MGWB COMMITTEE: September 21, 2006
Item # 2

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: Making Government Work Better Committee

FROM: Randall Murphy
Interim CIO

SUBJECT: **Status Report On Major Information Technology Projects**

DATE: September 7, 2006

Approved Date

RECOMMENDATION

It is recommended that the Making Government Work Better Committee accept this report on the status of the Information Technology projects discussed below.

BACKGROUND

The purpose of this memo is to summarize activities and provide a status update of the major Information Technology projects. It must be stressed that it is important to view technology initiatives in a citywide context to better assess technical strategies as they affect service delivery.

This report presents projects in two categories: Shared and Common Services, and Business Process Services. Shared Services are systems or technology solutions used to support many City functions, while Common Services are comprised of applications that perform specific functions utilized by all City departments. Business Process Services are technology solutions that meet the need of one specific department service or function.

Shared Services

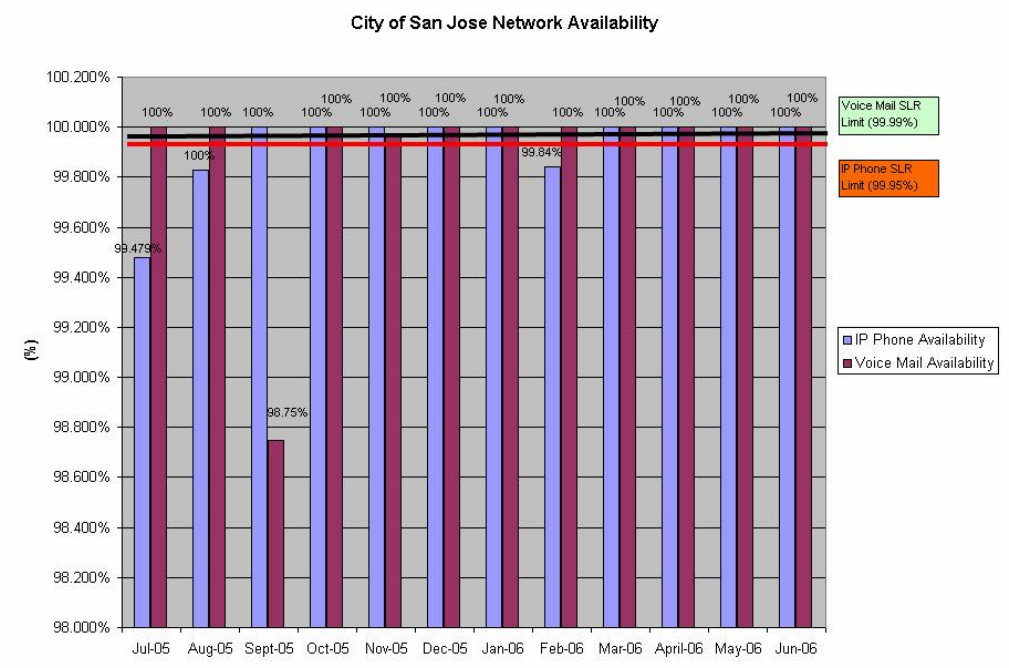
Shared-service projects presented in the report include Converged Network, Electronic Document Management System, and the Geographic Information System (GIS) Integration Plan. These projects represent generic technology solutions used as a foundation to automate multiple business processes.

1. **Project Name:** Converged Network
   Project Champion: Randall Murphy
   Project Manager: Vijay Sammeta
   City Service Area: All
   Corporate Priority: Effective Use of Technology

Background: On March 8, 2005, the City Council adopted a resolution authorizing the City Manager to execute an agreement with Nortel Networks Corporation for the purchase of a Converged Network and Telephony System. The Agreement establishes June 9, 2005 as the critical milestone of system operational functionality for move-in to commence. The converged network serves as the backbone for communication at the new facility as well as the foundation for future investments. This project is a comprehensive solution that essentially meets all of the City's needs for data, telephones, call centers, and conferencing. A critical component to the implementation is providing City staff training with an emphasis on the end-user.

