County of Santa Clara

Fiscal Year 2014 – 2016 Information Technology Three-Year Plan

On file in the Clerk of the Board's Office

Presented May 7, 2013 to the

Board of Supervisors

Mike Wasserman	District 1
Vacant	District 2
Dave Cortese	District 3
Ken Yeager	District 4
Joe Simitian	District 5

Jeffrey V. Smith County Executive

Joyce Wing County Chief Information Officer

Contents

Message from the County Executive	1		
Message from the Chief Information Officer	3		
Information Technology Strategy and Plans – Fiscal Years 2014-2016	5		
Aligning Technology with Business Strategies	5		
Information Technology Vision and Mission	8		
IT Focus Areas and IT Goals	9		
IT Strategies and Projects	11		
Information Technology Governance	12		
Key Technology Initiatives	19		
Countywide Focus	20		
County Common Directory and Software as a Service Office Productivity Solution			
Enterprise Content Management			
Electronic Forms			
Mobile Strategy			
sccLearn – County Learning Management Solution	29		
Public Safety and Justice System Focus	30		
Law and Justice System Roadmap	30		
Public Safety Realignment – AB 109	32		
California Disposition Reporting Improvement Project (CA-DRIP)			
CAD Integration, Common Operating Picture and Data Exchange Projects	35		
Health and Hospital System Focus	37		
HHS Core Health Information System – HealthLink	37		
Additional Initiatives	41		
Continuous Improvement While Making IT Green	41		
Appendix A: Fiscal Year 2013 Technology Infrastructure Funding Status	43		
Appendix B: Information Technology Project Inventory	45		
Appendix C: Enterprise Content Management (ECM) Projects	51		





Message from the County Executive

May 1, 2013

To: Board of Supervisors

From: Jeffrey V. Smith, County Executive

Subject: FY 2014 – FY 2016 Information Technology (IT) Three-Year Plan

The FY 2014 – 2016 Information Technology (IT) Plan emphasizes improving the effectiveness of our information technology strategies, and driving improvement through an enterprise focus. The need for knowledge sharing, improved access to information and collaboration is paramount at this time. Clients, program administrators, and funders are interested in accessing data on multiple platforms and between silos.

Projects such as HealthLink, the County's new electronic health record, the Common Directory, and the Office 365 hosted service (Software as a Service – SaaS) are only the three largest examples of technology aimed at information sharing across broad boundaries. No longer is individual department data adequate to either serve clients directly, or to study data which crosses departmental boundaries yet affects the same client(s).

To meet these demands, I am recommending adding additional IT Leadership positions to align functional cross-County teams required to implement the complex Common Directory/Office 365 initiative, plan for its ongoing management and support, and to meet operational needs. I have also recommended augmentations to build the necessary technology foundation and to ensure County departments are able to leverages available features and functionality of the new services.

Augmentations to FY 2013 Infrastructure Refresh and Common Directory/Office 365 Project Funding

Description	Ongoing Allocation	One-time Allocation
Common Directory and Office 365 Project	\$1,079,887	\$4,400,000
Infrastructure Refresh and Installation		\$3,400,000
Total Allocation	\$1,079,887	\$7,800,000

The FY 2014 – 2016 IT Plan builds on efforts begun in prior years, and reflects progress toward connecting IT strategy with business strategy, and connecting the Information Services Department (ISD) objectives to the County Vision Elements and IT value disciplines. The governance structure begun in 2010 has continued to evolve, adding additional Centers of Excellence (COEs) during FY 2013, and these COEs' recommendations are incorporated in the recommendations of the Business Information Technology Steering (BITS) Committee, and my FY 2014 recommendations.

Key technology initiatives with Countywide focus, as well as policy area focus are outlined in this document. A description or status, as well as goals, milestones, return on investment, expected outcomes, and progress to date are included for each initiative.

Projects included in the IT Plan indicate current and future unmet needs, but are not an exhaustive list. Estimated costs and milestones have been provided to the extent possible. The IT Three-Year Plan is not a budget document; rather it is a planning tool to be used in conjunction with the budget document. The purpose of this document is to assist the County in establishing a direction to identify the technology needed to best support the County's business goals and strategies. Projects may change yearly based on the dynamic factors impacting the County, the rapid pace of technology changes and the continuing budget deficits. Funding will be determined, reviewed and prioritized on an annual basis according to Board Policy and with the appropriate Board Committees.

The following table displays the County Executive's General Fund recommendations for technology projects in FY 2014.

FY 2014 Technology Projects

	Ongoing	One-time
Description	Allocation	Allocation
Business Analysis Services	\$350,000	
Sheriff's Office Field-based Activity and		\$500,000
Incident Reporting System		
Requirements Development Projects		
Electronic Report Distribution		\$150,000
Information Services Department		\$150,000
Internal Service Fund Financial		
System		
Digital Evidence		\$300,000
Electronic Referrals		\$300,000
Notifications/Call Back System		\$300,000
Subtotal ISD Allocation	\$350,000	\$1,700,000
Department of Alcohol & Drug		
Services Projects		
Electronic Health Record for		\$375,000
Contract Service Providers		
Methadone Clinic Avatar Interfaces	\$3,750	\$30,000
Total Allocation	\$353,750	\$2,105,000



Message from the Chief Information Officer

May 1, 2013

To: Board of Supervisors, County Executive and Agency and Department Heads

From: Joyce Wing, County Chief Information Officer

Subject: Fiscal Year 2014 – Fiscal Year 2016 Information Technology (IT) Three-Year Plan

Purpose

The purpose of the IT Three-Year Plan is to convey the IT goals, strategies and projects that are planned or in process that support the County's business strategies. This is a planning document only. This is not a budget document. Project funding requests are made through the annual budget process so the funding reflected in this document is projected or planned only, and funding may or may not be allocated.

Business and Technology Strategies

As business needs change and technology trends and capabilities change, it is necessary to ensure business and IT strategies stay aligned. In the following section, Information Technology Strategies and Plans - Fiscal Years 2014 - 2016, a high level overview is provided to document the interdependencies between IT strategies and business strategies, and initiatives that support those strategies. The following are highlights of what has been accomplished, is in progress or is being planned. More detail on these and other initiatives are provided later in this document.

Highlight of Accomplishments and Plans

Over the last few years, the County Executive's Office has sponsored Center for Leadership and Transformation (CLT) teams and IT Rapid Transformation projects that have focused on identifying priority areas to transform how the County provides IT services. The efforts have focused on a Countywide perspective to reduce the overall cost of doing business by standardizing, consolidating and leveraging economies of scale across the organization versus individual efforts by each department. The activities include the following areas, which are underway or being planned: **Standardization, Consolidation, Investment in New Technology:** There are multiple efforts underway to establish technology standards, consolidate infrastructure and to invest in newer technology products and services. The purpose of these activities is to:

- Eliminate duplication of hardware, software and resource efforts to avoid and reduce costs
- Negotiate enterprise software agreements to leverage economies of scale to lower costs
- Introduce newer technology to gain capabilities and features that enhance services
- Enable mobility with enhanced secure remote access
- Redirect IT resources to value-added IT business solutions.
- Manage IT commodity services more efficiently and effectively.

County Common Directory and E-mail/Microsoft Office 365 Hosted Service (Software as a Service "SaaS"): This initiative supports the County's IT Rapid Transformation focus to standardize, consolidate, and reduce ongoing costs and support efforts by providing cloud-based (externally hosted) commodity software. Office 365 will enhance collaboration, communication, security, disaster recovery and resource management Countywide.

Integrated Electronic Healthcare Record: The Health and Hospital System is implementing HealthLink, an electronic healthcare system provided by Epic Systems Corporation. HealthLink supports integrated services, such as outpatient scheduling, patient accounting, ambulatory care, pharmacy dispensing, etc. HealthLink can improve patient safety, foster high quality patient care, and subsequently compensate the organization for those improvements. The HealthLink initiative is a major effort that supports healthcare reform within the County. The first phase of HealthLink will "go-live" on May 4, 2013.

Improve Customer/Client Access to County Services: The public portal transformation initiative implemented a service-oriented focus that enabled easier web access to County services, improved search capabilities, and enabled better interaction with the public. Current efforts are improving how the information is organized, and further enhancing search capabilities. Department web sites have been migrated to the public portal, and some sites were



redesigned with a new look and revised content. Departments also are provided guidelines and best practices to improve and organize departmental web site content.

Mobile Devices: There are multiple efforts underway to manage mobile devices. The County is completing a Mobile Device Management Solution Request for Proposal (RFP) that will provide a centralized approach to manage the increasing number of mobile devices and tablets in use Countywide. Mobile device policies are under development and will be presented to the Board for review and approval. In addition, by implementing the County Common Directory and Office 365, there will be increased security that will facilitate mobility for the County workforce.

Mobile Apps: Aside from managing mobile phones and other devices, the County is developing mobile applications. A mobile app strategy and approach has been developed to ensure consistency across multiple customer devices. In October 2012, the mobile app SCCvote was released prior to the November elections and has been well received. Many other counties have requested this application. The CIO is working with a group of counties and the National Association of Counties to investigate the means and options to share mobile apps amongst government entities.

sccLearn: A Countywide e-Learning Management system has been implemented to provide online registration and online training to all County staff. Topics include Driver Safety and Sexual Harassment Prevention, as well as selfpaced training in technical topics. The sccLearn solution saves on mileage and travel, provides easy access and use, and allows staff to regain that saved time for increased productivity. sccLearn improves mandated tracking and reporting Countywide.

Improve Employee Access to Online Services and Information: A service-oriented employee portal is being developed that will enable:

- Easy access to information, processes, and policies
- Improved search capabilities
- Department and Countywide collaboration
- Online services and electronic forms ("eForms").

Development of IT Governance and IT Project Management Oversight: Efforts continue to refine an approach, garner resources, and build a sustainable governance and project portfolio structure. The structure will ensure the County is investing in the right things, realizing the promised benefits, within the timeframe and budget allocated.

Planning and Development of Enterprise Architecture, Policy Guidelines, and Standards: A County policy group, chaired by the County Executive's Office, is forming to develop a framework to create, revise, review and store approved policies that are easily searchable, and routinely reviewed electronically with staff. The group will standardize policy formats for printed policies and portal-based policies. The policy group will work on simplifying language and conform (or refer where appropriate) to Federal and State policies.

IT Security Program Assessment, Planning and Strategy: Efforts continue to assess the County's IT Security and Risk Assessment Program to enhance security training and awareness, provide appropriate products and services, refine and add needed policies, procedures and processes, and develop an IT Security Strategic and Tactical plan.

Summary

Technology is essential to support County services. Focus will continue on developing and aligning business and IT strategies with emphasis on reducing the cost of doing business by investing in newer technology, simplifying support, and redirecting resources to value-added IT business solutions. Many of the current efforts would not have been possible without the support of the Board of Supervisors, the County Executive's Office, Department and Agency Heads, and numerous managers and staff across the County organization who participated on focus teams. Their contributions are greatly appreciated and have assisted in transforming how the County provides its services to the public, employees and business partners.



Information Technology Strategy and Plans – Fiscal Years 2014-2016

Aligning Technology with Business Strategies

The County Executive's Office has established Center for Leadership and Transformation (CLT) and related IT Rapid to focus on Transformation groups developing recommendations to transform the County organization's approach to using and managing technology. In many ways, Information Technology (IT) systems and projects are approached in a siloed manner without cross-organization collaboration, which reflects the way many departments have often operated within the County. The CLT initiatives represent a concerted effort to economically modernize the County's IT operations to enhance business effectiveness, drive efficiencies, and support larger County transformation programs.

IT strategies and performance are interdependent with County business strategies and performance. Without understanding the business strategies, the IT strategies may be misdirected. In turn, without the underlining technology to support the various County business services, the departments' ability to achieve their service outcomes could be negatively impacted or near impossible.

The County is taking steps by providing training to develop strategic plans and to understand the importance of business and IT interdependencies. Rather than being brought into assist after business strategies and processes have been developed, IT needs to be invited to collaborate in developing the "how" to achieve business goals. IT strategies are intended to align with and fulfill business strategy and to support business units in achieving their goals. The Chief Information Officer will continue to reach out to Executive Leaders and departmental staff to work together in determining how IT can efficiently and effectively meet the business needs of the County.

Interdependence of County Business Strategy and IT Strategy

The following table, as well as other guiding principles, has been derived from multiple Gartner articles advising CIO's on the importance of alignment between business and IT strategies. A key concept for both business and IT is:

"Strategy is about doing the right things; Operations is about doing things right."

To maintain strategic alignment, key control elements are necessary.

Demand Business Side	Controls Joint Management	Supply Technology Side
Business Goals	Business and IT Principles – Guidelines	IT Services
Business Performance Metrics	Business and IT Governance/Oversight	Enterprise Architecture Technology Roadmap
Business Capabilities Needed	IT Financial Management	People/Resources
IT Capabilities Needed	Performance Goals, Metrics, and Review	Sourcing



Fiscal Year 2014 Business Department Strategies and Needs

In fall 2012, the CIO met with 36 Department Heads and key departmental staff to understand departmental business strategies and needs, and to discuss the departmental impact of the County Common Directory and Office 365 initiative. In those meetings, departments expressed a number of common themes. One of the key concepts expressed is that business department managers generally do not want to manage IT services. They want to focus on what they do best: managing business services.

Department leaders would prefer to partner and focus on IT business solutions rather than have the responsibility of managing IT infrastructure. They are interested in cloud (vendor or internally hosted) solutions to reduce costs, efforts and management of IT. As the cloud hosting industry matures and provides robust, secure solutions, the County could benefit by moving in that direction.

Other common strategies and needs are summarized below.

