

# **Los Angeles County Chief Information Office**

## **Integrated Business Automation Plan**



**Fiscal Year 2006-07**

*"To Enrich Lives Through Effective And Caring Service"*

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Chief Information Officer**



## **County of Los Angeles**

### **Integrated Business Automation Plan Fiscal Year 2006-2007**

**February 2007**



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## CIO Message 2006-2007



The Los Angeles County Board of Supervisors has adopted a Strategic Plan that sets a standard for the County as a responsive and effective service provider where the delivery of timely and customer centric services is the key measure of success.

The County's Guiding Coalition, comprised of key County leadership, is charged with leading the implementation and management of the strategic planning process. As a member of the Coalition, it is my responsibility to ensure that the County's information technology (IT)

resources are used strategically to affect the delivery of information and services to the public while enhancing the business processes of departmental operations.

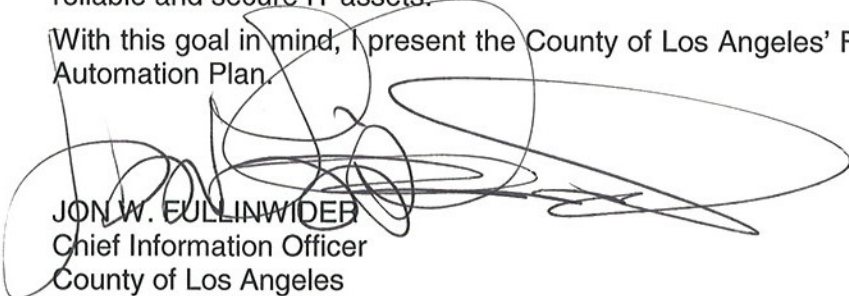
The foundation for evaluating countywide strategies and IT opportunities rests with the development of departmental Business Automation Plans (BAP) and their consolidation into a countywide Integrated Business Automation Plan (IBAP). The departmental BAP provides a comprehensive planning framework for ensuring alignment of IT initiatives to departmental business objectives. The BAP represents both a strategic (three years) and tactical (one year) business plan and is the key document for communicating departmental IT directions and alignment with countywide strategies. Lastly, the BAP promotes opportunities to assess and leverage common departmental needs, interests and activities to promote data sharing and delivery of services in a more effective and efficient manner.

Annually, the outcome of this planning process is summarized in the form of the Integrated Business Automation Plan (IBAP). The IBAP provides an overall summary of countywide strategic IT directions, as well as current budget and resource utilization trends.

The importance of the IBAP rests with its presentation of key Countywide and departmental IT initiatives. Information Technology is a key element in the delivery of information and public services. As such, an understanding by the Board of Supervisors and all County management is essential to ensure the maximum value and benefits of technology-based solutions are understood and attained.

The County's efforts to transform its business process while providing its constituents with convenient, high quality customer-focused services depends on its ability to support scalable, reliable and secure IT assets.

With this goal in mind, I present the County of Los Angeles' FY 2006-2007 Integrated Business Automation Plan.

  
JON W. EULLINWIDER  
Chief Information Officer  
County of Los Angeles



# 1 Executive Summary

## 1.1 Purpose

The Integrated Business Automation Plan (IBAP) is an annual report of major departmental and enterprise-wide IT activities for the County of Los Angeles (County). This report provides a framework for understanding and evaluating the use, management and deployment of IT resources. The IBAP highlights the progress made toward meeting the goals and objectives outlined in each departmental Business Automation Plan (BAP), and describes each department's accomplishments during the prior fiscal year. It also identifies strategies for implementing major countywide initiatives, identifies emerging technology trends, and provides an analysis of IT financial and inventory data.

The County makes substantial financial expenditures operating and contracting for information technology (IT) systems, services and projects. IT encompasses computer and communications infrastructure (hardware and software), communications (voice, data, and video), and databases, as well as the applications using that infrastructure to deliver services to internal and external customers. These applications and corresponding data are assets of the County that provide essential information management and communication capabilities. Well-developed IT projects become resources for county operations that will result in improved efficiency, program outcomes and worker morale.

The systematic development and review of plans for IT management and investment provide a mechanism for evaluating the alignment of IT direction with the County's core business goals, as well as a process for determining the most cost-effective allocation of limited resources. The BAP process provides a structured framework to support that objective.





## 1.2 County Strategic Plan

The Strategic Plan adopted by the Board of Supervisors articulates a vision of shared values and aspirations for the County of Los Angeles. This statement describes the County as a responsive, efficient and effective service provider, delivering value to its citizens.

In June 2002, the County formed a “Guiding Coalition” to provide leadership to its Strategic Planning process. The Coalition has since revised the County Strategic Plan periodically. The exhibits below and on the page that follow summarize the most recent version, released in March of 2006.

### County Vision

Our ***purpose*** is to improve the quality of life in Los Angeles County by providing responsive, efficient and high quality public services that promote self-sufficiency, well-being and prosperity of individuals, businesses and communities.

Our ***philosophy*** of teamwork and collaboration is anchored in our shared values:

- Responsiveness
- Integrity
- Professionalism
- Commitment
- Accountability
- A Can-Do Attitude
- Compassion
- Respect for Diversity

Our ***position*** as the premier organization for those working in the public interest is established by:

- A capability to undertake programs that have public value.
- An aspiration to be recognized through our achievements as the model for civic innovation.
- A pledge to always work to earn the public trust.

### County Mission

***“To enrich lives through effective and caring service.”***



As noted in the CIO Message, the County will achieve this vision and mission through four organizational goals and four program goals that will be jointly pursued by the 39 separate County departments and commissions.

<b>County Strategic Goals</b>	
<b>Organizational Goals</b>	
<b>1. Service Excellence</b>	Provide the public with easy access to quality information and services that are both beneficial and responsive.
<b>2. Workforce Excellence</b>	Enhance the quality and productivity of the County workforce.
<b>3. Organizational Effectiveness</b>	Ensure that service delivery systems are efficient, effective and goal oriented.
<b>4. Fiscal Responsibility</b>	Strengthen the County's fiscal capacity.
<b>Program Goals</b>	
<b>5. Children &amp; Families</b>	Improve the well-being of children and families in Los Angeles County as measured by achievements in the five outcome areas adopted by the Board: good health; economic well-being; safety and survival; emotional and social well-being; and education/workforce readiness.
<b>6. Community Services</b>	Improve the quality of life for residents of Los Angeles County's unincorporated communities by offering a wide range of department coordinated services responsive to each community's specific needs.
<b>7. Health &amp; Mental Health</b>	Implement a client-centered, information-based health and mental health services delivery system that provides quality services across County departments.
<b>8. Public Safety</b>	Increase the safety and security of all residents in Los Angeles County through well-coordinated, comprehensive response and recovery plans for terrorist incidents.

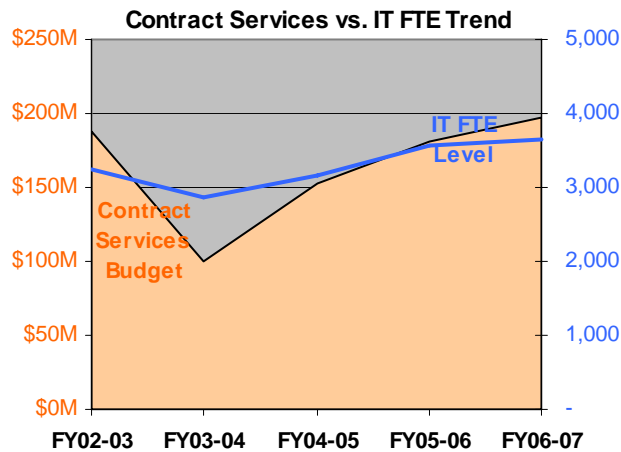
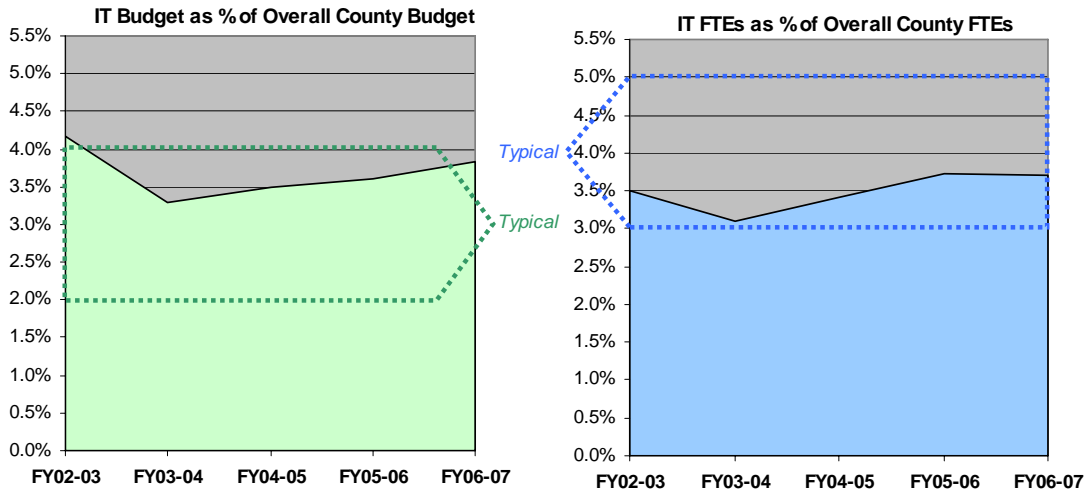


## 1.3 County IT Environment

This section summarizes the County’s IT staffing and budget, progress toward County technology standards, and strategic alignment of major IT initiatives. Additional information on IT staffing, budget, and technology can be found in Chapter 2, while Chapters 3 and 4 contain the details of the County’s IT strategies and projects.

### IT Budget and Staffing

The left-hand chart below depicts the County’s IT budget as a percentage of overall budget. This key indicator is down from its level of four years ago, and is now within the range of 2% to 4% typical of most local governments. The trend suggests that while the County has succeeded in managing its overall IT costs, **it will need to closely monitor IT spending in future years.**



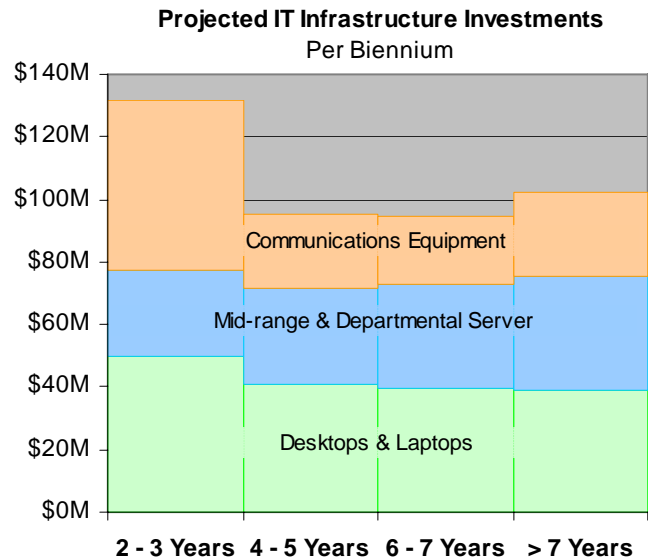
The right-hand chart above shows IT staffing levels as a percentage of overall County staffing levels on an FTE basis. **As a percentage, IT staffing has remained relatively stable over the last two years** – and near the lower end of the 3% to 5% band typical of most local governments.

The chart at left reflects the County’s increasing reliance on contractors to ensure consistent availability of requisite IT knowledge and skills. Use of contractors allows the County to mitigate a variety of factors that impact the County’s ability to consistently maintain staffing levels and keep pace with rapidly changing knowledge and skill requirements.



The departments provided the CIO with their projected IT infrastructure investment needs over an eight-year timeframe. Replacement of obsolete networking and communications equipment drives much of the higher spending requirements in the initial 2 to 3 years. **As suggested by the chart below, maintaining and upgrading IT infrastructure represents a significant capital cost of \$430 million over the next 7 to 9 years.** The County must plan effectively to address these core technology needs.

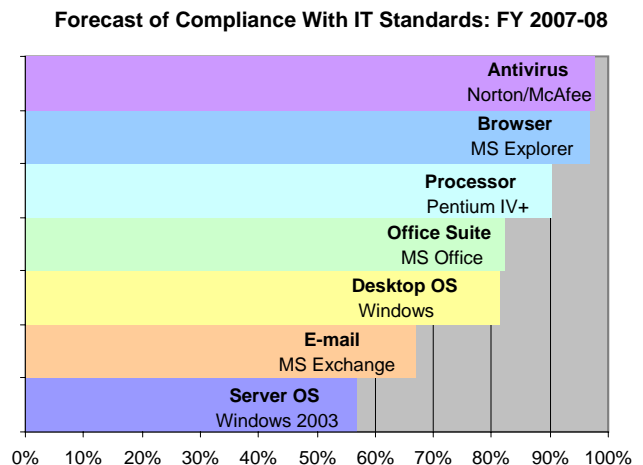
One critical project that exemplifies the need to adequately plan and budget for this looming capital outlay is the replacement of the County's LAC-USC hospital, including migration of 36 existing IT systems to the new facility in time for its November 2007 opening. DHS, the CIO and Internal Services (ISD) are augmenting the DHS project team by providing project management and oversight for the IT related components, estimated to cost \$22 million.



### County IT Standards

One of the CIO's prime responsibilities is encouraging departments to follow County IT standards. **Compliance with these standards lowers acquisition costs, improves security and interoperability, and makes it easier for staff to transition between departments.**

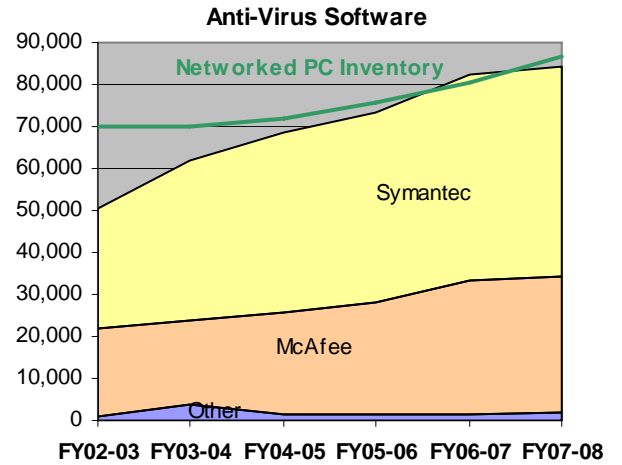
The CIO has negotiated enterprise licensing agreements for many of the software standards, making it easier and less expensive for departments to adopt them. **This summary chart shows the progress departments are making in achieving IT standardization.** Charts on the following pages provide additional detail<sup>1</sup>.



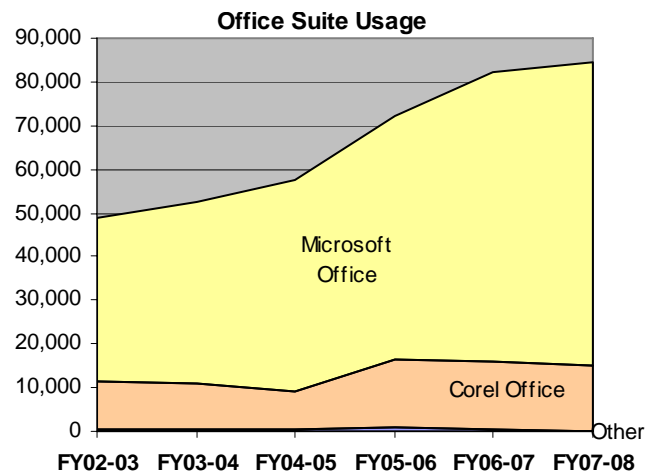
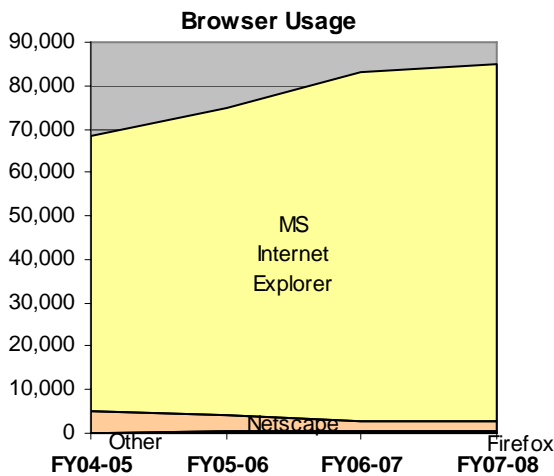
<sup>1</sup> 83% of the servers forecast to be non-compliant with the Windows 2003 standard are concentrated in 3 departments.



One of the first enterprise licensing agreements negotiated by the County was for anti-virus software. Departments receive discounted pricing and priority support for either of the County standards: Symantec or McAfee. As shown on the chart, **in FY 2006-2007 anti-virus deployment is projected to cover all of the County's networked desktop and laptop computers.**

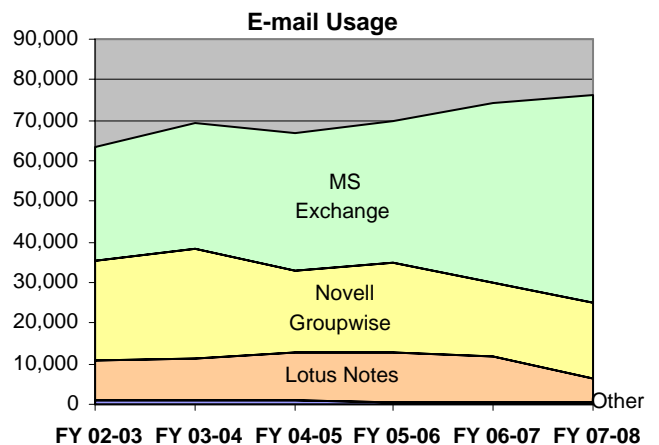


The County can expect similar results as departments adopt enterprise licensing. The charts below display the increasing dominance of the standard Microsoft productivity software.



Departments have migrated about half of the County's E-mail users to the Microsoft Exchange standard. A number of departments remain on Novell GroupWise, due in part to the costs of upgrading from a functional product which is actively supported by the vendor.

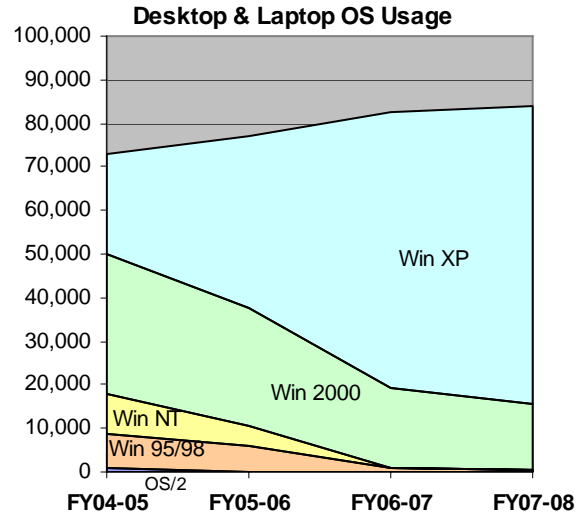
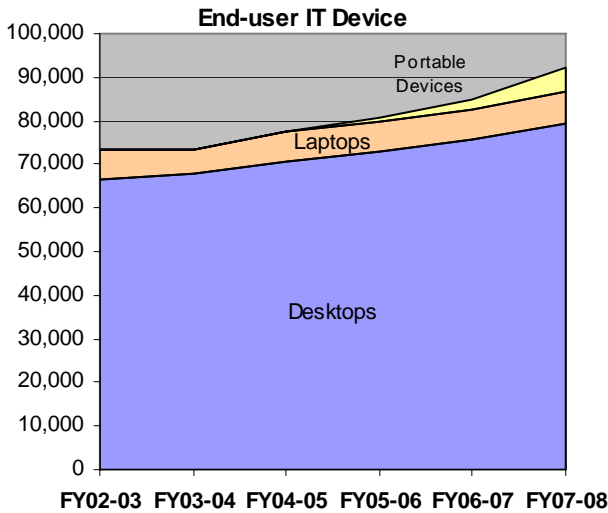
Of greater concern are the departments (i.e., District Attorney, Public Social Services, and some units of Health Services) using Lotus Notes for E-mail. **Lotus Notes E-mail is losing market share to the County's standard, Microsoft Exchange.** As shown in the right-hand chart, departments are reducing their dependence on Notes for E-mail. Those that have not already done so must formulate a strategy for migrating to Exchange.



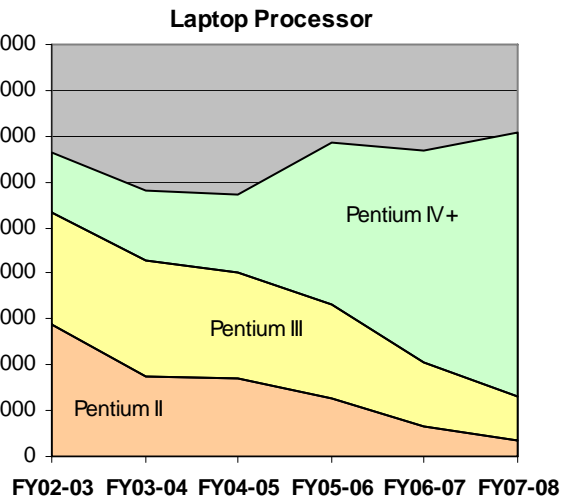
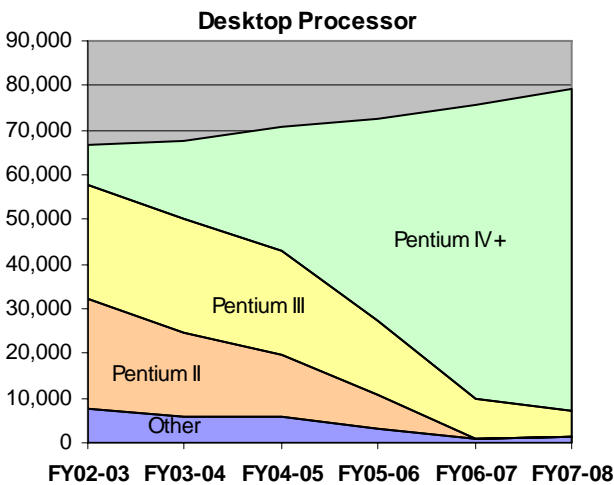




**Desktop computers remain the primary device used by staff for information access.** Laptops and portable devices show only modest growth. **Windows XP is rapidly replacing older operating systems.** Windows NT, 98, and 95 are no longer supported as a workstation OS by Microsoft and pose a security risk. Windows 2000 has transitioned to extended support, which will end in 2010.



Departments are rapidly replacing their older desktop computers with Pentium IV-based models (or above). Replacement cycles for laptop computers are a bit longer, but the trend toward newer Pentium IV processors is also evident.



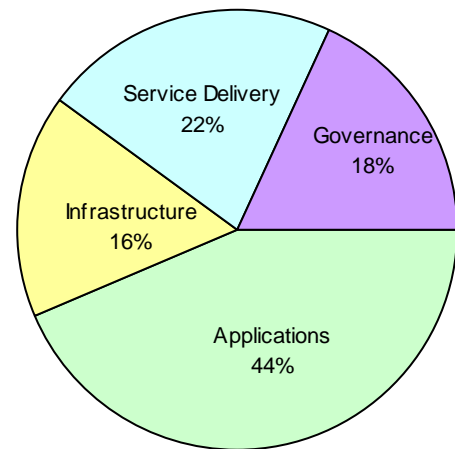


## Strategic Alignment of Major IT Projects

The County currently has 40 major IT projects underway or recently completed. This section provides an overview of how these projects align with County goals and compare with local government trends. Chapter 3 examines in greater detail how the projects support the County's overall and IT strategic goals. Chapter 4 describes each project and its key benefits. Appendix B provides detailed tables supporting the strategic alignment analysis.

This chart provides a set of strategic IT trends seen in other local governments as a framework for evaluating the County's strategic IT projects. The analysis counts the number of County IT projects that directly support each trend listed in the table below. 33 of the 40 projects directly support one or more focus areas. **This comparison shows that the County has strategic IT projects covering all trends in the four focus areas (i.e., applications, infrastructure, service delivery, and governance).**

County Strategic IT Projects by "Local Government" Focus Areas



A plurality of the projects aligns with the *Applications* focus area. This is a positive indicator, as departments tend to receive the most value from investments in software to enhance business operations. Other IT focus areas are supported in a balanced fashion relative to their importance.

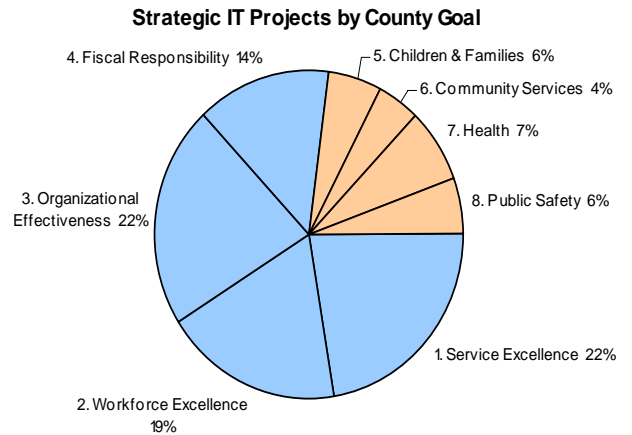
When comparing the County's projects to local government strategic IT trends, the areas of *eGovernment*, *Field Automation*, *Regionalization*, and *Enterprise IT Standards/Processes* have the largest number of associated County projects. This speaks to the high priority that the County has assigned to providing government services electronically – *a direct benefit to constituents*. These trends also highlight the County's lead role in cooperative IT initiatives with other local jurisdictions and agencies, and with standardizing IT across the enterprise – *supporting service efficiencies and economies of scale*.

Local Government Focus Area / Strategic IT Trend	# County IT Projects Aligned
<b>Applications</b>	<b>24</b>
eGovernment	8
Field Automation	7
Enterprise Content Management	4
Customer Relationship Management	2
Integrated Land Information	3
<b>Infrastructure</b>	<b>9</b>
Server Consolidation	4
Network Technology Convergence	3
Intranet	1
Municipal WiFi	1
<b>Service Delivery</b>	<b>12</b>
Regionalization	7
Support Consolidation	4
Pay Anywhere	1
<b>Governance</b>	<b>10</b>
Enterprise I/T Standards/Processes	8
Centralized/Standardized I/T Procurement	2



A similar comparison against County goals shows that the strategic IT projects offer broad support for the four organizational goals – in fact, *all* of the projects support goals 1 and 3. In addition, each of the program goals is supported by multiple projects.

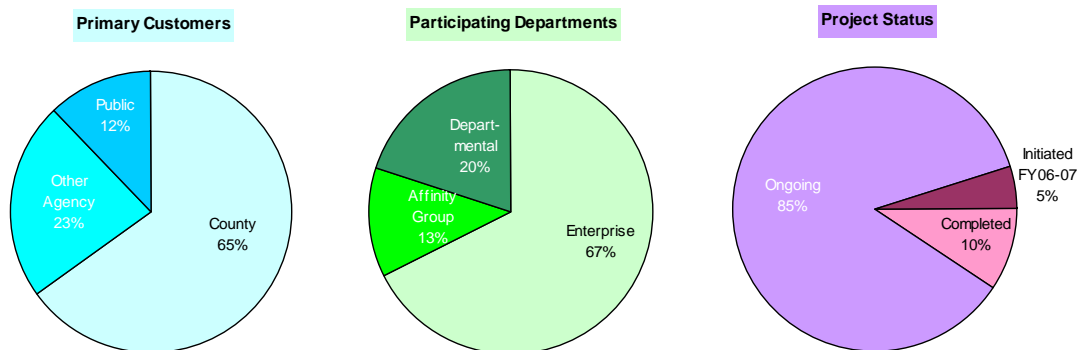
Strategic Goal	# County IT Projects Aligned
<b>Organizational</b>	
1. Service Excellence	40
2. Workforce Excellence	34
3. Organizational Effectiveness	40
4. Fiscal Responsibility	26
<b>Program</b>	
5. Children & Families	10
6. Community Services	8
7. Health	13
8. Public Safety	10



The County also evaluated each of the strategic IT projects described in Chapter 4 in the following three areas:

- **Primary Customers** – About two-thirds of the projects have an internal County customer focus; the remainders have an external focus on serving the public or other agencies.
- **Participating Departments** – The majority of projects are enterprise in nature, or span affinity groups.
- **Project Status** – Nearly half of the project portfolio were initiated in the prior fiscal year. The focus for FY 2006-2007 will be management and oversight of the numerous ongoing projects.

**Strategic IT Project Summary**



Primary Customers	Projects	Participating Departments	Projects	Project Status	Projects
County	37	Enterprise	27	Completed	4
Other Agency	13	Affinity Group	5	Ongoing	36
Public	7	Departmental	8	Initiated FY06-07	2



## 1.4 County IT Strategic Directions

The CIO has established a set of IT Strategic Directions that identify major goals related to IT and its ability to serve as an enabler to meet the needs and goals of the County of Los Angeles, in alignment with the County's overall Strategic Plan. The goals and subordinate strategies are interrelated, and meant to provide a cohesive approach to the use of IT.

The County has been successful in addressing each of these goals through its implementation of key IT projects, detailed in Chapters 3 and 4. The remainder of this executive summary outlines these goals and strategies, along with their major accomplishments and current projects.

### **GOAL ONE: CONDUCT COUNTY GOVERNMENT ELECTRONICALLY.**

1. Strategy – Utilize electronic business technologies to reduce costs and improve service.
2. Strategy – Promote use of electronic communication.

The County Strategic Plan has set the direction for the County of Los Angeles to bring seamless electronic government (eGovernment/eServices) to the public. This recognition stems from a revolution in the use of technology during the 1990s. The "Internet Age" has had a profound impact on the way citizens and businesses accomplish their business. The County's customers expect government service to be as convenient, open, centralized and service-oriented as the private sector.

The transformation to eGovernment redefines the ways in which citizens and government interact. By harnessing the scope and power of the Internet, the County will be able to expand the delivery of information and services to constituents. Similarly, the intranet offers the same benefits among departments and their employees.

The following tables highlight major accomplishments and key projects associated with the strategic IT goal of conducting County government electronically.

### ***Major Accomplishments***

- Implemented a common **Electronic Credit Card Payment platform (Link2Gov)** for any department to accept payments over the Internet.
- Installed the **InkaVote Plus** system providing audio assistance for blind and disabled voters, as well as electronic ballot screening to detect over-voting, safeguarding the process and results for all of the electorate.
- Implemented **document imaging and workflow** for the Sheriff, Probation and District Attorney with options to include other County departments as needed.



- Implemented **Electronic Development and Permit Tracking System (eDAPTS)** permitting and inspection modules in four County departments (Public Works, Fire, Public Health and Regional Planning), consolidating several disparate applications to a single Web/GIS-enabled system and providing more efficient services to the public.

### **Key Projects**

- **County Portal Rewrite** – Makes the County’s existing Website easier to use, providing countywide standards for presentation, content, navigation, and technical infrastructure.
- **One-E-App** – Allows applicants to determine their eligibility for various social services programs regardless of which department administers them.
- **Intelligent Traffic Systems** – Provides real-time roadway information via the Internet and portable electronic devices.
- **COGNOS Business Intelligence Projects** – Tailors a set of performance measures for each department with data gathered from multiple systems.
- **Medical Passport** – Provides secure and confidential medical records for foster children, accessible by authorized care providers and social workers via the Internet.
- **Enterprise Content Management (ECM)** – Supports common processes and applications across departments to manage documents in various digital formats.
- **Los Angeles Document and Object eXchange (LADOX)** – Manages the flow of documents between criminal justice departments using the ECM framework.
- **ISAB Service Oriented Architecture & Web Services** – Establishes a global standard for exchanging information among the criminal justice departments and outside agencies.
- **Patient-related Electronic Document Imaging Management (PEDIM)** – Supports the first “near paperless hospital” in the nation at LAC + USC using the ECM framework.
- **Library Public Wireless Access** – Provides patrons and staff with Internet and network access on laptop computers.
- **Assessor Information Management System (AIMS)** – Automates Assessor workflow, replacing outdated systems and manual processes with an integrated application accessible at the office and in the field.





## **GOAL TWO: PROVIDE SECURE ACCESS TO ELECTRONIC APPLICATIONS.**

1. Strategy – Develop a countywide information privacy program to safeguard the management of sensitive and confidential information.
2. Strategy – Develop a countywide security architecture (policies, procedures, and communication processes) and program to protect critical information assets and mitigate the impact of computer security incidents.
3. Strategy – Develop a technology infrastructure that provides secure data access to ensure confidentiality and security.

While eGovernment and electronic service delivery initiatives enable the public to have increased access to County services, it brings a number of challenges in maintaining the security of IT assets (computers and networks) and maintaining the privacy of the public's personal information as required by law. The integrity, confidentiality, and availability of these assets and information must be protected from internal and external threats through appropriate and sufficient security measures.

In order to mitigate the risk of an attack on the County's IT assets and to safeguard the public's information, the County has developed a comprehensive security program for defending its information infrastructure that enables it to reduce information security exposures and respond appropriately to any incidents which may occur. The County has undertaken a number of actions which have significantly reduced the County's exposure to threats, and has put in place policies and procedures to prevent, detect, respond to and mitigate these threats.

The following tables highlight major accomplishments and key projects associated with the strategic IT goal of providing secure access for electronic applications.

### ***Major Accomplishments***

- Implemented **Strohl Systems Business Continuity Planning** software, and trained all departments on its use.
- Implemented **countywide wireless security architecture and standards** to ensure secure wireless communications.
- Developed a **comprehensive anti-spam strategy** and acquired enabling software to increase the relevancy of electronic mail and improve employee productivity.
- Acquired and piloted **Internet filtering software** to control inappropriate use of County IT assets.
- Developed and published **countywide desktop and server security standards** to protect the confidentiality, integrity, and availability of information.



- Expanded the County's Information Security Program by establishing an **Application Security Engineering Team** to develop best practices, standards, and guidelines for development and acquisition of IT applications.
- Implemented an Information Security Intranet Website to provide security awareness information to all County employees.

### **Key Projects**

- **Secure Messaging** – Provides confidentiality, integrity, and authenticity to electronic messages within the County and with external entities.
- **Business Continuity Program** – Develops and tests a plan for each department to recover critical services in the event of a disaster.
- **Privacy Legislation Compliance Program** – Ensures compliance with Federal and State requirements for privacy of medical records.
- **Information Security Awareness Program** – Provides web-based IT security training to all employees using County IT resources.
- **Computer Security Incident Response Process** – Provides a response capability to computer incidents to reduce loss, preserve evidence, and respond to privacy issues.
- **Application Security Guidelines** – Establishes a standardized application security lifecycle for developing/acquiring, operating, and maintaining business applications in a secure manner.
- **Vulnerability Assessment** – Identifies and measures security vulnerabilities that potentially could impact the County's IT environment.
- **Mobile Device Information Protection Program** – Implements County standards for data encryption on laptop computers and other portable digital devices.
- **Orange County Disaster Recovery Site** – Provides a backup location for computer operations and data storage in support of critical services during a disaster.
- **Internet Content Filtering** – Provides a centralized control mechanism for preventing employee access to inappropriate websites.



### **GOAL THREE: UTILIZE ENTERPRISE SOLUTIONS TO MEET COMMON NEEDS.**

1. Strategy – Provide a high-capacity, scalable, wide area network (WAN) that supports existing and planned applications.
2. Strategy – Ensure appropriate acquisition of IT systems, applications and services.
3. Strategy – Share technology resources.

Historically, the County has built its information systems departmentally and incrementally, resulting in “silo” systems, each with its own business rules, data models and measures of effective performance. This has resulted in system duplication and data redundancy, and has presented a serious barrier to effective organizational communications and productivity leading to cost inefficiencies.

For the County to ultimately deliver effective eGovernment services and meet County Strategic Goals, it must foster an open and shared information exchange whenever possible. Continuous efforts should be developed to minimize data and system duplication and to take advantage of existing data and systems. Using a common IT infrastructure will realize greater value obtained through specialized expertise, shared resources and volume purchase cost savings.

The following tables highlight major accomplishments and key projects associated with the strategic IT goal of utilizing enterprise solutions to meet common needs.

#### ***Major Accomplishments***

- Implemented a centralized **Business Intelligence (BI) Enterprise Reporting Infrastructure** for improved management information and reporting.
- Standardized disparate **pharmacy, lab and operating room systems** with a unified application suite common to all DHS facilities.
- Completed **Phase I of eCAPS**, implementing a modern and integrated financial, project and grant management system throughout the County to improve financial reporting and accountability.
- Acquired all images for the **Los Angeles Region Imagery Acquisition Program**, sharing the cost of detailed aerial photography with other local governments.
- Negotiated additional **enterprise licenses and service agreements** providing favorable pricing and services from vendors in support of County IT standards.
- Implemented **secure wireless fidelity (WiFi access)** in selected County facilities to improve flow of communication and enhance productivity.



### **Key Projects**

- **Enterprise Network Expansion** – Develops a request for proposals for a new telecommunications carrier agreement supporting the County's voice, data, and Internet connectivity needs.
- **Converged Technologies** – Brings voice and videoconferencing to the enterprise network, replacing costly dedicated circuits.
- **Wireless Computing** – Provides secure access to County data for laptops and mobile devices across the metro area.
- **IT Governance Initiatives** – Formalizes major technology acquisitions to improve return on investment and strengthen support for County goals.
- **eCAPS Phase II** – Replaces aging procurement, capital assets, and materials management systems with a modern, Web-based application.
- **GIS Enterprise Repository** – Creates a countywide data store of geographic information layers.
- **County Data Center** – Replaces the County's decades-old data center with a modern seismically engineered facility.
- **IT Shared Services** – Offers small and mid-size departments a professionally supported desktop and server infrastructure for improved availability and security of IT assets.
- **Sheriff/Fire/Office of Public Safety Mobile Data Communications** – Replaces disparate and obsolete voice, data, and dispatch systems with a consolidated system.
- **DHS Healthcare Information System** – Provides a common patient records system across all of the County's hospitals and clinics, accessible from any location.
- **Sheriff Jail Health Information System Telemedicine** – Allows medical care via teleconference for inmates, improving security and reducing travel expense.

### **GOAL FOUR: IMPROVE THE IT SKILLS OF THE COUNTY WORKFORCE.**

1. Strategy – Improve skills and competencies of county IT professionals.
2. Strategy – Raise and maintain the IT skill level of all county employees.

IT plays a major role as the County strives to improve its efficiency and effectiveness, institute performance-based management and improve communications with citizens. Advances in technology are employed to transform the relationship between citizens and government by enabling the delivery of services more directly, more rapidly and electronically to the individual.



If the County is to harness the full power of IT, it must have a well-skilled workforce that can manage, implement and utilize technology products.

eLearning, (i.e., technology-based education) has become a vital component of virtually every County department's training delivery strategy. With the expansion of computer availability throughout County departments, the opportunity to provide skills training and instruction in forms other than the traditional classroom setting, has provided County departments with considerable savings of both dollars and employee time.

The following tables highlight major accomplishments and key projects and initiatives associated with the strategic IT goal of improving the IT skills of the County workforce.

### ***Major Accomplishments***

- Completed competitive procurement of an **e-Learning Suite** for DHS-Public Health Programs (**Phase I**) to manage employee training, licensing and certification.
- Secured funding to purchase additional licenses, hosting services, and provide implementation services to support a countywide implementation (**Phase II**) of the **enterprise e-Learning Suite**.

### ***Key Projects***

- **Enterprise e-Learning Management System** – Manages the development and delivery of traditional and Web-based content, for both IT-related and general-purpose staff training.





## 1.5 Conclusion

The IBAP provides a framework for understanding, evaluating, and ultimately *improving* the County's use of IT resources. Each year, the IBAP helps highlight the County's IT progress. This executive summary concludes with the key improvements the CIO envisions for the coming year.

### IT Budget

To keep IT spending clearly under control, the CIO will **encourage departments to hold the line on their IT budgets**, keeping IT costs as a percentage of overall County budgets in line with industry norms.

### IT Governance

Working in conjunction with the County's Guiding Coalition, the CIO will establish a formal IT Governance body, chartered with ensuring development and implementation of countywide IT directions, initiatives, policies and guidelines, and IT standards. This body will also help emphasize to all departments the importance and overall value of adopting countywide standards.

The CIO will also establish a Countywide Geographic Information System (GIS) governance structure to maximize value of existing GIS resources and to implement and enhance a shared GIS repository for countywide use.