Current Project Status: The converged network is operating in the maintenance and support phase of the project. City staff continues to perform knowledge transfer from onsite Nortel personnel and attend structured Nortel training classes to further their ability to support the system independent of the managed services currently provided by Nortel. In addition, City staff is beginning to integrate Nortel support practices into their standard operating procedures as part of the transition. Finally, additional sites such as the Central Service Yard and Police Administration Building are being evaluated for future expansion of the system.

Below is a summary of the Converged Network availability to date:



2. **Project Name:** Electronic Document Management System/Technology Master Plan
   Project Champion: Randall Murphy
   Project Manager: Marsha Lynch
   City Service Area: Strategic Support
   Corporate Priority: Effective Use of Technology

   Background -. Based upon the business requirements of several departments and in light of Sunshine Reform measures, the time is right for the City to adopt an overall strategy for managing documents, business processes, and web content. An Electronic Document Management System (EDMS) is essential for optimal service delivery in the storage and retrieval of public records, whether those documents are available on the internet or stored in a database.

   There are a few departments that independently implemented systems to address retrieval of public records and posting web content. However, we must invest in an integrated suite of systems to accomplish the following:

   - Eliminate filing time and storage space.
   - Improve response time for retrieving documents for normal business or in response to a Public Records Act request.
   - Improve input and access to documents by providing desktop access to the system or by internet for City customers.
   - Reduce the number of misplaced files.
   - Provide an easy to use interface for document retrieval.
   - Provide a workflow engine to expedite review processes.
   - Provide revision control and audit trail of electronic documents.
   - Allow non-technical staff to update content of web pages without knowing any Web technologies.
   - Centrally store and control the look and feel of the City's website.
   - Provide tools that allow integration with the financial management system, customer relationship modules, and e-commerce opportunities.
   - Provide search capability of documents (minutes of meetings, agendas, contracts, public records, and web pages) on the City's website.

   Current Project Status – The project is now incorporating a plan to fast track automation of intensive document-centric processes for the City Clerk's Office. The initial project strategy was to identify citywide business requirements and implement 4 pilot projects (to include the City Clerk's Office) to establish an EDMS technology standard for the City. With the recent directive from the Mayor's 2006-2007 June Budget Message for the City Clerk and the Chief Information Officer to return to the City Council "with a plan to purchase technology solutions within 60 days," efforts are now focused on implementing an interim solution specific to City Clerk's Office. To meet the implementation timeframe specified in the Mayor's 2006-2007 June Budget Message, internal resources are now being diverted from the citywide effort to document business requirements for the City Clerk and to implement an interim solution. *The technology*

used in the interim solution may be different from the standard the citywide EDMS project is set out to establish.

A Technology Reserve was established during the FY2006-2007 budget process that includes funding for RFP preparation and implementation planning to roll out Citywide services for EDMS. Next steps include:

- Prepare an RFP for consulting services to document citywide business requirements to develop an Enterprise Information Management Technology Master Plan. This RFP will be issued October 2006. Once developed, this master plan will allow us to:
    - Define Departmental and Citywide business needs for EDMS, Web Content Management, and Master Citywide Events Calendar. Each department will participate in a formal business requirements definition process to clarify departmental needs and uses for these technologies prior to implementation.
    - Prepare an RFP for the selection of Electronic Document Management/Web Content Management and Web Events Calendar software package, which is scalable, to meet the City's requirements.
    - Identify the City's business, regulatory, legal and fiscal requirements for compliance, and draft the appropriate records management policies.
    - Identify Policy and Procedure issues relevant to Electronic Document Management (EDM) that the City needs to address to successfully implement and support a Citywide EDM service.
    - Provide options for technical infrastructure to support a city EDM service.
    - Implement rollout strategy options.