- Infrastructure Replacement and Consolidation: Many departments need infrastructure replaced due to age, rate of failure, cost and effort to support, and the inability to move forward to meet business and application needs with existing hardware.
- Large-scale Document Scanning and Easy, Searchable Retrieval: Many departments expressed a need to scan and digitize documents in a carefully constructed process in order to electronically search, link, manage and secure documents. This online library of scanned documents will enable collaboration, information sharing, and compliance with records retention policies. The anticipated outcomes are self-service that will reduce staff time and cost to search for documents.
- Single Point of Entry Employee Portal: Departments generally want the employee portal to be a single point of entry with a consistent, intuitive interface. Through the planned, new employee portal, employees could login and easily find information based on roles/filters (manager, line staff, department, etc.), receive and disseminate internal communications, complete electronic forms, sign selected documents electronically (esignature), take training online, and review other official information.

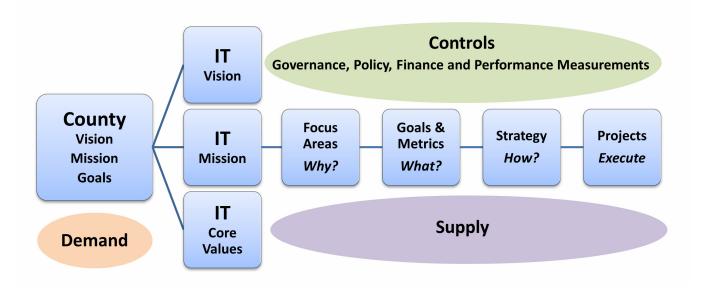
- Business Analysis and Strategic Planning Assistance: Department leaders want assistance in developing an integrated business and IT strategic plan for their departments. Several managers also want to examine and streamline business functions and processes that are part of their departmental Center for Leadership and Transformation efforts.
- Mobile Phones, Tablets, and Other Devices: Departments want a mobile management system, procedures, and policies to facilitate their workforce having secure, mobile device access to key information anywhere, anytime. Managers want practical guidelines about appropriate devices to issue to departmental staff. Also, they want to reduce the drudgery of departmental tracking and billing for mobile services and devices. ISD is renegotiating mobile voice and data plans and will be consolidating services around mobile devices.
- **Virtual Desktop:** Some departments want staff to be able to work using their personally-owned or County-owned computers (while at home or another remote location). These remote access requests are increasing. To protect the County's information assets, there will need to be central control of the virtual desktop environment, including the operating system and applications. At the Health and Hospital System, a relatively extensive virtual desktop solution that requires HIPAA compliance already is available to selected employees.
- Data Analytics and Reporting to Measure Performance: With mandates for healthcare reform, Public Safety Realignment, as well as many other projects, there is a growing need to define service performance measurements, and then measure at pre-determined intervals. Through business intelligence, program service measurements could be derived by analyzing aggregated data across business units. Also, client and patient services could be improved if client/patient information were shared, legally, across and within County agencies used by an individual, such as the Social Services Agency and Health and Hospital System. Additional technology services and tools are needed to provide this interagency and intra-agency business intelligence. The ongoing advice from County Counsel regarding legal restrictions on linking data across service areas is required.



Replace Legacy "One-off" Applications with Shared Supportable Services: Department managers reported dependence on small, obscure, or custom software with diminished vendor support. They are anxious to implement replacement software to maintain these key business functions. With the integration capabilities of Office 365, along with easy-to-use rapid development toolsets, there is potential to replace department applications using a shared service approach, providing an industry standard solution to meet multiple business needs. These shared services and rapid deployment toolsets will be investigated in FY 2014.

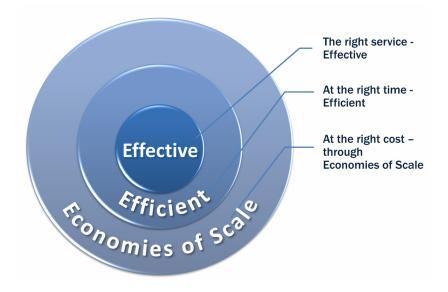
Connecting Business Strategy and IT Strategy

The following diagram depicts some connecting interdependencies between County (business) and IT visions and goals. This FY 2014-2016 Plan describes the IT goals, strategies and project initiatives that are planned to align with the known County business strategies and needs. Continued structured work efforts and communication between business and IT will refine the close alignment of business and IT goals and strategies.





Information Technology Vision and Mission



County Mission

The mission of the County of Santa Clara is to plan for the needs of a dynamic community, provide quality services, and promote a healthy, safe and prosperous community for all.

County IT Vision and Mission

To serve as an enabling resource for the County and region in providing the Right Service, at the Right Time, and at the Right Cost to promote Countywide efficiencies and improve the effectiveness and quality of County services.

Connecting Departmental Objectives to Vision Elements

The North Star or long-term goal of IT is to be a model county IT organization that partners with County departments, the community, and business partners to support established goals and performance outcomes. Departments have been encouraged to incorporate the following County Executive's vision elements into their departmental objectives:

- Customer Focus
- Performance Measurement and Results
- Mid-Manager Empowerment and Engagement
- Use of Latent Talent and Resources
- Reduce the Cost of Services
- Consolidation Where Needed
- Build Bench Strength.



IT Focus Areas and IT Goals



IT Emphasizes Operational Excellence

IT Focus Areas

These IT value disciplines depict the value IT brings to the business. However, it is difficult to be "best" in all three simultaneously. These three value disciplines were created by Michael Treacy and Fred Wiersema, and are helpful in determining what specific trade-offs are needed. Their research shows that successful businesses consciously emphasize one value discipline, and the remaining two have lesser focus.

In the model, "Operational Excellence" equates to IT operations and support. The CIO recommended to the Business and Information Technology Steering Committee (BITS) that Operational Excellence should have the highest focus. Currently, County IT operations and support has inefficiencies and high costs. However, it is the area that has the ability to transform most readily in the context of current County resources, funding, and available technologies.

To simplify this perspective, the Operational Excellence value discipline has been assigned a "10"; the two remaining value disciplines, Customer Focus and Innovation, have each been assigned a "5". However, because these value areas intersect, each area contributes to the others, and in some cases is the root cause of problems in the other areas. For example, if operations device management is improved, a customer's request to repair a device will have a faster response. In turn, the customer satisfaction ("Customer Focus") will improve, even though there was higher focus on "Operational Excellence." Goals are defined as the result or achievement toward which effort is directed; the measurable purpose. The goal defines the "What" with measurable outcomes. IT goals have been grouped in the following focus areas:

Operational Excellence (IT Operations and Support)

Goal 1.1 Provide Operational Excellence by investing in technology and training staff, optimizing technology capabilities, support structures, and processes to eliminate duplicative functions, and to take advantage of economies of scale with the outcome of reducing the cost of delivering IT services and infrastructure.

Measurements: Cost reductions or avoidance, including hardware and software elimination. Additional services and capabilities provided. Enterprise software agreements, service time and quality improvement metrics. Identified efficiencies and quality outcomes as a result of consolidation and organization of IT services and resources.

Goal 1.2 Provide Operational Excellence by focusing on the IT commodity services that can be shared across the County or within large groups, have minimal risk, can be implemented quickly, enable self-service and automation, and provide the highest value with the least amount of investment.



Measurements: Creation and deployment of shared services. Cost avoidance, increased efficiencies, capabilities, and economies of scale. Ability to meet service outcomes and value-added productivity gains.

Customer Focus (Business Support Service)

Goal 2.1 Provide Business and Customer Support Service for initiatives that support compliance with Federal, State or County mandates and outcomes, within mandated timeframes.

Measurements: Implementation of solutions within budget, on schedule, with required resources that meet identified outcomes.

Goal 2.2 Provide Business and Customer Support Service by developing business plans and providing IT consulting services. Early stage services include documenting business requirements, developing strategic plans that identify business needs and streamline processes, and creating a roadmap for technology needs. Later stage services include support for selecting and implementing IT solutions, project planning and project management, and facilitating shared service opportunities across business service areas.

Measurements: Support services meet or exceed the written document describing deliverables and outcomes.

Goal 2.3 Provide Business and Customer Support Service by establishing strategy, infrastructure and supporting IT services to implement data analytics and reporting services to meet Federal, State, and County reporting requirements through business intelligence toolsets and methodologies to identify service baselines and service program performance measurements.

Measurements: The identified and agreed upon deliverables and outcomes were documented and achieved.

Goal 2.4 Provide Business and Customer Support Services by implementing technology solutions to grow self-service capabilities for the public, employees, and business partners. Self-service is expected to reduce support efforts and provide information at the point and time needed, from any device.

> **Measurements:** Identified self-service offerings and expected outcomes achieved, including savings in time, costs, value-added outcomes, and customer satisfaction levels.

Innovation (IT Strategic Planning and Alignment)

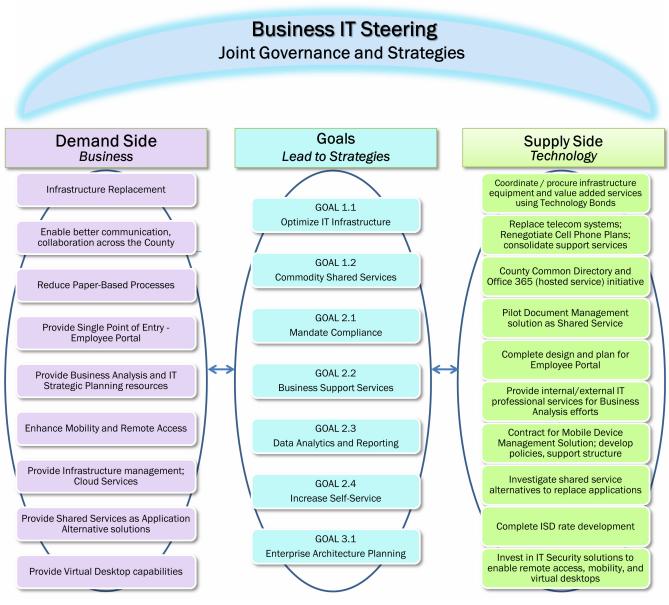
Goal 3.1 Align IT strategic plans with business strategic plans by developing standards, guidelines, policies and a technology roadmap. These will improve planning and investment decisions based on how business wants to grow and transform, create cost reductions and efficiencies, and desired service improvements.

Measurements: Time and cost changes, productivity measures, and developed roadmaps to make business strategies actionable.



IT Strategies and Projects

Examples of Identified Business Needs Tied to Technology Projects



IT Strategies and Projects are "How" the goals will be achieved. Project tracking and management is an evolving effort, and over time, project descriptions will demonstrate alignment with business outcomes and IT goals. The Appendices list projects provided by departments and the Information Services Department.

11



Information Technology Governance

As the County continues to transform how IT is structured, managed, funded, and implemented, there are many areas that have to be addressed in parallel. The initial area of focus has been around IT Governance. The Business Information Technology Steering (BITS) Committee was established in 2011, and is jointly chaired by the Offices of the County Executive and Chief Information Officer. It is comprised of Agency and Department Head representatives from the Board Policy Committee areas. The purpose of the group is to ensure technology aligns with business strategies, priorities, and policies. As governance becomes more established, the IT strategic plan will become more welldefined.

Efforts to better define IT services, the IT organization to structure those services, and service level requirements needed to support the business service areas made progress in FY 2013, and will continue in FY 2014.

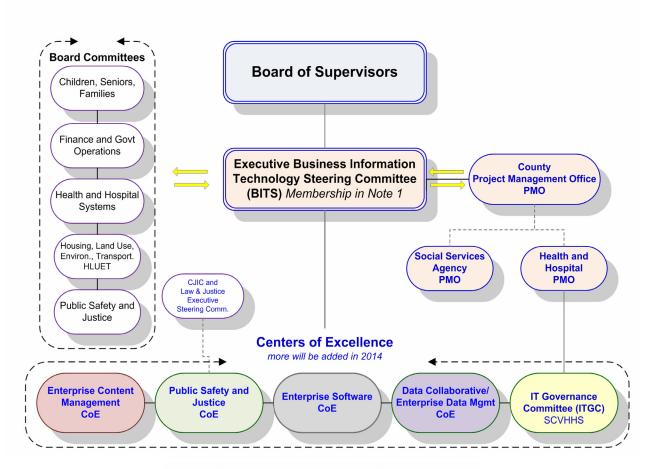
In light of ongoing funding limitations, the BITS Committee is reassessing how the County funds ongoing operations and new projects and initiatives. The BITS Committee has agreed that funding be concentrated on IT infrastructure and products that can be commoditized, such as e-mail and anti-virus products, to reduce ongoing costs and to provide a foundation for newer technology. The goal is to centrallymanage the IT infrastructure to achieve IT operational efficiencies. This will reduce the infrastructure utility or operational workload on departmental IT staff. Those departmental IT staff can be redirected to meet specialized business needs with value-added IT business solutions. The IT Governance model has been developed to support a more holistic view of IT Countywide. The goal is to better manage the County's entire portfolio of IT projects. This model encompasses an enterprise perspective that includes all departments' plans, projects and funding sources. Resources are being established to support this evolving approach to IT Governance. The IT Governance model has defined success as being the ability to affirmatively answer the following questions:

- Is the County investing in the right things?
- Is the County optimizing its capacity?
- Is the County realizing the promised benefits?
- How well is the County executing?
- Can the organization absorb all the changes?
- Does the resource model support County goals?
- Do County policies support County goals?

Wherever possible, project requests are reviewed with County staff knowledgeable in the business and/or technology area impacted by the request. The Centers of Excellence (CoE's) and the CIO's Office also reach out to knowledgeable staff who provide input into the process.

In FY 2014, the CIO will begin to staff the new County Project Management Office to track projects Countywide. The County PMO will not have sufficient staff to manage many projects, however. The project tracking will facilitate rapid identification of golden opportunities and burning platforms, as well as the breadth and depth of project activities.