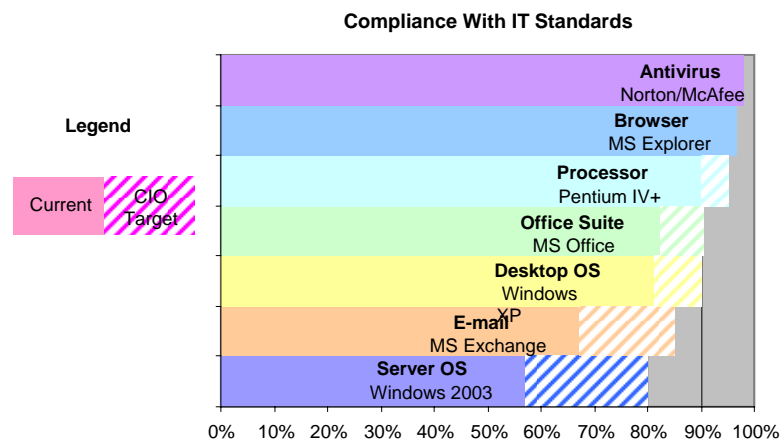
### IT Staffing and Contract Spending

IT contract services spending will continue to fluctuate as dictated by the countywide implementation of major IT systems and the County's ability to recruit and retain professional IT staff. Funding for **permanent IT staff will change slowly**, keeping pace with overall County staff levels in the long run. Given the County's reliance on contracting implementation services to accommodate peak project demands and offset impact of fluctuating staffing levels, IT staff as a percentage of County staff will continue near the lower end of the 3% to 5% range typically seen in local government.



## County IT Standards

The CIO expects departments to continue their progress toward compliance with County IT standards, **especially in the areas of E-mail software and Server OS**. Departments are encouraged to acquire or develop IT applications that enable the migration to evolving County and industry technology standards.



## End-of-Life Technology

The CIO expects departments that rely on obsolete technology to plan and budget for replacement of those systems, including hardware, software, and necessary implementation services. Moreover, maintaining a consistent level of technology currency is necessary to ensure continuing vendor support and maintenance, which enables access to available security patches and version upgrades. The ability to identify, patch, reconfigure, and otherwise remediate systems to eliminate security vulnerabilities before they can be exploited is a critical element of the County's security management program.

## Planning for IT Infrastructure Needs

Maintaining and upgrading IT infrastructure represents a significant capital outlay that must be planned and budgeted. Maintaining the existing infrastructure as well as keeping pace with ever-changing technologies requires new funding strategies in order to ensure the security and viability of IT assets that play a critical role in the delivery of services to the public.

## IT Project Management and Oversight

The prior fiscal year marked the initiation of numerous strategic IT projects at the County. Active project management and oversight will be crucial to ensure that these projects meet their objectives. The CIO will also establish a Project Management Office to provide guidance and



coordination via a best practices framework to ensure County departments have the tools and information to guide technology deployment towards successful business outcomes. The CIO will also encourage the departments to use the Business Intelligence (BI) toolset to report on the operational performance of IT projects after they are implemented.

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Overall, the County's major IT investments clearly align with overall County strategic goals and the County continues to realize significant benefits from its substantial IT investments. These deliver improved customer service, increased organizational effectiveness, and long-term cost savings – the keys to a “world class” County government. The CIO anticipates continued progress on all these fronts in the next fiscal year.



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## 2 County IT Environment

This chapter presents an overview of the County's IT environment and outlines the Business Automation Plan (BAP) process. In a typical year, the County spends over \$700 million on IT - including hardware and software, communications (voice, data, and video), and databases, as well as the software applications supported by that infrastructure. These applications and the data they maintain represent critical County assets that enhance operations, efficiency, program outcomes and worker morale.

The systematic development and review of plans for IT provides a mechanism for evaluating the County's overall IT capability and future direction. It also establishes a baseline useful for informing decisions regarding the cost-effective allocation of limited financial resources. Within this context, the County developed the BAP process.

### 2.1 BAP Planning Framework

The Chief Information Office uses the BAP process as a part of its oversight function. The BAP continues to be refined to include additional strategic reporting and data collection sections. This information serves as a resource management tool for County departments and the CIO's strategic planning efforts. The CIO, in collaboration with the departments, has a project underway to improve the BAP process and supporting tools. These improvements will be reflected in the BAPs and IBAP over the next two years. For FY 2006-2007, the departmental BAPs comprised 15 components, described below.

**1. Mission**

The mission provides an overall understanding of the department's purpose.

**2. IT Mission**

The IT mission provides the department's view of the role of IT in support of its operation(s).

**3. Business Goals**

The business goals identify three or four major, long-term departmental business goals. These goals are derived from the department's mission and are critical to its success. They are program and organizational goals that are supported by IT.

**4. Planned FY 2006-2009 IT Strategies**

The planned strategies provide information on IT initiatives that the department plans to pursue in FY 2006-2009 to support its business goals.

**5. Enterprise Alignment**

Enterprise alignment provides a brief summary of how departmental IT activities support the County IT Strategic Directions published by the CIO. (*Refer to Appendix A*). These directions are key strategic goals and key statements of direction related to IT and its ability to enable departments to meet the needs and goals of the County of Los Angeles. Strategic goals are intended to provide an environment in which the County can achieve its objective of high quality customer service.





**6. Organizational Assessment**

Organizational assessment describes the department's plan for administering the IT functions and its ability to support current and future IT program and management needs.

**7. Telecommunications and Networking Initiatives**

This section identifies emerging telecommunications and network technologies that will drive bandwidth capacity requirements for the new Enterprise Network (EN).

**8. Geographic Information Systems (GIS)**

This section requires departments to assess their needs for GIS data and/or identify opportunities to leverage existing investments.

**9. Web-Based Applications**

This section describes the department's plans to web-enable its business applications in support of the County's Strategic Goal for Service Delivery.

**10. Storage Area Network (SAN)/Network-Attached Storage (NAS)**

This section describes what departments are doing to implement alternate storage technologies to help manage the expanding amount of data (e.g., E-mail, databases, web content, GIS, etc.).

**11. FY 2006-2007 IT Objectives**

This section identifies the major IT objectives that the department plans to accomplish this fiscal year. The IT objectives are performance targets that a department strives to achieve. IT objectives are measurable, quantifiable and time-based statements of outcomes the department will accomplish in FY 2006-2007. IT objectives should support the overall business goals and directly map to the overall department's mission, goals and objectives.

**12. FY 2006-2007 IT Contracts**

This section provides a list of the department's funded IT contracts including voice and data communications circuits, products and services, and an estimate of the annual cost for the planned agreements.

**13. IT Inventory**

This section provides an inventory of the department's hardware, software, infrastructure and applications along with the department's utilization of the listed inventory for these items.



#### 14. FY 2006-2007 IT Projects

This section provides a brief discussion of IT projects that are planned for acquisition and/or implementation in FY 2006-2007.

#### 15. FY 2006-2007 IT Budget Request

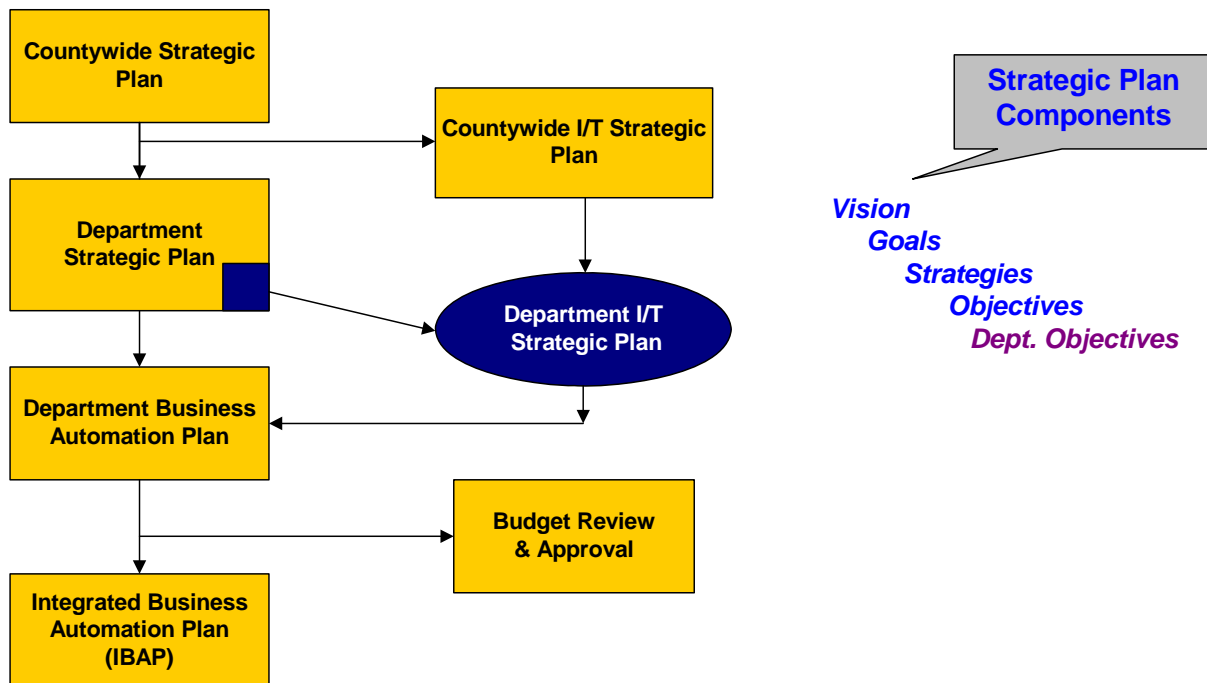
This section identifies the department's dedicated IT full-time equivalents and budgeted appropriation for FY 2006-2007 by specific categories of technology investment.

In addition, departments were requested to complete an online questionnaire to assist the County's Information Security and Privacy Team in gaining an understanding of the departments' logical security, physical security and application security processes.

## 2.2 BAP Planning Cycle

The BAP planning cycle is depicted below. It is an iterative process, continually adjusted and refined through the course of repeating fiscal year cycles.

### STRATEGIC PLANNING PROCESS



Key components of the BAP planning cycle are listed as follows:

- **County Strategic Plan** –The County's Strategic Plan articulates a vision statement, organizational goals, and strategies to achieve those goals. These goals establish the



direction and priorities for County departments and guide the delivery of services provided by the County.

The Chief Administrative Office (CAO), in conjunction with the County's Guiding Coalition, has developed an action plan to manage the Strategic Plan. This action plan is refreshed each year and identifies countywide objectives in support of the Strategic Plan. The latest revision of the Strategic Plan was released in February 2006.

The CAO has established sites on the County's Internet at [www.lacounty.info](http://www.lacounty.info) and the County's intranet to promote the County Strategic Plan and to communicate plan activities throughout the organization. County employees may visit the site at <http://web.co.la.ca.us/lacounty/StrategicPlan/index.htm>.

- **Department Strategic Plans** - Each department is responsible for developing a strategic plan that is consistent with the County Strategic Plan. The department strategic plan should describe significant IT activities that support departmental goals and objectives. These departmental IT activities serve as the foundation for development of a countywide IT Strategic Plan. This plan involves the overall assessment of the County environment to identify technology trends and future opportunities.
- **Department BAPs** - The BAP details how departments plan to utilize resources to operate, maintain and expand IT to support departments' missions and goals. The BAP provides a map to department managers and staff, and provides the Board, CAO and CIO with information on how funds will be expended.

Department BAPs are reviewed to ensure that key strategic goals related to IT are aligned with the IT Strategic Directions of the County. The IT Strategic Directions are principles of direction for IT that enable departments to meet the needs and goals of County government. The primary role of IT is to support the business goals established by the Board and to support the delivery of high quality, timely and accessible services to the public.

- **Integrated Business Automation Plan (IBAP)** - The Integrated Business Automation Plan (IBAP) is an annual report of major departmental and enterprise-wide activities for the County. The report provides a high-level framework for reviewing the use, management and deployment of IT resources. The IBAP highlights the progress made towards meeting the goals and objectives outlined in each departmental BAP, and describes each department's accomplishments during the prior fiscal year. It also identifies strategies for implementing major countywide initiatives, identifies emerging technology trends and provides an analysis of IT financial and inventory data.

## **BAP Preparation and Planning Process**

### **A. CIO Plan and Project Review**

The CIO review focuses on planned contract and project submissions, and the allocation of appropriations between staff, capital equipment and services. The review assesses how well the BAP supports the department's mission and business needs; how it drives implementation of countywide initiatives related to cost-effective deployment of information resources; and how it complies with the County IT Strategic Directions.



The CIO works with departments to ensure that their projects and initiatives are aligned with the County IT Strategic Directions. The CIO makes recommendations to the CAO on those projects and initiatives that should be given highest consideration subject to available resources. The CIO also makes recommendations on the overall IT budget and requested IT positions.

**B. CAO Review and Funding Process**

The CAO reviews departmental budgets, which includes projects and initiatives in light of budget policy priorities. The CAO review focuses on the stated business/program benefits, and on the completeness and accuracy of the cost and resource assessments.

Specifically, the CAO is responsible for reviewing funding proposals and requests, and incorporating requests into overall County program/budget priorities.

**C. DHR Review of IT Position Requests**

The CAO also works closely with the CIO to review department IT position requests to determine the appropriate levels for requested IT items.

**D. Board of Supervisors**

The Board of Supervisors is the executive body of County government and has responsibility for providing a range of services to County residents, including residents in cities and in unincorporated areas. The Board of Supervisors approves the department budget requests and specifically reviews budgets for public policy initiatives.

**Budget Process**

**A. Proposed Budget**

The Proposed Budget is the preliminary financial and operational plan for the County of Los Angeles. The Budget contains performance measures, the maximum number of full-time equivalents allowed, the level of funding recommended by the CAO and the method of financing for each department's appropriation. The Proposed Budget does not delineate IT allocations. The IBAP identifies those allocations by five groupings of departments.

**B. Board Budget Deliberations**

Budget deliberations are a series of sessions that permit the Board and other stakeholders to justify the appropriateness of the Proposed Budget and to allow the Board to achieve consensus and adopt the budget.

**C. Adopted County Budget**

The Adopted County Budget represents the financial and operational plan for the County of Los Angeles.

**Technology Oversight**

**A. CIO IT Project Oversight**



The CIO provides guidance and oversight for key department, interdepartmental, and enterprise projects to ensure that these projects are completed on time, within budget, and to the customer's expectations. To assist in project monitoring and reporting, the County has developed an Information Technology Tracking System (ITTS) that presents to County executives, staff, and CIO a succinct and timely summary of status of key IT projects. These are projects exceeding \$50,000 in estimated project costs and deemed mission critical, or having enterprise significance. The ITTS provides a visual status indicator, or dashboard, for each key project's major milestones and associated costs. The dashboard establishes a common framework for department staff, executives, and CIO to periodically update project activity, monitor progress, assess risks and promote early intervention.

## 2.3 Functional Categories

County departments, commissions and budget units are segmented into five functional groups that closely align with each department's mission and the services they provide. Some commissions are not included because their missions are carried out without significant IT expenditures. For example, the Los Angeles Superior Court is not included due to the passage of the Trial Court Funding Act of 1997, which shifted responsibility of court operations to the State. The Natural History Museum and Art Museum did not submit BAPs because their IT investments are funded through foundation and private funding. The five functional groups and the organizations and budget units that they encompass are detailed in the table below.

Functional Group	Organizations/Budget Units
HEALTH	Health Services, Public Health, and Mental Health
SOCIAL SERVICES	Children and Family Services, Child Support Services, Community and Senior Services, Military and Veteran Affairs, and Public Social Services
PUBLIC SAFETY	Alternate Public Defender, Coroner, District Attorney, Fire, Information Systems Advisory Body, Office of Public Safety, Ombudsman, Probation, Public Defender, and Sheriff
GENERAL GOVERNMENT	Affirmative Action and Compliance, Agricultural Commission/Weights and Measures, Animal Care and Control, Assessor, Auditor-Controller, Beaches and Harbors, Board of Supervisors, Chief Administrative Office, Chief Information Office, Community Development Commission, Consumer Affairs, County Counsel, Emergency Preparedness and Response, Human Relations Commission, Human Resources, Internal Services, Parks and Recreation, Public Library, Public Works, Regional Planning, Registrar-Recorder/County Clerk, and Treasurer and Tax Collector
INTERNAL SUPPORT	Information Technology Fund, Internal Services Department/Information Technology Services, and Telephone Utilities

## 2.4 IT Budget Data

The IT budget reports actual and planned expenditures for a department. Development of the IT budget is a critical step in determining which projects or initiatives to allocate mandatory and/or discretionary funding. To facilitate budgetary planning, each IT Manager is responsible for preparing a budget section within the department's respective BAP. The BAP encapsulates the department's short-term and long-term strategies for IT, captures important statistical



information such as hardware, software, infrastructure and application inventories, and the supporting funding. To accomplish the planning task, the IT Manager must communicate outside of the IT department and reach executive management staff, key stakeholders and decision makers across the entire organization to ensure funding requirements are addressed.

Prior to developing the IT allocation, management must fully understand what the ensuing year's priorities include (i.e., business needs) and how the allocation of IT resources will affect their ability to meet those needs, which is why communication throughout the organization is critical. The final allocation is made during "final changes" in which departments are requested to update their IT budgets to reflect any revisions due to administrative, regulatory or departmental factors.





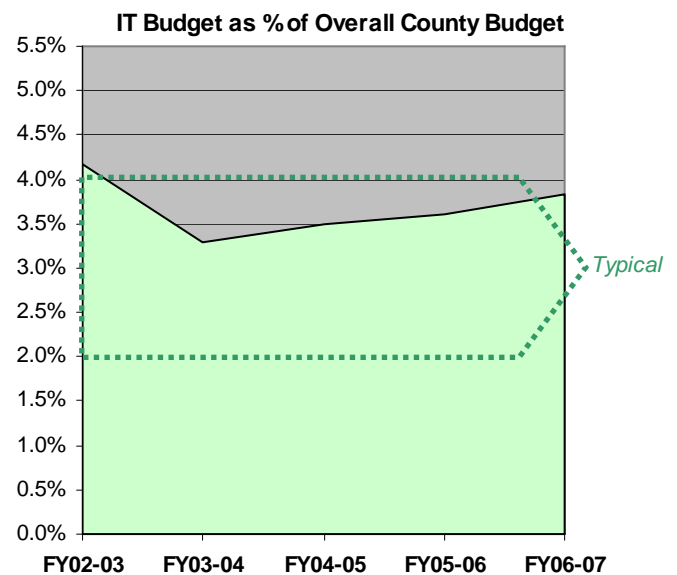
## 2.5 Enterprise IT Budget

The department BAPs provide FY 2006-2007 proposed budget information and indicate planned IT spending for the year. CIO staff then adjusts these figures to reflect the final budget approved by the Board. The FY 2006-2007 IT budget of \$769 million (see table below) represents a \$50.9 million increase (7.1%) from the budget of \$718 million in FY 2005-2006.

**FY 2006-2007 County IT Budget**

Description	2003-2004 Budget	2004-2005 Budget	2005-2006 Budget	2006-2007 Budget	Change	% Change
Salaries & Employee Benefits	267,273,053	284,936,552	329,555,611	346,292,853	16,737,242	5.1%
Contract Services	99,959,478	152,497,879	181,720,290	197,893,206	16,172,916	8.9%
Telecommunications	44,555,246	53,981,663	66,409,312	80,853,065	14,443,753	21.7%
Hardware & Software	71,100,971	77,873,542	102,648,553	104,402,203	1,753,650	1.7%
Leases	8,382,645	9,158,161	10,752,654	8,870,442	(1,882,212)	-17.5%
Fixed Assets	12,850,941	24,254,120	26,973,614	30,708,133	3,734,519	13.8%
Other	59,969,340	24,631,528	-	-	-	0.0%
<b>Total Budget</b>	<b>\$ 564,091,674</b>	<b>\$ 627,333,445</b>	<b>\$ 718,060,034</b>	<b>\$ 769,019,902</b>	<b>\$ 50,959,868</b>	<b>7.1%</b>
<b>Full-time Equivalents</b>	<b>2,868</b>	<b>3,175</b>	<b>3,564</b>	<b>3,658</b>	<b>93</b>	<b>2.6%</b>

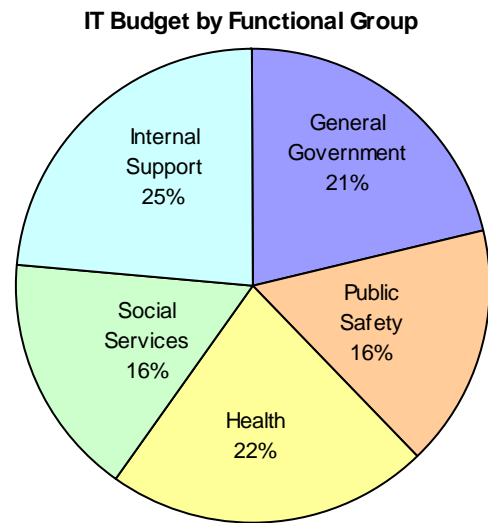
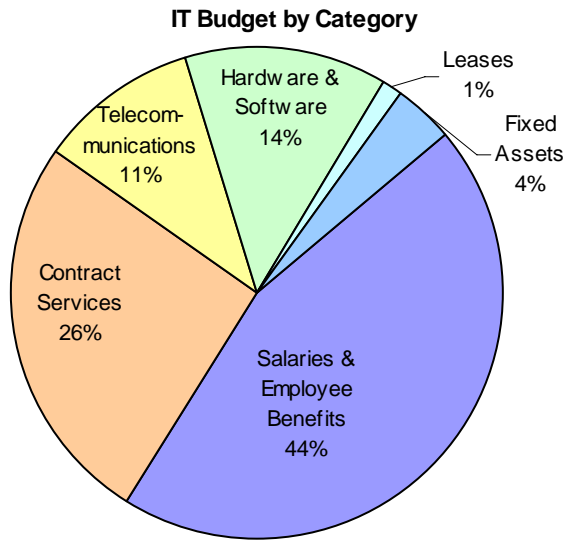
As the County's funding picture has improved over the past two fiscal years, IT budgets have increased in tandem. As illustrated by the accompanying chart, IT as a percentage of overall County budget has declined from its peak of four years ago and is now within the 2% to 4% band typical of local governments. The County's FY 2006-2007 adopted general budget is \$20.041 billion, a 0.8% increase from the FY 2005-2006 budget of \$19.881 billion. The FY 2006-2007 IT budget represents 3.8% of the County's proposed FY 2006-2007 general fund requirements, an increase of 7.1% from the FY 2005-2006 IT budget.



	FY02-03	FY03-04	FY04-05	FY05-06	FY06-07
Overall County Budget	\$ 16.854	\$ 17.127	\$ 17.973	\$ 19.881	\$ 20.041
IT Budget	\$ 0.703	\$ 0.564	\$ 0.627	\$ 0.718	\$ 0.769
<i>IT % Budget</i>	4.17%	3.29%	3.49%	3.61%	3.84%



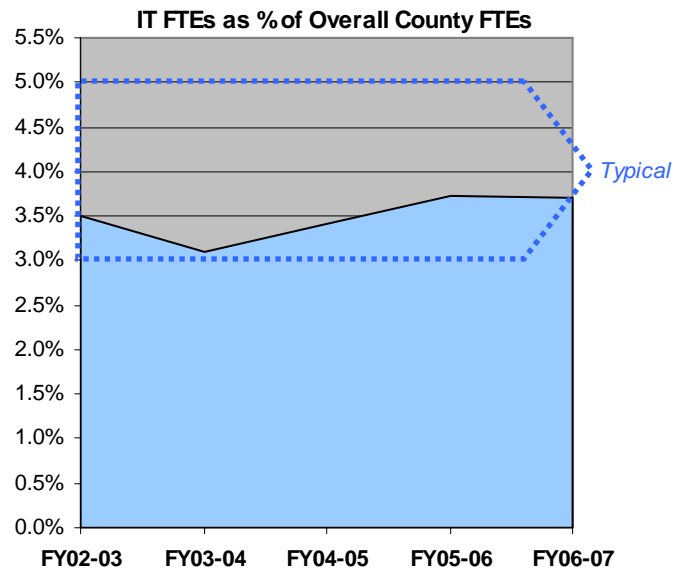
The pie charts below compare the ratio of IT budget allocations by budget category and by functional group as a percentage of the total FY 2006-2007 IT budget.



## 2.6 IT Staffing

IT staffing levels have remained relatively stable over the last two years, rising modestly in the last three years after the cutbacks of FY 2003-2004 in tandem with overall County staffing levels.

Of the County's 98,623 budgeted positions, technology positions comprise approximately 3.7%. In FY 2006-2007, the proposed number of FTEs for IT positions is 3,658, a 2.6% increase from the prior year. As shown by the accompanying chart, IT staffing levels fluctuate at the lower end of the 3% to 5% band typical of local governments.



	FY02-03	FY03-04	FY04-05	FY05-06	FY06-07
Overall County FTE	92,714	92,688	92,872	95,675	98,623
IT FTE	3,255	2,868	3,175	3,564	3,658
<i>IT % FTE</i>	3.51%	3.09%	3.42%	3.73%	3.71%

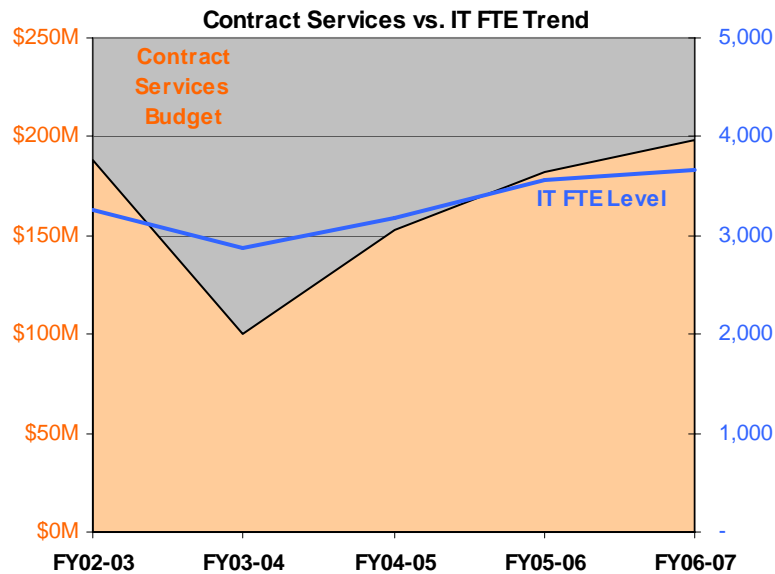


The table below presents additional details on IT staffing levels by functional group.

	Budget				FY 06-07 IBAP		% Chg
	FY 2001-2002	FY 2002-2003	FY 2003-2004	FY 2004-2005	Budget FY 2005-2006	Proposed FY 2006-2007	
Health	304	672	645	745	880	894	1.5%
Social Services	445	351	168	433	483	492	1.8%
Public Safety	563	526	523	540	538	559	3.8%
Internal Support	1,178	1,146	1,086	1,143	1,098	1,121	2.1%
General Government	631	560	446	546	565	591	4.4%
	<b>3,120</b>	<b>3,255</b>	<b>2,868</b>	<b>3,407</b>	<b>3,564</b>	<b>3,658</b>	

## 2.7 Contracts

County departments rely on third-party technology services when departmental expertise and/or knowledge do not exist within the organization, or when it is more cost effective to do so. The County's use of contract services fluctuates over the years, while IT staffing levels change only modestly. This reflects the County's direction for contracting major application deployments, rather than adding permanent staff.

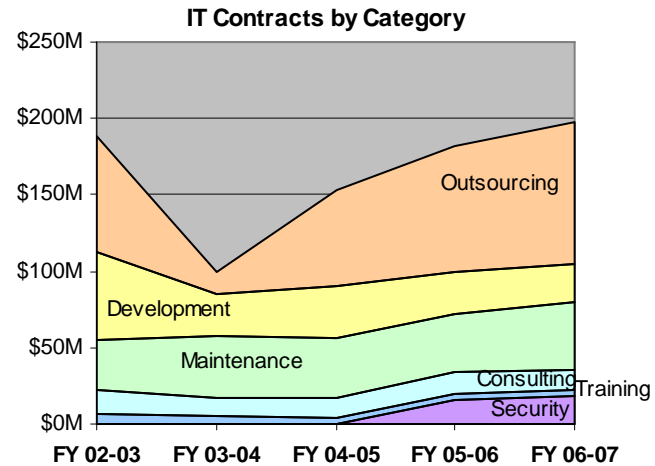




An estimated \$198 million will be spent for all contract services, which include IT consulting, development, maintenance, outsourcing, training, and security<sup>2</sup>. This is an 8.2% increase in IT contract services from FY 2005-2006. The line item expense for contracted services represents 25.7% of the entire IT budget.

	FY 02-03	FY 03-04	FY 04-05	FY 05-06	FY 06-07
Consulting	\$ 16.5M	\$ 11.9M	\$ 12.3M	\$ 14.0M	\$ 13.3M
Development	\$ 56.9M	\$ 27.6M	\$ 33.2M	\$ 26.9M	\$ 25.2M
Maintenance	\$ 32.6M	\$ 40.9M	\$ 39.9M	\$ 38.7M	\$ 44.5M
Outsourcing	\$ 75.7M	\$ 14.6M	\$ 62.6M	\$ 82.7M	\$ 93.3M
Training	\$ 6.2M	\$ 4.9M	\$ 4.5M	\$ 3.8M	\$ 4.0M
Security	\$ -	\$ -	\$ 0.0M	\$ 15.6M	\$ 17.8M
<b>Total</b>	<b>\$ 187.9M</b>	<b>\$ 100.0M</b>	<b>\$ 152.5M</b>	<b>\$ 181.7M</b>	<b>\$ 197.9M</b>

Information Technology Support Services Master Agreement (ITSSMA) contracts represented \$20 million or approximately 16% of the \$182 million budgeted in FY 2005-2006 for all contract services.



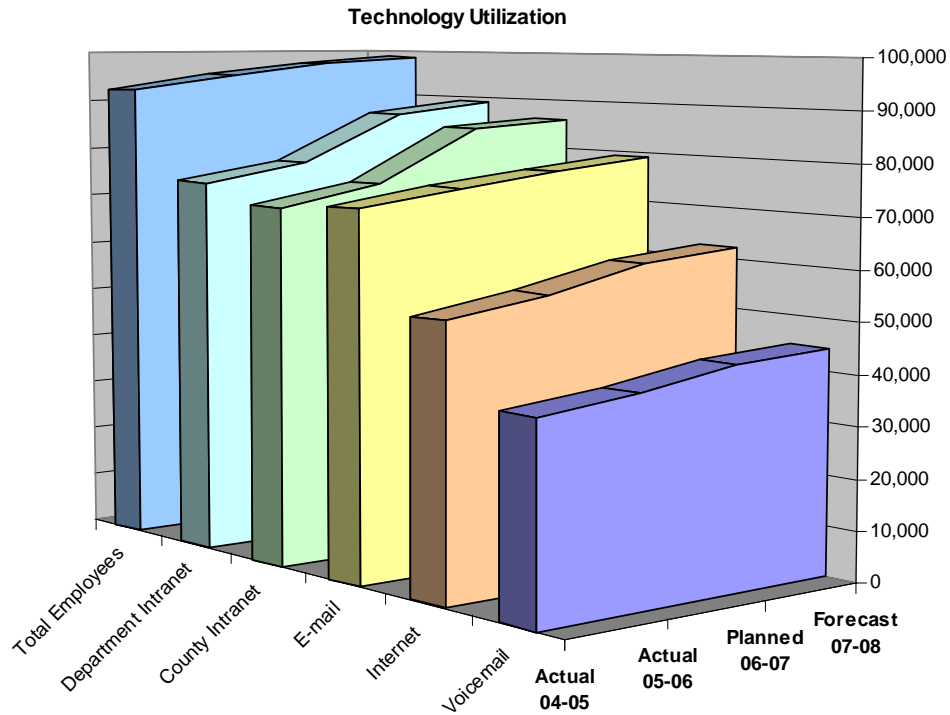
## 2.8 Enterprise Computing Assets

### 2.8.1 Computing Assets

The BAP development and analysis process requires departments to use the CIO's Strategic Directions to comply with technology standards. These standards serve as a resource to help the County streamline its business processes, promote information sharing, foster collaboration and ensure consistency countywide. The CIO reviews contracts and planned projects to ensure that departments move towards implementing such standards and that proposed initiatives address, in whole or in part, the standards set forth by the CIO. This section addresses some of the infrastructure hardware and software standards. The positive trends indicate the County's gradual move toward full departmental compliance.

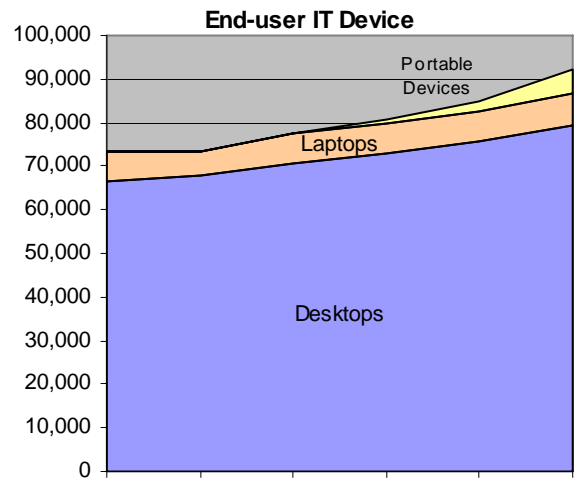
The County's Strategic Plan goals require the review of programs/services to ensure full alignment to the Strategic Plan. More specifically, when we look at *Workforce Excellence* and *Organizational Effectiveness*, systems and technology play a critical role in increasing worker productivity. The graph on the following page shows the **increasing use of information technologies by County staff**.

<sup>2</sup> Please note that budget data for IT security contract services was not collected prior to FY2005-06.



**Desktop computers remain the primary device used by County staff to access information systems.** Laptops have shown only modest growth since the IBAP began tracking them in FY 2002-2003. The vast majority of desktop and laptop computers are connected to the County network.

Personal Digital Assistant (PDA) and Smart Phone devices show an increase although total numbers remain small. These devices may become more widely used as wireless technologies and remote data access applications make them more practical.

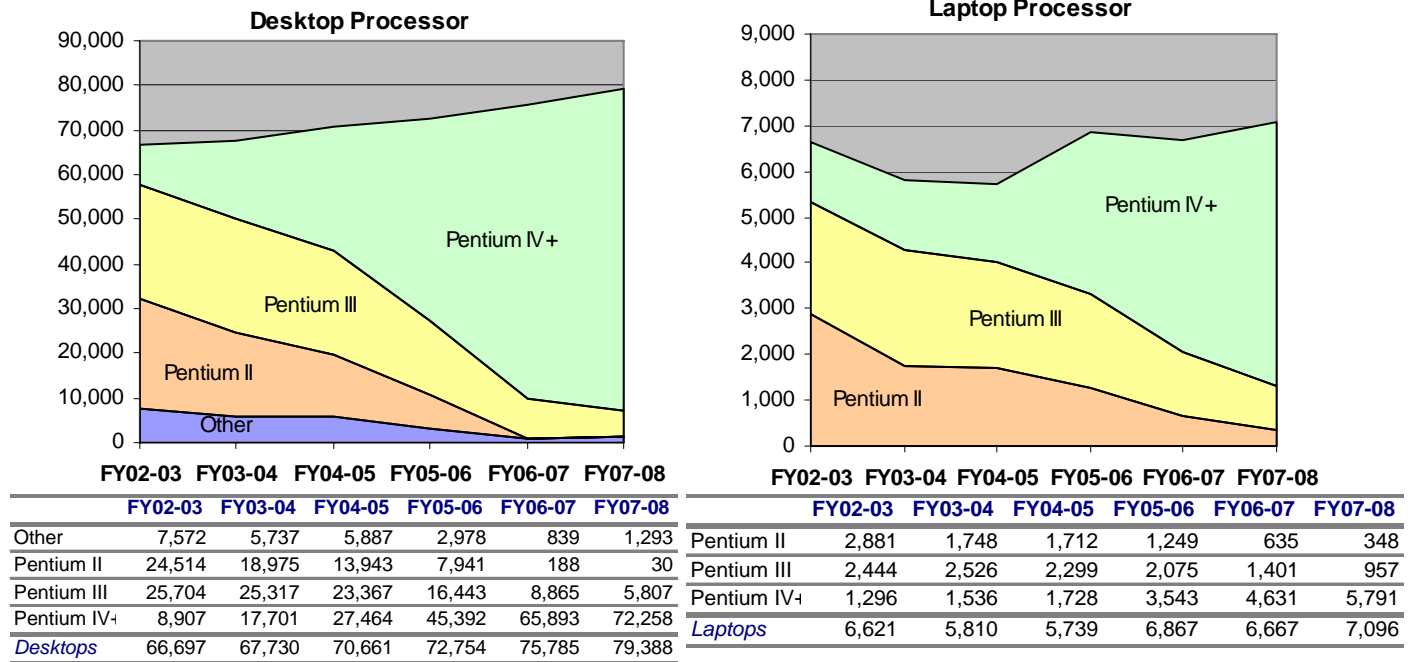


FY02-03 FY03-04 FY04-05 FY05-06 FY06-07 FY07-08

	FY02-03	FY03-04	FY04-05	FY05-06	FY06-07	FY07-08
Desktops	66,697	67,730	70,661	72,754	75,785	79,388
Laptops	6,621	5,810	6,867	6,867	6,667	7,096
Portable Devices				993	2,452	5,788
<b>Total</b>	<b>73,318</b>	<b>73,540</b>	<b>77,528</b>	<b>80,614</b>	<b>84,904</b>	<b>92,272</b>

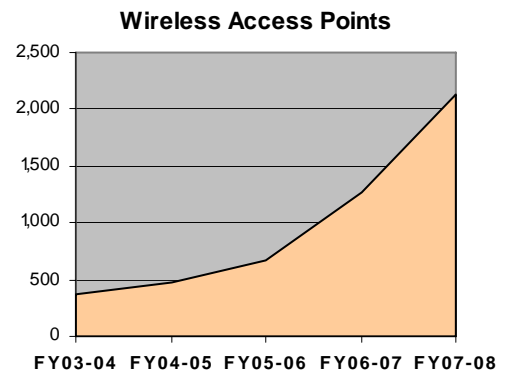


As the charts below indicate, both desktop and laptop computers at the County are rapidly undergoing upgrades to the newest Pentium IV and Centrino processors. These processors provide better application performance, improved desktop management, and integrated network connectivity.



On the technical end, these figures represent conformity to hardware standards and the goal of providing an infrastructure that allows more effective sharing of information. The County is clearly reaching toward its goal of a fully-networked environment that will ultimately improve business processes and align with the County Strategic Goal for Organizational Effectiveness. Further analysis should be performed to assess whether all employees that need access to computers/networked drives are connected.

An emerging trend within the County is the use of wireless technology, especially in laptops with Centrino processors offering optimized performance and longer battery life in a wireless environment. The chart to the right shows the sharp upward trend for wireless access points in the current and following fiscal year – an average annual increase of more than 100% beginning in FY 2005-2006.

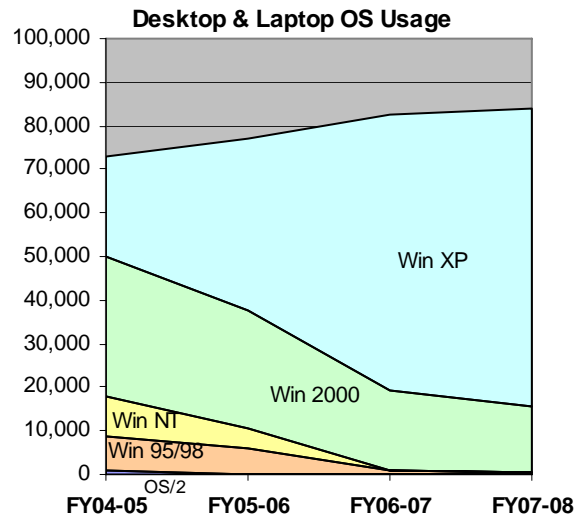




## 2.8.2 Workstation Operating Systems

As the table and chart indicate, **Windows XP is rapidly replacing older operating systems.** Windows NT, 98, and 95 are no longer supported as a workstation OS by Microsoft and pose a security risk. Windows 2000 has transitioned to extended support, which will end in 2010.