- Establish continuous audit and review processes
- Create a cross-functional oversight team consisting of representatives from the IT, legal, finance/budget and functional departments, and designate an executive sponsor
- Select/install the technical infrastructure
- Select/implement functional application software.
- Select/implement 4 proof of concept projects
- Evaluate strengths/weaknesses of each project
- Based on evaluation identify expansion phases to include outcomes, functionality enhancements and costs.

3. **Project Name:** Geographic Information System Integration Plan
   Project Champion: Joseph Horwedel
   City Service Area: Economic & Neighborhood Development, Aviation, Public Safety, and Strategic Support CSA's
   Corporate Priority: Customer Service and Effective Use of Technology

   Background - The Enterprise GIS Strategy for the City of San José, as supported by the Information Technology Planning Board in September 2005, is to establish a centralized GIS infrastructure administered by the Information Technology Department (ITD) with

data management responsibilities held by the line departments that are the primary users. This project has a number of specific deliverables, including 1) identifying opportunities and constraints related to integrating the various GIS systems in use within the City; 2) overseeing the efforts of the GIS Technical Advisory Committee as they recommend enterprise processes, projects and standards for GIS, and 3) supporting the City's orthophotography and base map spatial adjustment (rubber sheeting) projects.

Current Project Status - The adjustment work on the sanitary sewer layer was accepted in May 2006. The current contract for rubber sheeting the City base-map and data layers is now complete. Other infrastructure layers, such as the storm drain and streetlight layers will be adjusted when resources are identified.

Although the City / County data sharing agreement has expired, the City and County are working together, with a consultant, to simplify the process for updating and storing the new countywide base map. A needs assessment was completed during June. Informal data transfers and updates are still scheduled on a quarterly basis. The cooperation agreement for data sharing expired because County staff turnover has delayed work on the formation of the Regional GIS Cooperative required by the agreement.

The City is participating in a County program to update the high-resolution orthophotographs obtained in 2001. The County vendor has completed the photography and scanning portion of its contract. The ortho-rectification process is scheduled for completion by fall, 2006. After receipt from the County, the orthophotographs will be added to the City's intranet eOrtho website.

Contour elevation data was obtained during April for Phase 3 of the City, County and Water District funded Orthophotography Program. The City has accepted the contour data processed for a pilot area and the consultant is using lessons learned from that exercise to process data for the valley floor. Final deliverables are scheduled for the first two months of 2007.

GIS staff members continue working with others to integrate the new GIS layers into existing enterprise applications. (i.e. adding fire hydrant and parcel layers to CAD, replacing adjusted layers for San Jose Permits Online)

On May 16, 2006, the City Council adopted the recommendation to release funds from the Geographic Information Systems (GIS) Reserve to establish a central repository where GIS information can be shared by departments. Staff has purchased hardware and software for this repository and is currently performing configuration tasks. When completed, this central repository will provide a vehicle where information is updated easily and accurately to achieve the integration objective of the reserve. The estimate completion date for consolidation and integration of GIS data is November 2006.

Common Services

Projects that are considered to be Common Services are technology solutions that are used to perform functions are common to all departments. Projects in this category

include the Integrated Human Resource/Payroll system and the Room Reservation/Master Calendar project.

4. **Project Name**: Integrated Human Resource / Payroll System
   Project Champion: Mark Danaj
   Project Manager: Dan Kadomoto
   City Service Area: Strategic Support
   Corporate Priority: City as Employer of Choice

   Background – The PeopleSoft Human Resource/ Payroll last major upgrade to PeopleSoft Version 8.1 was implemented in April 2002. This version's application maintenance support provided by Oracle / PeopleSoft will continue as follows: Patches and Fixes to March 2006, Upgrade Scripts to March 2007. This version strategically embraces the City's e-government initiative using web-based functions, and provides an opportunity to streamline payroll and human resource business processes. The project's priorities since the implementation are: 1) reduction of system customizations, reducing the complexity of maintenance and reduction in processing time; 2) further implementation of standard PeopleSoft Employee Services and Payroll processes to provide greater efficiency, and 3) implementation of web enabled self service functionality.