Membership, April 2013	
County Executive	Jeff Smith
County Chief Operations Officer	Gary Graves
Deputy County Executive, Administrative Services and Programs, <i>Co-chair</i>	Leslie Crowell
Deputy County Executive, Health and Hospital System	Rene Santiago
Deputy County Executive, Employee Services Agency	Luke Leung
County Chief Information Officer, Co-chair	Joyce Wing
Director, Agriculture and Environmental Management	Amy Brown
Director, Finance Agency	Vinod Sharma
Director, Parks and Recreation	Robb Courtney
Director, Pretrial Services	Garry Herceg
Director, Social Services Agency	Bruce Wagstaf
Planning Manager, Dept. of Planning and Development	Kirk Girard

Centers of Excellence

In 2011, the County restructured the information technology governance process, defining an executive-level steering committee (now called the Business and Information Technology Steering Committee – "BITS"), and the underlying Center of Excellence committees. In FY 2013, the BITS Committee chartered additional Centers of Excellence for Public Safety and Justice, for Enterprise Software, and early in 2013, began work towards a CoE for Data Collaboration. The existing Enterprise Content Management (ECM) CoE and HHS Information Technology Governance Committee (ITGC) matured over the year. The CoE's make recommendations to BITS about strategy, policy, and project funding. In some instances, the CoE may approve and oversee smaller projects.



CoE's provide more in-depth oversight of projects, promote collaboration, and foster the use of best practices around a specific focus area to drive business results. The CoE's provide:

- Support to the business departments by providing services or subject matter expertise
- Guidance and a repository for standards, best-practice methods, tools and other knowledge
- Opportunities for training, certification, skill assessments, and collaboration
- Measures of project benefits and results
- Project recommendations and other support to BITS to ensure the County is investing wisely.

Enterprise Software Center of Excellence

The Enterprise Software Center of Excellence oversees, directs, and facilitates administering the Countywide enterprise software products and agreements. The Enterprise Software CoE was formed in FY 2013, and is initially focused on managing and administering the Countywide Microsoft Enterprise Agreement. The Enterprise Software CoE will strive to ensure that Countywide software standards and licenses align with business needs, while focusing on timely software implementation at minimal cost for the initial license and ongoing support.

Enterprise Software CoE responsibilities include, but are not limited to:

- Assume management of Countywide software licensing.
- Develop standards for enterprise software and exemption waiver process.
- Develop policies and guidelines for procurement of enterprise software.
- Establish processes and procedures for reviewing and evaluating department requests for software and additional benefits.
- Develop and maintain processes and procedures for tracking software asset purchases, history, and allocations for departments.

- Develop policies, processes and procedures for handling software downloads, media, and distribution of software keys in a timely and efficient manner.
- Promote awareness and establish methods of communication between the staff, department IT and managers, and the Center of Excellence.
- Assess operational requirements, ongoing resource needs, and division of responsibilities between central and departmental IT staff, and make recommendations as needed.
- Function as a resource for County departments and an intermediary with software vendors and their resellers.

Enterprise Content Management Center of Excellence

The Enterprise Content Management Center of Excellence (ECM-CoE) was formed in May 2012 and is chartered to:

- Provide guidance and make recommendations regarding the County of Santa Clara's external (Public) and internal (Employee) web sites including, but not limited to:
 - The look, feel and branding of the County's sites and any applicable agency site
 - Overall site navigation and information architecture
 - Functionality and features
 - Operational guidelines
 - Content.
- Review and approve the Public and Employee portal content.
- Assist in developing and reviewing ECM-related policies and procedures.
- Educate County management and staff about enterprise content management and social media, as well as reviewing social media business plan proposals.
- Coordinate with other Center of Excellence committees.



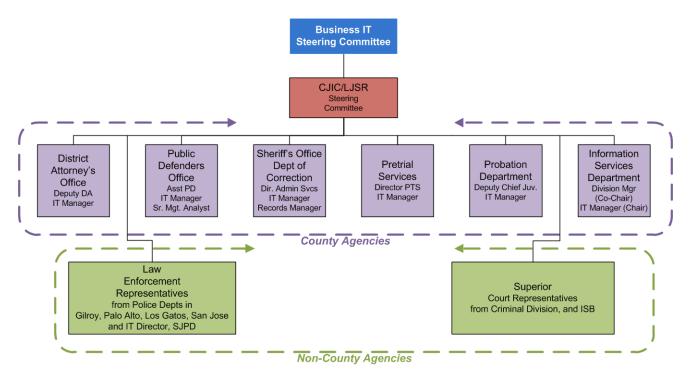
Public Safety and Justice Center of Excellence

The Public Safety and Justice Center of Excellence (PSJ-CoE) provides direction and support for the County's Law and Justice systems and structures. At the request of BITS, the Public Safety and Justice CoE derives authority as a subcommittee of the Criminal Justice Information Control (CJIC) & Law and Justice Executive Steering Committee.

The CoE committee's charter includes:

- Define the vision and establish the collaborative environment for sharing project information across Public Safety and Justice agencies.
- Define the strategy for meeting the vision.
- Provide guidance and make recommendations regarding prioritizing projects within the Public Safety and Justice area.
- Identify risks and constraints for PSJ IT projects which cross-over agency boundaries.

- Direct strategic use of PSJ IT project resources based on the prioritized projects.
- Provide recommendations and input on training for employees who are impacted by PSJ projects.
- Assist in developing policies and procedures for implementing PSJ projects, and provide oversight or recommendations for policy enforcement.
- Coordinate with the other County Centers of Excellence committees.
- Set annual goals and objectives, review dates, and internal processes, within the purview the committee.
- Fulfill the role of technical advisor to the CAL ID Remote Access Network (RAN) Board and the CJIC Steering Committee.
- Provide representation and/or input into other Centers of Excellence, as it pertains to the interests of the Public Safety and Justice area.



Public Safety and Justice Center of Excellence

The CoE committee membership includes a business representative and technical representative from each Public Safety and Justice department, including the District Attorney's Office, Public Defender's Office, the Probation Department, the Sheriff's Office, Pretrial Services, the Superior Court, Law Enforcement Agencies, the County Executive's Office of Budget and Analysis, and the Information Services Department.



Accomplishments in FY 2013

- Developed project charter and bylaws
- Determined membership participants and selected a Chair and Co-Chair
- Documented projects that are in progress
- Submitted recommended FY 2014 Project List to CJIC & Law and Justice Executive Committee, and BITS for review and approval.

Health and Hospital System (HHS) IT Governance Committee CoE

In collaboration with BITS, the HHS IT Governance Committee (ITGC) ensures that information technology systems at HHS are planned and organized to support HHS' and the County's strategic goals. ITGC makes recommendations to BITS regarding major technology initiatives. However, if a major project is necessary to meet regulatory requirements, ITGC will make the decision regarding funding the project. More specifically, ITGC:

- Reviews medium and major project requests and related business cases, and decides (for medium) and recommends (for major) which projects shall go forward.
- Actively oversees projects to ensure they are on schedule, within budget and achieving their intended outcomes.
- Reviews Scope Change Requests and decides whether to approve.
- May decide to terminate medium-size projects; recommend to BITS termination of major projects that are not properly aligned; and defer completion of lower-ranked projects to reallocate resources to complete higher-priority projects.

- Approves policies and procedures to prevent the proliferation of undesirable, unlicensed and/or unauthorized systems and software throughout HHS.
- Reviews and proposes long-range computer system plans for possible recommendation to BITS.

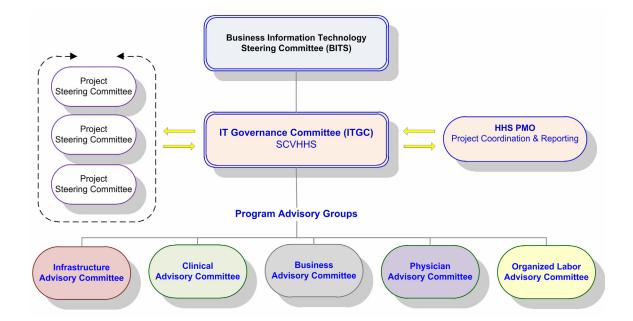
ITGC members represent all areas of the HHS organization. ITGC is chaired by the Chief Nursing Officer. The HHS Chief Healthcare Technology Officer provides linkage between ITGC and information technology subject matter experts.

The five Program Advisory Groups (shown in the organization chart) inform ITGC in their areas of subject matter expertise. The Program Advisory Groups:

- Review business cases for proposed projects, and making recommendations to ITGC regarding project approval and priority.
- Advocate on behalf of the larger groups they represent.
- Assist in disseminating project information to HHS staff.
- Assist in coordinating project resources.
- Conduct post-implementation project reviews to facilitate learning.
- Assist with IT scope and change management processes.

Routine projects with an estimated effort of less than 100 hours or estimated capital costs of less than \$5,000 are prioritized and managed within the Santa Clara Valley Health and Hospital System's Information Services Department.





Deputy County Executive (HHS) CEO, SCVMC Chief Nursing Officer, SCVMC (Chair) Chief Medical Officer (SCVMC) Chief Financial Officer (HHS) Chief Healthcare Technology Officer (HHS) Director of Planning & Business Development Inpatient Medical Director, SCVMC Deputy Director Ambulatory Care, SCVMC Director, Clinical and Support Services Director, Mental Health Department PMO Director Assistant Director (HHS) Director, Dept of Alcohol & Drug Services CEO, Valley Health Plan Director, Public Health Medical Director, Mental Health Services Medical Director, Acute Psychiatric Services Medical Director, DADS Medical Director, VHP Medical Director, Public Health Clinical Advisory Committee Chair Physician Advisory Committee Chair Business Advisory Committee Chair Infrastructure Advisory Committee Chair Organized Labor Advisory Committee Chair



County IT Project Management Office (PMO)

		Strategic Alignment	:	
	Business	Maturity		Stage 5 Center of
	Process Support		Stage 4 Advanced PMO	Excellence
Process	Control	Standard PMO Apply an integrated & comprehensive project Stage 2 Establish capability asic PMO & infrastructure to	Manage continuous improvement and	
Project Oversight	Stage 2 Basic PMOEstablish capability & infrastructure to support & govern a cohesive project environmenteve project verables &Provide a standard & repeatable PM methodology for use across all projectEstablish capability & infrastructure to support & govern a cohesive project environment		project management	cross-department collaboration to achieve strategic
Stage 1 Project Office		capability to achieve business objectives	business goals	
Achieve project deliverables & objectives for cost,		environment		
schedule & resource utilization				

Project Management Office: Competency Continuum Framework

In FY 2013, the CIO's Office began developing a County Project Management Office (PMO) to provide project oversight, process control and eventually process support for County projects that are related to technology. The County PMO will collaborate with the HHS PMO, the Social Services Agency PMO, and other departments that do not have a dedicated PMO. One early goal of the County PMO is to move toward a County standard project intake process at each PMO. County PMO development is a step-by-step approach that follows the competency continuum depicted in the accompanying figure. This framework ensures that the County PMO will be mature enough to properly manage the progressive stages of a Project Management Office.

The key areas of the Project Management Office include:

Monitor, Control and Report on Projects: Focus on project governance such as reporting status and monitoring of service outcomes achieved to upper management, monitoring and assisting project management in maintaining project performance, implementing a project information system and developing a project scoreboard.

Develop Project Management Competency and

Methodology: Develop a standard methodology that promotes project management within the organization, trains personnel in project management, mentors project

managers, and provides a toolset to support consistent and improved management.

Project Management Excellence: Manage projects and portfolios ensuring consistent project management success by using the Project Management Institute's body of knowledge and methodologies.

Strategic Alignment and Benefits Management:

Participate in department/agency business strategic planning to gain understanding of business needs and optimal technology solutions. Support the CIO in managing the strategic alignment between IT and businesses, and scanning the County environment to identify common needs and opportunities across departments/agencies.

The immediate short-term goal is to develop a County PMO that would be classified as a Stage 3 Standard PMO. However, if there is not sufficient staff for the County PMO, then the County PMO may be at Stage 2 in the maturity model until sufficient resources can be obtained. After the County PMO is firmly established at Stage 3, the goal will be to move toward an Advanced PMO, where the County PMO can optimally support County business goals.



Key Technology Initiatives

The following projects and programs are highlighted in this document. Other projects are listed in tables in the appendices.

Countywide Focus

- County Common Directory and SaaS (Software as a Service) Office Productivity Solution
- Enterprise Content Management (ECM) Program
- Electronic Forms
- Mobility Strategy
- sccLearn County Learning Management System

Public Safety and Justice System Focus

- Law and Justice System Roadmap Program
- Public Safety Realignment AB 109

- California Disposition Reporting Improvement Project (CA-DRIP)
- CAD Integration, Common Operating Picture and Data Exchange Projects (CAD2CAD/CROP/DX)

Health and Hospital System Focus

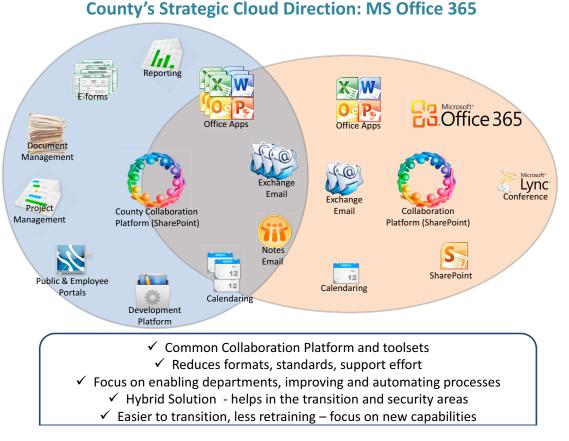
■ HHS Core Health Information System - HealthLink

Continuous Improvement While Making IT Green

- Server Consolidation and Virtualization
- Shared Storage (SAN) and Backup/Recovery Services
- Teleworking
- Cloud Services (Hosted Solutions)
- In-Building Wireless



COUNTYWIDE FOCUS County Common Directory and Software as a Service Office Productivity Solution



The County Common Directory and Software as a Service (SaaS) Office Productivity Solution gained momentum as the result of multiple teams participating in the Center for Leadership and Transformation and IT Rapid Transformation. The Office 365 and Common Directory implementation are an opportunity to focus on a large-scale IT program with IT staff from around the County participating to standardize County IT commodity solutions, and consolidate to a single Common Directory.