	FY04-05	FY05-06	FY06-07	FY07-08
Win XP	22,825	39,566	63,684	68,110
Win 2000	32,115	27,087	18,312	15,080
Win 95/98	7,462	6,121	690	579
Win NT	9,368	4,430	40	18
OS/2	1,143	30	2	1
<b>TOTAL</b>	<b>72,913</b>	<b>77,234</b>	<b>82,728</b>	<b>83,788</b>

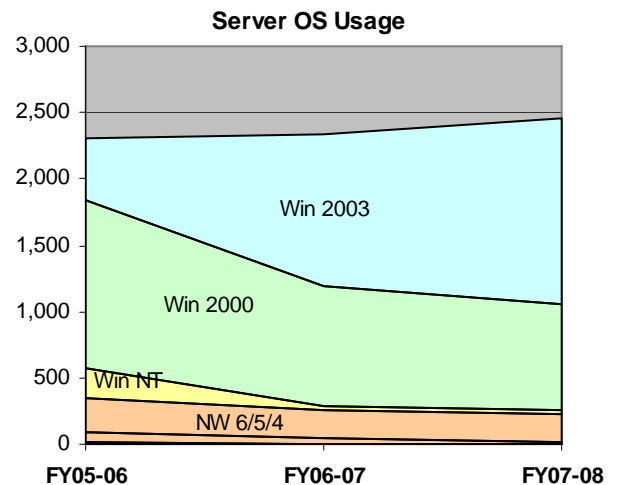


## 2.8.3 Servers

Servers using the Microsoft Windows family of operating systems (e.g., Windows 2003, 2000, NT, etc.) constitute the majority of County systems. As noted above, Windows 2000 has transitioned to extended support. **Windows NT presents a security risk as a server OS. Departments and the County are taking steps to eliminate this risk.**

Non-standard Novell Netware servers are gradually being phased out by the departments.

	FY05-06	FY06-07	FY07-08
Win 2003	459	1,150	1,397
Win 2000	1,260	897	803
Win NT	231	34	27
Netware 6	266	219	207
Netware 5	67	37	17
Netware 4	16	1	1
<b>TOTAL</b>	<b>2,299</b>	<b>2,338</b>	<b>2,452</b>



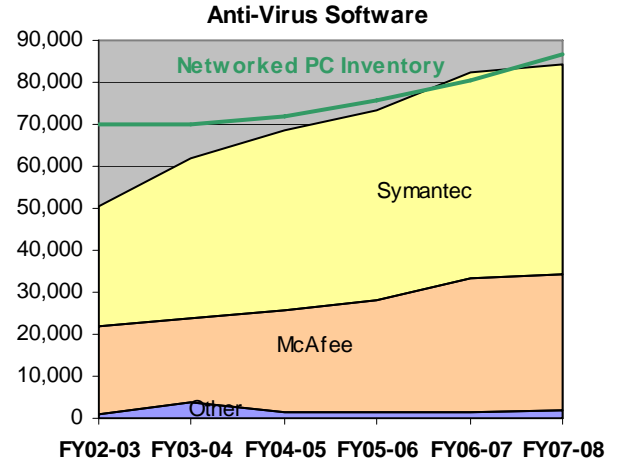




## 2.9 Anti-Virus Software

The County and ISD have negotiated an enterprise anti-virus agreement with the two leading software companies: Symantec Corporation and McAfee, Inc. The negotiated agreement allows for discounted purchases on Symantec and McAfee antivirus software.

The chart reveals that departments have almost completed conversion to one of the two standards. As of the current fiscal year there will be sufficient anti-virus licenses to cover all of the County's networked desktop and laptop computers. This strategy guarantees that there is full coverage, allowing dissemination of updates by the County's Security Task Force when responding to viruses and/or malicious code attacks.



	FY02-03	FY03-04	FY04-05	FY05-06	FY06-07	FY07-08
Symantec	28,177	37,999	42,952	45,168	48,991	50,002
McAfee	21,023	20,250	24,351	26,476	31,634	32,505
Other	1,059	3,746	1,425	1,647	1,590	1,870
<b>TOTAL</b>	<b>50,259</b>	<b>61,995</b>	<b>68,728</b>	<b>73,291</b>	<b>82,215</b>	<b>84,377</b>
<i>Network PCs</i>	69,841	70,073	72,009	75,930	80,438	86,788

## 2.10 Office Productivity Software

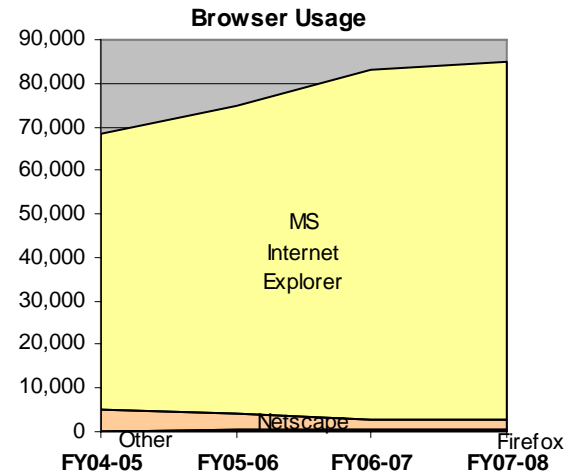
The CIO has developed standards for County departments that required conversion to the Microsoft Suite of products, (i.e., Microsoft Office.) This standard was developed in conjunction with the Strategic Goals to facilitate the exchange of information by using common productivity applications.



## 2.10.1 Internet Browser

The County's Internet browser standard is Internet Explorer, which Microsoft provides as part of its desktop software offering. The vast majority of County computers follow the standard. Use of Netscape and other browsers continues to decline.

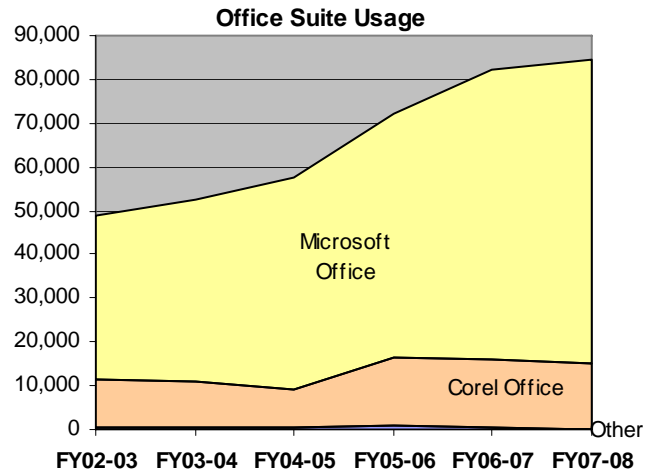
	FY04-05	FY05-06	FY06-07	FY07-08
Other	148	121	67	67
Firefox	0	151	410	487
Netscape	4,748	4,045	2,339	2,150
MS Internet Explor	63,600	70,555	80,086	82,076
<b>TOTAL</b>	<b>68,496</b>	<b>74,872</b>	<b>82,902</b>	<b>84,780</b>



## 2.10.2 Office Suite

The County's primary office suites are Microsoft Office and Corel Office. Since FY 2002-2003 the number of licenses for MS Office has increased from 37,476 to 69,439.

The change represents an 85% increase in MS Office use over the five-year period. Comparatively, Corel inventories have decreased as a percentage of total from 23% in FY 2002-2003 to a projected 18% in FY 2007-2008. Departments with the most inventories of Corel WordPerfect applications are the Sheriff, Public Defender, and Public Library. Reduced inventories of Corel demonstrate continued growth in compliance with the County standard.



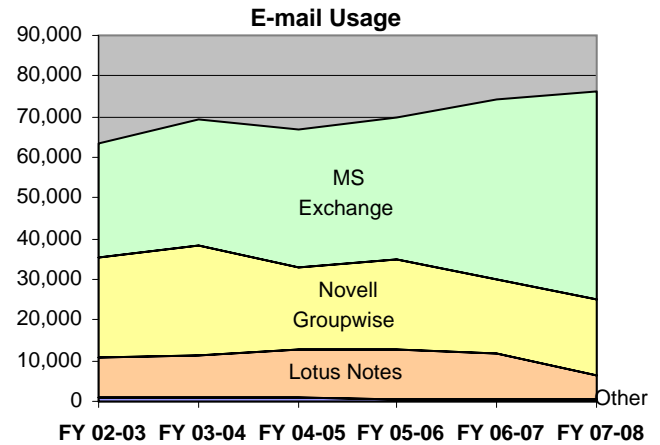
	FY02-03	FY03-04	FY04-05	FY05-06	FY06-07	FY07-08
Other	556	669	639	820	230	224
Corel Office	10,903	10,367	8,387	15,550	15,589	14,902
Microsoft Office	37,476	41,728	48,570	55,608	66,632	69,439
<b>TOTAL</b>	<b>48,379</b>	<b>52,095</b>	<b>56,957</b>	<b>71,158</b>	<b>82,221</b>	<b>84,341</b>



### 2.10.3 E-mail

The County's E-mail standard is Outlook for the desktop and Microsoft Exchange on the E-mail server.

As shown by the chart, the County uses a variety of E-mail platforms. Use of Exchange has nearly doubled since FY 2002-2003, while use of other products has declined. **Lotus Notes E-mail is losing market share to the County's standard of Microsoft Exchange, requiring a migration strategy for those departments still dependent on this system.**

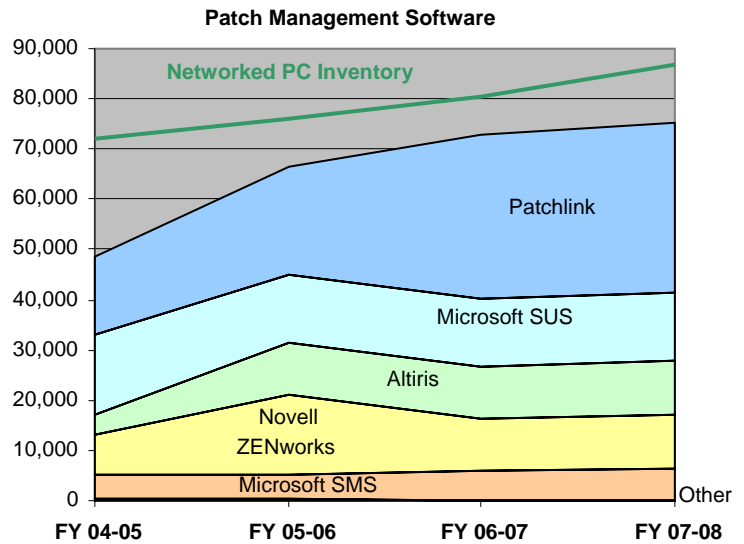


	FY02-03	FY03-04	FY04-05	FY05-06	FY06-07	FY07-08
Other	980	1,120	1,187	263	273	273
Lotus Notes	9,962	10,034	11,505	12,483	11,516	6,316
Novell Groupwise	24,383	27,262	20,174	22,177	18,359	18,562
MS Exchange	28,201	31,068	33,978	35,045	44,058	51,138
<b>TOTAL</b>	<b>63,526</b>	<b>69,484</b>	<b>66,844</b>	<b>69,968</b>	<b>74,206</b>	<b>76,289</b>

### 2.11 Client Management Software

Client management software consists of products which make it easier for IT staff to manage the applications, tools, and operating system components of computers. An effective suite of client management software is critical to cost-effective maintenance of a large computer inventory. The departments use a variety of these products to perform auto discovery, inventory, software distribution, and patch management. The chart below shows the number of products in use for patch management alone. The situation is similar for other categories of client management software.

As detailed in the body of this document, part of the ISD IT Shared Services (ITSS) offering includes a standard suite of client management tools to its customers. Any department using ITSS will need to migrate to the County standard.



	FY04-05	FY05-06	FY06-07	FY07-08
Patchlink	15,297	21,685	32,921	33,704
Microsoft SUS	16,286	13,530	13,511	13,534
Altiris	3,826	10,166	10,343	10,908
Novell ZENworks	8,144	15,848	10,227	10,527
Microsoft SMS	4,685	5,065	5,998	6,495
Other	302	219	20	20
<b>TOTAL</b>	<b>48,540</b>	<b>66,513</b>	<b>73,020</b>	<b>75,188</b>
<b>Network PCs</b>	<b>72,009</b>	<b>75,930</b>	<b>80,438</b>	<b>86,788</b>

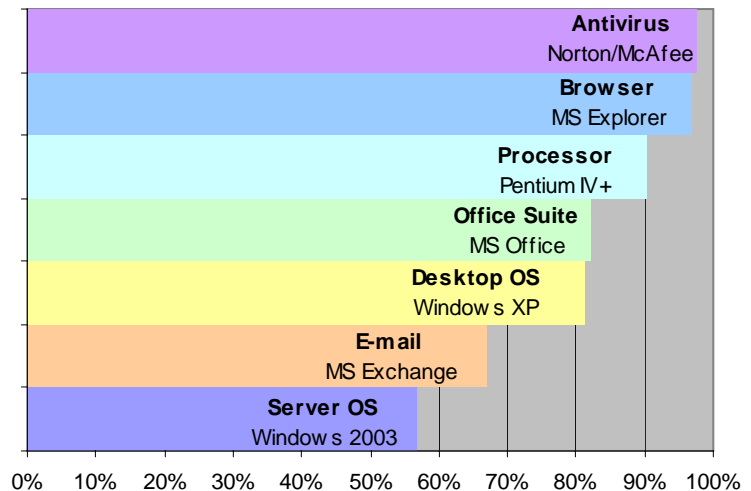


## 2.12 County IT Standards

Establishing countywide software and hardware standards ensures interoperability, improves security, simplifies maintenance and provides opportunities for cost savings through leveraged purchasing. As the County moves toward implementation of more enterprise-wide applications, establishing software and hardware standards becomes increasingly important. Disparate approaches will add to the cost of implementing enterprise solutions. Focusing on enterprise agreements provides an opportunity for the County to expand its purchasing power.

**Forecast of Compliance With IT Standards: FY 2007-08**

Standard	Percent Compliant
Antivirus - Norton/McAfee	98%
Browser - MS Explorer	97%
Processor - Pentium IV+	90%
Office Suite - MS Office	82%
Desktop OS - Windows XP	81%
E-mail - MS Exchange	67%
Server OS - Windows 2003	57%



The chart above forecasts significant progress toward compliance with County standards in the next fiscal year, with the exception of Server OS. As shown in section 2.8.3, the majority of non-compliant servers utilize Windows 2000, which will be in its extended support period until 2010.

*Please refer to Appendix C for a list of the County of Los Angeles Preferred Enterprise IT Standards and Recommendations.*

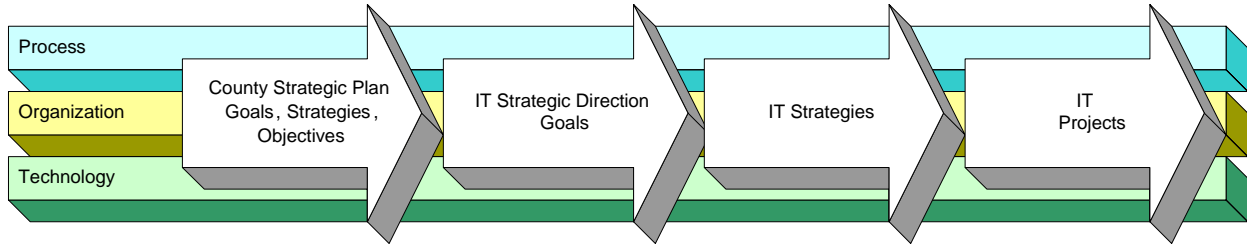


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### 3 Strategic Directions

This chapter presents the County’s overall strategic goals and explains how the County’s IT strategic direction goals support them. The diagram below illustrates how County goals and strategies drive IT goals and strategies, which ultimately translate into actionable IT projects.



In 1999, the Board of Supervisors approved the County’s first countywide Strategic Plan. The Plan sets forth a bold vision, goals and strategies for the County of Los Angeles government in the 21st century. It articulates the County’s shared values and aspirations as a responsive, efficient and effective service provider that provides value to its citizens.

In June 2002, the County formed a “Guiding Coalition” to provide leadership to the County’s Strategic Planning process. The coalition has periodically updated the Strategic Plan, with the latest revision in March of 2005.

<p style="text-align: center;"><b>County Vision</b></p> <p>Our <b><i>purpose</i></b> is to improve the quality of life in Los Angeles County by providing responsive, efficient and high quality public services that promote self-sufficiency, well-being and prosperity of individuals, businesses and communities.</p> <p>Our <b><i>philosophy</i></b> of teamwork and collaboration is anchored in our shared values:</p> <ul style="list-style-type: none"><li>• Responsiveness</li><li>• Integrity</li><li>• Professionalism</li><li>• Commitment</li><li>• Accountability</li><li>• A Can-Do Attitude</li><li>• Compassion</li><li>• Respect for Diversity</li></ul> <p>Our <b><i>position</i></b> as the premier organization for those working in the public interest is established by:</p> <ul style="list-style-type: none"><li>• A capability to undertake programs that have public value;</li><li>• An aspiration to be recognized through our achievements as the model for civic innovation; and</li><li>• A pledge to always work to earn the public trust.</li></ul>
<p style="text-align: center;"><b>County Mission</b></p> <p style="text-align: center;"><b>“To enrich lives through effective and caring service.”</b></p>



The County will achieve this vision and mission through four organizational goals and four program goals that will be jointly pursued by the 38 separate County departments.

<b>County Strategic Goals</b>	
<b>Organizational Goals</b>	
<b>1. Service Excellence</b>	Provide the public with easy access to quality information and services that are both beneficial and responsive.
<b>2. Workforce Excellence</b>	Enhance the quality and productivity of the County workforce.
<b>3. Organizational Effectiveness</b>	Ensure that service delivery systems are efficient, effective and goal oriented.
<b>4. Fiscal Responsibility</b>	Strengthen the County's fiscal capacity.
<b>Program Goals</b>	
<b>5. Children &amp; Families</b>	Improve the well-being of children and families in Los Angeles County as measured by achievements in the five outcome areas adopted by the Board: good health; economic well-being; safety and survival; emotional and social well-being; and education/workforce readiness.
<b>6. Community Services</b>	Improve the quality of life for residents of Los Angeles County's unincorporated communities by offering a wide range of department coordinated services responsive to each community's specific needs.
<b>7. Health &amp; Mental Health</b>	Implement a client-centered, information-based health and mental health services delivery system that provides quality services across County departments.
<b>8. Public Safety</b>	Increase the safety and security of all residents in Los Angeles County through well-coordinated, comprehensive response and recovery plans for terrorist incidents.

In support of the County's organizational and program goals, the Office of the CIO has developed a set of IT goals and strategies. The remainder of this chapter presents the IT goals and strategies, shows their linkage to overall County goals, and lists the associated IT projects which are detailed in Chapter 4.

### **3.1 Goal One: Conduct County Government Electronically**

The County Strategic Plan has set the direction for the County of Los Angeles to bring seamless electronic government (eGovernment/eServices) to its citizens. This recognition stems from a revolution in the use of technology during the 1990s. The "Internet Age" has had a profound impact on the way citizens and businesses accomplish their business. The County's customers expect government service to be as convenient, open, centralized and service-oriented as the private sector.

The transformation to eGovernment redefines the ways in which citizens and government interact. By harnessing the scope and power of the Internet, we will expand the delivery of information and services to constituents. Similarly, the intranet offers the same benefits among departments and their employees.





### 3.1.1 Strategy 1.1 – Utilize electronic business technologies to reduce costs and improve service

eCommerce has brought lower costs and higher quality to transactions between businesses and consumers. eGovernment holds the same promise for interactions between the County and its constituents.

Most County departments maintain a Web presence. These are organized within the County portal, giving the public a single point of entry for any on-line information available from the County. While the past focus of these Websites was largely informational, several departments have started providing government services on-line. Among these are:

- Purchasing and contract opportunities
- Employment opportunities
- Transportation, construction, temporary service cut-off, beach use, and other simple permits
- Property tax information and payments
- Library research services
- Cultural event tickets
- Searchable information for lost and adopted pets
- Geo-locator applications for locating services and quality-of-life issues

Looking to the future, the County will need to put in place the policies, standards, and technologies required to support the growing number of eGovernment transactions. Specific objectives (with highlighted benefits) developed by the CIO to accomplish this strategy are to:

- Adopt industry and regulatory standards for open systems computing based on the use of standards-based interfaces (e.g., Web Services and eXtensible Markup Language (XML)), Electronic Funds Transfer (EFT), electronic signatures, and Internet/intranet-based transactions. These standards will facilitate transacting business utilizing electronic means thus **reducing cycle times and transaction costs.**
- Establish requirements for business partners to exchange business transactions electronically. The electronic exchange of data will **reduce paper processing and required inventory levels.**

The table on the following page lists the strategic IT projects in support of this strategy, and the linkage to the County's strategic goals. *Please see Chapter 4 for details on the projects.*



Linkage of IT Projects to County Strategic Goals

Goal One: Conduct County Government Electronically										
Strategy 1.1 Utilize electronic business technologies to reduce costs and improve service.					County Strategic Goals					
Major IT Projects					1. Service Excellence	2. Workforce Excellence	3. Organizational Effectiveness	4. Fiscal Responsibility	5. Children & Families	6. Community Services
Electronic Commerce	X	X	X	X						
County Portal Rewrite	X		X							
Electronic Voting	X		X							
One-e-App	X	X	X	X	X				X	
Intelligent Traffic Systems (ITS)	X		X				X			
COGNOS Business Intelligence (BI) Projects	X	X	X	X						
Medical Passport	X	X	X		X				X	

### 3.1.2 Strategy 1.2 – Promote use of electronic communication

The majority of County employees work daily on tasks which require them to communicate with other staff, outside agencies, and the public. Much of this communication can take place electronically which speeds workflow, improves productivity, and simplifies record-keeping.

The County has made significant investments in electronic communications capabilities for its staff. These efforts are reflected in the widespread adoption of E-mail, Internet, intranet, and other technologies as noted in Chapter 2. The County has also invested heavily in networks, personal computers, and office productivity software, with the result that most County departments have the baseline technology to meet their communications needs.

Further progress will require that the County take an enterprise view of the information it handles, transcending departmental boundaries and partnering with the public and outside agencies. Several of the projects that support this strategy focus on document and content management, and others look to improve public and inter-agency access to County information. Specific objectives (with highlighted benefits) developed by the CIO to accomplish this strategy are to:



- Maximize the use of electronic mail and workflow software to **improve communication and improve service and accountability.**
- Upgrade and/or implement premise LANs to conform to the County’s Premise Network Standards to **maximize inter-operability and manageability.** The standards include a fiber optic backbone using gigabit Ethernet, enhanced Category 5 and 6 wiring, and switched 10/100 megabit and gigabit to the desktop.
- Use Internet/intranet for information access and dissemination, constituent services and business transactions. The Internet/intranet will be used to provide employees, citizens and business partners access to county information and also support **conducting business with citizens on a 24-by-7 basis.**
- Utilize Web technologies to **expand access to county information and data.**

The table below lists the strategic IT projects in support of this strategy, and the linkage to the County’s strategic goals. *Please see Chapter 4 for details on the projects.*

Linkage of IT Projects to County Strategic Goals

Goal One: Conduct County Government Electronically										
Strategy 1.2 Promote use of electronic communication.						County Strategic Goals				
Major IT Projects						1. Service Excellence	2. Workforce Excellence	3. Organizational Effectiveness	4. Fiscal Responsibility	5. Children & Families
						6. Community Services	7. Health & Mental Health	8. Public Safety		
Enterprise Content Management Strategy	X	X	X							
Los Angeles Document and Object eXchange (LADOX)	X	X	X							X
ISAB Service Oriented Architecture (SOA) & Web Services	X		X							X
Patient-related Electronic Document Imaging Management (PEDIM)	X	X	X	X	X	X	X			
Public Library Public Wireless Access	X	X	X		X					
Assessor Information Management System (AIMS)	X	X	X	X						



## **3.2 Goal Two: Provide Secure Access to Electronic Applications**

While eGovernment and electronic service delivery initiatives enable the public to have increased access to County services, it brings a number of challenges in maintaining the security of IT assets and maintaining the privacy of the public's personal information as required by law. These assets and information must be protected from internal and external threats through appropriate and sufficient security measures.

In order to mitigate risks of an attack on the County's IT assets and to safeguard the public's information, the County has developed a comprehensive security program for defending its information infrastructure that enables it to reduce information security exposures and respond appropriately to any incidents which may occur. The County has undertaken a number of actions which have significantly reduced the County's exposure to threats, and has put in place policies and procedures to prevent, detect, respond to and mitigate these threats.

### **3.2.1 Strategy 2.1 – Develop a countywide information privacy program**

The County processes and maintains large amounts of sensitive information to serve its constituents. As an example, the County's health care programs typically require the compilation of very personal information. The County also collects personal information for both tax collection and welfare services. While much of the information collected is made available to the public by State law, every effort should be made to ensure that only necessary and relevant information is disclosed to protect an individual's privacy, as much as possible.

The County is currently directed to protect health information under the auspices of the Health Insurance Portability and Accountability Act (HIPAA). State and Federal legislation is pending to require privacy for other information that is maintained on employees and constituents. In addition, the CIO has committed to implementing a privacy program whether or not it is required by legislation. This privacy program requires parallel efforts in information security to protect information contained within the County infrastructure and respond to incidents that may occur. This process also requires the assignment of Privacy Officer duties to the CISO in addition to his security role.

As permitted by law and for health and safety purposes, the County has the authority to collect and use information without the permission or knowledge of its constituents. There is little recourse against the County when it uses information in ways that may be considered harmful or objectionable. However, this position must be balanced by the need for the County's constituents to have a high degree of trust that any information utilized and disclosed by the County is done so under proper and necessary conditions. Without this trust, the County's eGovernment initiatives will not succeed, as they must collect sensitive information from those who choose to access services electronically.



The County also has numerous external business relationships with other government and commercial entities. Some of the business transactions come under confidentiality clauses that require both parties to protect and safeguard certain information. Once again, there is a sense of mutual trust between both parties. If this trust is breached due to privacy violations, the County could be held financially liable and potentially suffer disruptions to critical business operations.

Specific objectives developed by the CIO to accomplish this strategy are to:

- Review and assess efforts to identify and manage privacy concerns and the safeguards used to protect sensitive and confidential information.
- Ensure that only necessary and relevant information is collected, used, and disclosed in accordance with applicable laws, regulations and professional standards.

The table below lists the strategic IT projects in support of this strategy, and the linkage to the County's strategic goals. *Please see Chapter 4 for details on the projects.*

Linkage of IT Projects to County Strategic Goals

Goal Two: Provide Secure Access to Electronic Applications										
Strategy 2.1				County Strategic Goals						
Develop a countywide information privacy program.				1. Service Excellence						
				2. Workforce Excellence						
				3. Organizational Effectiveness						
				4. Fiscal Responsibility						
				5. Children & Families						
				6. Community Services						
				7. Health & Mental Health						
				8. Public Safety						
Major IT Projects										
Secure Messaging				X	X	X	X	X	X	X

### 3.2.2 Strategy 2.2 – Develop a countywide security architecture

Information technology has enabled the County to collect, process, and distribute volumes of information, both public and private, at levels never before realized. The infrastructure for enabling such widespread access also presents a tempting target for hackers and “script kiddies” who are motivated by malicious intent. **To counter these potential assaults to the County’s critical and sensitive information and to reduce these risks, the County implemented an information security program.** The County must continuously review and assess its defenses and operations to counter and respond to these threats.



To clearly present users and managers with acceptable computing practices that affect information security, the Chief Information Security Officer (CISO), under the CIO, is charged with leading the County's efforts to develop and publish enterprise security policies that will be applicable to all departments. Key policies already established include acceptable use, secure E-mail, incident reporting, patch management and desktop security. This ensures that minimum security standards are identified to reduce the risks of the weakest link syndrome. With the publishing of approved security policies, departments are responsible for the necessary policy awareness and appropriate training of their employees.

In tandem with the overall security architecture, **the County also has initiatives underway to secure information and provide quick restoration of services in the event of a natural disaster.** The Business Continuity Program (BCP) is largely complete, while the Orange County Disaster Recovery Site is in the active planning stage.

The specific objectives associated with this strategy are to:

- Establish countywide information security policies and procedures to **promote best practices.**
- Identify and train designated information security staff to **support the countywide security program.**
- Foster departmental participation in countywide security initiatives and teams to **manage and mitigate information security threats.**
- Establish and conduct employee information security awareness training programs to **promote and implement best practices.**
- Establish a countywide business continuity program to **ensure the availability of time-sensitive critical services/processes and assets** in case of a major disaster or outage.

The table on the following page lists the strategic IT projects in support of this strategy, and the linkage to the County's strategic goals. *Please see Chapter 4 for details on the projects.*



Linkage of IT Projects to County Strategic Goals

Goal Two: Provide Secure Access to Electronic Applications									
Strategy 2.2					County Strategic Goals				
Develop a countywide security architecture and program to protect critical information assets and mitigate the impact of computer security incidents.					1. Service Excellence				
					2. Workforce Excellence				
					3. Organizational Effectiveness				
					4. Fiscal Responsibility				
					5. Children & Families				
					6. Community Services				
					7. Health & Mental Health				
					8. Public Safety				
Major IT Projects									
Business Continuity Program (BCP)	X	X	X	X					
Privacy Legislation Compliance Program	X		X		X		X		
Information Security Awareness Program	X	X	X	X	X	X	X	X	X
Computer Security Incident Response Process	X	X	X	X	X	X	X	X	X
Application Security Guidelines	X	X	X	X	X	X	X	X	X
Vulnerability Assessment	X	X	X	X			X		

### 3.2.3 Strategy 2.3 – Develop a technology infrastructure that provides secure data access

The systems that store, process or transmit the County’s valued information are susceptible to a variety of attacks at both the hardware and software layers. There is no single security solution that can protect the network through all application levels. To best defend both known and unknown attacks, **the County has adopted a “defense in depth” concept of security.** The security architecture model is a layered information protection approach so that no single breach of security would allow total access to the information that is being protected.

To help counter the threat of hackers and malicious attacks, the County is taking a proactive stance in monitoring its critical information systems. Enabling the audit capabilities of key devices and applications allows tracing of triggered events considered crucial to security troubleshooting and forensics. The County has also implemented a robust network intrusion detection/prevention system that monitors the County’s wide area network “around the clock” to detect and block malicious activity from internal or external sources. **Through pre-planned responses and coordination, the County minimizes the impact of security intrusions.**

The key security issue with desktop and laptop computers is that they are maintained by the departments that own them. The vast majority of these are now protected by one of the two County anti-virus standards, Symantec or McAfee. The departments have deployed a variety of





solutions for other patch management, auto-detection, and client software distribution tasks. ISD includes licensing and support for a County standard suite of these tools as part of its IT Shared Services (ITSS) offering. **Moving to the ITSS standard will be especially beneficial to smaller departments** as they will no longer have to deal with the overhead of maintaining IT security for all of their personal computers.

Specific objectives required to accomplish this strategy are to:

- Develop a **countywide security plan** that includes public key infrastructure that utilizes digital signatures and key encryption for *secure electronic transactions* between citizens, businesses and employees of county government. This plan will adhere to industry standards and ensure regulatory compliance.
- Develop **applications** that will allow citizens and businesses to *transact business securely* with the County by using digital signatures.
- Deploy **network, server, and client technologies** to *detect, block and/or remediate security threats*.

The County's recent accomplishments in this area include:

- Implemented countywide wireless security architecture and standards to ensure secure wireless communications.
- Developed a comprehensive anti-spam strategy and acquired enabling software to increase the relevancy of electronic mail and improve employee productivity.
- Acquired and piloted Internet filtering software to control inappropriate use of County IT assets.
- Developed and published countywide desktop and server security standards to protect the confidentiality, integrity, and availability of information.
- Expanded the County's Information Security Program by establishing an Application Security Engineering Team to develop best practices, standards, and guidelines for development and acquisition of IT applications.

The table on the following page lists the strategic IT projects in support of this strategy, and the linkage to the County's strategic goals. *Please see Chapter 4 for details on the projects.*



Linkage of IT Projects to County Strategic Goals

Goal Two: Provide Secure Access to Electronic Applications										
Strategy 2.3 Develop a technology infrastructure that provides secure data access.					County Strategic Goals					
Major IT Projects					1. Service Excellence	2. Workforce Excellence	3. Organizational Effectiveness	4. Fiscal Responsibility	5. Children & Families	6. Community Services
Mobile Device Information Protection Program	X	X	X							
Orange County Disaster Recovery Site	X	X	X	X						
Internet Content Filtering	X	X	X	X	X	X	X	X	X	X

### 3.3 Goal Three: Utilize Enterprise Solutions to Meet Common Needs

Historically, the County has built its information systems departmentally and incrementally, resulting in “silo” systems, each with its own business rules, data models and measures of effective performance. This has resulted in system duplication and data redundancy, and has presented a serious barrier to effective organizational communications and productivity.

For the County to effectively deliver eGovernment services and meet County Strategic Goals, it must foster an open and shared information exchange whenever possible. Continuous efforts should be developed to minimize data and system duplication and to take advantage of existing data and systems. Using a common IT infrastructure will realize greater value obtained through specialized expertise, shared resources and volume purchase cost savings.

#### 3.3.1 Strategy 3.1 – Provide a high-capacity, scaleable, wide area network (WAN)

At the core of the County’s IT strategies is a reliable, accessible and responsive infrastructure. The network architecture and its supporting operations are key factors for facilitating efficient and effective business processes, information flows, systems integration and IT investment sharing. Interoperability is also essential to inter-departmental communications, permitting units from two or more different departments to interact with one another and to exchange information according to a prescribed method that yields predictable results. **It is imperative that the County has a common, reliable network infrastructure** to support its enhanced



interoperability efforts and to ensure that a common baseline for information privacy, security and performance is delivered in a uniform manner.

An enterprise IT infrastructure requires consistent frameworks, guidelines and standards for building and managing information systems. **It is founded on industry standards and guided by best practices.** The architecture should provide appropriate access to available information systems and network services through a single workstation and provide a logical path to information resources. The County continues to work towards standardization in technologies and the use of common methodologies, practices and procedures.

**The Enterprise Network (EN) provides the seamless communications fabric to conduct County business.** It is a desktop-to-desktop architecture based on advanced industry standards, scalable in locations and capacity, and fully redundant in the backbone. The County is currently in the process of re-bidding EN services. The new EN services agreements will build on the success of the current WAN by including support for new technologies such as Voice over IP, Video Conferencing over IP, and widearea wireless computing.

Specific objectives required to accomplish this strategy are to:

- Implement a **single Internet Protocol (IP) WAN** utilized by all county departments to *provide ubiquitous access to information resources.*
- Establish an **enterprise-wide network management support structure** to ensure high availability, reliability, and maintainability. This structure will take advantage of *economies of scale, maximize the utilization of scarce technical resources, reduce training costs, and improve service delivery.*

The table on the next page lists the strategic IT projects in support of this strategy, and the linkage to the County's strategic goals. *Please see Chapter 4 for details on the projects.*



Linkage of IT Projects to County Strategic Goals

Goal Three – Utilize Enterprise Solutions to Meet Common Needs											
Strategy 3.1 Provide a high capacity, scalable, wide area network (WAN) that supports existing and planned applications.				County Strategic Goals							
Major IT Projects				1. Service Excellence	2. Workforce Excellence	3. Organizational Effectiveness	4. Fiscal Responsibility	5. Children & Families	6. Community Services	7. Health & Mental Health	8. Public Safety
Enterprise Network Expansion – New Carrier Agreement RFP	X		X X								
Converged Technologies – VoIP initiatives, Video Conferencing over IP	X	X	X X								X
Wireless Computing – Wireless LANS	X	X	X								

### 3.3.2 Strategy 3.2 – Ensure appropriate acquisition of IT systems, applications and services

The County understands the need for establishing IT standards to support interoperability, simplify maintenance, and provide opportunities for greater cost savings through leveraging the purchasing power of the County as a whole. Disparate departmental purchasing approaches within the County increase the overall cost of implementing and maintaining IT applications.

**The County already benefits from negotiated enterprise software licensing and services agreements,** and will continue to pursue additional enterprise agreements and leverage such volume purchases to support this strategic direction.

**The CIO is also pursuing initiatives to strengthen the IT governance processes that lead to major technology acquisitions.** To this end, departments are now required to submit a formal business plan as part of their justification for major IT initiatives, which includes cost/benefit analysis, linkage to departmental and County goals, and coordination with other departments using related technologies and processes. Improvements to the IBAP process and departmental IT strategic planning effort now underway will additionally strengthen the County’s IT governance.



Specific objectives (with italicized benefits) associated with this strategy are to:

- Promote **procurement of technology** goods and services in accordance with the County objective to *leverage volume purchases and achieve economies of scale*.
- Evaluate **commercially available software**, including integration of multiple packages, as an initial step in the business requirements process.
- Foster **enterprise-wide licenses and volume purchase agreements** for hardware, software and services. These enterprise-wide agreements will *ensure compatibility, eliminate redundancy, reduce costs, and shorten purchasing cycles*.
- Promote the use of **Web-based applications** as preferred application technology.
- Link IT budgets to the department’s planning process. The **department’s BAP must link to its business plan**.

The table below lists the strategic IT projects in support of this strategy, and the linkage to the County’s strategic goals. *Please see Chapter 4 for details on the projects.*

Linkage of IT Projects to County Strategic Goals

Goal Three: Utilize Enterprise Solutions to Meet Common Needs						
Strategy 3.2 Ensure appropriate acquisition of IT systems, applications and services.				County Strategic Goals		
Major IT Projects				1. Service Excellence	2. Workforce Excellence	3. Organizational Effectiveness
Enterprise Licenses & Service Agreements	X	X	X	X		
IT Governance Initiatives	X	X	X	X		

### 3.3.3 Strategy 3.3 – Share technology resources

Each County department has a specific mission and goals. These goals are accomplished with processes that have many cross-departmental similarities and interactions. **Sharing IT resources to automate these processes will reduce costs, enhance communications, and improve the quality of County services.**



The County has a strong track record in deploying and supporting shared technology resources at the enterprise level. Recent successes include the implementation of eCAPS Phase I, design work for the new County Data Center, the Business Intelligence (BI) infrastructure, the Los Angeles Document Exchange (LADOX) framework, and the Enterprise Network (EN) wide-area network infrastructure.

Enterprise technology sharing initiatives underway include a shared GIS repository which will reduce departmental costs for GIS layers and aerial imagery, along with IT Shared Services as a “total solution” for departmental PC support and upgrade. The County is also encouraging departments and affinity groups to share IT resources. Examples of this include the standardization of applications across DHS and the new mobile data communications system which will be shared by Sheriff, Fire, and OPS.

Specific objectives (with italicized benefits) needed to accomplish this strategy are to:

- Promote opportunities to **consolidate data centers** to *achieve efficiencies and maximize scarce technical and management resources*.
- Promote opportunities for an **enterprise-wide LAN premise support structure** to *maintain and ensure high availability and reliability*. This structure will take advantage of economies of scale, maximize the utilization of very scarce technical resources, reduce training costs, and improve service delivery.
- Develop strategies that enable and encourage **resource sharing** and promote opportunities for **interoperability, reusability and portability**. These standards will include the development methodologies and tools that promote resource sharing, shared training, and *reduced support costs*.
- **Share technical support resources across departments** to *reduce costs and leverage specialized skills*.
- Develop enterprise-wide processes to **move data collection and validation to the source** and *reduce data duplication*. Information should be shared and exchanged electronically to avoid transcribing and manual re-entry of data.

The table on the following page lists the strategic IT projects in support of this strategy, and the linkage to the County’s strategic goals. *Please see Chapter 4 for details on the projects.*



Linkage of IT Projects to County Strategic Goals

Goal Three: Utilize Enterprise Solutions to Meet Common Needs										
Strategy 3.3 Share technology resources.					County Strategic Goals					
Major IT Projects					1. Service Excellence	2. Workforce Excellence	3. Organizational Effectiveness	4. Fiscal Responsibility	5. Children & Families	6. Community Services
					7. Health & Mental Health	8. Public Safety				
eCAPS Phase I & II	X	X	X	X						
Countywide Addresss Matching System (CAMS)	X	X	X	X						
Enterprise GIS Repository	X	X	X	X						
Los Angeles Region - Imagery Acquisition Program (LAR-IAP)	X	X	X	X	X					
Business Intelligence (BI) Enterprise Reporting Infrastructure	X	X	X	X						
County Data Center	X	X	X	X						
IT Shared Services (ITSS)	X	X	X	X						
Sheriff/Fire/Office of Public Safety Mobile Data Communications	X	X	X	X	X			X		
DHS Ancillary Standardization	X	X	X					X		
DHS Healthcare Information System (HIS)	X	X	X					X		
Sheriff Jail Health Information System (JHIS) Telemedicine	X	X	X	X				X	X	

### 3.4 Goal Four: Improve the IT Skills of the County Workforce

IT plays a major role as the County strives to improve its efficiency and effectiveness, institute performance-based management and improve communications with citizens. Advances in technology are employed to transform the relationship between citizens and government by enabling the delivery of services more directly, more rapidly and electronically to the individual. If the County is to harness the full power of IT, it must have a well-skilled workforce that can manage, implement and utilize technology products.





Technology-based learning (eLearning) has become a vital component of virtually every County department's training delivery strategy. With the expansion of computer availability throughout the County, eLearning tools can provide County departments with considerable savings of both dollars and employee time by presenting alternatives to the traditional classroom setting...