   Because of issues related to the on-going support of the current 8.0 version, an upgrade to the latest version of the Oracle / PeopleSoft 8.9 version was approved for 2006-2007.

   Current Project Status: After the approval of the consulting contract with CedarCrestone Inc, a PeopleSoft consulting company, at the May 2 Council Meeting, the upgrade project to the version 8.9 Oracle / PeopleSoft release was started. In addition to increased functionality and elimination of customizations, the project implementation, schedule for December 2006, will also provide continued maintenance and support for application through 2010 and payroll tax updates through 2011.

   We current have approximately 5 consultants onsite, in addition to consultants at their lab facility in Atlanta, GA performing additional work to complete a "lab upgrade" of our PeopleSoft databases. We also have 6 fulltime equivalent City staff participating on the project, plus 3 management employees over seeing the project from Employee Services, Information Technology Department and Finance, the main sponsor departments. The Office of Employee Relations is also playing a critical role in driving issues relating to Memorandums of Agreement.

   The project has finalized the analysis of new functionality provided by the 8.9 version applications and determined the new processes the City will be able to utilize to provide increased efficiencies in the process areas and also determined which of the City current customization can be eliminated.

5. **Project Name**: Room Reservation/Master Calendar
   Project Champion: Matt Morley
   Project Manager: Connie Bowles
   City Service Area: Strategic Support
   Corporate Priority: Customer Service and Effective Use of Technology

   Background – In January 2005, an RFP was issued to purchase and install a system to manage the reservation of meeting rooms and other resources for use at the new City Hall. During implementation, it was discovered that this software did not satisfy all business requirements. Before reissuing the RFP, business requirements were modified to include functionality to address one specific item of the Sunshine Reform initiative, which is the desire to view city meetings online:

   > "Establish a single City of San Jose's Master On-line Calendar where all city activities, events and meetings of committees, boards, commissions and advisory bodies and events are posted."

   This project has 3 distinct phases to meet the business requirements of reserving meeting resources, posting calendars of Mayor and City Council online, and finally posting calendars of city meetings online.

   Current status – The posting of Mayor and City Council calendars online will be implemented utilizing existing technology tools. City Council staff is currently being trained will be testing the process of posting and redacting calendars. Testing will be complete September 2006.

   In August 2005, a vendor was selected to implement the resource reservation and master calendar software. A kickoff meeting is schedule in September. Testing is expected to begin late October 2006 with final implementation rollout in November 2006.

   <u>Business Process Services</u>

   The Business Process Services projects reported in this memorandum include the Consolidated Utility Billing System (C-UBS), the Fire Records Management System, the Registration and E-Commerce System (RECS), Automated Information System – Automated Reporting System, and the Computer Aided Dispatch/Automatic Vehicle Location Project. These projects are technology projects to enhance the service of specific business processes that are not common to all City departments.

6. **Project Name:** Consolidated Utility Billing System
   Project Champion: Scott P. Johnson
   Project Manager: Peter Owen
   City Service Area: Environmental and Utility, Strategic Support
   Corporate Priority: Customer Service, Effective Use of Technology, Performance-Driven Government, and Neighborhood-Focused Service Delivery

Background – In December 2001, Council directed staff to develop a Request for Proposal (RFP) for the procurement of an integrated Customer Relationship Management (CRM), Utility Billing System (UBS), and Partner Relationship Management (PRM) System. On May 27, 2003, Council approved the RFP document for C-UBS 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. On March 23, 2004, Council accepted a report for the C-UBS project from the Making Government Work Better Committee and directed staff to proceed with the RFP process for a licensed, off-the-shelf solution to be supported by City Information Technology staff that integrates the City's four utility services (recycle plus, sanitary sewer, municipal water and storm sewer).