This project will:

- Establish a Common Directory through consolidation of existing departmental directories as a basis for unification of information technology resources.
- Consolidate departmental e-mail systems into a single email system by subscribing to a cloud-based SaaS hosted e-mail system, which also will provide other messaging, collaboration, and office productivity functions.

 Consolidate Microsoft licensing to achieve enterprise standardization and economies of scale to reduce ongoing costs, provide a consistent level of products, and provide efficiencies within and across the organization.

Project Goals

This project will deliver a Countywide e-mail and general office productivity suite that will allow for greater collaboration, productivity, and remote access. Once established, the County Common Directory will allow sharing of technology resources and provide a foundation for automating Countywide and departmental internal services.



Elements in Scope

The initial focus of the scope of this project covered the first three elements, but the final scope encompasses all of the listed elements. As more requirements and capabilities were understood, plus their required integration, the items were added to ensure flexibility, compliance and additional security.

- Office 365 Productivity/Collaboration/Communication
- County Common Directory & Infrastructure Foundation
- Security
- Device Management
- Identity Management
- Anywhere, Anytime Access

Milestones

Milestones	Status
Develop objectives and determine requirements	Completed
Evaluate and select a SaaS product	Completed
Evaluate and select a Common Directory approach	Completed
Procure Licensing/Negotiate SaaS Agreement	Completed
Develop and document vision and scope	Completed
Procure resources and services needed for implementation	In Progress
Implement and complete directory consolidation	Schedule to be developed
Implement SaaS solution	Schedule to be developed

Return on Investment

The specific objectives of this project are to:

- Reduce process inefficiencies that result from multiple platforms and systems and lack of collaboration tools.
- Reduce costs by reducing the number of servers in use, reducing maintenance efforts, and by leveraging economies of scale with enterprise software agreements.
- Increase capabilities in the areas of remote access, disaster recovery, and ability to perform legal discovery and litigation holds.
- Provide a foundation to support shared services and enterprise-wide systems.

- Improve identity management and timely user and resource provisioning.
- Allow redirection of IT staff from IT maintenance/repetitive services to business process improvement.

Outcomes for Common Directory and Office 365 and Associated Products

The Common Directory and Office 365 solutions include a major investment for the County to build a secure environment that enhances communication, collaboration, and information sharing across the County. It also builds a foundation for future shared services such as electronic signature, eForms, workflow, and document management, not only within the County organization, but with regional partners and the public. All of the departments are in agreement with the approach with only a few that have technical and State requirements that need to be finalized. Santa Clara County is the one of the larger counties leading the movement to this hosted service provided by Microsoft.

Expected Outcomes for Staff:

- Enhanced communication, collaboration and information sharing within departments, County, clientele, and business partners (example: web and video conferencing)
- Reduction in travel, saving time and mileage, and gaining productivity
- Enhanced security, confidentiality and privacy components to provide flexibility and reduce risks
- Self-service for password resets
- Enhanced search capabilities to access information for staff and the public
- Increased storage and access to archived information
- Enhanced mobility and remote access
- Experience a consistent foundation for shared services and easier access to information in departments and the County (example: reduction of logon accounts)
- Sets foundation to build additional shared services, such as e-Signature capabilities
- No one left behind in technological capabilities for email, calendaring and office productivity tools



- One single, accessible employee repository to easily enable new capabilities to all County staff or groups, such as ePay, online pay advices, and soon W2 forms
- Office 365 is a Software as a Service (SaaS) solution so new features will automatically be provided Countywide on an ongoing and faster pace and can be provided via self-service implementation.
- E-Discovery and litigation hold will be provided in a simpler way that can be better managed, controlled and completed Countywide across e-mail and files stored online
- Federal, State and County policies can be managed across the technology to ensure compliance.

Expected Outcome for IT Resources:

- Consolidation and automation of routine functions to reduce effort
- Automation of staff provisioning and de-provisioning (adding and deleting staff accounts when staff are hired or leave the County) to reduce time and effort and ensure compliance
- Better monitoring, managing, reporting and auditing tools
- More security to provide better protection and flexibility for staff
- Built in disaster recovery, backup and recovery capabilities
- Reduction in servers, managing software, and maintenance
- Fewer staff to manage once initially setup, allowing staff to be redirected to value-added IT business solutions
- Establish focused technical teams consisting of subject matter experts with training and career path and clarity of roles and responsibilities
- State, Federal and County regulation compliance
- Better management of software licensing to ensure compliance and reduce liabilities.

Expected Outcomes for Public and Business Partners:

As more information is digitized and organized to be more accessible, easily searchable and linked, self-service can increase to provide the right information, at the right time, on any device at the point of contact for the public and business partners who engage with the County.

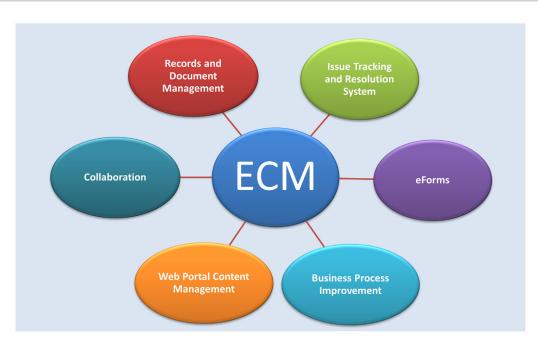
Progress to Date

After evaluation through an open solicitation process, Microsoft Office 365 was selected as the SaaS Office Productivity product. ISD negotiated a contract to consolidate all County Microsoft software licensing, and at this point, only a few departments are left to be added to the new enterprise agreement.

The County contracted with Microsoft Consulting Services in fall 2012. Microsoft Consulting Services worked with the County team to develop and document the vision and scope for this project. At the time of this writing (April 2013), implementation plans are being finalized and resources have been requested as part of the FY 2014 budget process.



COUNTYWIDE FOCUS Enterprise Content Management



Enterprise Content Management – "ECM"

The ECM area has grown and includes multiple initiatives identified in the above diagram. The Enterprise Content Management unit at ISD collaborates with IT staff across the County. The purpose of the ECM unit is to:

- Establish and manage a common platform for an Enterprise Content Management system that is integrated to enhance the interaction of information, collaboration and workflow within departments and across the organization.
- Manage all web-related functionality including, but not limited to, web domain registry, platform administration, portal functionality, training, and content management to ensure all County department needs are met.
- Develop desktop and mobile applications that follow Responsive Design guidelines and also integrate with multiple solutions. Applications cover both public and internal facing needs.
- Enable business process improvement via ECM Professional Services to customer departments on all phases of a project, from analysis to development and implementation. ECM team members are technical liaisons between the business owners and technology solutions to facilitate feasibility studies, provide recommendations

based on business needs, enable process automation and implement new system integration with existing enterprise platforms.

- Engineer an employee web portal capable of consolidating Countywide and departmental shared resources personalized for each County employee to improve efficiency with access to appropriate information at the right time.
- Establish a Countywide system to manage documents and records. Provide both business and technical guidance to all departments in order to standardize record management and document management. Coordinate with County Counsel and the County Executive's Office to establish necessary policies, governance, and retention schedules related to record management and document management.

The Enterprise Content Management group is integral to many Countywide projects which require collaboration, document management, record management, content management, and application development. ECM's County facing goals are to streamline Countywide processes and improve efficiencies whenever possible. Current targets for improvements are electronic forms with automated workflow, document management, records management and issue/resolution tracking. Public facing goals are to improve the public user experience on County web sites by



improving mobile web site interfaces, enabling online applications/requests and enabling online electronic payment options and developing more online County services.

Appendix C includes a list of all ECM projects planned for FY 2014, and ECM projects completed as of April 2013.

Milestones

Milestones	Status as of April 2013
Design technical architecture	Completed
Implement the Public Portal on new platform with service-oriented architecture	Completed
Implement Employee Portal on new platform	In progress
Implement advanced search capabilities	In progress
Develop plans for department web site redesigns and content transformation	In progress; Completed for some departments
Develop plans for document management capabilities for departments	In progress; Completed for some departments
Integrate with County's Office 365 initiative Countywide	Plan to be developed
Develop integration with Business Intelligence solutions for reporting dashboards	Plan to be developed
Establish requirements and options for e- Signature	Plan to be developed
Develop Mobile App Strategy for the public and for off-site workers	Plan to be developed
Integrate with Geographical Information Systems	Plan to be developed

Return on Investment

The objectives of the Enterprise Content Management unit are to:

- Provide Enterprise Content Management tools and infrastructure to bring value-added IT solutions to departments and organization, reducing duplication of infrastructure, simplifying support, providing faster pace to implementation, and enhancing access to information, sharing and collaboration.
- Achieve economies of scale with enterprise licensing.
- Provide a foundation to support shared services and enterprise-wide systems.
- Allow redirection of IT staff from IT maintenance/repetitive services to business process improvement.
- Make changes on the public web site and mobile web site to lean towards a self-service model. The self-service model ameliorates County processes and allows County employees to be more productive.

Progress to Date

Considerable progress has been made to improve employee efficiency. Work on the employee portal is well underway to improve employee workflows and allow easier access to department information. Electronic document management solutions have been implemented in the Clerk of the Board, Parks and Recreation, and Roads and Airports Departments.



COUNTYWIDE FOCUS Electronic Forms (eForms) e-signature

Project Description

Electronic forms may replace some current manual forms which are used for County approval processes or public requests. Many County processes require forms for request or approval which need to be manually filled out, printed, signed, scanned, and e-mailed to various departments. Forms are either submitted by the public or submitted by County employees. Electronic forms would greatly improve the overall efficiency of the County by replacing manual methods.

Project Goals

In the initial phase of the eForms project, the goals are to:

- Establish frameworks for development of eForms
- Establish policies for identifying public and internal forms ideal for conversion
- Establish a streamlined methodology for eForm implementation.

Return on Investment

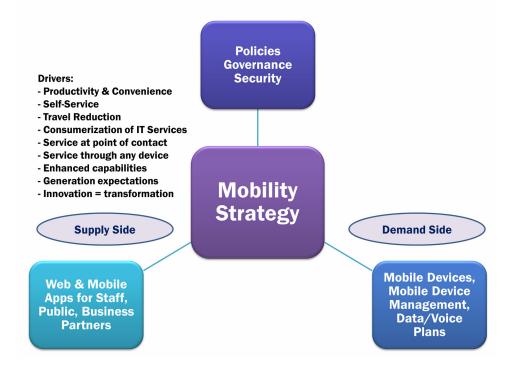
- Reduce time spent on manual workflows.
- Improve efficiency by reducing mistakes with electronic validation.
- Improve status tracking of requests, approvals and applications.

Progress to Date

Initial teams for design and development have been created. Specific forms to target have been identified and are in the initial planning stages.



COUNTYWIDE FOCUS Mobile Strategy



With rapidly evolving mobile technology and growing expectations of staff, the public, and business partners to remotely access information from any device, the need to establish a mobility strategy is essential. There will need to be multiple generations of the strategy as the technology innovations increase. The number of mobile apps, the number of consumers downloading to mobile devices, and the number of mobile devices is growing substantially. Government will need to develop strategies to prepare for the growing demand for governmental services, information, and the use of innovative capabilities that are being developed for smartphones and other mobile devices.

Statistics on Mobile Apps/Downloads and Mobile Devices

- There were 29 billion apps downloaded in 2011, up from 9 billion in 2010. ABI Research (October 2011)
- Mobile device sales will grow to reach 1.9 billion units in 2013. Smartphone sales are expected to hit 1 billion units in 2013, which means that for the first time, smartphones will outsell feature phones. (Gartner Prediction February 2013)

Mobile Device Management Strategy and Goals – 1st Generation

The mobility strategy will focus on enabling employees to be more efficient with anytime, anywhere, any device access to content, reducing the dependency on paper and increasing the capacity to electronically search and access information in a timely manner. However, the need to manage, maintain and support these mobile devices is as involved as any small computer systems; they have full operating systems and require security patches, configuration changes, software distribution, and more.

The proliferation of mobile devices has become a challenge to support, creating complexities with changes in devices, and with more personally-owned devices and device types coming into the mix. The current security level for some mobile devices is marginal and will require a mobile device management system to address. The market for these devices is maturing rapidly, and the need to develop policies around the use of personal devices needs to be completed.

There are the three main aspects to mobility as noted in the above diagram: Policies, Devices and Applications. The following highlight the Device and Application efforts.

Current Activity regarding Devices:



- Renegotiation of cell phone voice and data plans to provide more cost effective plans
- Consolidation of Mobile Device Management within ISD to order, service, and bill
- Selection of Mobile Device Management Solution to manage security and policy
- Development of Mobile Device Policies.

Milestones for Mobile Device Component

Milestone	Status as of April 2013
Develop mobile strategy and update policy	High-level strategy presented to BITS for approval in FY 2013. Status reports provided to the Board of Supervisors Finance and Government Operations Committee.
Develop requirements for a MDM (mobile device management) tool	MDM system vendor selected through RFP process and currently in contract negotiations.
Establish a Center of Excellence group to maintain and evolve with the rapidly changing industry	In process
Publish standards, security levels, and procurement processes	Will be developed in parallel with implementation and roll-out of MDM system.

Return on Investment

The specific objectives of this project are to:

- Lower County cellular phone bills with new enterpriselevel plans negotiated with the three major cellular providers.
- Streamline billing process through ISD.
- Leverage new mobile technologies to provide access anytime, anywhere, on any device to provide efficiency gains.
- Provide mobility in a secure manner to reduce risk of data loss and associated liabilities.
- Establish standards and implement toolsets to ease management support of mobile devices.

