing technology solutions based on a 5-year contract. The analysis of the costs for outsourcing technology indicated that the proposed costs for implementation plus the annual operating costs over a five year period would be significantly greater than that of the licensed solution. This was due to increased per bill and account costs. The 5-year total costs for this option were an average of 24% higher than the 5-year totals for the licensed solutions.

Extend Existing Technology (Plan B) – Option 3
In an attempt to reduce the project costs, given existing budgetary concerns, staff reviewed an alternative solution to study the feasibility of extending the life cycle of the City's existing utility billing, customer service and contract management systems. This study (Plan B) was developed based on assessing the immediate needs as identified in the functionality and scope of the CUSP RFP. The systems currently used to perform the existing core functions (Customer Service, Utility Billing and Hauler Contract Management) were developed in-house, some of which are over 10 years old. These systems were created as an interim solution and are now outdated and incapable of accommodating any major program modification(s). Additionally, the City is currently at risk with the existing systems given they are not supported by a software maintenance agreement. As a result, any "system crashes" or modifications necessary for business processes would have to be addressed solely by in-house IT staff.

Under Plan B, the minimum requirements to update our existing systems and develop the functionality would require in-house software development efforts. This option would be expensive and risky since software development for enterprise (corporate) systems of this magnitude is not a core service currently provided by City IT staff. This option would require the establishment of an IT Software Development Team proficient in outdated, legacy technology. Updating existing systems would again only be an interim solution because it would only address a portion of the project's functionality needs, could not be configured or

easily modified with changing business processes and new City requirements, and its expected life cycle would last no longer than five years.

Maintain the Status Quo – Option 4
Staff does not support a "do nothing" approach based on the business needs identified earlier and the risks associated with relying on existing outdated systems. The existing systems do not have the capability to manage enforcement of the hauler's performance compliance provisions of the contracts. Costs of procuring technology at a later date may be significantly higher as the economy recovers. In addition, delaying the project would further delay implementation of eGovernment for the City since the CUSP project was to be one of the first hosted eGovernment solutions for the City.

Return on Investment (ROI) Analysis

Staff has developed an ROI model using the average costs of the top tier proposals received in response to the RFP and factored into the model the other options noted above. Using a ten-year net present value criteria, the ROI was calculated for each option factoring in the total costs for implementation, on-going annual maintenance costs, estimated revenue opportunities, and potential efficiency savings not available on the existing systems.

It should be noted that staff's ROI analysis includes a funding plan that would expand the City's commercial paper (CP) program to fund the project related costs for Options 1 and 2. The project costs include amortizing the repayment of the funded costs over a ten-year period for Option 1. Option 2 implementation costs would be funded over five years. Given the temporary life cycle of Option 2, after five years a new system would be necessary and those costs have been factored over a ten-year amortization period. The repayment for the CP Program is amortized beginning in the first year respective option would go live. Options 3 and 4 would not be eligible for a CP program and would need to be funded through program revenues as incurred.

The chart below summarizes each element of the ROI analysis. As the chart indicates, the results of the net present value calculations clearly show that Option 1 (CUSP) achieves the greatest financial benefit for the City in the long-term. In addition to the needs for a new system outlined above and the risks associated with the alternative options identified, the CUSP option would result in estimated net present value savings over a ten year period after implementation (go-live) of $13.3 million to the City after paying all project related costs over the same period.

Ten Year ROI Summary
(in Dollars)

Option	Amortized Project Costs	Average Annual Costs	Total Revenue Opportunities	Projected Total Efficiencies	Net Present Value
1) CUSP	7,820,000	518,000	15,701,000	13,787,000	12,170,000
2) Plan B	5,039,000	510,000	12,214,000	11,273,000	10,211,000
3) Outsource Technology	5,490,000	988,000	15,701,000	13,787,000	11,029,000
4) Status Quo	0	265,000	-15,701,000	-13,787,000	-27,245,000

NEXT STEPS

The CUSP Steering Committee recommends that the MGWB Committee accept this update on the CUSP project and refer the report to the City Council to provide further direction to staff on moving forward with the project.

COORDINATION

This report has been coordinated with the departments of Finance, Environmental Services and Information Technology, and the offices of the City Manager and the City Attorney.

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