On May 10, 2005, the City Council adopted a resolution to execute an agreement for services between the City of San José and BearingPoint, Inc. to implement the Stage 2 (development/software modification) phase of the project. Work immediately began to return to the Council with the following recommended actions: 1) award a Bill Printing and Remittance Processing contract with a third party vendor and associated scope changes to BearingPoint's Stage 2 contract to further integrate the Enterprise Revenue Management (ERM) software; 2) approve possible scope changes in BearingPoint's Stage 2 contract and allocation of resources to staff a change management effort necessary to successfully modify City business processes and the organizational structure consistent with the C-UBS model, and 3) approve scope changes to BearingPoint's Stage 2 contract and allocation of resources to implement a limited Customer Relationship Management (CRM) function to support Call Center functions related to the ERM software.

Current Project Status: After over 18 months of dedicated work by the Consolidated Utility Billing System (C-UBS) project team, the system officially went "live" on Wednesday morning, July 12, 2006. Implementation of the C-UBS project is a significant milestone in the City's ongoing efforts to create a 'One-Stop' customer service model and in improving the quality of service and information we provide to our customers and residents.

The project team continues to support the business areas in the Finance and Environmental Services Departments, and the Customer Contact Center. By August 25 over 200,000 bills were processed and sent to customers, and all customers will have received their first bill from the new system by the end of August. Billing issues have been few, and the project team is quickly addressing these issues as they arise.

The newly created Customer Contact Center managed by our Call Center Manager, Dottie Disher, is "live" and taking calls using the new system. Call volume and wait times are being actively managed in the Customer Contact Center (CCC). To support this effort, the C-UBS project team provided focused training for additional temporary staff and continues to provide supplemental training to existing CCC staff. The project

also continues to manage issues, provide updated operations documentation, and facilitate clarifications to business processes for the Contact Center.

Payments are being taken by Customer Service Representatives over the phone, and in person at City Hall. Customers have been making Healthy Neighborhoods Venture Fund (HNVF) donations using the new bill remittance stubs. Customer Service Representatives can also view actual images of customer bills directly in the system, which helps facilitate customer-billing inquiries - which are the most common type of customer contact. The web self-service is operational and can be accessed directly from the City's home page as Customer Service Online. Electronic Bill viewing and payment for customers will be added to online self-service, anticipated to be available to our customers by November/December 2006. Payments by the automated Interactive Voice Response (IVR) system will also be activated in this time frame. The web self-service is a major added resource to our community where customers can request a service, ask a question, report a problem, access their utility account and more - 24 hours a day, seven days a week. Customers have been registering with the service and creating self-service cases, which are being worked by CCC staff with support from the project team.

Program staff in the Finance and Environmental Services Departments is actively performing their respective jobs on the new system. The IT team and functional project staff are ensuring the system is running smoothly and securely supporting the users, and managing escalated issues. The system has provided uninterrupted service to users with no significant down time since go-live.

7. **Project Name:** Fire Records Management System
   Project Champion: Jeff Clet
   Project Manager: Tom Bohn
   City Service Area: Public Safety
   Corporate Priority: Effective Use of Technology

   Background: The Fire Records Management System will provide the information necessary to analyze demand for Fire Department services and Fire Department performance against General Plan service levels. Additionally, the system will provide a vehicle for analyzing experimental alternative deployment models.

   Current Project Status: The RFP for the procurement of the Records Management System was issued on July 31, 2006. Proposals are due August 28th, 2006. We expect to have a vendor selected by September 30, 2006. The Fire Department is also developing the staffing requirements for both the implementation and support of the system.