Web and Mobile Application "Mobile Apps" Strategy – 1st Generation

The first generation strategy for mobile apps is to render web sites on mobile devices. To do this in an efficient manner, a development framework was created to quicken the development process, eliminate double entry of content and leverage existing mobile device features. The result has provided a rapid development process that is easy to support. The key development strategies include:

Mobile Friendly Templates	 Build mobile friendly templa automatic rendering of Cou sites on mobile devices 	
	 Allow single content creation management for web and r devices 	
	Content owners enter conte	ent once
Native Mobile Apps	 Develop native apps for ser which utilize mobile device for better user experience 	,
	 Leverage full mobile device like GPS, camera and phon 	
Build Services Framework	 Build service functions onc reuse in multiple mobile ap 	o unu
	 Utilize the same service fun both web and mobile platfor well as third party solutions 	rms as

Progress to Date

- In October 2012, the ISD ECM unit launched the Registrar of Voters Mobile App SCCVote.
- Launched new web site redesigns and mobile versions of the District Attorney's Office and the Santa Clara Valley Medical Center's web sites.
- Soon to be launched are the County Hospital (VMC) Way Finding mobile application and County Vector Control Pest Reporting mobile application.
- Redesigned multiple public web sites to improve the user experience.
- Creation of a consolidated and searchable County department contacts page available to the public.
- Web electronic payment systems have been built to enable public payment online with Animal Control and the Weights and Measures divisions being the first implemented.



Multiple counties have requested the SCCVote Mobile App. A plan is being developed with other counties and County Counsel to determine how to best share mobile apps and compensate the developing county that will be maintaining the mobile app. In addition, discussions with the National Association of Counties are being planned to determine the mechanism to share nationwide.

	ARA	Search Q Contact	s Agencies & Departments Services
R	n t	istrar of Voters	
			中文 Español Tagalog Tiếng Việt
Home > Voter Education			4
		Mobile Apps	
Elections	>	Developed the DOOLOTE Making Area	Last modified: 10/8/2012 5:24 PM
Vote by Mail	>	Download the SCCVOTE Mobile App All the election information you need in the palm of your ha	nnd
Register to Vote	>	For iPhone/iPad & Android	Santa Clara County
Candidate & Measure Information	>	Click the links to download:	of Voters
Voter Education	>	Coogle play	
Volunteer at the Polls	>	Make your vote count with easy-to-use election tools for Santa C	

Example of a Mobile Friendly Site:





sccLearn – County Learning Management Solution

	n		/ 🗍 My Calenda
SCC Le	a	11	
My Success Plan My Learnin	ng 🔰 My Skill	s and Compet	encies My Netwo
Velcome to sccLearn			
➔ 1. Search			
Enter Keyword, ID or Description	All Resource	es ct matches on	✓ Search ly
Browse: Learning Library Catalog	Adva	nced Search	Contribute a Resource
3. In-Progress Learning Activities			
		Sort By	Event Start Date
Name		Start Date	Actions
Accomplishing More with Less			Begin Registration
<u>Certification: Customer Service Ac</u>	dvan tage		Begin Registration
/iew All In-Progress Activities			

First Year Operation and Growth Planning

The sccLearn Learning Management System has completed its first year of operation, delivering online, self-service course registration and initial e-learning offerings to 15,000 County employees. Accomplishments include standardization of compliance reporting for two Countywide mandatory training courses, promoting user adoption of e-learning, and developing a growth strategy to increase the return on investment and help drive down training costs for multiple County departments.

Return on Investment

Improve efficiency and reduce costs related to Countywide employee training programs including:

- Centralized administration.
- An automated registration process.
- Minimizing time away from the job.

- Reducing training-related travel time and mileage expenses.
- Reducing non-compliance for mandatory training, thus reducing risk/exposure costs for the County.
- Just-in-time training through e-learning courses to increase work efficiencies.

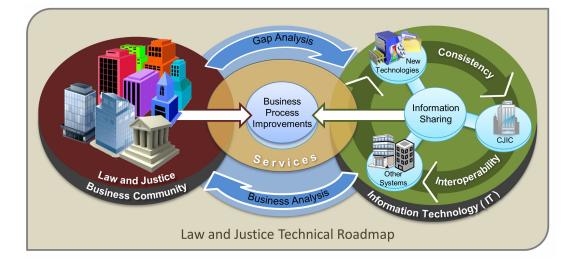
Future Milestones

Future Milestones	Target Date
E-learning Phase 2: Deploy 270 courses	Spring 2013
Manager's Team Dashboard Pilot	Starting Spring 2013
Add more department course catalogs	Starting Summer 2013
Santa Clara County Superior Court joining sccLearn	Starting Fall 2013
Track Continuing Education (external courses)	Starting Fall 2013



PUBLIC SAFETY AND JUSTICE SYSTEM FOCUS

Law and Justice System Roadmap



Project Description

This project is developing a Law & Justice Information Systems Roadmap (LJSR) for Santa Clara County. The roadmap involves the processes and information-sharing needs from the following agencies: Superior Court; District Attorney; Public Defender; Alternate Defender; Pretrial Services; Adult Probation; Sheriff's Office; and local, State and Federal law enforcement agencies (LEAs).

Within the community, many different technology and systems are in use. At the center is the Criminal Justice Information Control (CJIC) system, a County mainframe application that tracks local adult criminal histories and provides the operational framework for criminal case processing. With over 4,000 users, CJIC is integrated into every aspect of the County's day-to-day law and justice operations. CJIC annually processes more than 88,000 criminal court cases and over 70,000 formal bookings.

The project is focusing on planning for the Law and Justice Community's shared needs in an integrated manner, specifically addressing the following:

- Business improvements
- Opportunities to share information and collaborate between agencies
- Cost savings by implementing quick win projects
- Cost and technical system assessments and recommendations.

Project Goals

- Develop and implement strategies to increase information sharing and business analytics across a variety of technical platforms;
- Develop solutions to current and future resource, economic and technological challenges;
- Develop an architecture plan for an integrated Law and Justice system, currently CJIC;
- Develop a plan, and implement where possible, other technology and process changes that will reduce costs and streamline operations;
- Develop a strategy to provide increased flexibility to accommodate new access/integration requirements while maintaining system response time and security.



Milestones

Milestone	Status as of April 2013
Develop a Project Charter	Completed
Gather detailed requirements	Completed
Analyze and document process flows and identify process improvement opportunities	Completed
Implement quick win projects	Completed
Request & obtain grant budget modification approval	Completed
Implement business analytics & reporting pilot project	In progress, target completion date FY 2013
Implement Law & Justice agency learning management system	In progress, target completion date FY 2013
Implement web services pilot project	In progress, target completion date FY 2013
Streamline business operations across the justice community by piloting electronic processing of bench warrants	On progress, target completion date FY 2014
Develop a comprehensive information systems roadmap for Santa Clara County integrated law & justice systems	In progress, target completion date FY 2014

Return on Investment

The specific objectives of this project are to:

- Support technical integration and business collaboration in the most cost effective manner.
- Provide a foundation for ongoing improvements in law and justice technology in the County.
- Identify strategies and develop a comprehensive plan to address the increasing cost and decreasing availability of resources needed to keep CJIC in the mainframe environment.
- Enable management and operational reporting.
- Adapt to the changing external environment in a flexible and cost-effective manner.
- Provide a more effective and efficient manner of training law and justice personnel to minimize time away from critical tasks (such as LEA patrol).
- Provide field officers faster access to criminal offender information.
- Reduce costs of information sharing.
- Adopt, where feasible, national technical standards to improve cross-agency data exchanges.
- Minimize disruptions in service levels.



Public Safety Realignment – AB 109

PUBLIC SAFETY AND JUSTICE SYSTEM FOCUS

Project Description

Assembly Bill 109 (known as Public Safety Realignment) went into effect on October 1, 2011, shifting responsibility for lower level offenders released from state prison to local jurisdictions, and lower level time commitments to County jails. Public Safety Realignment results in very complex changes to County business processes, and implementation plans need to be performed. The impact is multijurisdictional, requiring a business process and technical plan for collection and sharing of information related to realignment individuals, programs, and performance measures. This project will develop a comprehensive and multi-jurisdictional solution, including both State and local agencies, to collect and share data on individuals, programs, services, and outcome measures as related to Public Safety Realignment.

Project Goals

- Identify Realignment-related data, where it resides, and how to extract and report on it.
- Identify and implement interim 'quick win' solutions to improve Realignment reporting, using existing technology and tools.
- Document business and operational processes and perform a workflow analysis related to Realignment, in order to better understand the data needs and flow between agencies.
- Obtain detailed data requirements and outcome measures as defined by the Community Corrections Partnership (CCP) Data Workgroup.
- Document agency and integrated systems, such as the State Parole "LEADS" system, CJIC, and other agencyspecific systems, to determine potential sources of Realignment information.
- Determine the best reporting solutions and automate data exchanges, where possible, between State and local agency systems, in order to more efficiently share information across agencies.

Milestones

Milestone	Status as of April 2013
Develop a Project Charter	Completed
Document Realignment business processes for Probation, Custody Administration, and the Superior Court	Completed
Document Realignment business processes for Custody Booking & Programs, Custody Health, Mental Health and Department of Alcohol and Drug Services	Completed
Obtain CCP Data Workgroup outcome measures	Completed
Submit funding request for FY 2014	Completed
Document realignment business processes for District Attorney, Law Enforcement, Pretrial Services, Public Defender and the California Department of Corrections and Rehabilitation	Completed
Complete gap analysis between current and future systems and data requirements	Completed
Develop and implement interim improvements for reporting & data sharing	In progress, ongoing
Complete draft data collection & sharing plan	Completed
Document Realignment business processes for the Department of Revenue and Social Services Agency	Completed
Develop and implement Phase One of the long- term solution for Realignment data collection, sharing and reporting	In progress, target date FY 2013



Return on Investment

The specific objectives of this project are to:

- Realize short-term Realignment reporting improvements, using existing technology and systems.
- Develop a comprehensive, cost-effective and feasible plan to meet the project objectives. This plan can be implemented within a reasonable timeframe and cost in a manner acceptable to all project participants.
- Reduce costs of managing Realignment individuals by streamlining business processes.
- Ensure adequate reporting and performance measures are in place to meet any State-mandated criteria for funding.
- Develop a collaborative approach to collecting and sharing data on Realignment individuals to increase efficiency and effectiveness and reduce costs.
- Provide required integration services in the most costeffective manner.
- Enable management and operational reporting.



PUBLIC SAFETY ANDCalifornJUSTICE SYSTEM FOCUSProject

California Disposition Reporting Improvement Project (CA-DRIP)

Project Description

This is a joint project with the California Department of Justice (DOJ) and the California Administrative Office of the Court (AOC) to improve the quality and timeliness of criminal history data that the County sends to the State. This project impacts all County justice agencies, all Law Enforcement agencies, and the DOJ and AOC. It is intended that Santa Clara County's efforts will form a model to be used Statewide to improve arrest and disposition reporting.

Project Goals

- Improve the County's charge code mapping to DOJ.
- Reduce the number of errors that occur when the County sends disposition information to the State.
- Streamline the reporting of arrest and disposition information to State and Federal agencies.
- Automate data exchanges and error reporting between the County and the State where possible.
- Form a model for State-wide improvements in criminal history reporting.
- Improve public safety.
- Ensure accurate criminal history records are available to law enforcement agencies and for pre-employment background checks.

Milestones

Milestone	Status as of April 2013
Develop a Project Charter	Completed
Document charge code mapping and reconciliation	Completed
Develop a charge code maintenance protocol	In progress, target date FY 2014
Communicate new protocols and business processes to all stakeholders	Not started, target date FY 2014

Milestone	Status as of April 2013
Document technical constraints and opportunities to utilize national technology and data exchange standards with existing systems	Completed
Develop necessary data exchanges & technical components	In progress, target date FY 2014
Develop plans to roll-out solution State- wide	Not started, target date FY 2014
Implement State-wide improvements to arrest and disposition reporting	Not started, target date FY 2015.

Return on Investment

The specific objectives of this project are to:

- Reduce manual effort reconciling charge codes between the County and the State.
- Improve accuracy and timeliness of criminal history data at the State and Federal levels.
- Reduce costs and time spent correcting errors in arrest and disposition reporting.
- Provide required integration services in the most cost effective manner.

Progress to Date

The County worked with the State to plan this project and obtain the necessary grant funding. During FY 2012 and FY 2013 much work was done to document and share business processes, technical designs, and existing constraints. National funding agencies (SEARCH and the National Center for State Courts) provided guidance and assistance on data exchanges and national standards. The multi-agency project team completed 5 of 8 project milestones. Currently, the County is awaiting further direction from the State DOJ and AOC.



PUBLIC SAFETY ANDCAD Integration, Common Operating Picture andJUSTICE SYSTEM FOCUSData Exchange Projects

Project Description

This project will link fifteen (15) Public Safety Answering Points (PSAPs) through their associated Computer Aided Dispatch (CAD) systems. Also included is the publication of multi-jurisdictional, multi-discipline dispatch event and resource status information on a map display, available via the Internet. This regional project includes all municipal and County PSAPs in Santa Clara County, the consolidated PSAP in Santa Cruz County, and the South Santa Clara County Fire Protection District's Contract Provider (CAL Fire).

The CAD systems used to track and dispatch field personnel and resources are not currently linked and have no way of sharing critical information. As a result, dispatchers in these 9-1-1 centers do not have access to, nor can they readily monitor, field personnel and resource information in neighboring jurisdictions. They must often engage in timeconsuming phone calls to share critical information and/or locate and request the dispatch of the closest available fire, law enforcement and/or medical resource. Dispatch centers providing 9-1-1 alternate answer backup services must also contact the responsible jurisdiction by phone and relay 9-1-1 call information verbally rather than electronically, which prolongs the response to emergency calls. Completion of the CAD2CAD, Common Regional Operating Picture (CROP), and Data Exchange projects will help address the previously mentioned issues, by enabling standards-based dynamic exchange and display of CAD event, resource status, and other related data between disparate CAD systems.