The County's Strategic Plan provides direction on the part that technology will play in improving the workforce. A key objective of the County's Strategic Plan Goal 2 - Workforce Excellence, is the acquisition of a robust and highly functional, enterprise-wide Learning Management System (LMS) for the County. It specifies that the County shall begin implementation of the following enabling technologies to improve assessment, design and evaluation processes:

- LMS
- Web-based learning systems
- Web-based survey systems

IT professional and end-user training is a vital part of the County's human capital equation. As the County develops and implements effective IT training programs, the following strategic goals will be pursued:

- **The County will coordinate countywide IT training.** This coordination effort will include procurement of training materials and identification of those training functions that should be centrally administered.
- **The County will implement online, interactive training.** The implementation effort will include the deployment and management of an online, interactive training delivery system to enhance and facilitate access to training materials and training opportunities (e.g. computer-based training and webinars).
- **The County will adopt IT training standards.** The adoption and use of IT training standards include minimum levels of training required annually for IT personnel. These minimum standards should be expressed in terms of number of hours of training in core areas of expertise for each IT position or position type.
- **The County will promote technical certification training.** The promotion effort will focus on the availability of department sponsored, industry recognized technical certification training (e.g., PMP, MCSE, CISSP etc.) and County developed certification tracks (e.g., information security, BI, business continuity/disaster recovery, and GIS) for IT staff, coupled with strong encouragement and/or incentives for employees to take advantage of training opportunities.
- **The County will track and monitor employee training.** This effort will focus on technology-based, centralized tracking and monitoring of employee training. This will ensure that the County workforce is receiving the training it needs, and that those efforts are well documented and transferable across departmental boundaries.



- **The County will deploy automated skills assessment tools.** This will assist County departments in more effectively ensuring that the proper type and level of training has been selected for their employees based on their skills level, thereby maximizing the value of the department’s training investments.
- **The County will adopt IT end-user skill requirements.** This effort will include the adoption of computer literacy skill requirements for the County workforce, and provision of training to fulfill those basic requirements, as necessary.

The County successfully piloted an e-learning system by THINQ at the Department of Health Services, Public Health Programs in 2004. THINQ has since been acquired by Saba Systems, who have agreed to license their improved suite of products to the County on an enterprise basis. This project supports the strategies for improving IT skill levels in both IT and end-user staff. *Please see Chapter 4 for details.*

Linkage of IT Projects to County Strategic Goals

Goal Four: Improve the IT Skills of the County Workforce		
Strategy 4.1 Improve skills and competencies of County IT professionals.	County Strategic Goals	
Strategy 4.2 Raise and maintain IT skill level of all County employees.	1. Service Excellence	
	2. Workforce Excellence	
Major IT Projects	3. Organizational Effectiveness	
	4. Fiscal Responsibility	
	5. Children & Families	
	6. Community Services	
	7. Health & Mental Health	
	8. Public Safety	
	Enterprise e-Learning System	X X X

### 3.4.1 Strategy 4.1 – Improve skills and competencies of County IT professionals

IT is dynamic and rapidly changing. Accordingly, this requires IT professionals to maintain their skills and competencies. Keeping these skills current requires investments in continuous learning. These investments should be targeted by conducting assessments of current skills of County IT personnel to determine the gap between existing skill sets and desired skills, based on technology needs and business priorities. This will enable training and staff development plans to be developed for each IT employee.



Recent accomplishments in training the County's IT professionals include:

- Trained an estimated 400 County staff on **COGNOS BI software** – reporting, analytical cubes, balance scorecards, dashboards, and extraction, transformation and load process.
- Trained an estimated 30 County staff on **architecting and developing data warehouses and data marts**.
- Trained County GIS practitioners on **ESRI GIS and mapping software** and utilizing the County's shared GIS repository.
- Sponsored workshops for County IT staff on **Linux and open source software**.

The County plans additional training for its IT staff in the following areas:

- Provide information security learning tracks for system administrators, system developers, network administrators, and security officers.
- Continue business intelligence learning tracks.
- Provide training on County standards for Web development and electronic forms.
- Host roundtable meetings on industry best practices and emerging technologies with County strategic business partners – Cisco, Microsoft, Intel, Symantec, McAfee, IBM, COGNOS, etc.

Specific objectives needed to accomplish this strategy are to:

- Inventory staff skill levels and knowledge to assess competencies in department functions and county strategic technologies.
- Develop training requirements to address required skill sets.
- Develop training strategies, plans and schedules to build competencies in identified skill sets.
- Measure training effectiveness and quality improvement.

### **3.4.2 Strategy 4.2 – Raise and maintain IT skill level of all County employees**

On a daily basis, County workers use computers and other technology. As the County moves toward eGovernment, not all county employees will work online all the time, but most will need to know how to use IT efficiently in some aspect of their job. The County Strategic Plan has identified actions to ensure that the overall level of "IT literacy" is appropriate to the tasks of all levels of the workforce.



Recent accomplishments in IT training for the County's workforce include:

- Provided **HIPAA security awareness** training on IT – password protection, managing IDs, protection against virus and malware, etc.
- Provided training on **use of eCAPS** to the entire County.

The County plans additional IT training for County staff in the following areas:

- Continue and expand HIPAA training programs.
- Provide comprehensive information security awareness training.
- Provide Business Intelligence end-user training for County managers on COGNOS business analytics (reporting, dashboards, cubes, balanced scorecards).
- Implement an enterprise e-learning system to track end-user IT and other training.

Specific objectives needed to accomplish this strategy are to:

- Inventory employee skill levels and knowledge to assess competencies in end-user productivity tools (office automation/desktop applications such as word processing, spreadsheets, E-mail, etc.).
- Develop training requirements to address end-user needs.
- Develop training strategies, plans and schedules to build end-user skills with productivity tools.
- Measure training effectiveness and quality improvement.



## 4 Major IT Projects

In support of the County's Strategic Goals and in alignment with the Strategic Directions for IT, the County has numerous major projects currently underway. These projects represent those long-term strategic initiatives that address the departments growing business and technology needs.

Many of the projects encompass a degree of financial and scope risk due to the complexity of the technology involved and/or the need for inter-departmental collaboration.

This chapter briefly describes each of these projects with an emphasis on those that meet one or more of the following criteria:

- **Enterprise or cross-departmental** – The challenges of coordinating requirements, resources, and schedules across multiple departments demands that these projects be strategically managed. Examples include eCAPS and the GIS Enterprise Repository.
- **Board directives** – Some projects are of special interest to the Board and must be managed accordingly. Examples include the Business Continuity Program and the Business Intelligence projects.
- **High public profile** – A number of major projects have outcomes with considerable impact on the County's constituents. Examples include Electronic Voting and One-E-App.
- **Address significant issues** – Some major projects address issues of technical obsolescence, stovepipe applications, limited functionality, etc. Examples include Sheriff/Fire/OPS Mobile Data Communications and DHS Ancillary Standardization.

Chapter 3 presented a table for each IT strategy showing the alignment of the supporting projects with the County's overall goals. The table on the next page summarizes all of the Chapter 3 tables.

The remainder of this chapter is organized by IT Goal and Strategy, in parallel with the previous chapter.



Alignment of Major IT Projects and County Strategic Goals	1. Service Excellence	2. Workforce Excellence	3. Organizational Effectiveness	4. Fiscal Responsibility	5. Children & Families	6. Community Services	7. Health	8. Public Safety
<b>1. Conduct County Government Electronically</b>								
<b>1.1. Utilize electronic business technologies to reduce costs and improve service</b>								
Electronic Commerce	X	X	X	X				
County Portal Rewrite	X		X					
Electronic Voting	X		X					
One-E-app	X	X	X	X	X		X	
Intelligent Traffic Systems (ITS)	X		X			X		
COGNOS Business Intelligence (BI) Projects	X	X	X	X				
Medical Passport	X	X	X		X		X	
<b>1.2. Promote use of electronic communication</b>								
Enterprise Content Management Strategy	X	X	X					
Los Angeles Document and Object eXchange (LADOX)	X	X	X					X
ISAB Service Oriented Architecture (SOA) & Web Services	X		X					X
Patient-related Electronic Document Imaging Management (PEDIM)	X	X	X	X	X		X	
Library Public Wireless Access	X	X	X		X			
Assessor Information Management System (AIMS)	X	X	X	X				
<b>2. Provide Secure Access to Electronic Applications</b>								
<b>2.1. Develop a countywide information privacy program</b>								
Secure Messaging	X	X	X	X	X	X	X	X
<b>2.2. Develop a countywide security architecture</b>								
Business Continuity Program (BCP)	X	X	X	X				
Privacy Legislation Compliance Program	X		X		X		X	
Information Security Awareness Program	X	X	X	X	X	X	X	X
Computer Security Incident Response Process	X	X	X	X	X	X	X	X
Application Security Guidelines	X	X	X	X	X	X	X	X
Vulnerability Assessment	X	X	X	X			X	
<b>2.3. Develop a technology infrastructure that provides secure data access</b>								
Mobile Device Information Protection Program	X	X	X					
Orange County Disaster Recovery Site	X	X	X	X				
Internet Content Filtering	X	X	X	X	X	X	X	X
<b>3. Utilize Enterprise Solutions to Meet Common Needs</b>								
<b>3.1. Provide a high capacity, scalable, wide area network (WAN)</b>								
Enterprise Network Expansion - New Carrier Agreement RFP	X		X	X				
Converged Technologies - VOIP initiatives, Video Conferencing over IP	X	X	X	X				X
Wireless Computing - Wireless LANs	X	X	X					
<b>3.2. Ensure appropriate acquisition of IT systems, applications and services</b>								
Enterprise Licenses & Service Agreements	X	X	X	X				
IT Governance Initiatives	X	X	X	X				
<b>3.3. Share technology resources</b>								
eCAPS Phase I & II	X	X	X	X				
Countywide Address Matching System (CAMS)	X	X	X	X				
GIS Enterprise Repository	X	X	X	X				
Los Angeles Region - Imagery Acquisition Program (LAR-IAP)	X	X	X	X		X		
Business Intelligence (BI) Enterprise Reporting Infrastructure	X	X	X	X				
County Data Center	X	X	X	X				
IT Shared Services (ITSS)	X	X	X	X				
Sheriff/Fire/Office of Public Safety Mobile Data Communications	X	X	X	X		X		X
DHS Ancillary Standardization	X	X	X				X	
DHS Healthcare Information System	X	X	X				X	
Sheriff Jail Health Information System (JHIS) Telemedicine	X	X	X	X			X	X
<b>4. Improve the IT Skills of the County Workforce</b>								
<b>4.1. Improve skills and competencies of County IT professionals</b>								
Enterprise e-Learning System	X	X	X					
<b>4.2. Raise and maintain IT skill level of all County employees</b>								
<b>COUNT</b>	<b>40</b>	<b>34</b>	<b>40</b>	<b>26</b>	<b>10</b>	<b>8</b>	<b>13</b>	<b>10</b>



## 4.1 Conduct County Government Electronically

### 4.1.1 Utilize electronic business technologies to reduce costs and improve service

#### 4.1.1.1 Electronic Commerce

Primary Customers	Participating Departments	Project Status
<input type="checkbox"/> County <input type="checkbox"/> Other Agencies <input checked="" type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input checked="" type="checkbox"/> Completed <input type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

**100%**

#### Project Description

The County's current electronic commerce (e-Commerce) architecture can be divided into three layers:

- Layer 1 - Merchant Commerce System (Storefront)
- Layer 2 - Payment Gateway
- Layer 3 - Payment Processor

The County is planning to expand its online credit/debit card acceptance to a broader range of services, including but not limited to, property taxes, licenses, permits, fees for services, etc. To support this expansion **in March 2006 the County selected Link2Gov Corporation and Marshall and Ilsley Corporation to outsource Layers 2 and 3 for current and future e-Commerce applications** for County departments.

Concurrently, the Board amended the Cost Neutral Credit/Debit Card Acceptance Policy to allow departments to either include credit/debit card transaction costs and other related application costs when developing the fees charged to all customers, or to absorb the costs in their budgets where there is a legitimate business reason to do so.

Existing County e-Commerce applications that will benefit from these outsourced services include Coroner's, Public Library FYI, and Public Works simple permits. Additional e-Commerce applications are planned to take advantage of this outsourcing agreement, including animal licenses, taxes, and other County services.

#### Major Benefits

- Provides a common countywide e-Commerce platform, lowering total cost and simplifying application design.
- Addresses information security, data privacy, and financial risk issues.





- Accommodates Board policies and external regulations regarding convenience fees and cost neutrality.
- Helps departments to quickly meet the Board's directive to increase the number of e-Commerce applications at the County.
- Increases availability, efficiency, and effectiveness for the citizens accessing County services over the Internet using e-Commerce applications.

#### 4.1.1.2 County Portal Rewrite

Primary Customers	Participating Departments	Project Status
<input type="checkbox"/> County <input type="checkbox"/> Other Agencies <input checked="" type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

#### Project Description

The County's Internet portal [www.lacounty.info](http://www.lacounty.info) has succeeded in bringing a wide range of departmental Web content under one umbrella. However, issues remain with the inconsistent "look and feel" between departmental sites (i.e. "branding"), incomplete search capabilities, differing technical architectures, and a fragmented service approach. The portal rewrite project aims to address these deficiencies.

The project will proceed in three distinct releases, each with its own Assess – Design – Build – Deploy cycle:

- **Release 1** will focus on instituting shared governance, establishing portal standards, designing the user interface, taxonomy, and content model, and laying out the technology.
- **Release 2** will initiate participation from departments, enhance content integration, and build out additional capabilities (e.g., services providing transaction interfaces) in a time-boxed, business benefit driven manner.
- **Release 3** will begin to address broader issues for the County such as secured services, multi-language approaches, better integration with backend applications, and the County intranet.

The County established an eGovernment Advisory Committee tasked with guiding this project, and with providing ongoing governance for the portal once the project is complete. The Portal Vision was reviewed with the Committee and a final decision on the portal infrastructure is being evaluated.



## Major Benefits

- **Enables service quality improvement** – The redesigned County portal will provide a more integrated view of County information and services that will reduce the need to access multiple department websites independently. Moreover, the new portal can customize content with targeted information for defined user groups (e.g., residents, businesses, employees, etc.) to provide improved customer service and reduce the number of service inquiries.
- **Supports timely web development and shared services** – The implementation of a common, shared portal infrastructure environment will enable ISD and other departments to more cost-effectively manage and deploy timely changes to County websites and expand its online services.
- **Facilitates standardization and consistency to the County’s web presence** – ISD and other departments will be able to develop and deploy a consistent County website look, touch and feel through the use of standardized tools and templates.

### 4.1.1.3 Electronic Voting

Primary Customers	Participating Departments	Project Status
<input type="checkbox"/> County <input type="checkbox"/> Other Agencies <input checked="" type="checkbox"/> Public	<input type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input checked="" type="checkbox"/> County Clerk	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

40 %

## Project Description

The County has adopted a deliberative multi-phased approach to the implementation of a new direct recording electronic (DRE) touch screen voting system due to four primary factors: 1) costs of implementing these systems (estimated at more than \$100 million); 2) rapidly evolving state of electronic voting technology and federal and state regulations governing this technology; 3) desire to learn from the experience of other counties converting to electronic voting systems; and 4) the unique challenges of implementing a system that scales to the County’s needs (four million voters and 5,000 voting precincts) and meets the unique requirements to translate the ballot into seven languages.

**Phase I** – Began in conjunction with the November 2002 General Election with the introduction by the Registrar-Recorder/County Clerk (RR/CC) of **DRE touch screen voting systems for “early voting”** at numerous sites in conjunction with County major elections and to expand public awareness of touch screen voting by using this equipment for small-scale city elections.



**Phase II** – Involved meeting the mandate to **replace the punch card system with an interim paper-base optical scan system**. A small ballot optical scan voting system, InkaVote was determined to be the most appropriate choice due primarily to its similarity to the familiar punch card system and low acquisition and operating cost. The RR/CC successfully implemented InkaVote for the November 2003 Uniform District Elections.

**Phase III** – Involves implementing a voting system that **complies with the federally mandated Help America Vote Act (HAVA) requirements**, which requires a means for disabled (blind and visually impaired) to vote privately and independently at each County polling place, and provide the capability to advise all voters if they mistakenly marked more than one voting selection in a contest (an “overvote”). The RR/CC released a Request for Proposal (RFP) in April 2005 to acquire and implement Precinct-Based Ballot Readers (PBR) Units and Audio Ballot Booths (ABBs) (i.e. precinct ballot tabulators with an audio component for blind voters) at each polling location. The InkaVote Plus system was selected, and was certified by the California Secretary of State in April 2006. The system was installed and tested by September 2006.

**Phase IV** – Involves continuing the pursuit of the goal to implement a **fully tested DRE touch screen voting system** that would be fully compliant with state and federal requirements after development, testing, certification, and successful installation of such systems in other counties.

**Major Benefits**

- Improves the efficiency and accuracy of the election process by automating a manual process.
- Provides flexibility for accommodating voters with special needs.
- Implements controls to avoid errors by voters and election workers.

**4.1.1.4 One-e-App**

<p><b>Primary Customers</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> County</li> <li><input checked="" type="checkbox"/> Other Agencies</li> <li><input checked="" type="checkbox"/> Public</li> </ul>	<p><b>Participating Departments</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Enterprise</li> <li><input checked="" type="checkbox"/> Human Services</li> <li><input type="checkbox"/> Departmental</li> </ul>	<p><b>Project Status</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Completed (Ph. I)</li> <li><input checked="" type="checkbox"/> Ongoing (Ph. II)</li> <li><input type="checkbox"/> Initiated FY 06-07</li> </ul> <p>20%</p>
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**Project Description**

Los Angeles County has the highest concentration of uninsured people in California and spends roughly \$2 billion a year on health care to serve this population. More than 2.4 million Medi-Cal recipients are enrolled or re-enrolled annually. One-e-App has the potential to significantly impact thousands of families and streamline administrative systems in a hugely overburdened public health system.



**One-e-App is an innovative web-based system that provides an efficient one-stop approach to enrollment in a range of public sector health programs**, such as Medi-Cal, Healthy Families, Healthy Kids and indigent care. One-e-App's state-of-the-art technology automates and streamlines the application processes. To date, One-e-App has been implemented in Alameda, Santa Clara, Santa Cruz, and San Mateo counties. Fresno County is slated to launch in fall 2005.

The goal of implementing One-e-App throughout Los Angeles County is to improve access, enrollment and retention in a range of health and social services programs. This will meet the needs of families and individuals who are currently enrolled in programs through a fragmented and cumbersome process as well as those who are uninsured but may be eligible for many programs.

**Phase I, a One-e-App feasibility analysis, was completed in January 2005.** It included a traditional return on investment (ROI) analysis which concluded that the economic impact of implementation (cost vs. savings) after the initial capital investment is neutral. It identified intangible benefits that provided ample justification for the project. Simplifying and streamlining the enrollment process will result in eligible but un-enrolled residents of Los Angeles County securing health insurance, thereby justifying the initial investment and resulting in wider community benefit for the entire County.

**The key stakeholders are negotiating a contract to begin Phase II of One-e-App implementation.** During this phase of the project, four essential programs for children – Medi-Cal for children and pregnant women, Healthy Families, Children's Health and Disability (CHDP), and Healthy Kids – will be designed for county-specific workflow, implemented, tested and launched at sites across the County. Interfaces will be developed for Los Angeles Care Health Plan and LADHS's enrollment tracking and reporting system for community-based organizations. Subject matter experts will be convened during this phase to perform a detailed requirements analysis, participate in design sessions, and conduct user acceptance testing. At the end of this phase, One-e-App will "go-live" with community-based organizations, public hospitals and clinics and L.A. Care Health Plan.

Another significant part of Phase II work will be preparation for Phase III including the development of requirements and detailed technical design documents. Phase III will include the addition of Adult Medi-Cal and interfaces the Los Angeles Eligibility, Automated Determination, Evaluation and Reporting (LEADER) system and other systems of record.

## **Major Benefits**


- Provides Los Angeles County with a "one-stop" application process for individuals and families eligible for programs such as Medi-Cal, Healthy Families, Child Health and Disability Program (CHDP), Healthy Kids and indigent care.



- Streamlines and modernizes outreach and enrollment efforts for county agencies, community-based and county clinics, community-based organizations, health plans and providers by using One-e-App's real-time screening and preliminary eligibility determination, data and document storage, error checking, and application management functions.
- Maximizes the use of state and federal resources by ensuring applicants are screened and enrolled for the full range of appropriate programs.

#### 4.1.1.5 Intelligent Traffic Systems (ITS)

Primary Customers	Participating Departments	Project Status
<input checked="" type="checkbox"/> County <input checked="" type="checkbox"/> Other Agencies <input checked="" type="checkbox"/> Public	<input type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input checked="" type="checkbox"/> Public Works	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07



#### Project Description

Since 1988 the County has participated in regional traffic signal synchronization efforts through the Los Angeles County Regional Traffic Forum. In 1995 the scope and funding for these efforts were greatly increased with the inclusion of Intelligent Transportation Systems (ITS) and funding provided by the Metropolitan Transportation Authority (Metro). **ITS includes elements such as Advanced Traffic Management Systems (ATMS), Advanced Traveler Information Systems (ATIS), Information Exchange Network (IEN), and Traffic Management Centers (TMC).** These projects enable cities and the County to monitor and control their traffic signals and adjust and coordinate their signal timing from a remote location, such as a city hall or a regional traffic management center. The objective of these projects is to provide for better traffic management during peak commute periods, traffic incidents, and special events.

**The County is in the process of installing ATMS throughout the entire forum areas.** An ATMS communicates with traffic signal controllers in the field and allows remote control and once-per-second monitoring of the signals for optimal operation and maintenance. The operational and functional monitoring of the traffic signals will provide agency engineering staff with immediate notification of signal malfunctions, which will enable faster and more efficient maintenance responses. Since November 2004, the County has been in the process of installing its ATMS, and has selected the Kimley-Horn Integrated Transportation Systems (KITS). System installation is currently delayed by the installation of communications and the initial field deployment is scheduled to begin during summer 2006. The initial deployment area will include 51 County-maintained traffic signals in South Bay.

**Under a private/public partnership, DPW and its consultant, Iteris, has launched ATIS.** While the initial deployment was focused on the El Segundo area, commuters throughout the Southern California region are reaping the benefits of what this project has completed to date. This project provides the motoring public with pre-trip and en route traveler information. Real-




time traffic information can be accessed via Internet, community access television, toll-free phone number, or text messages delivered to users' cell phones or E-mail accounts. Upon completion of the system, anticipated in 2007, Iteris will be expected to operate and maintain the ATIS without further public subsidies.

**The County successfully implemented the IEN in 2002.** The IEN is a computerized system capable of exchanging traffic signal data on a second-by-second basis between agencies across multiple jurisdictions. The vision is to make travel through cities virtually seamless and enable multi-jurisdictional coordinated responses to incidents and congestion. **All of this effort will come together at the County of Los Angeles' TMC which was opened in July of 2004** at the Department of Public Works' Headquarters Building in Alhambra. It will act as the central hub where all information will be gathered from and distributed to all agencies within the Los Angeles region.

### Major Benefits

- Reduces travel times by as much as 24 to 29 percent.
- Enables a multi-jurisdictional coordinated response to incidents and special events.
- Provides real-time traffic conditions on a variety of devices.

#### 4.1.1.6 COGNOS Business Intelligence (BI) Projects

<p><b>Primary Customers</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> County</li> <li><input type="checkbox"/> Other Agencies</li> <li><input type="checkbox"/> Public</li> </ul>	<p><b>Participating Departments</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Enterprise</li> <li><input type="checkbox"/> Affinity Group</li> <li><input type="checkbox"/> Departmental</li> </ul>	<p><b>Project Status</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Completed</li> <li><input checked="" type="checkbox"/> Ongoing</li> <li><input type="checkbox"/> Initiated FY 06-07</li> </ul> <p style="text-align: right;"><b>50%</b> </p>
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### Project Description

The County's 38 departments have numerous financial, personnel, purchasing and case management applications, with disparate reporting toolsets for each application. These disparities result in lower employee efficiencies and effectiveness for reporting, and in a higher total cost to support the reporting infrastructure. To address these issues, the County implemented a shared COGNOS BI infrastructure (see project 4.3.3.4 for details). Several departments have been "early adopters" of the new BI approach, with the following projects in various stages of completion:

- **Auditor-Controller** – Phase I eCAPS report development for the Auditor-Controller's Accounting Division has been completed. The reports addressed the areas of general ledger, accounts payable, accounts receivable, cost accounting, revenue, balance sheet





and budget reporting. The focus for 2007 will be the development of departmental reports for these same Phase I financial areas.

Phase II report development for time collection, procurement, capital assets and inventory is underway.

- **Chief Administrative Office** – Risk Management System Datamart is in a requirements definition phase. Special emphasis will be given to the development of multidimensional analytical reports to highlight the financial aspects of claims management and trial outcome activities of the County's third party administrators and County Counsel.
- **Health Services** – Simplified reporting for each of DHS' hospitals has been completed with a Health Services Financial Datamart under consideration. Health Services is also initiating a project to define their clinical reporting needs using the data within their clinical data warehouse.
- **Mental Health** – DMH has been using multidimensional analytical reports to reduce the workload on their information technology resources.
- **Internal Services:**
  - Completed "*Performance Counts!*" and Customer Satisfaction Dashboards.
  - Developed a template for small departments to create performance measurement dashboards. An example of this is the dashboard developed for Department of Community and Senior Citizens. ISD is also working with the Department of Children and Family Services on a similar project.
- **Public Social Services** – DPSS has completed a "*Performance Counts!*" dashboard which has been in use for over a year. DPSS is also developing a data warehouse from six disparate silo systems to drive the "*Performance Counts!*" Dashboard and to reduce the time it takes to produce reports. The silo systems are LEADER, GEARS, Child Care, In Home Services and DPSS' finance and item control systems. The reports from the data warehouse provide a complete picture of the welfare recipient's eligibility; the assistance they receive, and the income received from the Welfare to Work program.
- **Public Works** – is developing seamless reporting between eCAPS and the department's Financial Accounting System.

These projects support and automate the County's "*Performance Counts!*" measurement initiative, and also provide managers with tactical performance monitoring specific to their department. Highlighted accomplishments from the prior year include:

- **DPSS STATS Dashboard** – Served as a pilot project to test the effectiveness of using real-time performance monitoring to improve the delivery of social services. Over a four-month period STATS has improved line operations performance, increased information sharing, and provided the catalyst for a cultural shift towards ownership and accountability for results. It has been identified as a model to be used as a performance management tool for County departments.





- **Sheriff Dashboard** – The Sheriff is providing crime and response data to its contract cities. The dashboard has proved to be a simple and useful management information tool that provides answers to the question "What happened in my community last night?" It is a web-based data repository that summarizes patrol, crime and arrest activity, permits drill-down to detailed reports, and provides a high level view of law enforcement services and workload information.
- **Local Small Business Enterprise (SBE) Data Warehouse** – ISD's SBE data warehouse contains detailed data (e.g., expenditure category, location of vendor, amount, etc.) on each payment made to small businesses. This data reflects the total purchase order and contract payments made by the County for which small businesses should have been able to compete. This will allow the County to better target outreach efforts and, in working with the Small Business Commission, develop performance measures for the SBE program, including ones related to the percentage of total orders that are awarded to small businesses.

### Major Benefits

- Provides near real time access to County information as opposed to batch reports printed overnight and distributed to County executives for their decision-making.
- Builds a BI skill set among County employees that is transferable among departments.
- Fosters ownership of performance measures and accountability for results.
- Encourages the use of a common set of intuitive information displays, making management decisions easier to understand.

#### 4.1.1.7 Medical Passport

<b>Primary Customers</b> <input checked="" type="checkbox"/> County <input checked="" type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<b>Participating Departments</b> <input type="checkbox"/> Enterprise <input checked="" type="checkbox"/> Human Services <input type="checkbox"/> Departmental	<b>Project Status</b> <input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07
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A green arrow points from the 'Ongoing' status to a yellow box containing '30%'.

### Project Description

This application is intended to provide an automated means of viewing, recording, and maintaining the health care history of foster children currently under the charge of the Department of Children and Family Services (DCFS). It will provide a means for physicians to obtain the most current information concerning the child, such as allergic reactions to



medications, current prescriptions, and past medical appointments. It will utilize a web-based portal that will, to the extent permitted by privacy and confidentiality laws, enhance the exchange of health and education information between participating agencies that provide services to foster children.


The Chief Administrative Office’s Service Integration Branch (CAO/SIB), in conjunction with the Education Coordinating Council (ECC) are the lead agencies for the County on this project. A candidate system has been identified as the best model for implementing this system, to be rolled out to all medical hubs in Los Angeles County. At a later date, educational records could be added to the digital “passport” as a second phase of the project.

**Major Benefits**

- Improves quality and consistency of health care.
- Makes reductions in health care costs possible.
- Improves access to information.
- Provides more complete historical data enabling better diagnoses and treatment.
- Improves tracking and management.
- Expedites permanency planning for foster children.
- Enhanced oversight, accountability, and outcome measurement.

**4.1.2 Promote use of electronic communication**

**4.1.2.1 Enterprise Content Management Strategy**

<p><b>Primary Customers</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> County</li> <li><input checked="" type="checkbox"/> Other Agencies</li> <li><input checked="" type="checkbox"/> Public</li> </ul>	<p><b>Participating Departments</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Enterprise</li> <li><input type="checkbox"/> Affinity Group</li> <li><input type="checkbox"/> Departmental</li> </ul>	<p><b>Project Status</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Completed</li> <li><input checked="" type="checkbox"/> Ongoing </li> <li><input type="checkbox"/> Initiated FY 06-07</li> </ul>
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**Project Description**

County departments have many initiatives underway to improve how they conduct business and provide service to the public. Key to these improvements is better management of the vast numbers of documents they handle. These include both traditional static content such as word processing documents, E-mail, and static images; and also dynamic content within digitally formatted documents, such as Website content. The industry term encompassing these as a single-platform solution or strategy is Enterprise Content Management (ECM).



In 2003 the CIO developed a countywide strategic approach to ECM, identifying projects that would yield the greatest benefits. These projects span departmental “affinity groups” which share common processes and information:

- **Administrative** – Consists of the Auditor-Controller, Board of Supervisors, Executive Office, Chief Administrative Office, Internal Services Department, County Counsel, and Department of Human Resources. These departments share many document generation, approval, and distribution processes relating to Board motions, policies and procedures, and other content that is shared across the County.
- **Property Tax** – Consists of the Assessor, Auditor-Controller, Registrar-Recorder/County Clerk, Treasurer and Tax Collector, and Assessment Appeals Board. These departments share the processes of recordation, assessment, assessment appeal and taxation of property, as well as integration with common supporting systems.
- **Criminal Justice** – Includes the Alternate Public Defender, Coroner, District Attorney, Office of Public Safety, Probation, Public Defender, Sheriff, Los Angeles Superior Court, and Fire Department. These departments are primarily concerned with the courts and public safety. Commonalities include case management and tracking of individual client interactions with the departments.
- **Infrastructure and Planning** – Includes Beaches and Harbors, Department of Public Works, and Regional Planning. These departments all have processes that involve the design, planning, support, maintenance, and documentation of infrastructure throughout the County. They share similar specialized forms of content, such as CAD files, blueprints, and related documentation that have unique requirements for capture, storage, and retrieval.
- **Health and Social Services** – Includes Health Services, Mental Health, Child Support Services, Children and Family Services, Community and Senior Services, Public Social Services, Community Development Commission/Housing Authority, and Probation. Departmental commonalities include patient records, case management and shared clients.

This enterprise strategy for ECM allows the County to support common applications and processes across departments that have similar requirements and needs. Countywide standards for the supporting technologies permit centralized procurement and support, lowering overall costs and allowing the departments to focus on ECM applications rather than ECM technology. In June 2006, the CIO formed a cross-departmental task force to guide the selection of ECM vendors for a master contract.

The County’s ECM strategy has already provided a framework for two of the strategic projects discussed in the next few pages of this section:

- **Los Angeles Document and Object eXchange (LADOX)** – Provides document and object delivery solutions for electronic exchange of criminal justice-related information between agencies.
- **DHS PEDIM** – Supports the vision of the first “near paperless hospital” in the nation.



In addition the ECM strategy has guided several departmental projects which are summarized in Chapter 5:

- **Assessor** – Paperless Transfer System
- **Registrar-Recorder/County Clerk** – Document scanning of birth and death certificates
- **Treasurer and Tax Collector** – Scanning and indexing of departmental correspondence
- **Children and Family Services** – Court Report Document Imaging, Child Critical Incidents Document Imaging
- **Department of Public Social Services** – Quarterly Eligibility/Status Reports (QR7s) Digital Imaging
- **District Attorney** – Digital Archive Project
- **Probation** – Probation Enterprise Document Management System (PEDMS), Digital Image Project
- **Public Defender** – Electronic Document Management System (EDMS)
- **Parks and Recreation** – Document Imaging

**Major Benefits**

- Enables departments that share processes to achieve greater efficiency and integration of functions by implementing similar ECM solutions.
- Offers a commonly implemented ECM solution that can significantly improve the ability of these departments to provide responsive service to the public.
- Provides solutions with demonstrable value that can be replicated across departments, allowing for wider sharing of best practices.
- Provides shared ECM technology platforms and support service that reduce IT costs and allow departments to focus on the business application rather than the technology.

**4.1.2.2 Los Angeles Document and Object eXchange (LADOX)**

<p><b>Primary Customers</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> County</li> <li><input checked="" type="checkbox"/> Other Agencies</li> <li><input type="checkbox"/> Public</li> </ul>	<p><b>Participating Departments</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Enterprise</li> <li><input checked="" type="checkbox"/> Public Protection</li> <li><input type="checkbox"/> Departmental</li> </ul>	<p><b>Project Status</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Completed</li> <li><input checked="" type="checkbox"/> Ongoing</li> <li><input type="checkbox"/> Initiated FY 06-07</li> </ul> <p style="text-align: right;"><b>50%</b> </p>
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## **Project Description**

Justice departments, under the leadership and guidance of the Information Systems Advisory Body (ISAB), a multi-agency technology coordinating body, are implementing applications that include a complete suite of Enterprise Content Management (ECM) technologies (e.g., electronic forms, workflow, document management and records management). These initiatives are part of an overall strategy called the Los Angeles Document and Objects Exchange (**LADOX**), **which seeks to develop document and object delivery solutions for electronic exchange of criminal justice-related information between agencies.** Current objectives for the LADOX project are to:

- Continue the expansion and distribution of the Probation Electronic Document Management System (PEDMS).
- Define and prioritize additional documents for interagency exchange (e.g. the Complaint Filing Process).
- Develop and deploy an ECM reference architecture for document/content storage, indexing, routing and retrieval.
- Implement intelligent document techniques (e.g., XML) for transferring data and document information.
- Implement integration of document management with transaction-based justice systems.
- Support agency initiatives to evaluate and implement internal document workflow.
- Support the transport of data, documents and multi-media objects between multiple justice agencies utilizing integration broker, workflow and web services technology.
- Evaluate the opportunities for inter-agency document/content routing and workflow.

PEDMS, the first application developed within the LADOX framework, has been successfully implemented into production in all Juvenile offices. The next phase, to expand the LADOX framework to offices handling Adult cases, is in progress. ISAB is currently developing the DNA Order Tracking System (DOTS). DOTS will provide multi-agency notification to collect DNA based on Prop 69 qualifying arrestees and defendants. The system will include electronic DNA collection forms, fingerprint ID documentation, Court orders, invoices, reimbursements and workflow tracking. DOTS design specification is complete, and programming began in August 2005.

## **Major Benefits**

- Improves interagency exchange of criminal justice related documents.
- Provides a comprehensive, modern framework for the development of new applications serving criminal justice stakeholders.



- Replaces cumbersome paperwork and narrowly focused “silo” applications.
- Supports departmental and inter-agency process improvement efforts.

#### 4.1.2.3 ISAB Service Oriented Architecture (SOA) & Web Services

Primary Customers	Participating Departments	Project Status
<input checked="" type="checkbox"/> County <input checked="" type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input type="checkbox"/> Enterprise <input checked="" type="checkbox"/> Public Protection <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

#### Project Description

In the next three years, ISAB is planning to research, test, and support various SOA-based services for the member departments. Examples of such services are auditing, performance, XML firewalls, appliances, and accelerators.

The approach for this effort will be for the departments to develop Web services for their own applications, with ISAB providing security services including high speed authentication, auditing, and policy management enforcement for those Web services. There are also plans to provide a Universal Description, Discovery and Integration (UDDI) registry of services that can be queried by the member agencies, ensuring that common standards can be maintained and enforced for Web services across the justice enterprise. Future applications will be built based on these services.

At the request of the Department of Homeland Security CIO office, ISAB has recommended a “tiger team” to develop Naming and Design Standards for the development of a “National Information Exchange Model (NIEM)” based on the Federal DOJ Global Justice Extensible Markup Language (XML) Data Model (JXDM) vocabulary. In addition, ISAB has continued its work in developing XML data standards for the criminal justice enterprise and is a voting member of a Federal task force, Infrastructure Standards Working Group (ISWG) under the Federal Department of Justice, a voting member of Legal XML Court-filing standards group, a voting member and co-chair of OASIS Justice Integrated Justice standards group and an active contributor to the subcommittee developing a national Justice Systems Registry for XML data interchange.

The Global JXDM is an XML standard designed specifically for criminal justice information exchanges, providing law enforcement, public safety agencies, prosecutors, public defenders, and the judicial branch with a tool to effectively share data and information in a timely manner. The Global JXDM removes the burden from agencies to independently create exchange standards, and because of its extensibility, there is more flexibility to deal with unique agency requirements and changes. Through the use of a common vocabulary that is understood system






to system, Global JXDM enables access from multiple sources and reuse in multiple applications.

### **Major Benefits**

- Improves information sharing between County justice departments and external agencies.
- Meets Federal and State requirements for trusted access to criminal justice data.
- Utilizes a common framework to reduce cost for application development and maintenance.
- Reduces the number of interfaces required between systems.

#### **4.1.2.4 Patient-related Electronic Document Imaging Management (PEDIM)**

<p><b>Primary Customers</b></p> <p><input checked="" type="checkbox"/> County  <input type="checkbox"/> Other Agencies  <input type="checkbox"/> Public</p>	<p><b>Participating Departments</b></p> <p><input type="checkbox"/> Enterprise  <input type="checkbox"/> Affinity Group  <input checked="" type="checkbox"/> Health Services</p>	<p><b>Project Status</b></p> <p><input type="checkbox"/> Completed  <input checked="" type="checkbox"/> Ongoing  <input type="checkbox"/> Initiated FY 06-07</p> <p style="text-align: right;"> 30%</p>
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### **Project Description**

One of DHS' key current strategies is to implement an Electronic Medical Record (EMR) system for its providers and patients. Such a system will include multiple components and processes. **A key component of the EMR will be a Patient-related Electronic Document Imaging Management (PEDIM) solution, which aligns with the County's ECM strategy, for use in its patient clinical processes.**

DHS envisions that **the PEDIM system will first be implemented at the existing LAC+USC Hospital**, with the intention that the system will be migrated to the new 600 bed replacement facility when it opens in November 2007, **providing a near-paperless operating environment.** PEDIM's focus will be on "image-enabling" the LAC-USC's Healthcare Information System (HIS), QuadraMed's Affinity, with input from the Division's Misys Laboratory Information System (LIS) and other, division-wide clinical information systems. Multiple technologies will be involved including document imaging, Optical Character Recognition (OCR)/Intelligent Character Recognition (ICR), bar coding, document management (of electronic files), forms processing, COLD/Enterprise Report Management (ERM), and workflow.

In order to facilitate the successful transition to PEDIM, DHS has launched a patient-related forms redesign initiative to expedite the scanning and indexing processes and to develop templates that will leverage components of form automation technology. DHS is using the





County's existing agreement with Global 360 to begin scanning patient records now, so that one year's worth of active medical records will be in place when the new facility opens.

To ensure tight component integration with existing HIS at LAC+DHS and other Medical Centers, DHS plans to acquire QuadraMed's electronic document management software for its PEDIM. Currently, patient-related documents are being identified and reviewed for possible re-design. Draft functional and technical requirements have been identified. QuadraMed has provided hardware configurations for DHS review. Implementation of the PEDIM system began in December 2006 and will be fully implemented at the LAC-USC facility in July 2007.

### **Major Benefits**

- Improves patient care.
- Improves access to information of both current and historical patient information.
- Improves document management and archive controls.
- Provides cost savings associated with manual handling and storage of paper documents.