8. **Project Name:** Registration and E-Commerce System (RECS)
   Project Champion: Albert Balagso
   Project Manager: Traci Tokunaga
   City Service Area: Neighborhood Services
   Corporate Priority: Customer Service and Effective Use of Technology

Background – Parks, Recreation and Neighborhood Services (PRNS) will implement a system that streamlines the process of PRNS class and sports league registration, and the process of reserving rooms, sports facilities and campsites. An eCommerce component will be implemented to allow search, registration and payments online and over the phone for the above services.

Current Project Status: PRNS, in coordination with ITD, developed an RFP for a vendor to provide a computerized registration system. The RFP was released on July 31 as the "Online Registration and Recreation Management System" RFP. Proposals are due September 11, 2006.

9. **Project Name:** Automated Information System – Automated Reporting System
   Project Champion: Rob Davis
   Project Manager: Cecil Lawson
   City Service Area: Public Safety
   Corporate Priority: Effective Use of Technology

   Background - The Police Department envisions the Automated Reporting System (ARS) as being one of the primary tools used to automate data entry into the Police Records Management System (RMS). The objective of this effort is to reduce the gap between data collection and data entry, thereby improving usability. If an officer in the field is provided with the ability to enter data soon after an event has occurred, the content will be much more effective than if it is entered at a later time by someone who was not at the scene of the event.

   Current Project Status – The project is on hold as the Police Department evaluates the appropriate next steps in the deployment of new technology.

10. **Project Name:** Computer Aided Dispatch/Automatic Vehicle Location Project
    Project Champion: Rob Davis
    Project Manager: Cecil Lawson
    City Service Area: Public Safety
    Corporate Priority: Customer Service & Effective Use of Technology

    Background - The Police and Fire Department have been utilizing Computer Aided Dispatch (CAD) systems since San Jose assumed the responsibilities for communications services in 1990. The older Computer Aided Dispatch system was replaced in June of 2004. The newer CAD system introduced mapping, radio network bandwidth, and software related challenges.

    Progress – Current technical activities are focused on the continued improvement or resolutions of the major challenges introduced with the new CAD. Specific activities include:

- **Mapping Progress** - We continue to make significant progress with CAD map/Geofile related issues. Over 32,424 separate CAD events requiring location verification from December 2004 – May 2006. There are 37 unresolved mapping issues that are currently outstanding. For comparison, the average number of reported Geo errors for the old CAD systems is 50 per month. The number of reported errors for March '06 shows a continuing downward trend in error reporting and compares favorable with the old CAD system. Currently our mapping error rate is Below 0.1%

  We updated mapping information in the mobile computers along with other key information including field files (system user information) and several informational PDF (Adobe Acrobat).

- **Radio Progress –** The Motorola *DataTAC* system is a wireless network used to transmit data to our fleet of Police and Fire vehicles. The deployment of the new CAD system substantially increased the amount of data being transmitted through this system and threatens to cause delays during peak usage periods. Moreover, some CAD wireless capability was temporarily reduced to better manage severely limited bandwidth. We have experienced significant network slowdowns since the deployment of Intergraph's CAD system.

  Motorola conducted a system evaluation during from April 2005 to August 2005. Their finding verified that the additional data requirement from the new CAD deployment has significantly increased our use of the *DataTAC* 800Mhz wireless network. The department has embarked on the two-year evaluation of Sprint/Nextel Evolution Data Only (EDVO) Broadband wireless service. Our early testing has already shown great promise. We are in process of procuring and installing the necessary services and equipment to deploy the EVDO service.

- **Software Updates** - The next major release of the Intergraph CAD software is scheduled for later this year. We are expected to deploy the 8.0 version of Intergraph's CAD suite early in 2007. San Jose dispatchers at Intergraph's headquarters tested early version of the software and we continue to test the software on our CAD development server.

COORDINATION

This memorandum was coordinated with the Police, Fire, Public Works, Parks and Recreation, Human Resources, Finance, and Planning, Building, and Code Enforcement Departments.

Randall Murphy
Interim Chief Information Officer