Project Goals

- Develop a web-based presentation of first responder events and resource data on a GIS map customized to a PSAP's specific needs.
- Provide the ability for PSAPs to import and display event and resource data generated by other CAD systems.
- Develop a flexible data exchange solution that will expand and incorporate additional data exchanges.

Milestones

Milestones	Status as of April 2013
Develop project charter and project plan	Completed
Procure vendor services	Completed
Procure and install hardware and related components	Completed
Complete business analysis and develop business rules	In progress, target date FY 2014
Install software, including a message handling broker and business rules interface	In progress, target date FY 2014
Integrate GIS and situational correlation services	In progress, target date FY 2014
Design and implement necessary National Information Exchange Model (NIEM) conformant bi-directional data exchanges	In progress, target date FY 2014
Design and implement Common Regional Operating Picture portal	In progress, target date FY 2014
Design and develop additional non-public safety data exchanges	In progress, target date FY 2015

Return on Investment

The objectives of this project are to:

- Improve public safety by providing first responders with additional information on events.
- Improve response time to emergency situations.
- Improve auto and mutual aid responses between public safety agencies.
- Reduce costs of information sharing by automating current manual data exchanges.



- Leverage technology developed in this project to build additional data exchanges between public safety and non-public safety agencies such as the Valley Medical Center and the Roads & Airports Department.
- Increase field officer access to criminal justice and other critical information.
- Provide an analytical tool to better plan for and manage responses to emergencies.

Progress to Date

Use cases, business, technical and security requirements were developed by the County team in partnership with the Silicon Valley Regional Interoperability Authority (SVRIA). Preliminary technical designs and data exchange documentation have been completed. An RFP was issued in August 2011 resulting in a contract with Thinkstream, Inc. for provision of software and services. Hardware has been installed. Testing and application development are in progress. The first phase of the project will be completed in fall 2013.



HEALTH AND HOSPITAL HHS Core Health Information System – HealthLink

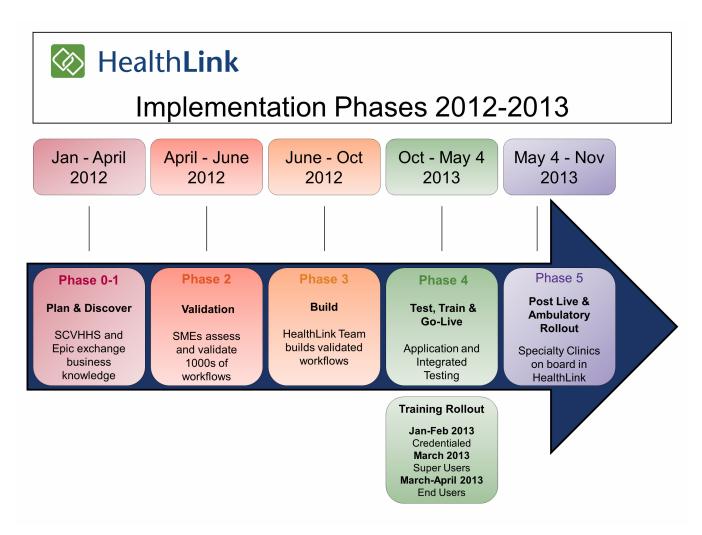
Project Description

System Focus

Implementation of the Epic Core Health Information System solution (HealthLink), including a wide variety of applications such as clinical documentation, billing, chart tracking, scheduling, registration, laboratory, radiology and nurse triage. When implemented, this solution will allow clinicians in any medical setting (either in a County facility or in neighboring facilities) to obtain needed information on patients who are presented with urgent/emergent needs, in order to provide safe and effective medical care. The Core HIS will be utilized by the Santa Clara Valley Medical Center hospital and clinics, as well as Custody Health, Mental Health, and Alcohol and Drug Services agencies.

Project Goals

- Facilitate evidence-based clinical and administrative decision-making.
- Provide for the seamless flow of information across the entire continuum of care (from the ambulatory care setting to the Emergency Department to return home and post discharge care).
- Support chronic disease management.
- Support patient self-management.
- Enhance patient, family and staff satisfaction.





Milestones

The milestones of this project are:

- **Wave 1** Implement replacements for existing legacy products (Siemens, NextGen) and functionality to allow demonstration of Stage 1 Meaningful Use criteria.
- **Wave 2** Implement replacements for existing legacy Lab, Radiology and Operating Room management systems as well as outpatient pharmacy functionality.
- **Wave 3** Implement specialty applications to support cardiology, ophthalmology, and nurse triage.

Return on Investment

The specific objectives of this project are to allow the Health and Hospital System to:

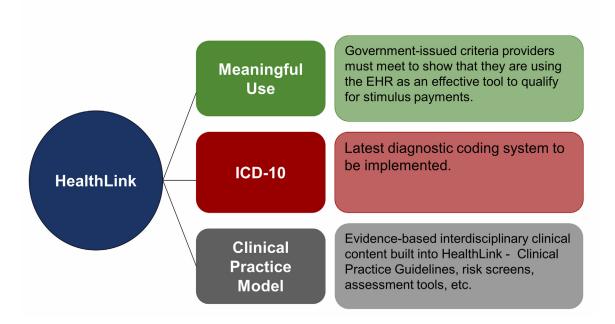
- Enhance patient care and improve patient safety.
- Qualify for American Recovery and Reinvestment Act (ARRA) Meaningful Use funding.
- Optimize revenue cycle processes and reimbursements.
- Reduce costs by minimizing duplicate testing and numerous other inefficiencies.

Progress To-Date

The HealthLink project has successfully completed the integrated testing of workflows that will comprise the HealthLink system. Workflows are currently being migrated to the "live" system. Date conversions – placing Santa Clara Valley Health and Hospital System (SCVHHS) legacy system data into HealthLink – is on schedule. This effort will provide caregivers access to historical patient information (i.e., allergies, medications, immunizations) at the time of HealthLink "go-live."

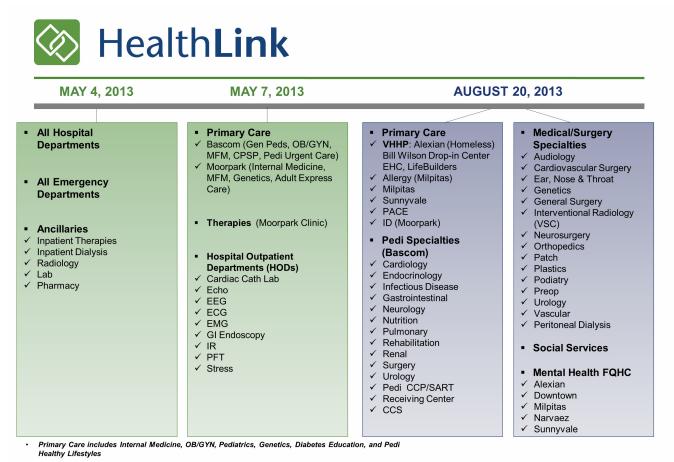
More than 600 Super Users were trained by March 16, 2013, with activities scheduled that will further ready Super Users for their at-the-elbow support role at "go-live." Training of approximately 5,000 physicians, clinicians and operational staff, those who will use HealthLink on May 4, is underway.

Several other "go-live" readiness activities are in progress. These activities include testing all HealthLink-related devices (i.e., printers, scanners, monitors) to ensure proper connectivity to SCVHHS networks and system cutover sessions that involve nursing and pharmacy staff practicing entering key patient data (i.e., pharmacy orders) into HealthLink from current systems. Command Center preparations are also in progress, including finalizing the Command Center schedules, staffing, and support processes, and installing required Command Center operational necessities such as computers and phones.



HealthLink Related Projects





* Custody remains under evaluation

This document will continue to evolve as decisions are made. Updated 3/20/13

HealthLink Applications – Now	Functions
ADT/Prelude	Admissions, discharges, transfers, bed management
ASAP	Emergency Department
Cadence	Registration, Scheduling, Referrals
Care Everywhere	Sharing of medical record with other Epic users
ClinDoc	Inpatient clinical documentation
EpicCare Ambulatory	Patient care
EpicCare Link	Provider online access

HealthLink Applications – Now	Functions
HIM	Legal Medical Record, Consents
MyHealth Online	Patient online access
Orders	Inpatient CPOE
Resolute	Hospital and Professional Billing
Stork	Labor and Delivery
Tapestry	Managed Care
Willow	Inpatient



🐼 Health**Link**

OCTOBER 1, 2013	NOVEMBER 5 , 2013	FEBRUARY 2014
 Primary Care East Valley Gilroy Tully Health Educators Medical/Surgery Specialties Bridge Child Protection Center High-risk Infant (HRIF) Infant Neurodevelopment Lenzen (Refugee /TB) Spina Bifida 	 Medical/Surgery Specialties Cardiology Dermatology Endocrinology Gastroenterology Geriatrics VSC Diabetes Services Neurology Ophthalmology/Optometry Oncology (Clinic) Pacemaker Protime Pulmonology Gynecology Oncology Rehabilitation (PMR) Rehabilitation (PMR) Renal Clinic Sleep Clinic and Sleep Lab Synagis Heart Failure Adult SART Custody 	Beacon Chemotherapy

 Primary Care includes Internal Medicine, OB/GYN, Pediatrics, Genetics, Diabetes Education, and Pedi Healthy Lifestyles

* Custody remains under evaluation

This document will continue to evolve as decisions are made. Updated 3/20/13

HealthLink Applications – Later	Functions
Beacon	Chemotherapy
Beaker	Lab
CRM	Customer Relationship Management
Cupid	Cardiology
Kaleidoscope	Ophthalmology
Nurse Triage	Nurse Triage
Op Time	Anesthesia
Radiant	Radiology
Willow	Outpatient pharmacy



Continuous Improvement While Making IT Green ADDITIONAL INITIATIVES

Server Consolidation and Virtualization

This ongoing effort involves a technology referred to as "Server Virtualization." This technology provides a server that is a "host" to many guest servers, which means there is one physical server that houses many other servers. The Information Services Department (ISD), as well as other departments, has continued to virtualize their servers. By virtualizing servers, the energy requirement and the support efforts are reduced, and the ability to respond and provide faster disaster recovery and business continuity options is increased.

Shared Storage (SAN) and Backup/Recovery **Services**

Instead of having storage devices on each server, shared storage devices have been implemented, thus providing more efficient use of storage, and reducing energy and support efforts. As more servers are virtualized, more managed storage and backup and recovery capabilities increase.

Teleworking

County of Santa Clara

The County has completed a teleworking policy to allow personnel to work from home. Office 365 capabilities, such as web and video conferencing and instant messaging, will assist teleworkers and their office peers to stay connected, improving overall experience. Teleworking has provided savings in travel and time-off, and provided a balance in work and home life, while reducing stress and increasing productivity.

Cloud Services (Hosted Solutions)

Hosted technology solutions referred to as "Cloud Services" are becoming increasingly more available and affordable. Cloud Services offer hosting for infrastructure, data, and applications, in a secure, energy efficient, and accessible manner. Cloud computing offers a virtualized pool of resources available via the web, thus eliminating the need for each agency to purchase and maintain its own computer hardware, software, and network devices. Resources can be dynamically allocated or re-allocated as needed. Also, instead of paying for all of the capacity an entity might need, the agency only pays for what it uses. Contractually-defined service level agreements with fully outlined cost plans are required to ensure performance and availability. There are current and planned applications that use hosted services. County IT services will move towards hosted solutions that are mature, secure and cost effective.

In-Building Wireless

In-building wireless infrastructure is being implemented in key areas within the County to allow employees to work remotely within County buildings when away from their office/workstation. As funding becomes available, this wireless infrastructure will be expanded.





Appendix A: Fiscal Year 2013 Technology Infrastructure Funding Status

Technology infrastructure funding is comprised of Technology Bond funding (\$20 million in FY 2013) and a one-time General Fund allocation (\$2,080,000 in FY 2013).

Infrastructure Funding Status as of April 2013

	Allocated	Year-to-Date Spent or Encumbered	Available
Telecommunications (excluding the Health and Hospital System and the Social Services Agency): Voice over Internet Protocol (VOIP) Phase 1 Mitel PBX Replacement and 16 Mitel XS-200 or SX-2000 Mitel replacements. 70% are in progress, 30% are planned.	\$3,491,886	\$197,531	\$3,294,355
Animal Shelter			
Employee Assistance Program (EAP)			
Elmwood Detention Facility			
James and Holden Ranches			
Juana Briones			
Juvenile Probation Dept.			
Main Jail			
Mitel Hub			
North County			
Public Defender at 120 Mission			
Public Defender at 701 Miller			
Roads – South County			
Roads – West Yard			
Roads and Airports – Schallenberger			
Roads and Airports – Skyport			
Sheriff Patrol			
South County Center			
County Network: CLARAnet enterprise network infrastructure and some departments' network infrastructure	\$2,606,602	\$717,244	\$1,889,358
Servers, Workstations, Enterprise Storage, Enterprise Backup and other devices, including Printers, Monitors, etc. for General Fund departments ^a	\$2,927,762	\$776,594	\$2,151,168
One-time General Fund Allocation ^b	\$2,080,000	\$171,609	\$1,908,391
Enterprise Software for Mobility and Security: Common Directory/E-mail Software as a Service (SaaS) Implementation costs and Mobile Device Management Solution ^c	\$2,675,000	\$355,528	\$2,319,472
County Communications 9-1-1 Equipment and Radio Infrastructure, including Sheriff/ Department of Correction and District Attorney handheld/mobile radios	\$7,280,000	\$5,691,317	\$1,588,683
Office of the Sheriff: Mobile Data Computers Replacement	\$1,018,750		\$1,018,750
Total Technology Bond Allocation	\$20,000,000	\$7,738,214	\$12,261,786
One-time General Fund Allocation	\$2,080,000	\$171,609	\$1,908,391
Total Infrastructure Funding Allocations	\$22,080,000	\$7,909,823	\$14,170,177

a. The types and counts of critical equipment are being refined. A planned large purchase of identical models of equipment will leverage economies of scale for purchasing and subsequently for support and maintenance.

b. In FY 2013, a one-time General Fund allocation of \$2,080,000 was provided for technology infrastructure.

c. Implementation cost estimates were completed in late March 2013. Contracts will be prepared for Board approval.