#### **4.1.2.5 Public Library Public Wireless Access**

<b>Primary Customers</b>	<b>Participating Departments</b>	<b>Project Status</b>
<input checked="" type="checkbox"/> County <input type="checkbox"/> Other Agencies <input checked="" type="checkbox"/> Public	<input type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input checked="" type="checkbox"/> Public Library	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

20%

### **Project Description**

Access to the Internet and to the County of Los Angeles Public Library's extensive collections of online information resources are among the Library's most popular services. Information gathered from the community in recent years points to a growing demand for electronic data access. This information is supported by the heavy use of the existing system and requests for additional services and equipment in our community libraries. Limited funding and facility space constraints, however, have prevented the Department from providing the number of computers needed to meet customer demands.

Providing wireless Internet access serves as a launching point for the technological innovation necessary for the Library to provide 21st century library service in a responsive and innovative manner. Installing wireless local area networks in our 84 community libraries is a cost-effective way for the Library to address this challenge. By enabling people to utilize their own portable communication tools, such as laptops, PDAs and cell phones, public access to the Internet and



online Library resources will be expanded, providing greater access to meet the growing demand.

The Public Library worked closely with the Internal Services Department in the development of this project. The project utilizes Cisco wireless access points and separate virtual private networks (VPNs) to isolate the public wireless traffic from the secure staff application traffic. The project complies with County networking and data security standards.

Installations began in the first quarter of FY 2006-2007. The targeted completion date for this project is December 2007.

### **Major Benefits**

- Achieves cost avoidance of \$9 - \$10 million which will be achieved over time by reducing the number of computers that the Library will need to purchase, replace and upgrade to meet the ever-increasing demand.
- Frees Library customers from a one-hour reservation system currently in place to meet the demand for public access computers.
- Increases staff productivity. Staff will be able to perform tasks using handheld wireless devices for such functions as materials checkout and inventory control.
- Increases use of Library online database resources and Website, and increases library card registrations. Anticipated operations measures include:
  - A 20% increase in use of the Public Library Website and online resources
  - A 15% increase in library card registrations.

### **4.1.2.6 Assessor Information Management System (AIMS)**

<b>Primary Customers</b> <input checked="" type="checkbox"/> County <input type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<b>Participating Departments</b> <input type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input checked="" type="checkbox"/> Assessor	<b>Project Status</b> <input type="checkbox"/> Completed <input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Initiated FY 06-07
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### **Project Description**

Recognizing the need for a comprehensive integrated solution to address the issues and inefficiencies associated with an aging and inadequate legacy system along with supporting manual processes, the Assessor initiated a business process reengineering project to identify the requirements for the Assessor Information Management System (AIMS). The goal of this system is to manage the assessment of all Real Property and Secured Personal Property. Not



in the scope of this project are the processes associated with the current Deed Imaging System (DIS) which handles the inbound processing of deeds provided by the Registrar-Recorder; processes associated with the Assessor's Mapping Services environment; and the processes associated with the assessment of Unsecured Personal Property.

The Assessor's vision for the Assessor Information Management System is to provide an accessible, integrated, and comprehensive solution that will enable staff to assess real property and process information within the office environment; more importantly they can achieve this from any location within Los Angeles County.

The reengineered model introduces three key new concepts to the organization:

- **Central Repository of Data** – Ready availability to all staff of timely, accurate, reliable information is critical to the new processes. The information needed to produce consistent, high quality products will be provided through the implementation of a Central Repository of data containing all the Assessor information for all properties within Los Angeles County (including information relating to property ownership, description of improvements, physical boundaries and characteristics of land parcels, and taxpayer inquiries.) The Central Repository will also contain information related to business responsibilities of the Assessor's Office in addition to appraisal business events, for which analysis and information gathering work assignments will be required.
- **Master Property Record (MPR)** – Currently the Office of the Assessor uses an Assessor's Identification Number (AIN) as a key identifier to represent not only boundary configurations of land, but also tax payment responsibility, ownership and property type. The introduction of the concept of the MPR, assigned to all land-based properties, allows for a representation of a physical property unit (including land-based and sub-surface attributes) that is separate from ownership and taxing interests.
- **Work Unit Management (WUM)** – The WUM, through configuration of work tasks and consistent application of business rules, will provide for the management of the Office of the Assessor's work load. WUM establishes work units, defines, and sequences work tasks.

The targeted release date for the AIN RFP is February 2007. The current schedule anticipates a 48 month post-RFP implementation, with an additional 18 months for testing and final acceptance of the new system.

### **Major Benefits**

- Increases efficiency from modernizing the methods of handling incoming mail including rapid extraction of information from standardized forms.
- Provides immediate access to information from any desktop, at all public counters, for field work and from homes of authorized staff.
- Prevents duplication of efforts when separate business events impact the same property.



- Eliminates the need to relocate staff to balance workload or address backlogs.
- Streamlines and standardizes work processes.
- Expands use of automated valuation tools and business rules.
- Improves interfaces with Affinity Group agencies.
- Enhances "self-service" capabilities for the public.
- Ensures continuous assignment of work as it is received and the associated enhanced responsiveness to the public.
- Improves coordination and control over processing, elimination of the manual assignment and manual handoffs of work.



## 4.2 Provide Secure Access to Electronic Applications

### 4.2.1 Develop a countywide information privacy program

#### 4.2.1.1 Secure Messaging

Primary Customers	Participating Departments	Project Status
<input checked="" type="checkbox"/> County <input checked="" type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

30%

#### Project Description

Several countywide and departmental initiatives will require secure messaging to communicate within the County and with external entities in the support of HIPAA compliance and to provide secure communications where needed throughout the County. A County taskforce has developed the requirements for a commercially available solution to provide secure messaging. This solution is specific to electronic mail transmissions. Once a potential solution is identified through a competitive bid process, it will be tested through a proof-of-concept process, and implemented to provide protection for sensitive electronic mail communications.

The RFP for software acquisition is in process and will be released in January 2007. The initial implementations will be those departments that must be compliant with HIPAA for the privacy of electronic protected health information (EPHI) and will also be made available to departments that require protection of information that is sent using E-mail.

#### Major Benefits

- Helps achieve compliance with Federal and State legislative mandates related to HIPAA.
- Provides confidentiality, integrity, and authenticity to electronic messages within the County and with external entities.
- Reduces risk of being compromised when confidential information is sent to external agencies.



## 4.2.2 Develop a countywide security architecture

### 4.2.2.1 Business Continuity Program (BCP)

Primary Customers	Participating Departments	Project Status
<input checked="" type="checkbox"/> County <input type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

60%

### Project Description

While human factors present a significant threat to the County's information systems, the forces of nature also have the potential to disrupt and destroy these systems with much greater impact. To counter the effects of both natural and man-made disasters, the County is developing a Business Continuity Plan (BCP) program to recover from the affects of these disasters. The County's BCP program achieves the following objectives:

- Identifies and documents critical, time-sensitive services/processes, identifying their dependencies and interdependencies, assessing the impacts associated with the loss of critical services/processes and establishes viable recovery time frames.
- Establishes a priority ranking of services/processes and application systems in line with their importance to the overall function of the County to ensure they are restored with their respective recovery windows and to properly size the recovery/restoration platform and strategy.
- Identifies, evaluates, and implements pragmatic and viable recovery strategies (internal or commercially available) that would enable each critical service/process to be recovered within required time frames.
- Develops department plans and an overarching county enterprise plan to recover critical time-sensitive services/processes.
- Develops a testing and maintenance process to validate the plan(s) and improve their effectiveness.
- Builds competencies internally within the County to maintain and expand the County's BCP Program over time to meet changing County requirements.

In October 2003 the County acquired BCP software and consulting services from Strohl Systems Group, Inc (Strohl). The BCP software for plan writing was customized to meet county business requirements and was used to develop a countywide Business Impact Analysis (BIA) study of critical, time-sensitive services/processes and direct plan building efforts which was completed by September 2004.



Office of Emergency Management (OEM) staff conducted BCP plan writing workshops with departmental staff to determine each department's critical programs or services based on the BIA results. Staff used Strohl's Living Disaster Recovery Planning Software (LDRPS) to develop department-specific BCP plans. Representatives from the County's Chief Information Office also participated in these workshops to address disaster recovery issues.


OEM continues with additional training for countywide emergency management and business continuity annual testing. In October 2006 the Board approved funding for additional software licenses, maintenance, and consulting which are needed to support increased departmental use of the BCP platform.

### **Major Benefits**

- Improves coordination between departments in post-disaster restoration of services.
- Prioritizes service restoration so that most critical needs are met first.
- Provides a mechanism to test procedures for disaster preparedness and response.
- Guides infrastructure planning to be more disaster resistant.

#### **4.2.2.2 Privacy Legislation Compliance Program**

<b>Primary Customers</b>	<b>Participating Departments</b>	<b>Project Status</b>
<input checked="" type="checkbox"/> County <input checked="" type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

 70%

### **Project Description**

Privacy legislation is being implemented at the State and national levels that affects the County and the information in its systems. HIPAA directly applies to the Department of Health Services, the Department of Public Health, the Department of Mental Health and subsets of other departments, mandating them to comply with its requirements for privacy of medical records.

A major part of the HIPAA security rule compliance process was the requirement to perform a security assessment and risk analysis for each of the covered departments that included DHS, DPH, DMH, Probation Kirby Center and Sheriff's Pharmacy. This analysis, completed by a third-party vendor in November 2005, identified and assessed risk (administrative, physical, technical) exposure to electronic protected health information (EPHI) and provided recommendations to reduce risk to a reasonable and appropriate level. Overall, the risk analysis validated that all the affected departments could be considered partially compliant with






HIPAA requirements. However, the analysis identified a total of 814 security risks or gaps between HIPAA requirements and current practices.

Following report delivery in November, each of the covered departments was instructed to develop work plans identifying and implementing business and technical remediation strategies to address the weaknesses that were identified in the risk analysis. The Chief Information Security Officer (CISO) under the CIO is working with them to provide a common approach to planning and status. Remediation of more than 50% of the gaps has been completed and efforts will continue throughout 2007.

### **Major Benefits**

- Achieves compliance with Federal and State legislative mandates related to HIPAA.
- Lays the groundwork to support anticipated future expansion of information privacy regulations.

### **4.2.2.3 Information Security Awareness**

<p><b>Primary Customers</b></p> <p><input checked="" type="checkbox"/> County  <input type="checkbox"/> Other Agencies  <input type="checkbox"/> Public</p>	<p><b>Participating Departments</b></p> <p><input checked="" type="checkbox"/> Enterprise  <input type="checkbox"/> Affinity Group  <input type="checkbox"/> Departmental</p>	<p><b>Project Status</b></p> <p><input type="checkbox"/> Completed  <input checked="" type="checkbox"/> Ongoing  <input type="checkbox"/> Initiated FY 06-07</p> <p style="text-align: right;"> 50%</p>
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### **Project Description**

One of the major components of the County’s Information Security Awareness Program is to provide web-based training to all employees that use County IT resources. Specific training tracks will also be developed to support information security duties such as security administration, system administration, network security administration, and application development. Training materials will be purchased where possible, or developed in-house to support specific needs.

The CISO is in the process of implementing the basic security awareness training content on the countywide learning management system for all users of County information technology systems. As the curriculum for additional security tasks is developed, content will be acquired or developed to provide that training as well.

The Countywide Information Security Website is a major contributor to the information security awareness program. The website is a central area for Intranet users to discover County and industry security alerts; learn about the Countywide Information Security Program; reference the County’s information security policies, standards, procedures, and guidelines; read publications from the County and the technology/security industry; and study online security awareness and

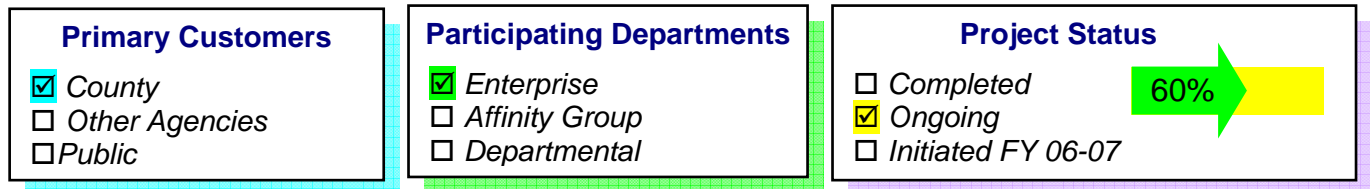


technical training. The site also provides numerous security awareness publications for all County employees. For example, FrontLine is a quarterly newsletter featuring security awareness articles relevant to every County employee, and includes a column from the CISO that discusses the latest activities and events related to the County's Information Security Program.

### **Major Benefits:**

- Provides the most cost effective security method that can be employed by an organization to protect IT assets and information.
- Supports the process of selecting and promoting County employees into security specific jobs.
- Reduces adverse information security incidents through awareness of secure behavior.

### **4.2.2.4 Computer Incident Response Process**



### **Project Description**

The Countywide Computer Emergency Response Team (CCERT) and Departmental CERT (DCERT) teams will respond to major attacks from malicious code as well as incidents. A computer security incident will not always indicate something unwanted; but it can also be something out of the ordinary that is not easily explainable. Therefore, incident response not only serves to defend and prevent further damage, but also to discover more event information and to verify facts. In essence, incident response provides initial discovery, maintaining chain-of-custody for potential prosecution, and preventative measures relating to a computer security incident.

Incident response includes a series of documented processes for responding to a technical (e.g., computer or network breach) or non-technical (e.g., lost, stolen, misplaced, or physically damaged IT assets) incidents. The organization has been established and procedures for incident handling are nearing completion.

All County Departments will adhere to processes developed and approved by the Information Security Steering Committee (ISSC). These include the *Countywide Notification Timeline for Computer Security Incidents*, the *Countywide Escalation Process Flows*, and the *Countywide*



*Notification Flow for Computer Security Incidents.* These documented processes will support the forthcoming Board of Supervisors' (Board) Policy for Incident Response Reporting and Notification.

In support of the policy, procedures for responding to technical or non-technical incidents are being developed. This will provide a description of proper handling and a consistent approach throughout the County when responding to a computer security incident.

### **Major Benefits**

- Provides a response capability to computer incidents in an effort to reduce loss, preserve evidence, and respond to privacy issues.
- Promotes proper handling and consistency of computer security information when a compromise or security breach occurs.
- Ensures preservation of evidence and appropriate incident response processes to assist in legal action, if required.

### **4.2.2.5 Application Security Guidelines**

<b>Primary Customers</b>	<b>Participating Departments</b>	<b>Project Status</b>
<input checked="" type="checkbox"/> County <input type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

15%

### **Project Description**

All acquired and internally developed software applications must adhere to the County's security policies, standards, procedures, and guidelines. The guidelines will establish a standardized application security lifecycle that will provide a consistent methodology for developing/acquiring, operating, and maintaining business applications in a secure manner.

The Application Security Team (AST), one of the County's Security Engineering Teams (SET), has been commissioned to formulate this security framework for applications. The framework will recommend security coding standards that will assist in mitigating risks associated with: in-house, commercial off-of-the-shelf (COTS) and contractor designed and developed programs. In addition, standard solicitation and contract language addressing information security and privacy will be developed to supplement the County's acquisition process for software and services.



## **Major Benefits**

- Decreases potential risks and vulnerabilities for acquired and internally developed software applications.
- Creates an application security lifecycle methodology for use throughout departments.
- Provides methodology for selection of commercially available software applications that includes appropriate and sufficient information security capabilities and features, or identifies the required supplemental security controls.
- Provides a methodology for use of digital certificates.

### **4.2.2.6 Vulnerability Assessment**

<b>Primary Customers</b>	<b>Participating Departments</b>	<b>Project Status</b>
<input checked="" type="checkbox"/> County <input type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

20%

## **Project Description**

Information security risk assessment is a mandatory activity in the County. It encompasses information gathering, analysis, and detection of security vulnerabilities and potential threats within the County's information technology (IT) hardware and software environment, and IT business practices. This practice requires remediation of the found vulnerabilities and potential threats.

Information security risk assessment is necessary to analyze and mitigate threats to the County information technology assets, which may come from any source including system outages, disgruntled employees, hackers, the Internet, equipment service malfunction and breakdowns.

This activity is based on the Board's approved Policy 6.107 - Information Technology Risk Assessment. The policy requires all 38 County departments to perform mandatory periodic risk assessments.

Assessments can occur with the use of a software tool, internal resources or a service agreement with a certified third-party vendor. It does appear that it is more cost effective to standardize on a countywide vulnerability assessment software tool. This model will require departments to have their personnel maintain and support its functionality and provide its outcomes, or the data collection can be transmitted to a centrally located server for further analysis and correlation.



A set of key processes must be put in place to provide this capability that includes:

- Either a centralized Internal Services Department based enterprise scanning and data collection, or a decentralized model that allows for data collection to a departmental server and forwarded to a centralized server.
- Departmental commitment to participate in the process and conduct or respond to the assessments.
- Continued assessments as systems evolve or new developments occur.

### **Major Benefits**

- Mitigates potential risks and vulnerabilities for the County’s IT business environment.
- Provides an information security health baseline for County IT hardware and software environment.
- Provides a process for identifying and measuring vulnerabilities that potentially could impact the County's IT environment.
- Reduces IT costs related to mitigating vulnerabilities because of unplanned outages.

## **4.2.3 Develop a technology infrastructure that provides secure data access**

### **4.2.3.1 Mobile Device Information Protection Program**

<p><b>Primary Customers</b></p> <p><input checked="" type="checkbox"/> County  <input type="checkbox"/> Other Agencies  <input type="checkbox"/> Public</p>	<p><b>Participating Departments</b></p> <p><input checked="" type="checkbox"/> Enterprise  <input type="checkbox"/> Affinity Group  <input type="checkbox"/> Departmental</p>	<p><b>Project Status</b></p> <p><input type="checkbox"/> Completed  <input type="checkbox"/> Ongoing  <input checked="" type="checkbox"/> Initiated FY 06-07</p> <p style="text-align: right;"><b>50%</b> </p>
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### **Project Description**

The growth of portable computing technology has established a major trend in the processing of information for enterprises and allowed for the mobility of knowledge workers in performing their jobs. This has led to increased risk to the information that is stored on them with particular emphasis on caring for sensitive personal data. The loss of sensitive information that is stored on portable devices has become a major issue for organizations throughout the country and also is a threat that the County must address. Loss of sensitive information may contribute to identify theft, the fastest growing crime in the world – identity theft.




Departments are responsible for ensuring that their portable computing equipment is properly protected and identified as an asset. The County is developing a Board policy that requires encryption of sensitive personal information. To support the forthcoming Board policy, one of the County’s Security Engineering Team (SET) for Host Strengthening and Isolation developed functional and technical requirements to support this initiative. These requirements were included in a competitive solicitation for the selection, acquisition, and implementation of software that provides automatic full disk encryption of portable computers, as well as a method to secure portable storage devices and personal digital assistants (PDAs). It is expected that a vendor-provided solution will be procured no later than January 2007.

Each department is required to support and maintain the County’s enterprise encryption solution standard for the protection of their personally identifiable information. Departments will establish written procedures to ensure that all portable devices are being properly maintained and have the appropriate level of security protections in place.

**Major Benefits**

- Allows mobile workers to be more effective in their work while providing security over the information they process.
- Provides compliance with privacy legislation currently in effect and planned for the near future.
- Protects the constituents, employees and business partners of the County.

**4.2.3.2 Orange County Disaster Recovery Site**

<p><b>Primary Customers</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> County</li> <li><input type="checkbox"/> Other Agencies</li> <li><input type="checkbox"/> Public</li> </ul>	<p><b>Participating Departments</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Enterprise</li> <li><input type="checkbox"/> Affinity Group</li> <li><input type="checkbox"/> Departmental</li> </ul>	<p><b>Project Status</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Completed</li> <li><input checked="" type="checkbox"/> Ongoing</li> <li><input type="checkbox"/> Initiated FY 06-07</li> </ul> <p style="text-align: right;"> 60%</p>
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**Project Description**

In June 2002, the Auditor-Controller conducted a review of the Internal Services Department’s (ISD) Disaster Recovery Plan. Several of the resulting recommendations involved the establishment of a Local Recovery Center (LRC). An LRC would serve to strengthen the County’s data processing data center and provide provisions to continue operations of County mission-critical applications in the event of a disaster.



The LRC was planned to be a multipurpose endeavor, enabling remote data replication, providing hot site capabilities, redundant Internet connectivity, printing for disaster recovery and high availability for selected applications. It will serve as a recovery facility for multiple computing platforms including the IBM mainframe, UNIX and Windows applications.

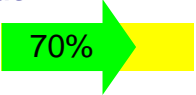
In determining locations for the LRC consideration was given to the distance of separation between the two facilities. The facility should be close enough to allow ISD staff to support the equipment and a recovery in the event of a disaster. It should also be far enough away to significantly reduce risks associated with potential threats to the Downey Data Center. After several alternative sites were considered, ISD entered into a lease agreement with Orange County for use of their data center as the LRC.

The project commenced in June 2005. The County’s Enterprise Network has been extended to the Orange County Center. Hardware required for selected systems to be replicated in the event of a disaster is being installed, and the disaster recovery scenarios are being tested. Replication for the IBM and Unisys environments was completed by June 2006, with the remaining identified systems to be completed by the end of 2007.

**Major Benefits**

- Allows critical applications to be restored with minimal downtime and loss of data in the event of a disaster.
- Permits ISD to more effectively test and improve its Disaster Recovery Plan.
- Replaces current mainframe “hot-site” locations in Pennsylvania with a more effective locally-based approach.
- Provides data mirroring and systems redundancy for server-based systems, which now make up the majority of the County’s computing assets.

**4.2.3.3 Internet Content Filtering**

<p><b>Primary Customers</b></p> <p><input checked="" type="checkbox"/> County  <input type="checkbox"/> Other Agencies  <input type="checkbox"/> Public</p>	<p><b>Participating Departments</b></p> <p><input checked="" type="checkbox"/> Enterprise  <input type="checkbox"/> Affinity Group  <input type="checkbox"/> Departmental</p>	<p><b>Project Status</b></p> <p><input type="checkbox"/> Completed  <input checked="" type="checkbox"/> Ongoing  <input type="checkbox"/> Initiated FY 06-07</p> <p style="text-align: right;"> 70%</p>
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**Project Description**

The use of the Internet has become a valued communication method within the County as well as outside the County to our diverse customers and constituents. However, use of the Internet





does not come without some risks and vulnerabilities. To reduce risks and vulnerabilities, as well as potentially increase the productivity of our employees, an Internet content filtering solution will be implemented. Filtering will provide the ability to block access to websites based on content. To support this effort, Board Policy #6.105 on Internet Usage has been approved.

The initial phase of this project's solution was implemented on July 14, 2006. During this time, Internal Services Department (ISD) became the first County department to be fully filtered for their more than 1500 employees who access the Internet.

In addition, during the initial phase, the implementation of an Internet compliance screen occurred throughout the County. All departments that have registered Internet users are presented with this screen during their initial access to the Internet. The compliance screen is an abstract of the aforementioned Board policy, where a user acknowledgement is required to proceed to an Internet web site. The screen provides immense benefits in reminding the user to adhere to the language of the policy.

Web content filtering is based on a countywide global policy that will prevent access to pornography and gambling sites, as well as four additional categorical sites for information security: spyware, malicious code, hacker, and proxy avoidance. All remaining departments will be implemented within eight (8) phases. Permanent and temporary exceptions to the global policy are available.

### **Major Benefits**

- Achieves additional layer of information security using a defense-in-depth methodology to reduce risks and vulnerabilities.
- Provides a centralized control mechanism for preventing employee access to inappropriate web sites.
- Reduces the cost of investigating inappropriate use of County IT assets relating to Internet access.




## 4.3 Utilize Enterprise Solutions to Meet Common Needs

### 4.3.1 Provide a high capacity, scalable, wide area network (WAN)

#### 4.3.1.1 Enterprise Network Expansion – New Carrier Agreement RFP

Primary Customers	Participating Departments	Project Status
<input checked="" type="checkbox"/> County <input type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07



#### Project Description

The County is preparing to re-bid its carrier services contracts which have an annual cost of approximately \$40 million. The current contracts with AT&T cover local services (conventional voice and data), enterprise network (countywide ATM network), and long distance. The County engaged Gartner Consulting (Gartner) to develop a procurement strategy for the new carrier agreement.

To meet the unique needs and requirements of the County, the RFP will group the County telecommunication services procurement into two areas:

- **Carrier Services** has limited competitive providers, limited growth in use, and is highly standardized. The primary goal of this area will be to maintain current coverage and minimize transition costs:
  - Local and long distance services
  - Legacy voice mail
- **Managed Services** has a number of competitive providers, is high growth, and will require customization to meet the unique needs and requirements of the County:
  - Management, upgrade, and support of the wide area data network.
  - Management and operation of the existing ISD VoIP infrastructure and provisioning of hosted VoIP services.
  - Source 7x24 monitoring and management of all County WAN's managed by ISD to the managed services vendor and consider transforming the current Network Operations Centers (NOCs) into an Enterprise Operations Center that monitors and manages across all the different silos (network , server, database, application).



The State is currently rebidding its carrier services as CALNET II. The County will monitor the progress of this procurement, and will use it to provide pricing and service benchmarks for its own procurement.

### **Major Benefits**

- Maximizes opportunity for price competition in the standard services, with a single vendor for the majority of County services.
- Maximizes opportunity for price competition and solution competition in the advanced services, with a customization level dictated by the needs and requirements of the County.
- Shifts current NOCs from commodity network monitoring to high-value monitoring of County applications and IT services.

#### **4.3.1.2 Converged Technologies – VoIP initiatives, Video Conferencing over IP**

<b>Primary Customers</b>	<b>Participating Departments</b>	<b>Project Status</b>
<input checked="" type="checkbox"/> County <input type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

**60%**

### **Project Description**

Converged technologies refer to the integration of traditionally separate systems onto a single IP network. Voice, data, and video conferencing technologies are converging by digitizing the voice and video traffic and transporting it via the TCP/IP protocol. This permits the use of a single wired infrastructure for these services within a building, and a single Wide Area Network (WAN) to connect these services to other sites.

#### ***IP Telephony***

The County has adopted IP telephony (VoIP) as the standard for voice communications. IP telephones convert voice conversations into IP packets. IP telephony uses the local area network (LAN) to switch the packets through the building and/or out to the public telephone network, and, in the future, over the WAN to other County facilities. Therefore, large PBXs are no longer required in the building. VoIP has the ability to integrate a user's phone, voice mail, and E-mail into a unified message system controlled on the user's personal computer. Although IP telephone instruments are more expensive than analog telephones, they are cost competitive with digital phones that are used with many PBXs. In new implementations, there is significant



cost savings by the elimination of voice cabling. IP telephony will be implemented in new facilities or where a new or upgraded telephone system, or call center, may be required.

ISD provides VoIP services from redundant servers in the Downey Data Center with back-up at the Local Recovery Data Center in Orange County. Hosted VoIP services have been added to the existing Carrier Services Agreement to provide VoIP as a month-to-month telephone service similar to analog Centrex services.

### ***IP Video***

Direct and indirect costs of traveling have spurred the growth of video services in the enterprise market. Video conferencing has moved from the dedicated meeting room to the desktop. Traditionally, video conferencing in the County has used Integrated Services Digital Network (ISDN) dial up circuits. Video conferencing over TCP/IP permits convergence of video with data and voice on a common infrastructure within the County and over the Internet. Video streaming permits one-way meetings and/or training to be available on the desktop real-time or on demand using IP protocols.

ISAB has taken the lead on video conferencing for the criminal justice departments through its Inmate Video Conferencing System. This system allows participants in the justice process to interview inmates without the travel expense or security concerns of visiting the jail. Several other departments are transitioning their ISDN video conferencing to IP as part of their network infrastructure upgrades.

### ***Related Technologies***

In addition to IP telephony and video conferencing, other devices such as alarms, card readers and closed circuit television cameras can be connected to the IP networks as part of the converged infrastructure. Integration of these types of devices eliminates costly circuit charges, provides for real time device management with existing network management systems, permits easy device installation and turn up, allows multiple display and control locations, and rapid re-location if necessary.

Examples of these technologies include the Fire Department's Coastal Monitoring Project which transmits streaming video from 19 remote cameras, and DPW's real-time rainfall monitoring system which tracks precipitation from remote rainfall gauges across the County.

### **Major Benefits**


- Reduces wiring infrastructure costs in new buildings.
- Eliminates costly dedicated circuits for voice, data, and video.
- Reduces labor costs to move, add, and change devices.
- Lowers costs for long-distance voice and video.



- Simplifies infrastructure administration.

#### 4.3.1.3 Wireless Computing – Wireless LANS

Primary Customers	Participating Departments	Project Status
<input checked="" type="checkbox"/> County <input type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

 40%

#### Project Description

Standardization of 802.11 'WiFi' wireless LAN technologies and the introduction of third-generation Evolution-Data Optimized (EVDO) and Enhanced Data Rates for Global Evolution ((EDGE) wide area wireless data services by cellular carriers make wireless access and computing an available and affordable option. The CIO and ISD, working with the Security Engineering Teams, issued Wireless LAN Guidelines to ensure the secure implementation of wireless LAN services. ISD implemented a secure access and authentication infrastructure for WiFi access.

A standard architecture for wireless access and authentication using the existing SecurID server in Downey permits WiFi services to be implemented in any County facility. This also allows employees to be mobile and yet be able to access to their departmental computing domains when in any of these WiFi enabled locations. The County's WiFi architecture guides the implementation of wireless access at these and other County facilities:

- **Hall of Administration** – ISD implemented over 30 Access Points in the Kenneth Hahn Hall of Administration to provide 802.11 b/g WiFi access from most of the conference rooms in the facility. This implementation is in addition to the WiFi access available at ISD's Downey and Eastern Avenue facilities.
- **Public Library** – The Public Library is implementing WiFi services in all the libraries for public Internet access. The system will also provide secure County employee access into their department domains and provides for wireless bar code scanning for book inventory.

The County's current cellular agreement vendors provide EVDO or EDGE broadband data services now. Through the use of Virtual Private Network (VPN) technologies, departments are able to access their applications remotely. The Sheriff, Probation, and Health Services are a few of the departments using this technology.



## **Major Benefits**

- Improves productivity of County employees by enabling access to their E-mail, calendars, and other applications wirelessly.
- Lowers County standard architecture acquisition and maintenance costs, and simplifies management and operations of the wireless infrastructure.

### **4.3.2 Ensure appropriate acquisition of IT systems, applications and services**

#### **4.3.2.1 Enterprise Licenses & Service Agreements**

<b>Primary Customers</b>	<b>Participating Departments</b>	<b>Project Status</b>
<input checked="" type="checkbox"/> County <input type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

60%

#### **Project Description**

The County established technology standards to support interoperability, simplify maintenance, and provide opportunities for greater cost savings through leveraging the purchasing power of the County as a whole. As a result of this standardization effort, enterprise software licensing and service agreements have emerged as a strategic initiative with the following goals:

- The County will manage its enterprise software and service agreements based upon demand and sound business and economic considerations.
- The County will develop simple administrative processes for determining and selecting effective enterprise solutions.
- The County will implement a software management and configuration program to manage its software resources and to assist in future planning decisions.

The advantages of **enterprise software licensing** have already been realized throughout the organization with these agreements:

- Anti-virus agreements with the industry's top two vendors (Symantec and McAfee) provide aggressive pricing for their enterprise products and maintenance, discounts for related security offerings, priority support, and periodic operational and infrastructure reviews.
- The Oracle software licensing agreement provides reasonably aggressive pricing on the vendor's entire software portfolio, as well as capped pricing on support and maintenance.



- The County selected Strohl Systems software to use as the County standard in developing a County Business Continuity Plan.
- A master licensing agreement with COGNOS for Business Intelligence (BI) software provides reduced pricing for the range of BI software modules along with reduced maintenance.
- The County selected Saba Solutions' software as the standard for the Learning Management System.
- An agreement with CGI-AMS for their Advantage Financial and Human Resources software provides the County with a single product for its administrative system upgrade and replacement program.
- An agreement with Microsoft for their office productivity and server software simplifies upgrades and lower overall costs.
- A master services agreement with IBM provides departments with access to services including mainframe support, Internet/intranet websites, server consolidation, digital content management, database management, legacy system migration, storage management, and systems planning.


The County will continue to explore other master agreements with the County's strategic partners.

### **Major Benefits**

- Reduces overall costs of software and services.
- Incentivizes vendors to give the County priority service.
- Incentivizes departments to follow County standards.
- Simplifies software standardization and upgrades.
- Improves interoperability of the County's software portfolio.

#### **4.3.2.2 IT Governance Initiatives**

<b>Primary Customers</b>	<b>Participating Departments</b>	<b>Project Status</b>
<input checked="" type="checkbox"/> County <input type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07







## **Project Description**

In an effort to strengthen the County's funding and investment for IT, the County's Chief Information Office has identified the following key IT governance initiatives as County strategic plan objectives for implementation over the next year:

- Establishing a formal IT governance body chartered to approve, or endorse where applicable, countywide IT directions, countywide IT initiatives, countywide IT policies and guidelines, and countywide IT standards.
- Developing a Countywide Geographic Information System (GIS) governance structure to maximize value of existing GIS resources and to implement and enhance a shared GIS repository for countywide use.
- Focusing on improved accountability for IT investments through development of a formal business case for proposed IT projects, which identifies total cost of ownership (implementation, infrastructure, ongoing maintenance and support) and definitive program/business outcomes that will be achieved (County Goal Strategy Objective 3.5.4). This initiative will include the following activity in 2007:
  - Establish a central Project Management Office to provide guidance and coordination via a 'best practices framework' to ensure that agency heads have the tools and information to guide technology deployment toward the right business outcome.
  - Build a repository of project management best practices and associated processes/templates/documents.
- Developing best practices/guidelines for County solicitation documents in order to streamline and improve the acquisition of IT solutions. This initiative will include the following activity in 2007:
  - Establish an IT contract training program covering contract guidelines and best practices to improve the management of IT solicitations and contracts.
  - Implement an enterprise content management licensing and master services agreement to effectively support countywide requirements.
  - Develop a countywide strategy and process for periodic volume purchases of computer equipment.
  - Establish countywide standard equipment configuration(s) and procurement strategies for consolidated purchases.

These objectives when taken together will substantially strengthen the County's IT governance and will ensure that County IT investments reflect the most effective use of available resources.




## **Major Benefits**

- Provides greater opportunities for cross-department opportunities to integrate and improve delivery of services.
- Enables departments to contribute and align their IT investments to broader County IT strategies.
- Provides decision makers with a more comprehensive understanding and justification of proposed IT investments.
- Streamlines the acquisition of IT solutions, while mitigating potential risks.

### **4.3.3 Share technology resources**

#### **4.3.3.1 eCAPS Phase I & II**

<b>Primary Customers</b>	<b>Participating Departments</b>	<b>Project Status</b>
<input checked="" type="checkbox"/> County <input checked="" type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input checked="" type="checkbox"/> Completed (Ph. I)  <input checked="" type="checkbox"/> Ongoing (Ph. II) <input type="checkbox"/> Initiated FY 06-07

## **Project Description**

The County entered into an Agreement with CGI-AMS to upgrade the County's existing legacy financial system; the project was labeled "eCAPS". The implementation plan identified a phased implementation for the full suite of Advantage 3 financials. Phase I, implemented in July 2005, included General Ledger, Accounts Payable, Accounts Receivable, and Cost/Project/Grant Accounting.

During the Phase I implementation a number of departments identified critical needs for additional functionality that resides within the Advantage 3 suite of financial and human resources modules offered to the County by CGI-AMS. This functionality is being implemented as Phase II of eCAPS, encompassing the following areas:

- **Budget Preparation**
  - Prepared the FY 2006 -2007 Budget using the new application.
  - Loaded budgets from Budget Preparation to financial General Ledger for FY 2006-2007.
  - Trained 22 departments on use of the application for preparation of the FY 2007-2008 Budget.



- **Time Collection – Department of Health Services (DHS)**
  - Implemented the pilot at Rancho Los Amigos National Rehabilitation Center (Rancho) *in October 2006*.
  - Began training staff at DHS Administration for the functionality to other facilities.
- **Capital Assets**
  - Continued progress and are on schedule for a *November 20, 2006* implementation.
  - Implements a single countywide capital asset application.
  - Began training staff *in October*.
- **Procurement and Inventory**
  - Completed implementation analysis documents.
  - Obtained software modifications approval from the eCAPS Advisory Committee; the application is currently in development.
  - Scheduled Procurement to 'go live' for central purchasing *in March 2007*.
  - Determined that the use of the application for department delegated purchasing will begin *in March 2008*.
  - Scheduled a 'go live' date for Inventory at DPW *in July 2008*.
- **Legacy Systems Analysis and HR Design**
  - Completed implementation analysis documents for human resources applications, DPW's replacement of their Financial Accounting System (FAS) and Auditor-Controller's Interest Allocation application.
  - Continued design efforts for the expansion of the Grant Management application currently in progress.
  - Continued development of full implementation proposals for the Human Resources Management design and the DPW FAS replacement design.

Phase I of eCAPS was budgeted at \$13.8 million, and Phase II is budgeted at \$37.3 million.

### **Major Benefits**

- Offers the opportunity to reduce the County's cost in implementing these modules.
- Provides a standard countywide system that will reduce the ongoing cost of support by limiting required interfaces.
- Eliminates the need for retraining as staff move between departments.



- Provides a higher level of automation to support County business functions.
- Lays the foundation for standardizing the County's procurement, budget preparation and human resource functions.
- Supports the Auditor-Controller's objective for consolidating and standardizing additional fiscal functions in departments.

#### 4.3.3.2 Countywide Address Matching System (CAMS)

Primary Customers	Participating Departments	Project Status
<input checked="" type="checkbox"/> County <input checked="" type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

60%

#### Project Description

Thomas Bros. Maps (TBM) has long used Geographic Information Systems (GIS) to maintain the spatial data layers needed to create the Thomas Guide map books. In 1999 the County licensed a copy of the transportation layer from TBM and used it as the foundation for a more comprehensive software implementation called the Transaction Update System (TUS). Compared to currently available technology, TUS is inefficient and cumbersome as a distributed, multi-user system, which hinders its wider acceptance throughout the County as both a data maintenance tool and a data source. **This project will replace the TUS system with a new countywide Address Management System (CAMS) utilizing state-of-the-art GIS technology that:**

- Better supports enterprise maintenance (i.e., distributed, multi-user).
- Redesigns and expands the address data model by supporting a wider variety of location information, address points, and landmarks.
- Allows for one or more sources of street and point data.

**CAMS will better meet the County's needs and more accurately represent the real world.** Use of address points will allow interfaces to other County data. Using the latest GIS technology, CAMS will:

- Provide full support for distributed, multi-user editing of CAMS data.
- Allow CAMS to be easily ported to other departments, cities, and agencies in the County.
- Encourage wider interdepartmental maintenance and usage of CAMS street centerline and address data as a shared resource.



- Integrate and streamline many redundant data sets and work flows that exist throughout the County.

**The CAMS geodatabase will also include a new address data model (database) that will solve addressing limitations in TUS** and support more sophisticated address maintenance capabilities. To achieve this, the cooperating departments have identified the following goals:

- Design a GIS database (a.k.a., a geodatabase) functioning as a central repository of Los Angeles County street centerline and address data (and all other required background reference layers) and supporting an improved address data model.
- Implement a new GIS data maintenance system (i.e., CAMS) designed to support distributed, multi-user editing of the street centerline and address point layers and their attributes.

In April 2006, an Information Technology Support Systems Master Agreement (ITSSMA) contract to bring a GIS programmer onto the project's in-house development team was executed. The project development team has established a test development environment at the Registrar-Recorder/County Clerk's (RRCC) headquarters in Norwalk. **The targeted completion date for this project is January 2007.**


### **Major Benefits**

- **Increases Automation and Productivity Using New Technology** – CAMS will store the reference layers in a central geodatabase at ITS that offers connecting client applications quick and efficient access to requested subsets of data.
- **Improves Interdepartmental Work Flow and Data Quality Control** – The record locking and versioning capabilities of CAMS will provide better support for structured work flows that prevent edit conflicts among different users, and allow supervisors to review the edits of end users before they are committed to the CAMS production dataset.
- **Provides User-Friendly Interface and Faster Performance** – The CAMS client interface will be developed around ESRI's latest ArcGIS 9.x software. This software provides an open application development environment that supports various industry standard Windows programming languages. CAMS will be programmed with a Windows-based graphical user interface that is more natural and intuitive to use than TUS and involves less user interaction for a more streamlined workflow.
- **Improves Address Data Model** – In the CAMS geodatabase, the features in the CAMS Line layer will be linked to a normalized address data model composed of several tables that solves addressing problems in TUS. The CAMS address data model will be designed independently of existing layer schema, as well as any other commercial data vendor's address data schema.