Appendix B: Information Technology Project Inventory

In fall 2012, the Chief Information Officer met with 36 Department Heads and key staff to understand departmental business strategies and needs. During those meetings, the CIO's Office collected information on existing and planned projects to begin an initial Countywide IT Project Inventory. In FY 2014, the CIO will staff the new County Project Management Office (PMO) to track projects Countywide more robustly. The County PMO will collect information about County projects with any IT components. Although the County PMO will not have sufficient staff resources to manage many projects, the project tracking should facilitate rapid identification of golden opportunities and burning platform projects, as well as the breadth and depth of project activities Countywide. The following table includes information collected from departments in Fiscal Year 2013 (excluding the projects shown in the County Executive's message). The IT Project Inventory is not exhaustive of all projects Countywide, and it will continue to be refined as the County PMO matures.

Department List	Project Name
Finance and Government Operations Committee (FGOC)-Assessor	Property Assessment Appraisal Management System (PAAMS) project
FGOC-County Communications	Silicon Valley Regional Interoperability Authority Data Exchange Project (SVRIA-DX)
FGOC-County Executive's Office (CEO)-IPM	Integrated Pest Management (IPM) System Selection
FGOC-CEO	Drug Testing Collaborative
FGOC-CEO-Office of Emergency Services (OES)	SVRIA-DX Expansion to include OES, Hospitals and others
FGOC-Clerk of the Board (COB)	COB Backfile Scanning
FGOC-Employee Services Agency (ESA)	Replace Worker's Comp iVOS
FGOC-ESA	Electronic Employee Performance Evaluation System Implementation
FGOC-ESA	ESA-Employee Development Tuition Reimbursement System Development
FGOC-ESA	Labor Relations Department Case Management System Selection
FGOC-Finance (FIN)-Controller (CON)	Kronos System Upgrade
FGOC-FIN-CON	Kronos Timekeeping Self Service Licenses
FGOC-FIN-CON	Office of Human Relations Case Management System Implementation
FGOC-FIN-CON	SAP Govt Risk and Compliance (GRC) Solution Design – Professional Services
FGOC-FIN-CON	SAP Grants Implementation
FGOC-FIN-CON	SAP Reporting Enhancements/Business Objects
FGOC-FIN-Recorder (REC)	Recorder Mainframe Replacement
FGOC-FIN-Tax Collector's Office (TCO)	Create In-house Failover for Critical Production Systems
FGOC-FIN-TCO	TCO Oracle License Expansion
FGOC-FIN-TCO	TCO Server Room Power Upgrades
FGOC-FIN-TCO	TCO Tape Backup Library Expansion
FGOC-FIN-TCO	TCO Tax System Off-Site Disaster Recovery
FGOC-Information Services Department (ISD)-Core Technologies	Core Technologies: Business continuity Disaster Recovery Plan for critical applications
FGOC-ISD-Core	Replace County Data Storage System
FGOC-ISD-Customer Support Services (CSS)	Help/Service Desk: Licensing, enhancements, and migration
FGOC-ISD-CSS	sccLearn: Ongoing licensing and program enhancements



Department List	Project Name
FGOC-ISD-Database Administration	Countywide Oracle Consolidation
FGOC-ISD-Enterprise Content Management (ECM)	Customer and Case Management System
FGOC-ISD-ECM	eForms Tool and Development
FGOC-ISD-Enterprise Data Center Operations	Upgrade networked digital video surveillance camera system for ISD and the data center
FGOC-ISD-Enterprise IT Products and Services (EPS)	Business Analytics (Business Objects, Cognos, SQL reporting)
FGOC-ISD-EPS	Countywide volunteer management application
FGOC-ISD-EPS	Electronic Signatures
FGOC-ISD-EPS	Integrated Workplace Management System expansion
FGOC-ISD-EPS	Application Management and Monitoring
FGOC-ISD-GIS	Geographic Information Services (GIS): Create GIS open data portal and extraction service with enhancements
FGOC-ISD-Network and Telecomm Services (NTS)	In-building WiFi network expansion for County General Government and Justice facilities. Includes both employee and public/visitor access.
FGOC-ISD-NTS	Mobile Device Management System Selection
FGOC-ISD-NTS	Replace obsolete Mitel phone systems through expansion of existing County Cisco Voice over Internet Protocol (VoIP) system.
FGOC-ISD-NTS	Replace obsolete Nortel phone systems through expansion of existing County Cisco VoIP system. Includes required local area network switching improvements.
FGOC-ISD-NTS	Network Infrastructure Improvements to support Software as a Service Microsoft Office 365 project and departmental networks.
FGOC-ISD-NTS	Replacement of County network SONET Ring with Gigabit capacity services.
FGOC-ISD-NTS	VDI implementation to provide highly secure remote access to virtual desktops for knowledge workers accessing HIPAA and legally protected PII.
FGOC-ISD-SEC	Security: IT Security Program recommendations for products and services (Specific projects will remain confidential to protect County assets)
FGOC-ROV	Registrar of Voters Voting System Upgrade
Health and Hospital System (HHS)- Custody Health Services (CHS)	Custody Telemedicine Expansion. Expand telemedicine capability to Main Jail and Elmwood.
HHS-CHS	Custody Wireless at Juvenile Hall and Ranches
HHS-CHS	Unicare Module and Integration Implementation
HHS-Mental Health (MH)	Bed and Housing Exchange Database to post open beds for inpatient/residential clients.
HHS-Public Health (PHD)	Capture & Display Non-9-1-1 ambulance AVL data in the SVRIA-DX CROP
HHS-PHD	Develop PHD data interface with Valley Medical Center Lab Information Management System
HHS-PHD	Medical Health Operations Center – MHOC Backup/Failover Site Creation
HHS-PHD	Migrate PHD Health System Database Server Platform
HHS-PHD	PHD Lab Apollo Web Reporting
HHS-PHD	PHD Mobile Computing System Implementation
HHS-PHD	PHD network bandwidth expansion
HHS-PHD	PHD Network Switch Addition
HHS-PHD	PHD Video Conference System Selection
HHS-PHD-EMS	Emergency Medical Services (EMS) Data System
HHS-Valley Health Plan (VHP)	Employee Wellness Intranet Site Development
HHS-VHP	Employee Wellness Public Site Development
HHS-VHP	EMS Diamond Development



Department List	Project Name
HHS-VHP	Enhance VHP Provider Search functionality
HHS-VHP	HealthAccessSolutions Valley Express Development and Upgrades
HHS-VHP	Interface Development
HHS-VHP	Replace five VHP servers
HHS-VHP	VHP Commercial Member Health Encyclopedia
HHS-VHP	VHP Commercial Member/Provider Portal Solution
HHS-VHP	VHP Credentialing System, search interface, and system upgrade
HHS-VHP	VHP Health Education Class Registration functionality
HHS-VHP	VHP Member Contact Management System Selection
HHS-VHP	VHP Member Health Risk Assessment and Wellness Portal Selection
HHS-VHP	VHP Member Personal Health Record (PHR)
HHS-VHP	VHP Milliman Module Implementation
HHS-VHP	VHP Mobile Application Development (currently in development by ISD)
HHS-VHP	VHP vendor and contract management system selection
HHS-Valley Medical Center	340B Compliance Tracking Software Solution
HHS-VMC	Cardio HeartLab upgrade for all older servers that will not support upgraded software for ICD-10 Compliance
HHS-VMC	Consumer Learning Centers established at 4 locations to provide support for consumer recovery programs
HHS-VMC	Core Health Information System – HealthLink
HHS-VMC	Glucose Meter Connectivity
HHS-VMC	International Statistical Classification of Diseases (ICD) upgrade from ICD-09 to ICD-10
HHS-VMC	Medical Staff Office Physician Credentialing Software
HHS-VMC-Pharmacy	VMC Outpatient Pharmacy Point of Sale Solution
Housing, Land Use, Environment, and Transportation (HLUET)-Agriculture & Environmental Management (AEM)	Multi-county collaborative improvement of "The Daily" software
HLUET-Parks & Recreation	Parks Network Performance Improvements
HLUET-Planning and Development (PLN)	Mac to PC Conversion
HLUET-PLN	Planning and Development Department new permit system
Public Safety and Justice Committee (PSJC)-Public Defender's Office (PDO), Alternate Defender's Office (ADO)	PDO Case Management System
PSJC-PDO, ADO	PDO Infrastructure Refresh
PSJC-PDO, ADO	Upgrade PDO Network Cabling
PSJC-Probation	Enhance Probation Public Portal
PSJC-Pretrial Services	Automated client management system for low-risk clients
PSJC-Sheriff's Office (SHO)	Transition fingerprinting (AFIS) and mug shot systems from San Jose Police Dept. to the Sheriff's Office
PSJC-SH0	Field Activity and Incident Management Backend Database Replacement
PSJC-SH0	Bandwidth Expansion
PSJC-SH0	Disaster Recovery Site Identification and Development
PSJC-SH0	e-Citation System Selection
PSJC-SH0	Microfiche Conversion
PSJC – SHO	Wireless Network Connectivity
PSJC-Sheriff's Office- Department of Correction (DOC)	DOC Warehouse Management System Replacement



Department List	Project Name
PSJC-SHO-DOC	Jail Management System Selection
PSJC-SHO-DOC	Jail Network Cabling Improvements
PSJC	Court System and Criminal Justice Information Control (CJIC) JRS Replacement Study
PSJC	Business Analytics & Reporting (Data Warehouse)
PSJC	California Disposition Reporting Improvement Project (CA-DRIP)
PSJC	County User ID pilot and software
PSJC	Data Collection & Sharing – Set up Pilot Data Warehouse for CJIC, Probation, SSA, DADS & Mental Health
PSJC	Electronic Warrants
PSJC	Law & Justice Systems Roadmap (LJSR)
PSJC	Legacy Systems Migration/Transformation Plan
PSJC	Web-based, Mobile CJIC Queries
Children, Seniors & Families Committee (CSFC)-Social Services Agency (SSA)-Central Services	Document Recognition (OPEX) – Phase 3 & 4
SSA-Central Services	Vital Signs Automation
CSFC-IHSS	In-Home Supportive Services (IHSS) Case Scanning
CSFC-IHSS	IHSS Data Warehouse
CSFC-IHSS	IHSS Remote Access
CSFC-SSA-Department of Aging and Adult Sevices	PAG Scanning
CSFC-SSA-Department of Employment and Benefit Services (DEBS)	Assignment Tracking for ASB Using TMT
CSFC-SSA-DEBS	Auto-Create TMT at Clerical Window
CSFC-SSA-DEBS	Auto-Create TMT at Scan/Validate Action
CSFC-SSA-DEBS	Auto-Upload of 45+ Listings for TMT Assignment
CSFC-SSA-DEBS	CalWIN eICT Interface to IDM
CSFC-SSA-DEBS	CATR Enhancement
CSFC-SSA-DEBS	Differentiate QR7 with & without Income for TMT Uploads
CSFC-SSA-DEBS	GA Loan Interface to VACS
CSFC-SSA-DEBS	Replacement of IEVS Application
CSFC-SSA-DEBS	SNAP Enhancements
CSFC-SSA-DEBS	Texting Capabilities for DEBS Eligibility
CSFC-SSA-DEBS	Use of Card Readers for Client Check-In
CSFC-SSA-Department of Family and Children's Services (DFCS)	CWS/CMS Replacement Modifications Implementation
CSFC-SSA-DFCS	DFCS Training Guides and Cheat-Sheets on Sharepoint vs LMS
CSFC-SSA-DFCS	IDM/Scanning
CSFC-SSA-DFCS	Mobile Applications / Mobility
CSFC-SSA-DFCS	SCC Dept of Education Database
CSFC-SSA-DFCS	Social Solutions' Efforts to Outcomes – CAPP African Ancestry Program
CSFC-SSA-DFCS	Social Solutions' Efforts to Outcomes in Data Warehouse/Dashboard
CSFC-SSA-Financial Management Services (FMS)	Collections BPR
CSFC-SSA-FMS	E-Timestudy Management Dashboards



Department List	Project Name
CSFC-SSA-FMS	FMS BPC Forecasting: Object 1 & Revenue
CSFC-SSA-FMS	FMS Data Warehouse Statistical Reports (Phase II)
CSFC-SSA-FMS	Tax Services (multiple project phases beginning with PAG)
CSFC-SSA-Information Systems (IS)	HHS MEDS New Batch Interface
CSFC-SSA-IS	Upgrade BOE to R4



49



Appendix C: Enterprise Content Management (ECM) Projects

ISD ECM Project for Department shown below	Project Title	Project Type
	ent – Public or Internal Facing	
Countywide	Enable login to County public portal using one's social media account (Facebook, Twitter, etc.)	Application – Public Facing
Countywide	General application development related to public portal that will benefit all departments	Application – Public Facing
FGOC-ESA	Case management system (EOD and Labor Relations Pilot)	Application – Internal Facing
FGOC-ESA	My Benefits page in employee portal	Application – Internal Facing
FGOC-FIN	Payment Request System support turnover	Application – Internal Facing
FGOC-ISD-APS	Application Development Standards and Methodologies	Application – Internal Facing
FGOC-PROC	Procurement Contract and PO Lookup Redesign	Application – Internal Facing
FGOC-ROV	Voter Opt-out from Paper Voter Guides	Custom Application - Public Facing
HHS-PH	Public Health SendHub	Custom Application - Public Facing
HHS-VMC	Santa Clara Valley Medical Center Provider Search	Application – Public Facing
HHS-VMC	Valley Medical Center (VMC) Bed Building Project Collaboration	Custom Application - Public Facing
HLUET-R&A	Roads & Airports Live Camera feed	Application – Public Facing
HLUET-R&A	Roads & Airports – Online Order of Plans and Specs with ePay	Application – Public Facing
HLUET-R&A	Roads & Airports Special Event Permit System Phase 2	Application – Public Facing
PSJC-SH0	Java app migration to .NET – Sheriff Fingerprint Scheduling	Application – Public Facing
PSJC-SHO-DOC	Java app migration to .NET – Department of Correction Online Visitor Registration	Application – Public Facing
Business Process Auto	pmation	
FGOC-ESA	Tuition Reimbursement Process Automation	Business Process Automation
HHS-PH	CHDP PM160 Form Document Imaging	Business Process Automation
HHS-PH	HHS PM160 Form Scanning and Automation	Business Process Automation
Document Manageme	nt	
FGOC-COB	Public Board Item Documents	Document Management
eForms		1
Countywide	eForms Initiative	eForms
Countywide	Employee Excellence Award Forms	eForms
Countywide	Employee Suggestion Program Form	eForms
Countywide	Mobile Device Activation Request	eForms
Countywide	Wireless Remote Access Request	eForms
FGOC-COB	Advisory Board Appointment	eForms
FGOC-COB	Changed Assessment Appeal Application	eForms
FGOC-ISD	Automate Site and Site Collection creation	eForms
FGOC-ISD	Centralized Cellular/Mobile eForm	eForms
FGOC-ISD	ISD – Hardware and Software Request	eForms
FGOC-ISD	Hardware and software request form for ISD-supported departments	eForms
FGOC-ISD	IT User Request Form	eForms

Projects Planned for April 2013 – July 2014



Projects Planned for April 2013 – July 2014

ISD ECM Project for Department		
shown below	Project Title	Project Type
FGOC-ISD	IT User responsibility statement	eForms
FGOC-ROV	Election Officer application	eForms
HHS-MH	Unicare report request	eForms
HHS-VMC	HHS IS PMO Project Request Form	eForms
HLUET-PLN	Violation Complaint form	eForms
PSJC-DA	Visitation violation report	eForms
PSJC-DA	District Attorney Consumer Complaint Against a Business Form	eForms
PSJC-PD0	Public Defender's Office Special Expense form	eForms
PSJC-PD0	Public Defender's Office Vacation Request form	eForms
mployee Portal – Site	e Migration, Redesign, and New Sites	
Countywide	Employee portal redesign and migration	Employee Portal – Site Redesign
Countywide	KnowledgeLake SharePoint (SP) document imaging infrastructure modules migration to SP2010 environment	Employee Portal – Migration
Countywide	Payroll intranet site migration	Employee Portal – Migration
Countywide	SharePoint 2007 to SharePoint 2010 sites migration	Employee Portal – Migration
Countywide	Training for Office Professionals "TOP" Program intranet site migration	Employee Portal – Migration
FGOC-CCO	County Counsel site migration	Employee Portal – Migration
FGOC-CEO	County Executive's Office – Center for Leadership and Transformation site migration	Employee Portal – Migration
FGOC-CEO	Climate Action and Sustainability Program intranet site migration	Employee Portal – Migration
FGOC-CEO-OBA	Office of Budget and Analysis – intranet site migration	Employee Portal – Migration
FGOC-CEO-OES	Office of Emergency Services intranet site migration	Employee Portal – Migration
FGOC-CEO-OPA	Office of Public Affairs site migration	Employee Portal – Migration
FGOC-ESA	EPAR-ELPF migration from SP2007 to SP2010	Employee Portal – Migration
FGOC-ESA	ePay migration to SP2010	Employee Portal – Migration
FGOC-ESA	Employee Services Agency – intranet site migration	Employee Portal – Migration
FGOC-FIN	ASAP intranet site migration	Employee Portal – Migration
FGOC-FIN	HARP intranet site migration	Employee Portal – Migration
FGOC-FIN	Kronos intranet site migration	Employee Portal – Migration
FGOC-FIN-CON	Controller intranet site migration	Employee Portal – Migration
FGOC-ISD	Information Services Department internal site redesign	Employee Portal – Site Redesign
FGOC-ISD	LiquidOffice EPAR old data migration for selected departments	Employee Portal – Migration
FGOC-ISD-PS	Printing Services intranet site migration	Employee Portal – Migration
HHS-VMC	HealthLink Project Employee Portal site redesign	Employee Portal – Site Redesign
HHS-VMC	Health and Hospital System (HHS) Employee Portal	Public Portal – New Site Request
HHS-VMC	HHS Quality Improvement Employee Portal new site	Employee Portal – New Site Request
HHS-VMC	HHS Strategic Roadmap video	Employee Portal – Site Redesign
HHS-VMC	Information Services System Inventory site migration	Employee Portal – Migration
HHS-VMC	Population Health Management / Chronic Care team site migration	Employee Portal – Migration
HLUET-PRK	Parks intranet site migration	Employee Portal – Migration



Projects Planned for April 2013 – July 2014

ISD ECM Project for Department shown below	Project Title	Project Type
ePayments		,
FGOC-CEO-OHR	Office of Human Relations (OHR) ePayments	ePayments
FGOC-FIN	ePayments Project and Info Site	ePayments
FGOC-FIN-TCO	Tax Collector ePayment Redesign	ePayments
Mobile Application De		
HHS-VMC	VMC Mobile App	Application – Native Mobile Public App
HLUET-AEM-VC	Vector Control Mobile Application	Application – Native Mobile Public App
HLUET-AEM-WM	Weights and Measures Scangun Replacement	Application – Native Mobile Enterprise App
New Internal Site Requ		
FGOC-FIN	Finance intranet site migration	New Internal Site Request
HHS-MH	Mental Health Adult Services Resources	New Internal Site Request
HHS-MH	Mental Health Audit Binder	New Internal Site Request
HHS-PH	Public Health Accreditation project site	New Internal Site Request
HHS-PH	Public Health intranet	New Internal Site Request
HHS-PH	Public Health Project Portfolio	New Internal Site Request
HHS-VMC	HHS IS PMO Timekeeping	New Internal Site Request
HHS-VMC	HHS MySite Deployment	New Internal Site Request
HHS-VMC	HHS Outside Employment-Activity Form v2.0	New Internal Site Request
HHS-VMC	Patient Education Content on Valley Pages	New Internal Site Request
HHS-VMC	Patient Education on HHS Portal	New Internal Site Request
HHS-VMC	PICU Training Videos on HHS Portal	New Internal Site Request
	design and New Site Requests	
Countywide	Ongoing Public Portal Enhancements	Public Portal – New Site Request
FGOC-CEO	Veteran Services – site redesign	Public Portal – New Site Request
FGOC-CEO	Sister County – site redesign	Public Portal – Site Redesign
FGOC-CEO	Sustainability – site redesign	Public Portal – Site Redesign
FGOC-CEO-OHR	Office of Human Relations – site redesign	Public Portal – Site Redesign
FGOC-D3	District 3 public – site redesign	Public Portal – Site Redesign
FGOC-D3	District 3 public blog	Public Portal – New Site Request
FGOC-ESA	Employee Assistance Program – site redesign	Public Portal – Site Redesign
FGOC-ESA	Retirement process verification automation	Public Portal – New Site Request
FGOC-FIN	Finance Agency Public – site redesign	Public Portal – Site Redesign
FGOC-FIN-CON	Controller new site	Public Portal – New Site Request
FGOC-ISD	Information Services Department new site	Public Portal – New Site Request
FGOC-ROV	Registrar of Voters – site redesign	Public Portal – Site Redesign
FGOC-TAX	Tax Collector – site redesign	Public Portal – Site Redesign
HHS-DADS	Department of Alcohol and Drug Services public – site redesign	Public Portal – Site Redesign
HHS-MH	Mental Health – site redesign	Public Portal – New Site and Site Redesign
HHS-PH	Public Health – site design enhancements	Public Portal – Site Redesign
HHS-PH	Public Health Virtual Joint Information Center (JIC)	Public Portal – New Site Request
HHS-VHP	Valley Health Plan Mobile Application site	Public Portal – New Site Request



53

Projects Planned for April 2013 – July 2014

ISD ECM Project for Department shown below	Project Title	Project Type
HHS-VHP	Wellness site redesign	Public Portal – Site Redesign
HHS-VMC	HHS Conference Rooms	Public Portal – New Site Request
HHS-VMC	HHS Finance Dashboards	Public Portal – New Site Request
HHS-VMC	HHS Forms Repository	Public Portal – New Site Request
HHS-VMC	HHS Nursing Portal	Public Portal – New Site Request
HHS-VMC	HHS PIO Portal	Public Portal – New Site Request
HHS-VMC	HHS Policies and Procedures	Public Portal – New Site Request
HHS-VMC	HHS Public facing iCals	Public Portal – New Site Request
HHS-VMC	VMC Rehab public site	Public Portal – New Site Request
HLUET-AEM-DEH	Environmental Health – site redesign	Public Portal – Site Redesign
HLUET-AEM-DEH	Environmental Health Central Permit Application and Tracking	Public Portal – New Site Request
HLUET-PRK	Parks and Recreation – site redesign	Public Portal – Site Redesign
PSJC-PROB	Probation – site redesign	Public Portal – Site Redesign
PSJC-PTS	Pretrial Services – site redesign	Public Portal – Site Redesign
Records Management		
FGOC-COB	Board of Supervisors' Archive Project	Records Management
PSJC-DA	District Attorney's Office Juvenile Electronic Reporting	Records Management

Projects Completed July 2012 – April 2013

ISD ECM Project for Department		
shown below	Project Title	Project Type
Application Developme	nt – Public or Internal Facing	
Countywide	Public Portal Content Administration and Governance Tool rollout	Application – Internal Facing
FGOC-ISD	System Change Notice (SCN)	Application – Internal Facing
HLUET-AEM	Animal Licensing Jurisdiction Verification	Application – Public Facing
eForms		
HLUET-AEM-AC	Animal Control – Volunteer and Lost Pet eForms	eForms
Internal Site Requests		
FGOC-D3	District 3 Internal Site	Project Collaboration
FGOC-ISD-GIS	Intranet site migration	Employee Portal – Migration
Mobile Application Dev	elopment	
FGOC-ROV	Mobile App for eVoterGuide	Public native mobile app
Public Portal – Migratio	n, Site Redesign and New Site Requests	
Countywide	Template 12 Development	Public Portal – New Site Request
CSF-DCSS	Public – Child Support Service site redesign	Public Portal – Site Redesign
CSF-SSA	Public – "EC" Employment Connection site redesign	Public Portal – Site Redesign
FGOC-CEO	Gun Buy Back web page	Public Portal – New Site Request
FGOC-CEO-OES	9-1-1 – Template 12 Conversion	Public Portal – Migration
FGOC-CEO-OES	AlertSCC – Migrate from Vignette to SharePoint Platform	Public Portal – New Site and Site Redesigr



Projects Completed July 2012 – April 2013

ISD ECM Project for Department shown below	Project Title	Project Type
FGOC-CEO-OES	Office of Emergency Services public site redesign	Public Portal – Site Redesign
FGOC-COB	Whistleblower site	Public Portal – New Site Request
FGOC-D2	Reentry Services (District 2) – AB 109 new site	Public Portal – New Site Request
FGOC-D5	District 5 Supervisor Simitian new site	Public Portal – New Site Request
FGOC-ESA	Consolidate and Integrate EOD site redesign	Public Portal – Site Redesign
FGOC-ESA	ESA public site redesign	Public Portal – Site Redesign
FGOC-ESA	Public – OSEC – Occupational Safety and Environmental Compliance new site	Public Portal – New Site Request
FGOC-FAF	Template 12 conversion	Public Portal – Migration
FGOC-FIN-DOR	Intranet new site	Public Portal – New Site Request
FGOC-FIN-DOR	Template 12 conversion	Public Portal – Migration
FGOC-ISD-GIS	GIS public site redesign	Public Portal – Site Redesign
FGOC-PROC	Procurement – site redesign	Public Portal – Site Redesign
FGOC-ROV	Add Precincts Report to Election Results	Public Portal – New Site Request
FGOC-ROV	Online Voter Guide Lookup	Public Portal – New Site Request
HHS-CHS	CHI-Kids Site migration	Public Portal – New Site
HHS-VHP	Provider Search enhancements	Public Portal – Site Redesign
HHS-VMC	HHS IS PMO Portfolio new site	Public Portal – New Site Request
HHS-VMC	Mother Milk Bank – site redesign	Public Portal – Site Redesign
HHS-VMC	VMC site redesign	Public Portal – Site Redesign
HLUET-PLN	Code Enforcement site redesign	Public Portal – Site Redesign
HLUET-PLN	Department of Planning and Development – site redesign	Public Portal – Site Redesign
HLUET-PLN-OAH	Affordable Housing – site redesign	Public Portal – New Site Request
HLUET-PLN-OFM	Fire Marshal – site redesign	Public Portal – Site Redesign
HLUET-R&A	Roads and Airports – Traffic Congestion site redesign	Public Portal – Site Redesign
PSJC-DA	District Attorney public site redesign	Public Portal – Site Redesign
PSJC-PDO-ADO	Create ADO Site Collection	Public Portal – New Site Request
PSJC-PD0	Template 12 conversion	Public Portal – Migration