- **Allows Greater Agency Participation, Data Sharing, and Standardization** – The central data storage, ease of access, enhanced quality control, and improved performance achieved by utilizing the new enterprise GIS architecture will make CAMS highly portable to other County and non-County departments and agencies and make it practical for all to share in the update and use of the CAMS data.
- **Fulfills Goals of Los Angeles County's Strategic Plan Update for 2005** – CAMS will represent a major step toward fulfilling part of Goal 3 of the recently updated Los Angeles County Strategic Plan.

#### 4.3.3.3 Enterprise GIS Repository

<p><b>Primary Customers</b></p> <p><input checked="" type="checkbox"/> County</p> <p><input type="checkbox"/> Other Agencies</p> <p><input type="checkbox"/> Public</p>	<p><b>Participating Departments</b></p> <p><input checked="" type="checkbox"/> Enterprise</p> <p><input type="checkbox"/> Affinity Group</p> <p><input type="checkbox"/> Departmental</p>	<p><b>Project Status</b></p> <p><input type="checkbox"/> Completed</p> <p><input checked="" type="checkbox"/> Ongoing</p> <p><input type="checkbox"/> Initiated FY 06-07</p> <p style="text-align: right;"> 25%</p>
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#### Project Description

An Enterprise Geographic Information Systems (GIS) Repository infrastructure has been developed and expanded to provide the foundation for the development of Enterprise GIS in the County of Los Angeles. An Enterprise GIS Steering Committee will be formed to expand the use of this Repository to allow ubiquitous County access to GIS data and tools.

The following items were completed in 2006:

#### **Geographic Information Officer**

The County Chief Information Officer hired a Geographic Information Officer (GIO) in September 2006 to implement the recommendations of the 2002 GIS Assessment study, which noted the lack of data sharing and access to shared resources. This officer will be responsible for advocating for enterprise GIS and showing the benefits of both GIS and an enterprise implementation. The GIO will oversee the establishment of an Enterprise GIS Steering Committee and report to this committee. The committee will establish responsibilities, scope, standards, technology, and funding used to develop and maintain enterprise GIS.

#### **Repository Development**

- The repository infrastructure was upgraded, including the replacement of three servers in Downey, and the creation of Internet and intranet GIS server sites.
- An Information Technology Fund (ITF) grant was awarded to increase the storage and distribution capacity of the Enterprise GIS Repository, including the purchase of an 80 Tb



capable Storage Area Network (SAN) server and an additional database server. This enhancement will be completed in January 2007.

- Automated monitoring software was installed to ensure the reliability of the Repository.
- Metadata development for data in the Repository was begun and is 50% complete.
- Work was begun on an Automated Geocoder Tool which will automate the integration of existing legacy data sources into GIS format. This project will be completed in February 2007 and is 60% complete.
- A geocoding web service was completed which provides direct access to GIS functionality in a service oriented architecture.

### **Current Resources in the Enterprise GIS Repository**

- *Applications*
  - Countywide Driving Directions Pages
  - DPSS EBT Locator
  - CDC Demographic Locator
  - CDC Enterprise Zone Locator
  - DCFS MyCSW and MYSCSW Mapping Support
  - DCFS RAVS (Referral Address Verification System)
  - DCFS Foster Care Search Engine
  - Office of Child Care Needs Assessment Report
  - Parks and Recreation Public Mapping Application
  - Sheriff Reporting District Mapping Application
- *Services*
  - Geocoding web service
  - Countywide Basemap mapping services
  - Metadata data search tool

### **Major Benefits**

- **Increases Data Access and Sharing** – Enterprise GIS will facilitate public and inter/intra-departmental access to enterprise GIS data by placing it in a central, highly available location on the countywide network.





- **Reduces Duplication and Costs for Departments** – With a single point of data and access in the County of Los Angeles, departments can share the cost of storing, accessing, and distributing GIS data, reducing the cost of building and maintaining redundant systems across the County.
- **Develops GIS Standards** – Enterprise GIS will develop countywide standards for GIS data, software, and applications, ensuring the interoperability of County departments and enhancing the usefulness of GIS.
- **Establishes a Center of Expertise** – Enterprise GIS will support departments as they implement GIS. It will provide best practices, strategic advice, and a source of expertise, to answer questions departments face as they deploy GIS. This will leverage existing enterprise investment to distribute the advantages of GIS across the County.
- **Enhances Public Outreach** – Enterprise GIS will enhance the use of GIS for providing information to the public and other outside stakeholders.

#### 4.3.3.4 Los Angeles Region - Imagery Acquisition Program (LAR-IAP)

Primary Customers	Participating Departments	Project Status
<input checked="" type="checkbox"/> County <input checked="" type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

80%

#### Project Description

The integration of high quality aerial imagery with Geographical Information Systems (GIS) has been demonstrated to significantly increase worker productivity and quality, and improved service to constituents. Orthogonal and oblique imagery and associated data allows users to zoom in on any parcel and see all sides of buildings to measure heights, look at structures from several different angles, find elevation for any point on the image, etc. The imagery is helping departments in many activities especially with property assessment, facilities management, flood control, road design, planning and zoning activities, and zoning enforcement.

The CIO contracted for a GIS study in 2002 to review the use of GIS across county departments. The study identified that 90% of the data and GIS expertise was maintained in six County departments and there was no formal mechanism to support resource and data sharing between all County departments. The study also determined that 75% of the County departments indicated that their operations would benefit from the availability of geography information, including imagery. This growing demand for GIS data and improved data sharing has also expanded the demand for access to updated imagery.



Based on the growing interest and desire for GIS imagery and data among County departments, the opportunity to acquire enhanced imagery and the potential savings through cost sharing, the CIO, Chief Administrative Office (CAO), and the Quality and Productivity Commission (QPC) recognized the benefits of expanding the shared cost model for aerial imagery to County departments and other cities and agencies. With this encouragement and support, the CIO and the Department of Regional Planning (DRP) have moved forward with the formation of the Los Angeles Regional Imagery Acquisition Consortium (LAR-IAC).

**The County's share of this \$6.3M project is \$3.2M. Data delivery was completed by June 2006. The contractor is now performing additional QA and data refinement to complete the final phase of this project.**

### **Major Benefits**

- **Generates cost savings** – 40% reduction on imagery acquisition costs based on the collaboration with other public entities, volume discount pricing and, cost-sharing through the joint acquisition strategy.
- **Generates cost savings** – 50%-75% reduction in the indirect costs associated with the legal and procurement process by eliminating multiple procurements of the same product.
- **Increases worker productivity** – High levels of precision in digital aerial imagery tools will reduce time spent on site visits and provide a more comprehensive view of land use issues.
- **Enhances decision support** – Digital imagery will aid in understanding and providing a context to constituent issues regarding land use issues at Board meetings, community meetings, hearings, etc.
- **Results in service enhancement** – Unifying digital aerial imagery will improve communication among all Los Angeles County government entities.
- **Results in service enhancement** – Integration of digital aerial imagery with GIS parcel databases and other GIS layers will provide a better context for improving the decision-making process.
- **Promotes future cost avoidance** – Elimination of multiple acquisitions from agencies for the same area.

#### **4.3.3.5 Business Intelligence (BI) Enterprise Reporting Infrastructure**

<b>Primary Customers</b>	<b>Participating Departments</b>	<b>Project Status</b>
<input checked="" type="checkbox"/> County <input type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input checked="" type="checkbox"/> Completed <input type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

**100%**



## **Project Description**

The Chief Information Office (CIO) led a countywide project team to select a Business Intelligence (BI) vendor, and COGNOS Corporation was selected. Several County departments have initiated BI projects. Each of these departments requires an infrastructure to support the reports, dashboard, multidimensional data cubes, and scorecards developed during their projects. The County has adopted a strategy of employing enterprise solutions for countywide deployment of common infrastructures. To fulfill this strategy, a central shared BI infrastructure is required that all departments can use.

Establishment of a centralized BI/data sharing infrastructure is a **key objective of Goal 3, Strategy 6 in the County Strategic Plan.**

Several County departments, such as the Chief Administrative Office (CAO), Department of Health Services (DHS), Department of Mental Health (DMH), Auditor-Controller (AC), Department of Public Social Services (DPSS) and Internal Services Department (ISD), have initiated BI projects (*see project 4.1.1.8 for details*). Each department has committed to evaluate the centralized server approach when it becomes available.

The central infrastructure consists of three environments - development, a pre-production (test), and a production environment. These environments are sized with the capacity to accommodate anticipated County projects and be scalable for future growth. This infrastructure also offers flexible alternatives for any department's adoption. Departments can define their needs and choose a best-fit model to use the central infrastructure.

**This project was completed in June 2006.**

## **Major Benefits**


- Facilitates electronic information sharing between County departments to support both the County Strategic Plan and department missions.
- Delivers an economical approach for deploying training, development, test and production environments for BI usage.
- Gives users a single sign-on approach for accessing reports, dashboards, analytical data cubes, and scorecards stored for County departments.
- Provides the technical infrastructure needed to combine and report on county information stored in departmental databases, with an opportunity to develop common enterprise metadata definitions.
- Provides a method for managing software licenses and software version upgrades in a regulated manner, enabling each county department to pay COGNOS Corporation for licenses used by their staff.



- Includes a supported production environment that is monitored 24x7x365 with help available from an established centralized help desk.
- Ensures consistent platforms/environments that avoid incompatibility issues during change control of new and updated program objects.
- Minimizes the proliferation of multiple server farms throughout the County.

#### 4.3.3.6 County Data Center

Primary Customers	Participating Departments	Project Status
<input checked="" type="checkbox"/> County <input checked="" type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07



#### Project Description

The County's existing data center provides information processing and communication services that are essential to the daily operation of all County departments. A 1999 needs assessment study of the existing County Data Center building in Downey, which was built in 1956 for general office purposes, determined that the structure does not meet modern seismic standards for a regular office building. The study also determined that the support systems and infrastructure are likely to fail due to their age and poor condition; that the building's electrical system has surpassed its useful life; and that its dependence upon a single power feed increases the potential for system interruption or failure. The study, and an additional review in 2001, concluded that design and construction of a new facility was the most cost-effective approach to address these issues.

In 2004, the architectural firm, Gensler was selected to proceed with the new Data Center program planning. The County identified a location on the south side of the Rancho Los Amigos Hospital campus for the building site. Initial program requirements and costs estimates were developed and, in January 2005, the Board of Supervisors approved the preliminary Data Center project and budgeted \$60 million. The County project team, consisting of the CAO, DPW and major tenants is now proceeding with the detail design phase of the project. Initial schematic designs are approved and the project team is working with the architect on structural and infrastructure designs.

The new data center will meet the following strategic goals:

- Given the nature and importance of the processing services provided at the County Data Center, the proposed essential facility will have an enhanced structural system to withstand nearby seismic events, emergency generators and uninterrupted power sources to minimize the risk of losing electrical power to the data processing equipment.



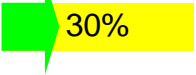
- The facility should be available 99.9 percent of the time with the inclusion of these measures. These measures are required to ensure that the new County Data Center will continue operating during and immediately after a moderate to severe seismic event.
- The proposed County Data Center will be approximately 58,000 square feet and will be located on a 10-acre site on the Rancho Los Amigos South Campus, Downey, California.
- The proposed facility will house all systems in the current facility and additional systems from the Public Library, Public Social Services, Probation, Assessor, Registrar-Recorder/County Clerk and Treasurer and Tax Collector. Limited space also will be available to provide standby support for other departmental systems.
- Since the new Data Center will be located in Southern California, the facility must be able to withstand severe seismic activity. Because of its criticality to the County systems, it also must have built-in redundant power, water and communications systems to survive unexpected events that could interrupt services.

The current plans include development of a single story structure dedicated to Data Center activities that will allow modular expansion as needed. The likely useful life of the facility will be at least 30 years. The current schedule calls for completion of the design documents in March 2007, construction bid award in August 2007, and acceptance of the new County Data Center by April 2010.

### **Major Benefits**

- Assures operation after seismic events, allowing the County to provide coordinated services during public emergencies.
- Provides state-of-the-art data center technology to improve data center manageability and County operations.
- Increases operational efficiency.
- Reduces costs.

### **4.3.3.7 IT Shared Services (ITSS)**

<p><b>Primary Customers</b></p> <p><input checked="" type="checkbox"/> County</p> <p><input type="checkbox"/> Other Agencies</p> <p><input type="checkbox"/> Public</p>	<p><b>Participating Departments</b></p> <p><input checked="" type="checkbox"/> Enterprise</p> <p><input type="checkbox"/> Affinity Group</p> <p><input type="checkbox"/> Departmental</p>	<p><b>Project Status</b></p> <p><input type="checkbox"/> Completed</p> <p><input type="checkbox"/> Ongoing</p> <p><input checked="" type="checkbox"/> Initiated FY 06-07</p> <p style="text-align: right;"> 30%</p>
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### **Project Description**



Computers have become as integrated into our work environments as the telephone. All departments use computers for their core activities and when computers or networks fail, the impact on business is perhaps greater than when telephone service is unavailable. The costs and technical skills necessary to support networked computers has risen considerably in the past few years due in large part to more frequent virus attacks and the need for disaster recovery and business continuance.

To minimize the length and impact of downtime, computers connected to any portion of the County's Enterprise Network need to be protected with the latest security updates and all business data needs to be backed-up regularly and kept secure. Although all computers on the County's network should have these safeguards only the larger departments are able to afford the hardware, software and staffing necessary to support these needs.

Information Technology Shared Services (ITSS) has been created to help departments fulfill these vital business needs. For a flat monthly fee per computer, ITSS provides:

- Directory Services
- E-mail & Calendaring Services
- Disaster Recovery Services
- Network Printing Services
- Managed Desktop
- Security

To date, ten small and medium size departments with a total of 3,321 computers have committed to ITSS. Target dates for implementation vary by department, with completion scheduled for March 2007. In addition, ITSS anticipates increasing the number of supported computers to 5,000 in FY 2007-2008.

### **Major Benefits**

- Allows customer departments to focus their limited resources more on their main mission rather than on the IT back-office and desktop services that can instead be obtained through ITSS.
- Eliminates customers need to recruit, hire, and retain the qualified technical specialists that are required to care for these types of services.
- Provides customers with reduced costs and improved services through consolidation of hardware, software, and staffing.





- Positions customers to take advantage of emerging countywide IT services, such as Voice over Internet Protocol (VoIP), Internet content filtering, managed instant messaging, wireless access, SSL VPN remote access, and mobile device access.
- Provides customer support 24 hours a day, every day of the year.
- Gives customers the option to obtain additional, customized IT services.

#### 4.3.3.8 Sheriff/Fire/Office of Public Safety Mobile Data Communications

Primary Customers	Participating Departments	Project Status
<input checked="" type="checkbox"/> County <input checked="" type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input type="checkbox"/> Enterprise <input checked="" type="checkbox"/> Public Protection <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

#### Project Description

During 2000, the County contracted with RCC to conduct a study to determine the feasibility of developing a consolidated voice and data radio system for the Sheriff, Fire and Office of Public Safety (OPS). The study concluded that a consolidated system was feasible and presented three alternative approaches for a joint Sheriff, OPS, and Fire data radio infrastructure and Computer Aided Dispatch (CAD). Funding constraints prevented implementation of a consolidated system at the time.

The Sheriff's data radio system has now reached the point of obsolescence. It is likely to have failures that will have a major impact on Sheriff operations. Fire's data radio system has also reached the point of obsolescence and is also likely to have failures that will have a major impact on Fire Department operations. Also, the Federal Communications Commission (FCC) has issued "narrow banding" rules to provide for more efficient use of the radio spectrum. Existing voice radio systems will no longer be available and will not be acceptable to the FCC after 2013.

All three of the presented alternatives are no longer desirable due to advances in mobile data technology that have occurred over the past several years. As a result, the County has retained RCC to develop an updated technical scope for a Consolidated Fire and Sheriff/OPS Communications Systems (CFSCS). RCC has finalized its recommendations for the radio spectrum to be used for voice (UHF) and data (700/800 Megahertz), for mobile and portable voice related equipment, and for a common data system. These recommendations along with other technical requirements will be incorporated into an RFP for the CFSCS, currently slated for June 2007. Estimates of the total project cost range up to \$550 million. Implementation timeframe is seven to ten years. Regional public safety agencies will participate in the project and may help defray some of the costs. The scope of the project includes:





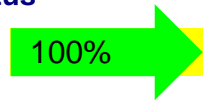
- Interim equipment required for short-term operational needs
- Voice and data radio equipment
- Computer-aided dispatch system
- Field and operations data systems
- Regional and departmental interoperability

### **Major Benefits**

- Improves delivery of emergency services.
- Fosters communications compatibility and interoperability with regional public safety providers.
- Provides an opportunity for other agencies to migrate towards utilizing County systems on a client based criteria, and/or encourages roaming capability for automatic and mutual aid activity.
- Transitions to modern technology in compliance with FCC regulations.
- Reduces overall costs through regionalizing, cost-sharing, and consolidation efforts.

#### **4.3.3.9 DHS Ancillary Standardization**

<b>Primary Customers</b>	<b>Participating Departments</b>	<b>Project Status</b>
<input checked="" type="checkbox"/> County <input type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input checked="" type="checkbox"/> Health Services	<input checked="" type="checkbox"/> Completed <input type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07



### **Project Description**

DHS is continuing its focus on restructuring its health services delivery system. Standardization of ancillary systems necessary to capture clinical patient data - laboratory procedures, pharmacy prescriptions, utilization, drug interactions, and operating room resources – has been identified as a strategic opportunity to reduce cost and improve service delivery. This project implemented the following enterprise systems:

- **Enterprise Laboratory Information System (ELIS)** – Implemented in all five hospitals and a multi-service ambulatory care center as of June 2006.



- **Enterprise Pharmacy Information System (RXIS)** – Implemented the Centricity Pharmacy Information System on a department-wide basis as of January 2006.
- **Enterprise Operating Room (OR) Information System** – Implemented Per-Sé Technologies ORSOS perioperative information system software to provide a completely integrated HIPAA compliant solution for patient, outpatient, and trauma OR scheduling, record keeping, staffing, and inventory controls as of June 2006.

**Major Benefits**

- Improves patient health care and safety.
- Reduces patient wait times to receive appropriate care.
- Reduces costs by improving effectiveness and efficiencies of operational processes.
- Eliminates OR scheduling conflicts and maximizes operating room resources.

**4.3.3.10 DHS Healthcare Information System (HIS)**

<p><b>Primary Customers</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> County</li> <li><input type="checkbox"/> Other Agencies</li> <li><input type="checkbox"/> Public</li> </ul>	<p><b>Participating Departments</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Enterprise</li> <li><input type="checkbox"/> Affinity Group</li> <li><input checked="" type="checkbox"/> Health Services</li> </ul>	<p><b>Project Status</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Completed</li> <li><input checked="" type="checkbox"/> Ongoing </li> <li><input type="checkbox"/> Initiated FY 06-07</li> </ul>
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**Project Description**

Since June of 1999 the County has had an agreement with Quadramed and its predecessors for a turnkey HIS. This agreement has provided enhanced Quadramed Affinity clinical software modules, hardware and software upgrades, communications network hardware, software and services, and other professional services, and continued maintenance on the hardware and software to support ongoing operations of the existing HIS at HUMC, OVUMC, and LAC+USC. DHS has established the Affinity HIS as their Department's enterprise solution and has implemented its use in all their hospitals and clinics.

The County has taken a phased approach to implementing the HIS. Previous phases have implemented enterprise medical records and have extensively cleaned existing data to eliminate duplicate records. These phases of work have laid the foundation for fully electronic patient records – a key assumption in the design of the new LAC+USC facility.

Phase VII of the project was approved and initiated in July 2006. Phase VIII is targeted for implementation in FY 2007-2008. The remaining HIS phases and their scope of functionality are summarized below:



- Phase VII – Master Patient Index Suite (MPI Suite)
  - PreciseID
  - MPISpy
  - SmartMerge
  - SmartID (downtime)
- Phase VIII
  - Quantim Report Writer
  - Quantim Chart Completion
  - Quantim Chart Locator
  - Quantim Correspondence Management/ROI (Release of Information)
  - Quantim eSignature
- Phase IX
  - Quantim Electronic Document Management (EDM) Revenue Management
  - Quantim EDM HIM (Health Information Management)
- Phase X
  - Inpatient Pharmacy (I RX) – HUMC & OVUMC Only
- Phase XI
  - Quantim Facility Coding
  - Quantim Abstracting
  - Quantim Inpatient Compliance
  - Quantim Outpatient Compliance

### **Major Benefits**

- Reduces storage required for paper-based records.
- Automates transfer of patient information between facilities and care providers.
- Improves accuracy of patient medical histories.
- Allows access and input of medical information through mobile devices, increasing the efficiency and quality of medical care.



- Ensures all patient information meets HIPAA requirements for confidentiality, security, and accessibility.
- Facilitates common processes and systems across all County hospitals and clinics.

#### 4.3.3.11 Sheriff Jail Health Information System (JHIS) Telemedicine

Primary Customers	Participating Departments	Project Status
<input checked="" type="checkbox"/> County <input type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input checked="" type="checkbox"/> Sheriff	<input type="checkbox"/> Completed <input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Initiated FY 06-07

60%

#### Project Description

This project extends the existing JHIS to include the hardware, software, and services required to support telemedicine for jail inmates. The Telemedicine module will significantly improve the quality of jail health care services by providing online doctor/patient interaction. This module will provide online telemedicine connectivity between the LAC and USC Medical Center, and ten Sheriff jail facilities using the Sheriff Data Network. It will be implemented as a video conferencing system using the Internet Protocol (IP).

#### Major Benefits

- Saves travel time and expense in transporting inmates to medical facilities.
- Improves inmate security and medical personnel safety.
- Allows for more frequent and personalized medical care using a broader range of specialists.
- Helps the County to meet State-mandated requirements for holding a Correctional Treatment Center (CTC) license.



## 4.4 Improve the IT Skills of the County Workforce

### 4.4.1 Improve skills and competencies of County IT professionals

#### 4.4.1.1 Enterprise E-Learning System

Primary Customers	Participating Departments	Project Status
<input checked="" type="checkbox"/> County <input type="checkbox"/> Other Agencies <input type="checkbox"/> Public	<input checked="" type="checkbox"/> Enterprise <input type="checkbox"/> Affinity Group <input type="checkbox"/> Departmental	<input type="checkbox"/> Completed <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Initiated FY 06-07

#### Project Description

The Enterprise e-Learning System provides the following functionality:

- Administration of training by tracking employee enrollment in courses, facilitating online registration, and providing access to Web-based courses.
- Online employee access to information on developmental opportunities and tools to define career paths.
- Inventory of employee skills and tools to assist in identifying the needs of the organization.
- Online test/survey development, administration, and analysis.
- Virtual classrooms and peer collaboration.
- Authoring tools to design, implement, and manage training content online.
- The ability to interface with other County systems.

THINQ completed the first phase implementation of the e-learning management suite for the Department of Health Services Public Health Programs (DHS-PHP) in August 2004. THINQ has since been acquired by Saba Solutions, who have agreed to extend the enterprise license discount to their own, improved learning management suite. Phase II of this project implements the Saba product on a countywide basis, staging the departments in six separate groups. As with Phase I, the implementation approach will largely be “out of box.”

As of June 2006, this project had accomplished the following:

- Conducted an initial project planning and implementation team training.



- Purchased and delivered software.
- Completed analysis and design.
- Second installment of software purchase and delivery in progress.

**The targeted completion date for this project is March 2008.**

### **Major Benefits**

- **Administration** – Speeds registration processes with online registration and workflow approval, allows training professionals to spend less time on administration, and ensures accurate data is gathered for certification and accreditation processes.
- **Delivery** – Provides efficient mass delivery of training programs, the ability to reuse and recombine content between training programs, and on-line training conducted at the employee's workstation which reduces lost productivity in travel time.
- **Career Planning and Competency Development** – Personalizes employee development plans based on current classification, recorded skills profile, and career goals. Also generates information on the status of critical skill sets (including skill type and level) in the County workforce for use in succession planning and emergency response management.
- **ROI and Cost Considerations** – Eliminates the proliferation of duplicate systems, reduces costs associated with administration by reducing the learning curve from department to department, and reduces development and delivery costs through the ability to recombine training content.

## **4.4.2 Raise and maintain IT skill level of all County employees**

### **4.4.2.1 Enterprise e-Learning System**

See the previous strategy for a description of the Enterprise e-Learning System, which will also be used on a countywide basis for staff training.



## 5 FY 2005-2006 IT Accomplishments

Departments have made significant progress toward achieving the goals articulated in the County's Strategic Plan. As this chapter indicates, they continue to invest in major departmental Website initiatives in support of the County's Strategic Goals and in alignment with the Strategic Directions for IT. The following material summarizes the technology accomplishments for each major departmental grouping for FY 2005-2006.

The departments developed their BAPs in the middle of the fiscal year. Their list of accomplishments was supplied separately after the end of the fiscal year, near the end of July 2006. Generally the accomplishments list corresponds to the departmental IT objectives from last year's FY 2005-2006 IBAP.

### 5.1 Central Support Services

#### 5.1.1 Animal Care & Control (ACC)

- Allow pet owners to **purchase new licenses and to renew pet licenses online** as part of Phase II of the project:
  - Completed the new Animal Control entry web page.
  - Completed the buildup of the server hardware required to support the project.
  - Activated the final stages of new ACC web server, with anticipated 'go live' date during the fourth quarter of 2007.
- Improved IT inventory process and IT service request tracking by deploying an **automated tracking and inventory application**.
- **Migrated software to County standards** by:
  - Replacing seven Novell 4.11 Servers with Microsoft Windows 2003 Server.
  - Seeking funds for replacement of unsupported desktop operating systems.
- Accomplished the following **technical infrastructure upgrades**:
  - Migrated phone systems to VoIP at all seven locations.
  - Replaced all backbone cabling to Category 5 wiring.
  - Replaced all LAN switches for compatibility with Cisco VoIP gateways.
  - Replaced department WAN routers to accommodate Cisco VoIP requirements.





## 5.1.2 Auditor-Controller

- **Maintained production applications** supporting the Auditor-Controller's main lines of business:
  - Provided a level of maintenance support that resulted in 99.22% of over 73,500 programs/systems running as scheduled.
  - Completed 100% of all maintenance modifications as scheduled *by June 2006*.
- **Developed both scheduled and on-demand reports for eCAPS using COGNOS**, making them available to all departments throughout the County. Though initially the reports were not available in a timely fashion and had accuracy issues, significant improvements have been achieved both in performance and accuracy. In the last quarter of FY 2005-2006, a COGNOS cube for General Ledger data was successfully deployed.
- **Moved the balance of CWPAY and CWTAPPS reports** that were distributed on microfiche to the **Optical Archive System (OAS)** in August 2005 thereby eliminating the use of microfiche in the department.
- **Initiated** a project that in conjunction with the eHR Project, **analyzed the reporting needs for the CWTAPPS and CWPAY legacy systems**, and maps the Department's application data to the eHR InfoAdvantage data warehouse.
- **Provided the lead role in the successful implementation of the eCAPS financial package:**
  - Coordinated interfaces with a myriad of County legacy systems.
  - Provided a testing facility to verify interfacing system's compliance with eCAPS.
  - Provided training on use of eCAPS to the entire County.
  - Coordinated with the vendor (CGI-AMS) as needed.
- **Provided the lead role in the development and testing of eCAPS Phase II functionality** including the replacement of the existing Budget, Inventory, and Fixed Assets systems, among others.
- **Implemented an automated system to calculate agency payments and provide Direct Deposit payments** to outside payroll agencies. The new work process will replace the use of Excel Spreadsheets and manual typing of warrants for approximately 120 payments amounting to \$70,000,000.
- **Conducted annual review of the Information Technology Plan** to ensure that the standards are kept current with advances in technologies and departmental needs.
- **Refreshed all work station hardware and software** as well as laptops in fiscal year 2005-2006 in accordance with established standards. Policies are in place to automatically update the virus data files and security patches.



- **Continued development and testing of the Property Tax Community Redevelopment Agency (CRA) Systems.** In spite of significant losses of contract developers the project team is poised to implement the project on schedule. Conversion programming has been developed and tested and was run on schedule *in August 2006*.

### 5.1.3 Board of Supervisors – Executive Office

- Selected **Survey Monkey** as a departmental solution for collecting survey data.
- Placed all minutes, agendas and supporting documents on **Stellant's Document Management System** for viewing from the Internet.
- Upgraded workstations to Windows XP Pro and Office 2003, and completed a number of server system upgrades.
- Completed a new *Web-enabled* **Scrolls system** for use by Board Offices and the CAO.
- IRM staff worked with the Assessor's office to make **assessment appeals data** available to all Assessor staff requiring information.
- Worked with ISD and implemented List Server functions on four Board Office Websites, used to create a **newsletter capability** using Stellant to publish documents for mailing by the list server.
- Collaborated with ISD to create templates for **fast-tracking Website development** for commissions.
- Rewrote the **report tracking system** used by Board Operations. The new system uses E-mail to automate notification letters to departments.
- Completed the **Antelope Valley Zoning System**, which tracks constituent zoning issues and complaints in the Antelope Valley.

### 5.1.4 Chief Administrative Office

*Note: the Chief Administrative Office (CAO) has three major divisions: Information Technology Services (CAO/ITS), Service Integration Branch (CAO/SIB), and the Office of Emergency Management (CAO/OEM).*

#### **CAO/ITS – Key IT Accomplishments**

- Implemented the CGI-AMS **eCAPS Budget Prep System** for the CAO and Auditor-Controller *in January 2006* for the FY 2006-2007 Proposed Budget Development Cycle.



- Completed the development, testing, and implementation of additional functionality and controls for the **Risk Management and Claims Administration Information System (RMIS)**, including a new (COGNOS-based) data warehouse for analysis and reporting.
- Implemented new **Symantec Brightmail** enterprise systems for Anti-SPAM and spyware.

### **CAO/SIB – Key IT Accomplishments**

- Installed the **SAS Enterprise Guide** for all SAS users in April 2006, providing a graphical user interface that allows transparent access to SAS. In June 2006, a **training plan was developed for the SAS users** of the Data Integration, Evaluation Services, and Urban Research Divisions.
- Developed a new project approach for the **Child Health and Education Passport System**. The new approach will have CAO-SIB and the Los Angeles County Education Coordinating Council (ECC) as joint lead agencies and will cancel the outstanding Passport RFP, since the ECC will need to be involved in the selection process for a new vendor system to be used as a model in conjunction with the Child Health and Education Electronic Record (CHEER) project of the Children's Action Network.
- Established the new **Data Integration and Sharing Workgroup** in support of *Goal 5, Children and Families Well-Being*.
- Went live with the **LACountyHelps** system at <http://www.lacountyhelps.org>, providing an integrated service information and referral application that enhances access for County residents to information on health and human service programs.
- Developed application drafts for the Productivity Investment Fund and the Chief Information Office Infrastructure Development Fund for the General Relief Service Integration Project, a part of the **Statistical Data Repository** Project.
- Departments have benefited from the following enhancements to the **Central GIS Repository** in FY 2005-2006:
  - **Staff** - Urban Research has hired two contractors to help meet the demand from GIS services clients.
  - **Infrastructure** - Purchased and integrated two new mapping computers and one new database computer into the Central GIS Repository.
  - **Data** - Created a metadata repository which will provide information about the enterprise GIS data layers in a searchable, updateable format.
  - **Software** - The Central GIS Repository has pooled the GIS software licensing for many of the departments that use the Repository.
  - **Tools** - Urban Research has developed the Geocode Web service and flash interface tools that can be leveraged by County departments to extend GIS into their organizations.



- **Training** - Urban Research organized four GIS training sessions.
- **Application Development** - Urban Research expanded the applications it supports to fourteen by adding the Sheriff Reporting District Mapping and Homeless Data Repository applications.
- Selected a vendor and completed functional specifications for the **Central GIS Automated Geocoder Tool**.
- Obtained funding approval for the **Countywide Address Management System (CAMS)** project. Participants include County departments, regional agencies, and the US Bureau of the Census.
- Provided County departments with **census and economic profiles** to meet their evolving operational needs.
- Continued support of State Board of Equalization, Health Services' Medi-Cal, and Mental Health's **revenue recovery systems**.

### **CAO/OEM – Key IT Accomplishments**

- Completed the **EMIS Re-Write** application using .NET framework and SQL Server databases.
- Purchased the **EOC Alternate Emergency Operations Center Trailer** with 30 wireless networked laptops, a server, satellite and TV connections, along with a generator, tables, chairs, tents, etc.
- Installed 120 of the 137 **EMIS satellite network sites**, including the County Emergency Operations Center (CEOC).
- Designed and implemented the **Grant Management System (GMS)** to administer grant requests from multiple grant sources that make up the FY 2005 Homeland Security grants.
- Completed initial implementation of the **EMIS incident management system** in *January 2006*.
- Completed the initial implementation of the **Training Tracker System** in *March 2006*.

### **5.1.5 Chief Information Office (CIO)**

- Coordinated the **development of countywide planning for the use and management of information technology resources** to ensure alignment with countywide goals and objectives and support effective technology investment management, including:



- The development of departmental BAPs, coordinated from January 2005 through February 2005.
- The County Performance Report highlighting FY 2004-2005 IT accomplishments, published in conjunction with the FY 2005-2006 Integrated Business Automation Plan (IBAP), which was published in January 2006.
- Provided effective **coordination and oversight of department information technology projects** to ensure alignment with countywide strategies and directions, minimize business risk, and increase project success:
  - Conducted contract review and analysis on 100+ agreements submitted to the Board of Supervisors for approval.
  - Collaborated with the CAO, ISD, and A-C to establish a countywide BCP Program to ensure the recovery of critical services and processes in the event of a major outage or disaster.
  - Provided support and recommendations on the implementation of the Los Angeles County 211 Information Services.
- **Developed and maintained a scaleable, high-speed enterprise communication network** for communication and data sharing and to enable implementation of IT applications and systems:
  - Over the past year the EN was monitored and additional functionality of the Asynchronous Transfer Mode (ATM) Protocol was implemented.
  - In concert with ISD, developed and issued an RFI with Gartner Group for the re-solicitation of the Telecommunications Carrier Services Agreement.
  - Upgraded the majority of the routers for the EN over the course of the year to the new CISCO 7600 series routers which provide improved throughput and edge control.
- **Identified and implemented an appropriate set of enterprise solutions** that provide countywide benefit at a reduced cost:
  - Supported the implementation of the CGI-AMS Advantage Financials and Performance Budget modules and completed the design and gap analysis for the Human Resources modules.
  - Developed a work plan and monitoring structure to coordinate countywide compliance with the federally mandated Health Insurance Portability and Accountability Act (HIPPA) security rules.
  - Coordinated the development of a Los Angeles Region – Image Acquisition Consortium (LAR-IAC) Program to acquire aerial imagery of the L.A. County Region.
  - Coordinated the development and implementation of countywide information security architecture.



- **Guided the County's transition to electronic government** by providing vision, plans, and standards for the enterprise deployment of an infrastructure, supporting technologies, and organizational priority:
  - Facilitated the update and ongoing development of the single County Web portal and use of standard Web branding for County websites.
  - Administered the Information Technology Infrastructure Investment Fund to fund applications that improve public access to information and services; including evaluation and approval of 9 new grant funded projects for an estimated \$3.1 million, management of funds estimated at \$32 million for 34 grant funded and designated projects, and preparation of an annual report to the Board of Supervisors delineating all approved ITF funded and designated projects.
- Additional accomplishments for FY 2005-06 not identified in the BAP, include:
  - Coordinated the development and presentation of a multi-vendor orientation workshop on Linux and Open Source.
  - Supported the development of a workshop on Enterprise Content Management with participation by numerous vendors providing software and hardware tools and solutions.
  - Provided organizational support and assistance in the development of the Supervisor Antonovich-sponsored County of Los Angeles Technology Week.
  - Developed an amendment to a delegated authority agreement for the Department of Health Services to expand the services of the consultant, Doculabs, to assist with the forms redesign effort required to support the implementation of their planned patient related document imaging system, Patient's Electronic Document Imaging Management System (PEDIMS).
  - Participated with the team that developed the Request for Proposal for the solicitation to outsource the hardware, software and services to provide the ecommerce infrastructure (shopping cart, payment server, and payment processing) for credit cards, debit cards and electronic checks.
  - Provided support for the eCAPS implementation by developing a delegated authority agreement for COGNOS Report Writers and Architects to assist in improving the eCAPS reporting for the Phase I financial modules and the development of the Performance Budgeting Reports.
  - Chaired a technical committee that monitored the eCAPS reporting environment and coordinated corrective actions to stabilize the reporting environment and improve the reporting performance.

### 5.1.6 County Counsel

- Set up **server mirroring** between offices at HOA and Children's Court, with completion scheduled for October 2006.





- Provided **IT security training** to all IT and office staff.
- Provided **Canon Multifunction** devices to all divisions.

### 5.1.7 Information Systems Advisory Body (ISAB)

- Provided project management to complete network expansion and network management training for **LAnet premises wiring infrastructure** at various County facilities:
  - Issued joint Superior Court and County RFP for vendor-provided wireless access point installations in courthouses to support County, private bar and public access to Internet.
  - All of the 94 CJIS II sites have completed network equipment upgrades and 15 of 34 sites have been completely rewired.
  - Replaced all obsolete U/B hubs with CISCO switches at all facilities.
- Implemented **videoconferencing stations** countywide for inmate interviews:
  - Continued operation for the JVICS system which allows 2600 interviews each month, and expanded the JVICS system by adding 7 new interviewer stations.
  - Switched from ISDN lines to IP-based connections on the County Enterprise Network resulting in a savings of approximately \$60,000 in telephone charges.
  - Upgraded 4 jail stations, and 2 new interviewer stations.
  - Fully integrated the Alternate Public Defender (APD) into the JIVCS program.
- Ensured the successful implementation of the Web-based **Probation Enterprise Document Management System (PEDMS)** in over half of all Probation area offices. The PEDMS production roll-out continues and is on-schedule for the remaining area offices.
- Expanded deployment of **commercial package version of PIX**:
  - Provided project management to implement Quovadx; a commercial message broker which receives, transforms, and sends data from one application to other systems.
  - Continued with PIX modifications as needed.
- Requested grant funding (PIF and ITF) to proceed with a Project Definition Study to develop a **Justice Automated Information Management System (JAIMS)**.
- Additional accomplishments for FY 2005-06 not identified in the BAP:
  - Added the Public and Alternate Public Defender's offices to the existing imaging and microfilm conversion services contract.
  - Completed development of a comprehensive Long Range Information Systems Plan.





- Made significant progress with the Naming and Design Standards for the development of a National Information Exchange Model (NIEM) based on the Federal DOJ Global Justice XML vocabulary.

### 5.1.8 Internal Services Department (ISD)

- Completed review of the detail design for the **new data center at the Ranch Los Amigos campus in Downey**.
- Selected a standard with a centrally-hosted **Voice over IP (VoIP) architecture and infrastructure**. Several sites have now been implemented, with over 2,000 devices operating on the VoIP architecture.
- Established a **Local Recovery Center (LRC)** at Orange County's IT center in Santa Ana. This will perform remote mirroring of critical applications in the event of a disaster.
- Implemented **Business Intelligence (BI)/Data Sharing infrastructure**, established a BI steering committee open to all departments, and set up a Web-site to support departmental BI efforts.
- Provided computing infrastructure to support the **eCAPS General Ledger and Financial** systems which were implemented on schedule.
- Conducted an analysis of the County's rates which indicated that they were competitive overall. The decision to extend the **Carrier Services agreement** for one year was made. ISD/ITS and the CIO continue to develop an RFP to bid for carrier services in the future.
- Conversion of E-mail from GroupWise to MS Outlook was temporarily suspended so that ISD could develop **IT Shared Services (ITSS)** offering centralized desktop support, file/print, and E-mail services to the departments.
- Increased the number of **wireless access points** to improve network access for County employees.
- Negotiated an agreement with a firm to provide "**back-end**" **processing of e-Commerce transactions**.
- Implemented a pilot for **Internet content filtering**.
- Completed a plan for **server consolidation** which will use VMWare virtualization software to reduce the number of servers in the data center.
- Upgraded the IBM mainframe environment with **2 new Z-900 systems**.
- Implemented **z/Linux** and **Websphere** on the IBM mainframe.
- Adopted a **change management strategy** based on ITIL best practices.



## 5.2 General Government Services

### 5.2.1 Assessor

- Continued efforts in the preparation of a Request for Proposal for the **Assessor's Reengineering Project** which will replace the core systems for the Real Property valuation process.
- Spearheaded the development and implementation of the **Property Tax Portal System** which provides a "one stop" Internet Website that directs public inquiries regarding property information relating to the Treasurer and Tax Collector, Auditor-Controller, Assessment Appeals Board, and Assessor.
- Developed a **Supplemental Tax Estimator** on the Assessor's Website wherein a new or prospective property owner can obtain an estimate of their supplemental property tax prior to purchase.
- Developed the **Paperless Transfer System** which significantly streamlines the valuation process for single family residential and condominium transfers.
- Completed the acquisition and deployment of **Host Intrusion Detection** software for all production servers.
- Additional **enhancements to application systems** include:
  - Completed the acquisition of equipment to replace the aging computer used for **document imaging**.
  - Developed and implemented an application to retrieve data from the Deed Imaging System and Time & Volume/Workflow System to generate several **Daily Production reports**.
  - Automated the **Annual Roll Report**.
  - Enhanced the **E-file system** to include a migration of the E-File database to its own server for increased performance, qualifying companies in Area 9 (Major Personal Properties) for e-filing, and simplifying the error message mechanism to display all errors at once.
  - Completed a new system providing a history of all transactions processed to the **Cross Reference File** in a database.
  - Created a program that identifies and lists all parcels that were involved in back-to-back **partial interest transfers**.



- Key **Web-based improvement** include:
  - Developed the **Legal Entity Ownership Program Tracking System (LEOPTS)**; a new system available on the intranet.
  - Implemented the **Mapbook Scanning project** which made the “Blue Books” maps easily accessible to all department users via the Assessor's intranet.
  - Developed an internal **on-line employee directory**.
  - Developed the **EZ Access system** to extract property statements filed through Orange County's SDR Website, merging them with records filed through the Assessor's E-file System for processing.
  - Enhanced the Assessor's Internet **Website to accommodate seven foreign languages** (Spanish, Korean, Farsi, Tagalog, Armenian, Japanese, and Chinese).
- A number of **technical infrastructure improvements** are in progress or completed:
  - Submitted plans to ISD to **improve the computer room** to conform to disaster and security regulations and policy.
  - **Upgraded the desktop and laptop computers**, added security to the operating systems, and facilitated compatibility of the computers with those of other organizations.
  - Completed hardware and software specifications for **Data Warehouse Expansion**.
  - Contracted with **Sungard Disaster Recovery Services** to include the IBM AS/400 and all Imaging and District Offices LANs, with plans to perform a hot-site test for both the AS/400 System and the Imaging System in late October 2006.
  - Acquired the hardware solution for the first phase of **E-mail Archiving**.
  - Implemented server-based **anti-spam and anti-spyware software** products to protect the Department from unwanted E-mail and spyware.
  - Implemented and expanded the use of **storage auxiliary networks** for several Assessor systems that reside in the local area networks.

## 5.2.2 Public Works (DPW)

- Led efforts to streamline and consolidate the Department's business processes to conduct plan reviews, permitting, inspections, and licensing within its divisions; the contract cities it serves and the outside agencies that perform similar functions. The **Electronic Development and Permit Tracking System (eDAPTS) project** will include the migration of several Public Works current mainframe permit tracking applications to a single Web/GIS-enabled system. The current implementation date for the remaining eDAPTS modules is December 31, 2006. Once implemented, the system will include the business permitting processes of the expansion departments.



- Implemented the **Solid Waste Information Management System (SWIMS) Phase III** effective July 2006. The system is in production and maintenance is in effect for six months. Improvements include enhanced reporting, integrated GIS mapping, and better data/access security. Currently developing the scope of work for SWIMS Phase IV which will include components for franchises, GDD contracts, and the Household Hazardous Waste Collection Program.
- Redesigned and enhanced the **Project Information Website (PIW)** to include requested user modifications: allowing users to perform activities that previously required IT staff to support, customizing project profiles and search results, expanding financial information capabilities, allowing batch reassignment of projects, and tracking staff roles (i.e., name and date of assignment).
- Began the detail design phase of implementing a state-of-the-art, multi-jurisdictional, **advanced transportation management system (ATMS)**, an **Advanced Traveler Information System (ATIS)**, and a **communications system for areas within Los Angeles County**. The overall system concept of operations involves local agency traffic signal monitoring, control and synchronization capabilities; real-time database management of traffic information; monitoring via Closed Circuit Television (CCTV) cameras; and inter-jurisdictional data exchange among affected agencies, the State of California Department of Transportation (Caltrans), and local agencies' engineering and maintenance staff. These projects will improve overall regional traffic mobility, reduce traffic delays on regional arteries, and improve air quality in the project areas. In addition, successful implementation of these projects will enable the local agencies in the project areas to coordinate with Caltrans' freeway operations to more effectively deal with daily recurring and nonrecurring traffic congestion on the arterial roadways and freeways.
- Implemented **several new public eGovernment applications** this year:
  - **Tract/Parcel Map Application Form** – The Department received the National Association of Counties Achievement Award for this application. This application was enhanced to issue subdivision map numbers, and allows users to apply for and receive parcel map numbers via E-mail immediately after the online form is completed.
  - **Service Locator** – A GIS-based application that allows the public to search for Public Works services and offices in their respective communities. Based on the location entered, the Website provides the information as well as driving directions to the offices instantly, which reduces the number of incoming calls to the Department.
  - **Graffiti Abatement Referral System** – Allows dispatchers to enter graffiti reports from the public. The reports are automatically assigned to contractors who will clean up the graffiti. Cities and other agencies are also automatically sent E-mails if the graffiti is in their jurisdiction.
  - **Water Billing Website** – Developed a Web-based application for Waterworks that provides water billing information to the public. The public can review water usage and compare it to the previous year and month.



- **Mapping & Property Management Surplus Property** – Created a Web-based application for Mapping & Property Management Division’s surplus properties that is used by the public to receive information about future surplus property auctions.
- **Land Records Information** – Developed an application to provide Record of Survey maps in PDF format to the public. The application allows the user to use a tabular search as well as an interactive map search.
- **Vendor Event Registration** – Implemented an application that allows vendors interested in attending departmental business events to register online. The application improves the registration process by reducing the amount of manual registration that takes place minutes before the event begins.
- **Greenbook** – Created a Website to provide standard specifications for Public Works construction online.
- Implemented a **number of Web-enabled applications for internal use** this year:
  - **eProcess Leave Request** – Enhanced this application (which facilitates the request and approval process) to include overtime requests and a calendar function that assists managers and secretaries in communicating when employees will be out of the office.
  - **eProcess Rental Request** – Developed an application to enable Fleet Management and rental coordinators with the ability to request, manage, and monitor cost associated with their division’s equipment. The system also provides division employees with centralized access to all the costing information by equipment, PCA, and yearly totals.
  - **Case Management System** – Implemented Goldmine, an off-the-shelf customer Relationship Management (CRM) product. Goldmine was configured to allow Human Resources Division (HRD) to manage employee cases related to disciplinary actions, Title VII, and grievances. The system reduces the significant amount of paperwork, increases data security, facilitates reporting and information sharing among the various sections within HRD.
  - **Safety Awards Online** – Developed a Web application to track employee eligibility for Safety Awards and to facilitate the selection and distribution of these awards at annual ceremonies. This system replaces a feature-limited Access-based version. It enhances the accuracy of the award process and significantly reduces the time and effort to manage it.
  - **Values Management Website** – Developed a Web-based tool that helps the strategic planning–values management team to easily collaborate and meet their goal in five different areas: Workplace Ethics, Managing Diversity, Equal Employment Opportunity, Values Communication, and Women’s Workplace.
  - **Web Search Utility-Intranet Search** – Evaluated search engine products in 2005 to improve the Department’s search capabilities on our Internet and intranet Websites. We selected and implemented Google to provide search capability for our intranet Website.



- **Headquarters Seismic Retrofit Project** – Implemented a Website to provide department employees information about the retrofit project and announce upcoming activities.
- **Administrative Personnel Database** – Developed a Web application to track administrative personnel at the level of section head and above, and their participation status in group activities. This application automates various aspects of group activity planning, from developing the list of activities, to creating mailing labels and tracking registration. It replaces a feature-limited Access-based version.
- **Copier Database** – Created a Web application to allow Information Technology Division (ITD) to effectively track the Department's copy machine purchases, leases, and rentals. It also allows divisions to better budget/plan their copier needs.
- **Materials Analysis Unit DB (MAUW)** – Implemented a Web-based application that tracks and monitors material analysis projects. Prior to this application, this function involved a manual paper-based process.
- **Emergency Response Team Information System** – Developed a Web application to allow the floor wardens at Public Works headquarters and Facilities Management staff to provide employees with timely floor orientations, easily identify employees with permanent or temporary handicaps, and track the wardens' CPR certifications. Overall, the system promotes emergency preparedness.
- **Radio Communications Database** – Created a Web application to allow ITD's Radio Dispatch staff to look up radio call signs and field personnel to get reports. Because the call sign data is maintained centrally, all users benefit from the same up-to-date information.
- **Storm Water System** – Developed an application for WMD to track storm water samples. Phase I encompassed lab data entry and the general site. Phase II included: in depth reporting, Lab Upload Spreadsheet, design query capability, and integrate photo application. Phase III included: Financial Module, Data Transmission, and Validation. Phase IV included: GIS and Handhelds.
- Other completed **key infrastructure improvements**:
  - **Cold Fusion** – Implemented a new intranet environment with Windows 2003, IIS 6.0, multiple instances of Cold Fusion 7, and a more logical server directory structure. The new environment allows the use of Cold Fusion 7 features in Web application development and the multiple instances decrease the risk of server outages by preventing the problems in one instance from affecting the other instances.

### 5.2.3 Regional Planning

- Continued multi-year efforts for countywide implementation of the electronic permitting project known as **Kiva (or e-DAPTS)** which began (for DPR) during FY 2002-2003. This project includes the Department of Public Works, Fire Department and Health





Services/Environmental Health Department. The key accomplishments to date are implementation of Land, RFS, Permits and DMS in August 2004. The key tasks remaining are implementation of the E-Commerce module for the Department of Regional Planning and in conjunction with all other departments.

- Made significant upgrades to the **Zoning Conversion Integration Project (ZCIP)**. **ZCIP** is a tremendous benefit to staff and provides substantial service improvements to department customers. Implementation of the first stage of this project—the Department's GIS-NET—was completed during early FY 2002-2003. Subsequent phases included the addition of the zoning layer and distribution of selected data to the public via the Internet.
- Continued to implement **enhancements to staff computer training**. Training is designed to meet specific needs and ensure that employees are maximizing the use of technology in the performance of their duties.
- Provided a number of **Web applications** to internal, County and public customers. These applications include **Webtrack**, an online public case tracking system, and **GIS-NET**, a GIS Web database serving internal department staff as well as limited customers in several other departments. Ongoing maintenance and support is required for each of these applications. The Department will continue to expand its support services as additional applications are brought online and existing applications expanded. Changes to certain applications will occur during FY 2006-2007 in conjunction with **Kiva**.
- Completed the comprehensive **Windows Migration Project** to move from NT 4.0 to Windows Server 2003, implement Active Directory, updated Outlook Web Access throughout departments.
- Worked with project team to roll out multiple computer workstations, network connectivity and access to all department business applications and information services in the new County **Office Center at East LA Hall**.
- Implemented project to provide **broadband wireless service and notebook computers** to each **Zoning Enforcement** officer in the department. This initiative created a true mobile office environment, allowing officers to access all business and technology applications in a broadband wireless environment, using the County's VPN. This project resulted in increased productivity and efficiency as officers may complete business tasks from the field without requiring a return to the office.
- Implemented **Blue Coat/IronPort Anti-Spam** solution to reduce SPAM on departmental E-mail server, reduce storage needs and increase productivity.

#### 5.2.4 Registrar-Recorder/County Clerk (RRCC)

- **Document Scanning of Birth and Death Certificates** – All programming and systems testing has been completed successfully. Birth and death certificates are arriving at the RRCC within 30 days of Health Services receipt instead of the historical 90 day delay. The





public is able to obtain a birth or death certificate within a reasonable time of the document's creation.

- **Campaign Finance and Candidate Reporting System** – Will automate and Web-enable the financial reporting of political committees, candidates and office holder campaign contributions and expenditures. The L.A. City system was purchased and has been converted for adaptation to L.A. County requirements. System reports are in programming, the database has been upgraded from MySQL to SQL and server hosting at ISD has been implemented.
- **Election Tally System and Ballot Layout System Replacement** – This project will replace a 35-year-old mainframe dependent system with one maintained by a large company and used successfully in many other counties. Progress on the system continues with the completion of the System Definition/Requirements, System Release and Beta Testing, and Full System Election Testing phases. Changing federal and state certification requirements for system certification has materially delayed progress by requiring new program features, specialized third party reviews of program code and additional auditing documentation. As of June 2006 the Federal certification of the GEMS system has been completed. The California Secretary of State has not yet certified the system.
- **Help America Vote Act (HAVA) Compliance** – HAVA requires by 2006 the ability to tell a voter they have over-voted or under-voted their ballot, and provides an audio ballot for the visually-impaired voter. The devices were successfully tested in 15 polls for the June 6, 2006 Primary Election.
- **Property Document Recording Re-engineering** – Replaces the mainframe property document recording system with a network-based system which provides new features and adaptable system capabilities. The completion of the first three phases has positioned the Department to confidently move forward with the acquisition of a system that will fit the complex requirements of three property document recording systems: mailed documents, title company documents and documents presented at public windows. Implementation is scheduled for January 2007.
- **GIS Application Software Upgrade** – Programs for manipulating precinct lines and generating reports have been upgraded to the new ESRI software solutions. Staff ability to work with the two systems has been greatly enhanced by the creation of a unified interface program set.
- **IRS Electronic Property Document Recording** – Successfully developed unique interfaces with the IRS to enable electronic transmission of IRS liens and releases with full electronic confirmation of each transaction. Paper document handling for a consequential volume of documents has been eliminated. Recording processes have been greatly accelerated from many days to minutes.
- **Candidate Filing System** – Candidates for political office are presently processed on a dated mainframe application which will be incompatible with the new network-based Ballot Layout and Tally systems. To achieve a seamless integration of candidate filing through ballot tally data flow, a new Candidate Filing system is required. Within the vendor provided



Voter Information System there is a subsystem for Candidate Filing which has been evaluated for compatibility with the RRCC requirements for processing candidates. Specifications for system enhancements to elevate the vendor system to a level adequate to support the requirements of the RRCC are in progress.

- **Telephone and Data Network Upgrade** – Replaces a dated telephone system and data network with a new Voice over Internet Protocol System (VoIP). The RRCC has initiated a project with ISD to implement a new communications network for voice and data that will provide the required capacities to successfully conduct deed recordings and major elections. By December, the new VoIP capability will be implemented for data networks. Voice implementation will follow at a date to be determined.

### 5.2.5 Treasurer and Tax Collector (TTC)

- Work with the Department of Mental Health, Coroner, County Counsel and Superior Courts, to finalize a Request for Proposal (RFP) for development of a new **Client and Asset Management System (CAMS)** to replace LAPIS, which is targeted for release by the end of July 2006.
- Implemented **Virtual Check (Vcheck)** in July 2005 for payments of Current Secured Property Taxes. The total Vchecks processed between July 1, 2005 and June 30, 2006 are 50,560, for a total of \$136.8 million. Since the initial implementation, TTC recently implemented a major enhancement to include Defaulted Tax Payments as well as other security and administrative features.
- Obtained Board approval of the Link2Gov contract on April 4, 2006, to provide the County of Los Angeles with a high availability **e-Commerce infrastructure and payment processing capability**. The e-Commerce Readiness Committee, chaired by ISD and includes TTC business and systems representatives as well as representatives from the CIO and other departments, is meeting regularly to define methods and provide guidance to departments for obtaining Link2Gov's services. TTC has selected the Auction Book Sales to be the first application to accept credit card processing. A statement of work is in development for the Auction Book Sales application, with a targeted implementation to coincide with the next sale of books in December 2006.
- Continued to allocate training funds and are providing basic PC Skills and Microsoft Outlook **training, as needed, for TTC employees. Training areas for the Departmental IT staff** include Web application development, network and security enhancements, as well as use of systems documentation tools and techniques.
- Collaborated with Animal Care and Control (ACC) to process 300,000 annual pet licensing fees through an automated remittance processing system called the **Animal Care and Control Payment Update Processing System (ACCPUPS)**.
- **Continued to provide maintenance** on over 45 mainframe and PC-based systems and equipment. Activities to date include:



- Performed several modifications and enhancements to the mainframe and PC-based TTC applications.
- Replaced 150 outdated PCs throughout the fiscal year.
- Migrated server environment to Windows 2003.
- Migrated E-mail service from Eagle to Exchange 2003.

## 5.3 Human Services

### 5.3.1 Child Support Services Department (CSSD)

- Completed first phase implementation of the California Child Support Automated System (CCSAS V1). Legislation was enacted that required the State to build the **California Child Support Automated System (CCSAS)** for monitoring and tracking child support cases for the State of California. The first phase implementation of CCSAS V1 was completed and federal certification is pending.
- Completed the following **ARS interfaces**:
  - ARS Consortia to State Wide Services (SWS)
  - SWS to ARS Consortia
  - SWS Payment Allocation
  - State Disbursement Unit (SDU)
  - Activity Log/Messenger Transport
  - Financial Reconciliation Reports
  - Enforcement Actions
  - IDB/IRS to ARS
  - CalWIN
- Completed the **Announcements (Electronic Bulletin Board)** system which automatically generates a monthly announcement E-mail to the "everyone" group for all New Hires, Promotions and Selective Resignations/Out of Service personnel for the month.
- **Installed the SAN storage expansion currently in production.** CSSD is in the final stages of **migrating from Novell to Microsoft** server operating systems, with about half the Department converted. All facilities are now upgraded to **Cat5e wiring**.
- Completed the following initiatives as part of CSSD's ongoing efforts to **enhance customer service at the Call Center**:
  - Installed equipment to record all calls.



- Redesigned the Automated Voice Response system.
- Implemented a Predictive Dialer system for outbound call campaigns.

### 5.3.2 Children and Family Services (DCFS)

- Completed the **Integrated Financial System** which automated the child support referral process and provides accurate data for revenue enhancement for DCFS children in Foster Care.
- Coordinated and developed, in a joint effort with Labor-management, a **plan to improve permanency outcome for children** and to meet federal and state-mandated permanency timelines for children in out of home care.
- Developed personalized home page, **MyCSW**, of critical information needed by the CSW to meet goals, track case milestones, and monitor CWS/CMS alerts allowing more time to be dedicated to protecting children and supporting families in LA County.
- Provided a new module in the **Adoptions Integrated System** that will track individual 'hotline' calls for recording, tracking and managing the Adoptions Assistance Payment requests and Posts Finalization Service requests.
- Completed **Foster Care Search**, a Web-based application that will be used to identify vacant foster family homes closest to the child's original home and school attendance area.
- Completed Phase I of the **Criminal Clearance Tracking System** and began implementation throughout the regional offices in June 2006.
- Completed **Concurrent Planning System** enhancements to accommodate new permanency initiatives implemented within DCFS with a focus on timely adoption or kinship placements to improve outcomes for foster care children.
- Actively collaborated with the Chief Administration Office's (CAO) Services Integration Branch (SIB), Chief Information Office (CIO), and other County departments and the State in the development of new systems to solve joint business needs, including:
  - An **ES/ILP Tracking System** allowing DCFS and Probation to determine services provided to eligible youth and assess their outcomes.
  - A new **DCFS Public Website**.
  - Electronic countywide Account Payable System (**eCAPS- Phase I**).



### 5.3.3 Community Development Commission

- Dedicated IT staff worked on **converting the CDBG CAPER system to a Web-based design** during the second year of the project. The enhancement to the CAPER system will ensure the flexibility needed to link to other database systems and to share data with other data users within the Commission. Phase II of the project involved automation of the funding pool and building many modules, including contract automation, on-line contract, funding request, check request, and quarterly performance modules. A planning summary module was built for project planning and submission for supervisor approval.
- Completed Phase 1 of the **Board Letter Tracking System**, whereby a report can now be generated that defines the letter categorization and schedules the calendar.
- A new **.Net-based CDC Website** is near completion that will allow end-users to administer and maintain content.
- The upgrade of the Exchange 5.5 and 2000 mail server to **Exchange 2003** provides better administrative capabilities, such as a better use of space and more disaster recovery options. During the FY 2005-2006, the Coral building and remote sites were fully migrated. Included the rollout of Webmail 2003 and a secondary PIX Firewall.
- Completed the Web-based **Fraud Case Management System** which consolidates four, small databases involving fraud and related issues connected to the Section 8 and Conventional Public Housing programs, thus allowing databases to check for common issues.
- Upgraded **Track-It Helpdesk system** to the latest version which allows automation of incoming helpdesk tickets. Implementation considerations are under review.
- Purchased two **EMC Storage Area Network (SAN) systems**, data replication software and installation services to create a data replication environment between the Santa Fe Springs and Monterey Park buildings. Also implemented Server Snapshot Backups.
- Delivered mandatory sexual harassment **training sessions to staff via the Web**. Other trainings automated this year included telecommuting, CDBG financial, and CDBG quarterly performance.
- Developed **web-based surveys** including the IT Survey, the Central Services Survey, the CDBG Agency Customer Satisfaction Survey, and the HR Benefits Survey.

### 5.3.4 Community and Senior Services (CSS)

- Completed Phases I and II of the **Adult Protective Service (APS) Case Management System**.



- Consolidated three prior Websites, Rapid Response, WorkSource California, and the Workforce Investment Board, into one.
- Implemented a system that will **track contractor performance** and increase contractor accountability.
- Implemented the **time card collection system (TCCS)** for all departmental sites with connectivity.
- Piloted the new **Board Letter Template**.

### 5.3.5 Health Services (DHS)

*Note: DHS has a large number of IT projects underway. The only projects listed here are those with major phases or the entire project completed in FY 2005-06. Additional key accomplishments not identified in the FY 2005-06 BAP are listed separately by DHS facility.*

- Acquired **MPI Cleanup** services and **Quantim**, enabling Harbor-UCLA, Olive View-UCLA, and LAC+USC (LAC+USC MC) Medical Centers and their related clusters to implement improved methods to reduce the number of duplicate medical records created, cleanup the multiple records already created, and manage paper documents better by digitizing medical and business office records.
- Introduced the **Oracle Healthcare Transaction Base (HTB)** component of the **DHS - Enterprise Data Repository (EDR)**. HTB ensures a standardized single source of information for proposed Web and non-Web services that provides mission critical operational information that is required for all levels of management.
- Completed **Enterprise Laboratory Information System** implementation at H-UCLA MC and RLANRC.
- The **HASTEN System** development effort and implementation was completed in November 2005. System configuration and user acceptance testing was completed with Public Health staff. Deployment to production was scheduled for January 2006, but has been delayed due to performance problems.
- DHS IT Security completed the following **HIPAA security rules**:
  - Security Management Process 164.308(a)(1)
  - Contingency Plan 106.308(a)(7)
  - Facility Access Controls 164.310(a)(1)
  - Access Control 164.312(b)
  - Audit Controls 164.312(b)
  - Transmission Security 164.312(e)(1)





- Deployed the **Enterprise Clinical Workstation Beta** project to the pilot physician groups and is currently being used by these physicians.
- LAC+USC is 100% live with **Order Management** at General Hospital, Women's and Children's Hospital, Outpatient areas and the Comprehensive Health Centers.
- LAC+USC **Health Notes** is 80% completed with electronic Discharge Summary documents and 100% completed with electronic Operative Reports posted on Affinity.
- Implemented the **Verinform Resident Physician Information System**. Users (attending physicians, interns/residents, residency program staff, graduate medical education staff and expenditure management staff) total over 3,000 department-wide.
- Completed and evaluated a pilot study of the **RIGHTCAD Ambulance Call Tracking System** using five field unit. It was determined that the software functioned as expected but that upgraded wireless modems and a more robust end user MDT were needed.
- Acquired, configured, and implemented a third-party **Strategic National Stockpile Inventory Management System** to support the tracking of medications and related assets in the Strategic National Stockpile. The system was deployed to production during March 2006.
- Expanded **vCMR and WebvCMR electronic lab reporting** to include seven new labs for Electronic Laboratory Reporting (ELR), three new labs for On-Line Manual Laboratory Reporting (O-MLR), and four additional centers for WebvCMR.
- Implemented the Web-based Time and Attendance Interface and the **Time and Attendance** module for **eCAPS Phase II** at RLANRC in June 2006.
- Implemented the **University Health System Consortium's (UHC) Patient Safety Net (PSN)** system for event reporting.
- Other key accomplishments not identified in the FY 2005-06 BAP for **HSA - Information Resource Management**:
  - Completed **LADHS.org** facelift and complied with the County Internet standards.
  - Established **software lifecycle development process** supported with IBM Rational tools and created an opportunity to transition from Cold Fusion to Java.
  - Migrated Evalisys (Catalyst) from paper-based classification to **Affinity Acuity and Staffing Module** completed at RLANRC.
  - **Referral Processing System (RPS)** had a successful HDHS Referral Center and CHP 'go live' January 2006.
  - Migrated from individual facility-based ANSOS to **Enterprise One-Staff** on Oracle platform December 2005.
- Other key accomplishments not identified in the FY 2005-2006 BAP for **HSA – Emergency Medical Services (EMS)**:





- Installed a fully operational **Hospital Emergency Administrative Radio (HEAR)** system with access to all remote base stations in the Mobile Departmental Operations Center (MDOC).
- Other key accomplishments not identified in the FY 2005-2006 BAP for the **Coastal Cluster**:
  - The **MISYS laboratory system** was completely installed on March 14, 2006 and is now live at H-UCLA MC.
  - The **Outpatient PSCAS Pharmacy System** replaced the legacy Sigma Pharmacy System in May 2006.
  - The **QuadraMed Affinity Inpatient Pharmacy System** was installed on June 21, 2006 and is currently operational for all inpatient units at H-UCLA MC.
  - Implemented **QuadraMed Order Management** at the Psych ER.
  - Implemented **QuadraMed Patient Charting** for the ancillary departments.
  - Implemented **QuadraMed Patient Charting-Vital Signs** for all nursing wards.
  - Purchased **CISCO wireless equipment**, designed wireless plan and deployment, including security, and implemented wireless plan.
  - Completed the **Patient Flow/Communications Forms** project in April 2006.
- Other key accomplishments not identified in the FY 2005-2006 BAP for the **LAC+USC Healthcare Network**:
  - Implemented **Affinity Clinical Documentation (Patient Charting & Assessment)** in two areas of the outpatient medicine clinics with great success.
- Other key accomplishments not identified in the FY 2005-2006 BAP for the **Martin Luther King Jr./Drew University Medical Center**:
  - Rewired the Leroy Weekes and Acute Hospital buildings to **Category 5**.
  - Completed the **Track Surgical Instruments** system for Surgical West.
  - Upgraded **Track It** Help Desk Software.
  - Upgraded to new version of **Affinity M3** software to maintain compliance with contract.
  - Installed **Plato** software to input data of ongoing medical records reviews.
  - Upgraded the **Automated Nurse Scheduling** application.
  - Upgraded the **Cardiology ECG** system.
  - Upgraded **Pharmacy 2000** application and relocated server.
  - Installed **Pharmacy 2000** automated outpatient prescription dispensing system at Hubert Humphrey.
  - Upgraded the **Life Scan** system.



- Upgraded the **Omincell** system and relocated server.
- Established a VPN tunnel for **Remote Radiology Services** so off-site radiologist can view images remotely from our PACs system.
- Other key accomplishments not identified in the FY 2005-2006 BAP for the **Rancho Los Amigos National Rehabilitation Center (RLANRC)**:
  - Developed and partially implemented a new Web-based system, **Rancho Team Information System (RTIS.net.)**.
  - Established access to other DHS hospitals' **Affinity HIS** to further continuity of patient care for patients transferred to Rancho (enabled viewing of lab results, medical imaging, past and future appointments, etc.).
  - Implemented the **Misys Enterprise Lab Information System (ELIS)**.
  - Replaced existing **Startel telephone system**.
  - **Redesigned the facility Website** to comply with the W3C (World Wide Web Consortium) Accessibility Guidelines and met a critical outstanding compliance issue from the CARF accreditation survey.
  - Developed and implemented a **Web-based ticket tracking system** to track all assignments and requests made to the PC Help Desk, HIS Support Section and System Development and Integration Section.
  - Replaced ANSOS with **OneStaff Nurse Scheduling** system.
  - Implemented **Affinity Acuity & Staffing (A&S)** system.
  - Installed a new **Water Detection System** in the Computer Operations Center.
  - Converted the facility's network interface engine from unsupported Datagate to **eGate**.
  - **CISCO PIX Firewall** implementation improved network and wireless security.
  - Implemented **Electronic Billing Analysis Tool (eBAT)** to manage telephone inventory and expenses.
  - Implemented Phases I, II, III of **Affinity Patient Accounting (PA)** module. This module replaces separate standalone systems that required interface and reconciliation processes.
  - Reviewed and improved **Affinity end-user menus** and consolidated others (150+) to provide for more efficient use of system.
  - Replaced Affinity Medi-Cal OES with **Provider Advantage X12** system, which is HIPAA compliant and provides Medicare as well as Medi-Cal eligibility information.
- Other key accomplishments not identified in the FY 2005-2006 BAP for the **Valley Care Olive View UCLA Medical Center**:
  - Implemented **Automated Cashiering** at OV-UCLA MC.



- Installed **PSCAS Outpatient Pharmacy System** as replacement system for the outpatient portion of Sigma Pharmacy System.
- Installed **Affinity Inpatient Pharmacy System** as replacement system for the inpatient portion of Sigma Pharmacy System.

### 5.3.6 Mental Health (DMH)

*The following major accomplishments were identified in the 2005-2006 BAP:*

- **Preparing MHA**

- Obtained State approval for MHA one-time funding of \$3.177 million to develop the requirements specification and RFP for the IBHIS project, developed an EHR vendor contract and EHR implementation plan, developed a Data Warehouse restructuring plan for expanded data integration and decision support, implemented the computer system interface application (BizTalk) and workflow software (Captaris), procured additional clinic workstations, developed IT system changes as required for implementing MHA Community Services and Support (CSS) Plan programs and for compliance with state reporting.
- CIOB developed a Web-based Outcomes Measures Application and Outcomes Data Repository to support capture of client assessments and report to the State on client outcomes as required by MHA.
- CIOB has assisted numerous prospective MHA programs with technology plans including site surveys; equipment assessments and estimates; and coordination with other DMH units.

- **Acquisition of an Integrated Behavior Health Information System (IBHIS)**

- Began to pursue the acquisition and implementation of an Integrated Behavioral Health Information System (IBHIS) in FY 2005-2006. In April 2006, DMH received Board approval to enter into a consulting services agreement to provide expert assistance in specification, selection, acquisition, and implementation of IBHIS.
- Defined the project structure, organized a Core Project Team and Advisory Board, designed a logo and held a successful Project Kickoff meeting on June 22, 2006.

- **Improvement of the MHMIS/IS Claiming Process**

- Implemented several enhancements to the IS that improved the Department's revenue flow, shortened turnaround for revenue reimbursement, gave providers with more efficient tracking mechanisms and reduced the number of duplicate client IDs.
- Began a major modification to the IS to migrate the administrative functions to the Clinical Module to improve claim processing for core IS users. In April 2006, DMH began testing the first in a series of complex improvements.



- Migrated FFS Providers to a HIPAA Compliant claiming input process in FY 2005-2006 without incident or claims processing disruption.

- **Development and Implementation of Project Management Methods**

- Researched and acquired an adaptable project management methodology for projects of various sizes and complexities as a foundation for DMH. CIOB developed the customized procedures, manuals, a desk reference guide and templates to meet DMH's needs. Tools appropriate to this methodology have been selected and are now being implemented.
- CIOB presented the DMH Project Management Methodology to the DMH Executive Management Team, the MHSA Implementation Team and the IT Planning and Advisory Board.

- **Other Planned Accomplishments**

- Developed and completed Older Adult Assessment Tool Web Application.
- Selected and procured E-mail Archive and Retention software. This multi-year effort has been carried over to next fiscal year.
- Documented Disaster Response Dispatch workflow and user requirements; identified two viable vendors – *multi-year, carried over to next fiscal year*.
- Upgraded 85 Windows 2003 and Exchange 2003 servers resulting in better E-mail management, greater security and faster performance.
- Upgraded about 50% of Windows desktops to Windows XP.

*The Department also accomplished a number of IT objectives not identified in the 2005-06 BAP:*

- **Web-Based Applications:**

- Developed and implemented DMH Telephone Directory Web Application enabling DMH employees to update their own MS Outlook telephone number.
- Developed and implemented IS Issues Web Application to track outstanding issues. This application is now in use in other significant IT projects.
- Developed and implemented Juvenile Justice Information System Web Application to provide a single and central platform to retrieve and maintain clinical information, including Maysi test results, related to children in the Juvenile Hall.
- Developed Employee Application Request System Web Application to facilitate the tracking of employee and contract provider requests for access to various end user information systems.
- Developed Psychotropic Medication Authorization Web Application that allows doctors and clerks to enter medical and background information on Child and Transition Age Youth clients which require prescribed medications.



- Developed and implemented Cost Savings Questionnaire Website.
- Developed and implemented Director’s Website.
- Developed CIOB Master RDO Calendar Website.
- **Technical Infrastructure Improvements:**
  - Implemented .NET Internet Architecture enabling DMH to develop Internet Web applications while accessing enterprise data securely.
  - CIOB established a new Test Lab and Domain to enable the testing of multiple applications in several different system configurations.
  - CIOB established the first Voice over Internet Protocol (VoIP) phone system within DMH.
  - Deployed a DMH Web-based collaboration infrastructure.
  - Established nine (9) new network sites and deployed over 100 network devices in two months for the Specialized Foster Care Program.
  - Replaced approximately 550 PCs still in use beyond their expected lifecycle.
  - Replaced old backup storage hardware with hardware that offers greater capacity, longer retention and improved reliability.
- **Management Initiatives:**
  - Performed a site survey, equipment estimate and network configuration changes to establish one of four planned DPSS co-located sites.
  - Established contract/service agreement with Microsoft for Premier Support Services.
  - Prepared ICCP Computers Chapter for the Center Operations Manual.
  - Documented requirements and specifications for an enhancement to the PAT system for the Pharmacy Indigent Medication Program.
  - Documented the STAR system in preparation for migration off the ISD mainframe and new system development.
  - Documented current system attributes, business rules and processes and functional requirements for replacement of the current Los Angeles Public Guardian System (LAPIS).

### 5.3.7 Military and Veteran Affairs

- Completed installation of Bob Hope Patriotic Hall’s first, second and third floor voice and **data wiring**. New telephones for these floors have been installed and activated.
- **Upgraded the In-house VETPRO Program for Windows to a Web-based system**. This system dramatically improved access to veterans forms filed; enabled veterans claims



counselors to work from the field or home satellite offices to maintain their own cases; cut down photocopying and the use of fax machines by 75%; allowed all veterans forms to be completed in a neat and professional manner; eliminated duplication of work; set the department up for electronic audits and will eventually eliminate paper files.

### 5.3.8 Department of Public Social Services (DPSS)

- Designed a hosted **Customer Service Center** that combines call distribution capabilities with data collection capabilities. This hosted Customer Service Center will be equipped to enable enterprise-wide reporting through Web-based interfaces or dedicated workstations and dynamic load balancing of calls. Also designed and acquired **Voice over Internet Protocol (VoIP)** capabilities for Automatic Call Distribution to direct the distribution of calls dynamically to appropriate agents, depending on the skills or functions the caller requires.
- Completed a prototype of the **Systematic Measurement and Accountability Review Tool (SMART)** data warehouse which will turn data into information for all decision-makers within the Department.
- Amended the **LEADER Agreement** with Unisys Corporation to purchase additional telecommunications hardware, software and services for the expansion of DPSS Academy, expansion of El Monte North Tower to support the DPSS Call Center, and 500 additional workstations and 25 additional printers to fill new and unmet needs for the Department's Eligibility Workers and clerical staff (included DPSS Call Center).
- Developed an application to **access and view the 14 million images converted from microfiche** by Global 360, Inc. A Website has also been designed that includes documents shared by ITD staff to control the loading of the hard drives and maintain logs of what has been processed.
- Enhanced **LEADER** to develop a new two-way interface with **eCAPS** (the Auditor-Controller's electronic Countywide Accounting and Purchasing System) to replace existing EFT (Direct Deposit) and 1099 interfaces and expenditure reporting.
- Developed the **Permanent Housing Assistance Service (PHASE)** application to monitor and track homeless families in Los Angeles County. The system went into production on April 3, 2006 and since then minor enhancements have been made to the system at the request of DPSS and other department's management.
- Developed the **Information Technology Expenditure Tracking System (ITEC)** application to monitor and track purchase orders, expenditures, IT budget, Stores Advance Planning Documents (APD), and related costs. This system went into full implementation during November 2005. Since then, minor enhancements have been made to make it more user friendly.
- Utilized wireless devices to enhance communication and collaboration among managers. The use of the **Blackberry Personal Digital Assistant (PDA)** was evaluated in June 2005





and approved for executives to access E-mail messaging, send E-mails, and allow telephone communication, calendaring, and daily to do list from the same multi-purpose device.

- Used the **DPSSTATS** process to track and monitor key departmental performance measures and to problem-solve critical departmental issues since June 2005. It has proven to be an effective tool in improving departmental performance.
- Completed internal design improvements for Quarterly Reporting processing that resulted in a reduced number of **Eligibility Determination/Benefit Calculation (EDBC)** iterations required to come up with a final result. This helped the Department maintain contractually agreed upon EDBC processing times under 30 seconds.

## 5.4 Public Protection

### 5.4.1 Alternate Public Defender (APD)

- **Implement Inmate Video Conferencing at Eight APD Branch Locations** – All eight units are now installed and functional. Currently APD averages about 210 conferences per month.
- **Implementation of New Training Paradigm** – The goal for 2005-2006 was to maintain the quantity of “purchased” training hours, and increase Department-provided training by 25%. During Fiscal Year 2005-2006 the APD maintained purchased training hours and increased Department provided training by 20%.
- **Phase 2 Development of Web-Based Technologies** – APD has an intranet server in production and has developed a user interface for distribution of training video programs for the attorneys. APD is now designing the more general user interface that will allow for access to important documents, motions, and other legal research materials.
- **Upgrade Case Management System** – APD upgraded the existing Case Management System to correct known bugs, update existing organizational changes due to changes in management and the expansion of services into new areas, and changes to current law. These changes allow for the more efficient entry and reporting of data, and the more accurate creation of mission critical documents.
- **Maintain and Upgrade Existing Equipment Infrastructure** – APD has upgraded all desktop and laptop PCs to Windows XP operating systems and retired all older, outdated PCs.
- **Develop a MAPP Tracking and Reporting System** – APD developed a MAPP Tracking and Reporting System that mirrors the department’s work flow for the creation, updating, and reporting of MAPP goals and performance. This system has created an efficient electronic workflow/database for tracking and updating MAPP participant performance and





has assisted the Department in keeping its MAPP managers on track for completion of their goals.

- **Upgrade Existing Data Backup System with an Enterprise-Based Solution** – APD had to delay actual implementation until Fiscal Year 2005-2006 due to budget constraints. This item is now complete with two tape libraries functioning at different locations backing up critical APD database, E-mail, and other content.

### 5.4.2 Fire Department

- Developed a **three-year IT Strategic Plan** that aligns Fire's Business Automation Plan with its business goals.
- Upgraded the existing infrastructure to the County standard of **Microsoft Active Directory and Exchange/Outlook**, including these three major milestones:
  - Installation of 1,800 XP desktops and migration of 60 servers to WinServer 2003.
  - Completion of the migration strategy.
  - Procurement of the hardware and implementation services necessary to complete the migration.
- Identified **"Performance Counts!"** indicators and measures.
- Continued involvement as an expansion Department in the **eDAPTS** project.
- Actively participated in the countywide **LMS** project.
- Launched new **Departmental Internet site** in December 2005.
- Participated in the analysis and requirements gathering for **eCAPS Procurement**.
- Developed and implemented an application to track **brush abatement inspections**.
- Implemented several **browser-based applications** to meet emergent needs to gather data for security, anti-terrorism and wellness fitness initiatives.
- Developed a **badge tracking application** to track the issuance of departmental badges to over 3,000 employees.

### 5.4.3 Ombudsman

- Acquired nine **new HP Deskjet printers** to replace broken and malfunctioning printers.
- Scheduled Ombudsman staff to attend a **half-day training course** which focused on Windows XP Professional.



- Upgraded laptop and workstations to **Windows XP Professional**.

#### 5.4.4 Probation

- Aligned the **Department's IT plan** with the Department's new Strategic Plan, serving as an enterprise information architecture to support the Department's operational needs.
- Completed a plan to **strengthen security, uptime, reliability, disaster recovery, and service quality** at the data center. New servers, backup generators, and virtualization technologies have been purchased, with plans for developing a secondary data center for disaster use.
- Continued Phase II implementation for the **new Web-based Probation Enterprise Document Management System (PEDMS)** to serve as a centralized repository of all departmental criminal justice documents. The scope of the project has been expanded to include the Juvenile Court and interfaces to the Adult Probation System (APS). Eighteen sites are complete, and the remainders are scheduled for December 2006.
- Developed the **Digital Image Barcode System (DIBS)** to assist in the bar-coding and tracking of the Department's documents that will be archived in the PEDMS Library. This system is in limited production with full production scheduled for *September 2006*.
- Continued implementation of the **enterprise Probation Case Management System (PCMS)**. Phase I includes development of interfaces to other agencies. The first phase is scheduled for completion *in April 2007*.
- Completed a number of significant **enhancements to the departmental intranet (ProbNet)**. Enhancements included the creation of sub-portals for Probation's field area offices, camps, halls, and administrative offices. Major additions included the HRMO E-mail System and the Pre-Trial Information and Resources Directory.
- Completed a number of significant **enhancements to the Department's Website**. On this list is the complete re-design of the Internet site, creation of the Probation Commission sub-portal, and locations of field offices with kiosks for report-in.
- Hired a **Department Information Security Officer (DISO)** to protect the integrity of the Department's data network and information systems assets. Initiatives underway include a new secure IP addressing scheme and encryption technologies for the Department's mobile computing and storage devices.
- Continued to evaluate the information technology training needs of staffs during this fiscal year and **provided various levels of IT training**. Training classes cover a wide range of topics, from basic computer training to application specific end user training.



- Provided **secure wireless Wide Area Network (WAN) access** to approximately 100 probation officers and support staff using a combination of Cellular Wireless Card technology with SecureID cards and CISCO VPN.
- The following systems and interfaces, not identified in the FY 2005-2006 BAP, were also completed:
  - New version of the Probation Pretrial+ system
  - Juvenile Court Report Web System (JCRWS)
  - JCRWS-to-PEDMS communication link
  - CRWS-to-PEDMS communication link
  - IP Address Tracking System (IPATS)
  - PEDMS Report and Monitoring System (PRMS)
  - Reserve Deputy System (RDS)

#### 5.4.5 Public Defender (PD)

- Completed the rewrite of the **Mental Health** and the **Mental Health Accounting Systems** that allow for statistical reports, court calendars and accounting status of cases represented by the Public Defender.
- Enhanced the **Defense Management System (DMS)** to allow Investigation case tracking to produce instant investigative status, generate reports for management's resource allocation and utilization, and produce statistical reports on a monthly and as-needed basis.
- Continued to work collaboratively with Information Systems Advisory Body (ISAB) agencies in the development and maintenance of **agency-shared applications**:
  - **Videoconference capabilities** continues with the assistance of ISAB.
  - **ISAB Law Library** has been enhanced with new tools and new access software; upgrades and expanded use is ongoing.
  - The Public Defender will soon have a contract with Global 360 for an **Electronic Document Management System (EDMS)**.
- Participated in CIO-mandated **ERP development work** activities for administrative work functions.
- **Technical infrastructure projects** in progress or completed in FY 2005-2006 include:
  - Upgraded 250+ computers with **XP Professional O/S**.
  - Installed 13 Netware Servers with the **latest NOS software**.
  - Reduced **problem call backlog** even with limited IT staff resources.



### 5.4.6 Office of Public Safety (OPS)

- **Completed development of a Contract Monitoring System** to address operational needs and augment processes related to information management of contract related data. This database management solution has enhanced business intelligence capabilities, providing the functionality and security infrastructure necessary to capture, organize and aggregate contract monitoring data.
- **Expanded existing department virtual and physical infrastructure** to include an additional 13 remote sites. This has greatly assisted remote support of staff who previously had no connectivity to the County's wide area network. Efforts continue to connect the remaining nine additional sites before the beginning of the calendar year.

### 5.4.7 Sheriff's Department

- **Los Angeles Regional Crime Information System (LARCIS)** – LARCIS has been optimized at the data center and database levels to improve user performance. Coplink, a new *Web-enabled* package for crime analysis and case solve ability, will replace the query and case management functions of LARCIS. A project to replace other LARCIS functions with a new commercial off-the-shelf (COTS) package records management system (RMS) has begun effective June 30, 2006.
- **Management of custody operations:**
  - The **Jail Information Management System (JIMS) Phase 1** commercial jail package was procured and installed on the Custody Cluster at the LASD Data Center. The development version of this Web-based applications software package is now fully functional.
  - The **Jail Health Information System (JHIS)** is a mission-critical application that enhances the delivery of health care services to inmates by storing the inmates' treatment and medical history in a centralized repository accessible to all authorized clinical staff. There are a few minor components, such as document imaging, that have not yet been implemented due to dependencies on a system upgrade. Integration of PACS with the JHIS application will be completed upon the completion of the JHIS system upgrade.
  - Web development for **Custody Applications**, specifically Housing, Inmate Transfer Line and User Security has been completed. Maintenance for all Custody Small Applications will continue for FY 2006-2007.
  - All Custody applications were successfully **migrated to the Super Dome**.
- Initiated the **Automated Civil Enforcement System (ACES) Phase 2** project through the RFP process to procure and customize a replacement system for MAPAS.



- **eCAPS** – Participated in countywide Phase I implementation of financial modules, and participated in Phase II Human Resources, Budgeting, Procurement, Material Management, and Training Records modules.
- **Mobile Digital Communications System (MDCS) and Computer Aided Dispatch Systems** – Participated with other public safety departments in a RCC Consulting study to determine best implementation approach. A contract was signed with RCC to prepare the Statement of Work (SOW), scheduled to be completed *in April 2007*.
- **Sheriff's Integrated Records Retrieval and Assembly System (SIRRAS)** – During the latter part of 2005, a new imaging contract was established by the Information Systems Advisory Body for the County family of departments. The new contract included funding for the extraction of report information from Sheriff's microfilm images. The microfilm conversion process began in earnest in January of 2006 and is anticipated to be completed *by December 2007*.
- **Replacement Los Angeles County Regional Identification System AFIS (LAFIS)** – All equipment has been delivered and installed. The system has been functioning without significant issue since it went operational in October of 2004. The Department completed the warranty period for the system which ran from October 2004 to October 2005, and has entered the maintenance agreement phase of the contract. All contract milestones have been met and they are evaluating the current technology, making upgrades and enhancements to the basic system.
- **Livescan System and Network** – Replaced 159 of the existing 163 criminal Livescan devices throughout the County. The remaining Livescan devices are anticipated to be installed by the end of July 2006. The software continues to be upgraded and improved as new requirements are identified. The initial software has been delivered and the next levels of enhancements are due August 15, 2006. Due to changes in the State Registration requirements, six additional devices were purchased and installed for use by the Adult Probation Department.
- **Medium-to Small-Scale Application Projects:**
  - The Department had a successful **migration of approximately one dozen client-server applications to a Web-enabled environment**. These applications are in production or ready for user acceptance testing. The migration of the Personnel Information Management System (PIMS) is in progress and the migration of the Personnel Performance Index is pending.
  - The Department had a need to replace its **evidence and property information management systems** with a single, distributed and functionally integrated application. The Department is in process of completing its business analysis with the goal to procure and implement a commercial software solution through a request for proposal process with a completion target date of December 2007.



- **Technical Infrastructure Projects:**

- **OpenView Operations** was implemented on 16 Superdome partitions running under HP-UX and 2 Alpha servers running OpenVMS. The CPU, memory, and other elements on these servers are being constantly monitored by software agents. Data storage files on 2 XP-12000's are also monitored.
- **Server Consolidation Project** – Four HP Superdome server frames, organized into 16 partitions were installed, in pairs, in the Norwalk and Sheriff's Headquarters data centers. Sixteen business critical applications were migrated to the new hardware environment. Eight V- and N-class servers were decommissioned simplifying system administration and reducing support expenditures by \$350,000. Storage and backup capacity were increased by the installation of two XP-12000 disk arrays and two ESL720 tape libraries. All devices were linked by fiber channel through SAN switches to provide an enterprise storage and backup solution.
- Completed **major network upgrades** at Custody, Court Services, and Sheriff's Headquarters in FY 2005-2006. Requested budget allocation to implement 20% infrastructure each fiscal year. If approved, this will be an ongoing upgrade plan to replace network infrastructure equipment on a five-year lifecycle.
- Completed migration from Windows NT domain to **Windows Active Directory** domain. This migration provides enhanced security and management tools to help protect the enterprise network.
- Configured and distributed **Windows System Update Software (WSUS)** to all servers and work stations on the network. WSUS is fully operational and provides daily patches and updates to all Windows-based machines on the network, except JHIS configured machines. It is anticipated that JHIS machines will be able to be updated regularly after the JHIS software upgrade scheduled for November 2006.
- Developed and implemented seven **Information Technology Security Policies** that were adopted by the Board of Supervisors and distributed countywide. These policies provide comprehensive security protocols, procedures and requirements that provide uniformity throughout the County.
- Deployed **Anti Virus 10+** enterprise-wide. Automatic virus definitions were pushed to Windows-based machines on a daily basis. Command console monitors enterprise network for virus outbreaks, update failures and AV run status. Approximately 90-95% of Window-based machines are protected.
- Initiated a **centralized reporting and monitoring structure for all security-related incidents and investigations**. During major security incidents, an Emergency Operations Center is established and the Information Security Specialist II directs technical security efforts of the various teams. Random security check and audits are conducted on a regular basis.





## 5.5 Recreation and Cultural Services

### 5.5.1 Beaches and Harbors

- Developed the **Transient Boater Registration** application and deployed it on the Department's intranet.
- Deployed a new version of the **Check In/Check Out** system on the Department's intranet.
- Played a key role in the implementation of **eCAPS**.
- Scheduled **Technical staff to receive training**, which included off-site classes to keep skills current with the industry.
- Continued to **maintain and upgrade technical infrastructure**, including:
  - Implementation of Windows 2003 and Exchange 2003 servers.
  - Upgrading to Windows XP on the desktop.
  - Replacement of out-of-date anti-virus software.
  - Improved reliability for Internet connection.
  - Improved systems security.

### 5.5.2 Parks and Recreation

- Migrated to **Windows Server 2003 and Active Directory**, deployed new domain controllers for the East, North, and South Community Services Agencies and replaced the outdated files and E-mail servers at the sites with new servers running Windows 2003 Standard Edition and Exchange Server 2003 Enterprise Edition. The Department also setup virus, spam, and patch management servers.
- Launched the Department's **new Website** in April 2006. Internal Services Department (ISD) is still finalizing implementation of the GIS part of the site which is scheduled to be completed by September 2006.
- **Added three new sites to the LA Net and the Internet**, Obregon Park, Placerita Canyon Natural Area, and Washington Park with two of the three, Obregon and Washington Parks having computer access centers.
- Purchased and deployed **200 computers and 35 printers** to replace old, antiquated computers and printers.





### 5.5.3 Public Library

- Installed **254 Windows XP PCs** in May 2006, replacing staff and public dumb terminals and outdated Windows NT PCs at 82 libraries. These workstations are configured with new images giving staff and the public access to Windows PC resources and the Web catalog that was not available on the dumb terminals and the old Windows NT PCs. The remaining 305 dumb terminals will be replaced during FY 2006-2007.
- Secured Board of Supervisors approved funding for the balance of the **new Integrated Library System (ILS)** in June 2005. The enhanced system is now fully funded at an estimated cost of \$7,485,450. In May 2006, the Library was authorized by the Board to enter into an agreement with one of the nation's leading library technology consulting firms to provide planning and project management for the ILS migration project. In order to minimize data conversion errors in the transition to the enhanced ILS, Library staff reviewed and purged 3,085,042 missing, lost and withdrawn item records and 1,236,261 obsolete fine records from the current system. Contract negotiations with the ILS vendor will begin in early FY 2006-2007.
- Developed proposed **re-design plans of the Library's entire Website** for review prior to implementation. These include plans to incorporate more customer interaction, addition of a career opportunities recruitment page, streamlining of the sections on resources (including services and other resources) to give customers one place to find the wealth of resources offered by the Library, expanded pages aimed at children, teens, and parents, and a new design for the Library home page to provide customers with a more prominent option to contact Library staff.
- Developed **system requirements** and obtained grants to implement wireless connectivity at all 84 County Libraries, with the following tasks completed:
  - Completed and procured preliminary engineering work for wireless access points for all facilities.
  - Completed detailed site surveys at 31 community libraries.
  - Identified required upgrades to the Internet Management system application.
  - Assembled a joint ISD, Cisco, and Comprise Technologies engineering team to address customer login, security, and related management issues.
- Redefined and expanded the scope of the **public access computer printing project** to include public access copiers, print release stations, and value-add kiosks. Extensive research was conducted and specifications were developed for the copier, copier controller, and value-add units which will be put out for bid in the 1<sup>st</sup> quarter of FY 2006-2007. The print release stations and credit/debit card processing will be added following the installation of the copier phase of the project.



- Purchased **Document Locator Professional** to automate the document management process which includes transforming hard copy documents into electronic documents and organization and management of electronic documents. In addition, the Department purchased 12 Canon photocopiers integrated with eCopy document capture software for the administrative facilities.
- Began a detailed examination of the software functionality of the current version of software available from the current library system vendor in comparison with the functionality requirements of the library in preparation for the **Integrated Library System (ILS) replacement project**. Library staff are creating plans for additional data cleanup on fine, patron and item databases which will be conducted over the next year. Detailed budget planning for the new integrated library system (ILS) was done during the year.
- Replaced obsolete fax machine equipment located in 87 library facilities with **network-connected multi-function devices** that provide scanning, computer printing, and copying capability.
- Updated the Public Library's **Communications/Low Voltage Specifications planning document** to incorporate updated requirements for VoIP telephone systems, WiFi, intrusion protection, and audio-visual systems. This document is provided to architects, engineers, and other design professionals on the Department's requirements for new facilities.
- Received a grant in February 2006 from the Bill and Melinda Gates Foundation in the amount of \$242,000. The purpose of the grant is to **replace 161 now obsolete public access Internet computers** at the 41 library sites that were eligible for the grant funded in 2000.
- In October 2005, the Board adopted a **revised public access Internet policy** which required significant policy, procedure, and IT modifications to implement. During FY 2005-2006, the Library completed the revised system design, procured the central site servers, computer monitors, and a portion of the physical relocations. Work was also completed on the major policy/procedure changes required to implement the new policy. Final implementation is scheduled for 2<sup>nd</sup> quarter FY 2006-2007.



## 6 FY 2006-2007 IT Initiatives & Objectives

This section highlights major IT initiatives and objectives, by department, to be accomplished in FY 2006-2007. The material for this chapter comes from sections 7 through 11 in each department's BAP. Specifically this includes:

- 7. Telecommunications and Networking Initiatives
- 8. Geographic Information Systems (GIS)
- 9. Web-Based Applications
- 10. Storage Area Network (SAN)/Network-Attached Storage (NAS)
- 11. FY 2006-2007 IT Objectives

Sections 7 through 10 contain free-form narrative which is summarized in bullet form within each section. Not all departments identified initiatives or plans in all four of these areas. It may also be worth noting that these sections may also reference past accomplishments that are relevant to enterprise IT.

All of the departments filled out section 11. This section requests the specific actions and completion dates for the FY 2006-2007 objectives which support the department's IT plan. These are also condensed in bullet form. Where several objectives were similar in nature (for instance, technical infrastructure) they have been grouped into multi-level bullets and, in some cases, combined.

### 6.1 Central Support Service IT Objectives

#### 6.1.1 Affirmative Action Compliance (OAAC)

##### Web-Based Applications

- **CBE Program** – The Department has *Web-enabled* the CBE program to provide public (vendor) access to information about the program by 1) allowing the public to apply via the Internet; and 2) view certified business contractors bidding on public contracts who may want to utilize them as subcontractors.
- **Local Small Business Enterprise (SBE)** – The Department has developed a CBE Program action plan that incorporated the County's new Local SBE certification process with the CBE process. The Department implemented the two (2) phases of service delivery that allow vendors to complete and submit their Local SBE registration electronically and communicate and receive certification notifications and reports electronically.



- **RM** – The Department plans to create a new *Web-enabled* system with input screens and reporting mechanisms to streamline the operation of the EDI Process. The system will also allow County employees to file complaints of employment discrimination electronically.
- **Employment Discrimination Mediation (EDM)** – The Department plans to enhance its existing Website about the County's Mediation Program to provide an interactive site for employees and departments to electronically elect mediation to resolve employee's complaints.

### **FY 2006-2007 IT Objectives**

- Enhance the Department's existing Website with **EDM application** described above. The Department projects to have a Website template available for testing by *December 2006*. Completion is projected for *June 30, 2007*.
- Implement an operational policy that gives structure to the maintenance of the Department's file system through **file/folder naming conventions**. Completion is projected for *December 31, 2006*.
- Continue the inventory replacement plan which began in Fiscal Year 2004-2005 in which the Department replaced all legacy systems. This objective will **replace 20 of the Department's workstations**. Completed by *June 30, 2007*.
- Perform configuration of **Exchange 2003 for Web access** using OWA feature. This project will be completed by *September 30, 2006*.
- Implement a new *Web-enabled* database that can **track the activity and progress of complaints and reports of allegations of employment discrimination** of the OAC. Internal Services Department's Internet Development Division has agreed to assist with this project's coordination, gathering requirements, designing new features, program development, testing, and production migration efforts. Completion is projected by *December 31, 2007*.

### **6.1.2 Auditor-Controller**

#### **Telecommunications and Network Initiatives**

- Expanded the use of Outlook Web Access and expanded VPN usage for remote access to the Auditor LAN systems. The Auditor-Controller is continuing to provide support for their Optical Archive System, which allows staff to view large reports on-line instead of printing them or sending them to microfiche. The Auditor-Controller is also expanding its Web presence internally within the County via its intranet Website. The Department is expanding the use of FTP (File Transfer Protocol) to transmit payroll reports to County departments and external stakeholders.
- Implemented VoIP in the Department's Shared Services Division.



- Implemented a video conferencing system to provide efficient communication between the Hall of Administration headquarters and its Alhambra office. This network was expanded in 2005-2006 to add the Hall of Records office to the Video Network.
- Used a wireless network to facilitate work stations associated with eCAPS during the last half of FY 2004-2005.

### **Web-Based Applications**

- Renewed contract with Element-K to provide computer-based training that automates the delivery of IT skills training for all levels of staff.
- Continued to maintain a departmental Internet and intranet site. The Internet site provides departmental information, the County's Consolidated Accounting Financial Report (CAFR), audit reports and board correspondence. It also provides the general public and research companies' access to un-cashed warrant information and property tax Information. The intranet site is focused on departmental services, policies and procedures, and dissemination of information regarding the centrally maintained accounting, payroll, personnel and disbursement systems.
- Continued support of the County's web technology initiative. The eCAPS project relies heavily on the use of Web technology to disseminate information and coordinate activities with team members and the departments through the use of the eCAPS newsletter and eCAPS Website.
- Develop CRA Project in a Web browser-based format. This will be the first major redesign of a Property Tax system in many years.
- Maintain the countywide Reporting Database which provides predefined financial corporate reports and ad-hoc capability via the intranet. The Department also implemented the countywide Contract Monitoring System (CCMS) which allows online updating of Board approved contracts and automated distribution of associated corporate reports.
- The Department plans to develop a Website limited to departmental staff. The site will act as a portal to all departmental information and facilitate the sharing of documents and collaborative work flow.

### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- The Department uses SAN technology to support the countywide Reporting Database (CWRD). During FY 2005-2006 this will increase substantially as this area will support the existing CWRD database as well as new eCAPS data warehousing needs. At this time storage requirements for eCAPS are projected at three Terabytes (TB).
- NAS technology is being considered to facilitate backup of data on departmental servers and to support the Office of County Investigation (OCI) forensic investigation of computer hard drives held as evidence in fraud investigations.



## **FY 2006-2007 IT Objectives**

- ***Maintain production applications supporting the Auditor-Controller's main lines of business:***
  - Provide support that ensures 95% of all systems/programs run as scheduled.
  - Complete 90% of all planned modifications *by July 2006*.
  - Develop a methodology to provide an appropriate security functionality to allow enhanced access to Payroll/Personnel data. This will be done with the assistance of COGNOS consultants, the County's Business Intelligence (BI) reporting standard.
- ***Improve service delivery to County departments and the public through the use of information technology:***
  - Expand the use of BI tools for the development and distribution of centrally-maintained information.
- ***Make information more accessible through an affordable, shared and widely used information technology infrastructure:***
  - Develop a methodology to provide an appropriate security functionality to allow enhanced access to Payroll/Personnel data. This will be done with the assistance of COGNOS consultants (the County's Business Intelligence reporting standard).
- ***Use information technology to respond quickly to changing business requirements:***
  - Provide planning and leadership to promote the effective use of technology in support of departmental and countywide business needs.
  - Update the Department's Information Technology plan *by September 2006*.
  - Continue to expand use of desktop applications such as data mining to maximize utility of electronic information and reduce redundant data entry *by July 2006*.
- ***Participate on projects to replace or enhance existing legacy systems:***
  - Participate in the development and implementation of a replacement for the existing timekeeping and payroll personnel system (CWTAPPS).
  - Participate in the Property Tax Community Redevelopment Agency (CRA) Project that addresses court mandates. Implementation of the first phase is scheduled *for July 2006*.
  - Implement the Budget Preparation Module of eCAPS Phase 2 *by February 2006*.
  - Implement the Fixed Assets Module of eCAPS Phase 2 *by December 2006*.
  - Implement the DHS Time Collection Module of eCAPS Phase 2 *by April 2006*.





## 6.1.3 Board of Supervisors – Executive Office

### Telecommunications and Network Initiatives

- Peer-to-Peer processing takes only a minor role in the Executive Office. We currently have less than 30 users who occasionally use Microsoft's Net Meeting.
- The Executive Office is not currently looking at replacing PBX equipment with VoIP. As the County establishes standards and new field offices are opened we expect that to change.
- The Executive Office supports a growing number of RIM Blackberry users. The Executive Office also provides Outlook Web Access to our users, including some with wireless devices.

### Web-Based Applications

- **Photos, Plaques, and Scrolls** – The Executive Office has completed the first phase of this project. Scrolls are now ordered using the Web. The next phases of this project will Web-enable plaque and photo requests. Current users of this system include Board Offices, Executive Office and the Chief Administrative Office. Future projects will incorporate ISD and possibly all County departments.
- **Legistar Legislative System** – The Executive Office currently uses a client/server version of this system. The Office plans to upgrade this system to a new *Web-enabled* system during this reporting period.
- **Report Tracking** – This subsystem is undergoing change this reporting period. The new Report Tracking system will include Web-based applications that will extend out to other departments.
- **Assessment Appeals Board** – The Assessment Appeals Board system is used to schedule hearings regarding appeals of tax information. This system modification would provide *Web-enabled* screens that would allow the public to fill in state required forms. The application would interface with the Assessor's system in providing status information. The forms would provide the public with better information when requesting a hearing and would cut down on errors made by filling in inappropriate fields.
- **Redesign the BOS Website** – The Executive Office maintains one of the largest and most used Websites in the County. The Website was designed several years ago and needs to be updated using new County portal technology. This upgrade would give the public better access to our information while providing an easier, staff maintainable environment. Areas of special concern are revamping the current SOP Search processes, making AAB information more readily obtainable, updating the Lobbyist information pages, and generally making the site easier to navigate.





## **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- The Executive Office currently uses a single location Storage Area Network. IR is currently in the final stages of ordering a second SAN to provide data redundancy. As a second phase of this project, the Executive Office is in the initial stages of working with ISD to obtain an off-site recovery location. This location will host a hot site for business recovery.

## **FY 2006-2007 IT Objectives**

- **Board of Supervisors (BOS) Customer Surveys** – Create an automated survey capability by *December 30, 2006*.
- **BOS Service Agreements** – Create service level agreements with end users by *June 30, 2006*.
- **Other Customer Surveys** – Create an automated survey capability for other customers by *March 31, 2006*.
- **Statement of Proceedings** – Redesign the access to the Statement of Proceedings in a more user friendly way by *December 31, 2006*.
- **AAB Web Update** – Complete a study to implement a Web-based Assessment Appeals filings process by *December 31, 2006*.
- **Commission Services Processes** – Standardize all commission services core processes by *December 31, 2006*.
- **Information Resource Management** – Complete installation of a redundant SAN by *May 30, 2006*.

### **6.1.4 Chief Administrative Office**

*Note: the Chief Administrative Office (CAO) has three major divisions: Information Technology Services (ITS), Service Integration Branch (SIB), and the Office of Emergency Management (OEM).*

## **Telecommunications and Network Initiatives**

- The EMIS future platform will create more avenues for information sharing between County and non-County agencies. The goal of creating a standardized emergency information gateway to help share data with other agencies may increase network traffic, but the Department does not expect an impact on the Enterprise Network (EN) Bandwidth.
- Explore possible use of VoIP in conjunction with the Alternate EOC project.
- Utilize wireless technology in the Alternate EOC Project IT infrastructure.
- The CAO currently uses video conferencing on CSAC-related communications and to conference with staff and representatives throughout the State and in Washington, D.C. The



video conferencing system is connected via a SBC ISDN connection and so it currently does not affect Enterprise Network bandwidth capacity.

- Though several new applications are planned that will increase transaction volume and size, the scale of the applications is not expected to severely affect Enterprise Network bandwidth capacity, with the exception of the GIS projects listed in the next subsection.

### **Geographic Information Systems (GIS)**

*SIB plans the following GIS initiatives for FY 2006-07:*

- Implement enhancements for the Central GIS Services with the enhancement of software components, additional data layers, and training services. To expand the GIS services provided to County departments allowing them to generate geographic data for addresses and make data available for visualization in maps, providing the ability to map service locations, providers, etc., *by June 2007.*
- Assess the feasibility of improving the address matching software currently installed in ESRI's products, and if found feasible, install improved *Web-enabled* probabilistic matchers in the centralized GIS server *by December 2006.*
- Implement a data sharing application to make County-relevant aggregated data (client loads, demographics, assets) available in a single portal, combining the new COGNOS infrastructure and the existing GIS Central Repository *by June 2007.*
- Prepare the infrastructure needed to support the US Bureau of the Census by developing specialized GIS applications to maximize the count of the County's population in the forthcoming 2010 Census to maximize the County's financial share of federal and state budget allocations *by December 2007.*

*OEM plans the following GIS initiative for FY 2006-2007:*

- A major goal of the EMIS Redesign project is to integrate both the Web-based and GIS portions of the EMIS system. The EMIS user will be presented with a seamless interface to maps, as opposed to a separate GIS application, as currently exists.

### **Web-Based Applications**

*SIB plans the following Web-based application initiatives for FY 2006-2007:*

- Implement the pilot of a Web-based application for the automation of UFS in the East San Fernando Valley Family Support Center *by June 2008.*
- Complete the Phase II implementation of the LACountyHelps, an Internet-accessible, self-administered software application, usable by County and non-County staff, community-based organization representatives, and the general public for identifying services and programs that might be available to individuals and/or families in need, based on their unique circumstances *by June 2007.*



- Implement the "Central GIS Automated Geocoder Tool" to provide County departments with the ability to automate, schedule, and manage the geocoding process *by January 2007*.
- Work with County Health and Human Services departments to expand the components of the Internet/intranet Web Surveys Enterprise Solution to provide adequate capacity that meets their current demands based on approval of funding *by December 2006*.
- The CAO in partnership with the Education Coordinating Council and other County Health and Human Services departments plan to implement a secured child health and education passport service application that provides the capability to securely access and update information via the Internet *by December 2007*.
- Enhance the capacity and functionality of the AB212 Early Educators Stipend Application to make it Web-based and allow applicants to complete and submit application forms and to track the status of their applications online via the Internet *by June 2007*.

*OEM plans the following Web-based application initiatives for FY 2006-07:*

- Currently EMIS, GMS, and TIS are Web-based applications. New applications and modules for EM IS and OEM-related applications are continuously being developed or enhanced. Information accessible to the public has been transferred to the OA Website.

### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- The CAO currently uses two NAS servers, one to store work-in-progress SAS and GIS information and the other to store temporary backup data for quick retrieval.

### **FY 2006-2007 IT Objectives**

*ITS has the following IT objectives for FY 2005-2006:*

- ***Implement a new Budget Information System***
  - Implement Phase II of the eCAPS Budget Prep System which includes rollout to all County departments *by September 2006*.
- ***Implement Risk Management and Claims Administration Information System (RMIS) Upgrades***
  - Implement RMIS upgrades to accommodate County Counsel and departmental (COGNOS) reporting requirements *by June 2007*.
- ***Implement Real Estate Asset Management System (REMS) Upgrades***
  - Implement REM upgrades to accommodate departmental requirements and to incorporate a GIS interface *by June 2007*.
- ***Implement CAO Central Intranet Upgrade***
  - Implement CAO intranet site upgrade to accommodate departmental requirements *by June 2007*.



- **Implement 99.999% Automated Security**

- Implement REM upgrades to accommodate departmental requirements and to incorporate a GIS interface *by June 2007*.

- **Restructure IT Human Assets**

- Complete IT organizational restructure plan *by August 2006*.
- Complete first phase of the CAO IT reorganization *by December 2006*.

*SIB has the following IT objectives for FY 2006-2007:*

- **Implement and Maintain I/T Infrastructure**

- Continue ongoing assessment of current SIB program requirements and develop recommendations.
- Support multi-agencies with the development and implementation of the Child Health and Education Passport *by December 2007*.
- Complete the capacity and functionality enhancement of the AB212 Early Educators Stipend Application *by June 2007*.

- **Establish Guidelines and Data Sharing Projects for County Services**

- Continue assessment of current Service Integration Action Plan requirements and develop recommendations -- *Ongoing*.
- Complete the capacity expansion for the Web Surveys Enterprise solution *by December 2006*.
- Complete the development and implementation of Phase II of the LACountyHelps *by June 2007*.
- Complete the development and implementation of the Statistical Data Repository project *by June 2007*.
- Complete the implementation of the Universal Face Sheet (UFS) automation pilot project *by June 2008*.

- **Provide Technical Expertise in Geographic Information Systems**

- Complete the implementation of new components and services for the Central GIS Services *by June 2007* based on the approval of funding.
- Complete the implementation of the "Central GIS Automated Geocoder Tool" *by January 2007*.
- Implement a data sharing application to make County relevant aggregated data (client loads, demographics, assets) available in a single portal *by June 2007*.
- Assess the feasibility of improving the data matching component of ESRI's products *by December 2006*.



- Implement the infrastructure required to support the US Bureau of the Census by developing specialized GIS applications to maximize the count of the County's population in the forthcoming 2010 Census *by December 2007*.
- **Provide Urban Research Studies and Demographic/Economic Profiles**
  - Continue efforts to provide County departments with Census and economic profiles to meet their evolving operational needs – *Ongoing*.
- **Maintain and Support Revenue Recovery projects**
  - Continue supporting the State Board of Equalization, Health Services' Medi- Cal, and Mental Health's revenue recovery systems.

*OEM has the following IT objectives for FY 2006-2007:*

- **Continue to Redesign EMIS Using Portal Technologies on the New EMIS IT Infrastructure**
  - Initiate the design phase for various modules that need to be redesigned *by July 2006*.
  - Initiate the development phase of EMIS redesign using a combination of the current OEM IT staff and consultant positions *by August 2006*.
  - Initiate the implementation phase of the EMIS redesign *by December 2006*.
- **Alternate Emergency Operations Center**
  - Deliver the mirrored server rack to the Denver disaster recovery location and complete all installation and testing requirements *by August 2006*.
  - Purchase all IT hardware and software pending approval of the OEM's mobile emergency operations center vehicle and trailer project *by December 2006*.
- **Emergency Satellite Communication Network (ESCN)**
  - Complete the setup, deployment and testing of the EMIS Satellite network at all of the installed facilities *by August 2006*.
- **Grant Management System (GMS)**
  - Continue to maintain and support GMS 2001 - 2005.
  - Complete, test and deploy the FY 2006 version of GMS *by August 2006*.
- **Emergency Information Gateway (EMIG)**
  - Complete the initial design *by August 2006*.



## 6.1.5 County Counsel

### Telecommunications and Network Initiatives

- Implement server mirroring over the Enterprise Network between our facility in Monterey Park and County Counsel office in the Hall of Administration.

### Web-Based Applications

- Continue to enhance and deploy the hearing notice program (SNAP) which combines information provided from the Superior Court's JADE and DCFS' and County Counsel databases to generate a list of hearing notice deadlines, notice of hearings for attorneys and CSW communications from the attorneys.

### Storage Area Network (SAN)/Network-Attached Storage (NAS)

- Implemented SAN technology in a cluster environment for file storage and to operate MS Exchange.
- Anticipate that the Department's next SAN solution will function as part of their overall disaster recovery system, and will function as part of the server mirroring project noted above.

### FY 2006-2007 IT Objectives

- Set up **server mirroring** between County Counsel office in the Hall of Administration and their office at the Children's Court in Monterey Park.
- Send selected **IT staff** (Department Information Security Officer and Network Administrators) to **Information Security Training**.
- Obtain materials, design and provide **Information Security Training for all office staff**.
- **Upgrade office desktop hardware and software** and migrate to MS Word.

## 6.1.6 Human Resources

### Telecommunications and Network Initiatives

- The Los Angeles County Enterprise network supports the Department's current needs.
- A proposal is being explored at this time to implement VoIP for the Employee Benefits Hotline at the Wilshire location.
- Explore market for an ideal video conferencing solution.
- DHR has access to two Wireless Access Points installed by ISD at the Kenneth Hahn Hall of Administration location on the 5th floor.





### **Web-Based Applications**

- All new applications developed in-house or contracted out are designed as Web-based. The DHR's current Web-based applications serving and improving the delivery of services to the public are the EASIER On Line Jobs Application, Jobs Bulletin, On-line Test Preparation, and the Jobs Listing Opportunities (JLO) Program.
- The Employee Transfer Opportunities and Assignment Tracking Systems offer improved services to all County staff.

### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- Implemented a Storage Area Network (SAN) at both locations: KHHOA installation was completed in August of 2005 and Wilshire in November of 2005. The SAN provides data reliability and accessibility within the two DHR locations. Additionally, it enabled the implementation of server redundancy technology.

### **FY 2006-2007 IT Objectives**

- Provide ongoing application development, support, maintenance and improvements, in addition to requirements analysis, research and development to all DHR Goals, Strategies and Objectives determined by the County Human Resources Strategic Plan.
  - Provide continuing technical support for Los Angeles County Training Academy, concentrating on finding appropriate solutions for distance learning, and supporting existing systems.
  - Provide continuing technical support for DHR's Web-based employment process and applications including enhancements to the Job Bulletins, Appeals Management System, Online Test Preparation, and Classification Specifications.
- Provide support, analysis, and implementation for the following information technology projects:
  - Maintain DHR's Storage Area Network (SAN) solution for DHR's Local Area Network at both KHHOA and Wilshire sites.
  - Assess DHR's hardware network infrastructure and upgrade systems as needed.
  - Assess DHR's network operating system to determine the need to migrate to Microsoft Windows 2003.
  - Develop, design and implement a dedicated intranet for DHR staff use only *by July 1, 2006*.
  - Continue to upgrade and refresh DHR systems hardware in the following areas:
    - » Replace approximately 20% of DHR network printers.
    - » Replace approximately 30% of DHR laptops.
    - » Install new PCs for additional DHR staff as needed.





- Continue with the creation of an intranet-based forms library for commonly-used, personnel-related forms used within the County.
- Continue with installation and implementation of a networked computerized item bank system that will be used to maintain written test item statistics and history. The system will also be used to create written tests for various exams.
- Enhance the employment application process on a continual basis.
- Provide ongoing IT support to the e-HR project team.

## 6.1.7 Information Systems Advisory Body

### Telecommunications and Network Initiatives

- Continue to move forward with the ISAB Integration Services (IIS) program to improve interagency sharing of documents. However, ISAB does not anticipate an impact on network capacity.
- Continue to use ISDN circuits for ISAB's current video conferencing project. Once the Enterprise Network is capable of handling the required bandwidth, ISDN will be phased out.
- Work jointly with ISAB partners, the CIO's office and ISD on exploring and testing viable wireless technologies in accordance with the County's Wireless LAN Guidelines.

### Web-Based Applications

- Develop and implement the DNA Order Tracking System.

### Storage Area Network (SAN)/Network-Attached Storage (NAS)

- Purchased and installed primary and back-up EMC Centera network attached storage devices as part of the Department's overall document management strategy.

### FY 2006-2007 IT Objectives

- **CJIS Wiring Project** – Continue upgrading premise wiring to support 10/100 Mbps to support imaging and video conferencing applications. During FY 2006-2007 approximately 10 locations will be upgraded.
- **DNA Order Tracking System (DOTS)** – Deploy to all users *by December 2006*.
- **Probation Enterprise Document Management System (PEDMS)** – Complete department-wide deployment *by June 2007*.
- **Quovadx expansion:**
  - Develop and implement the XML-based DOTS interfaces *by April 2007*.
  - Implement XML-based interfaces from CCRHS to DOJ Arrest Dispositions *by May 2007*.



- **Public Defender Digital Imaging Project** – Start digital imaging of all felony case files. Imaging to begin *by November 2006*.
- **Video Conferencing:**
  - Develop a plan to expand video conferencing units to multiple locations based upon needs assessments *by December 2006*.
  - Implement a high-quality shared video presentation and training room *by March 2007*.

### **6.1.8 Internal Services Department**

*Note: the Internal Services Department (ISD) has two major divisions: Information Technology Services (ISD/ITS) which provides IT services to other County departments, and the division which supports ISD's internal IT needs (ISD/MISD).*

**ISD/ITS has the following initiatives and objectives planned for FY 2005-2006:**

#### **Telecommunications and Network Initiatives**

- The major increase in network usage is occurring because of expanded Internet access and the size of files being downloaded. The establishment of a remote disk mirroring capability has resulted in greatly increased bandwidth demands to Orange County (MON service has been acquired from AT&T/SBC). Implementation of Internet filtering may put a damper on demand for bandwidth.
- Work with the CIO and County departments to create a VoIP centralized architecture for the County. ITS anticipates that some increased network utilization will result from VoIP implementations at some County facilities.
- Support video conferencing for County departments. There are over 50 sites supported. A goal for FY 2006-2007 will be to enable multi-cast video over LANet and the Enterprise Network.
- A key activity for ISD/ITS is to work with the CIO on a County wireless strategy. The industry direction is not clear as public broadband networks may supplant the need for wireless LANs in many locations.

#### **Web-Based Applications**

- Support numerous County customers in developing Web-based applications. ITS participates on a number of Guiding Coalition Cluster Groups to define Web access applications.

#### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- The Department is currently using both SAN and NAS technologies. They have two different SAN configurations grouped as: Midrange SAN and Midrange Windows.



- Midrange SAN hosts the largest and most critical applications supported by Midrange, such as the new electronic Countywide Accounting and Purchasing System (eCAPS), ISD's Information Technology Shared Services, ISD's Voice over Internet Protocol (VoIP) and many departmental applications.
- Midrange Windows consists of two SAN islands, one for Windows applications such as the Department of Mental Health Integrated System and the other for the backup infrastructure using CommVault Galaxy.
- The CAO also supports three EMC Criteria Content Addressable Storage (CAS) clusters that are replicating to the Local Recovery Center (LRC) at the Orange County data center. The Department has dedicated CAS clusters for the District Attorney and Probation and a shared cluster used by eCAPS for attachments and warrant images and the ISAB DOTS application.

### **FY 2006-2007 IT Objectives**

- Support the implementation of e-Commerce applications including conversion of existing applications to the outsourced payment processor vendor through June 30, 2007.
- Complete the establishment of ISO capabilities to provide digital telephony services in the County using the Voice over Internet Protocols (VoIP) technology including a VoIP ITS Help Desk Call Center. Additionally, make a recommendation on the role outsourcing can play, if any, in on-going VoIP support *by February 1, 2007*.
- Provide reliable, available, and secure centralized IT Shared Services (ITSS) to six small-to-medium sized County departments *by June 30, 2007*.
- Complete IBM, Unisys and Midrange disaster recovery/fail over testing in the Local Recovery Center (LRC) *by December 31, 2006*.
- By January 31, 2007, award the construction agreement to establish the County Data Center in a modern and resilient facility *by September 2009*.
- Re-bid existing Carrier Services contract, select vendor, negotiate with selected vendor and obtain Board of Supervisor approval for new agreement *by June 30, 2007*.
- Implement server consolidation and virtualization technologies in the data center, for Windows, Unix and Linux platforms *by December 31, 2006*.
- Deploy servers, software and the operational infrastructure to support eCAPS Phase II and Phase II *by June 30, 2007*.
- Double the capacity of the Central Business Intelligence/Data Sharing infrastructure for County Departments *by December 31, 2006*.



***ISD/MISD has the following initiatives and objectives planned for FY 2006-2007:***

### **Telecommunications and Network Initiatives**

- Expanded use of CAMIS, FAMIS, Service Center, and Asset Center is expected to result in increased network traffic.
- ISO has deployed a VoIP system at the Eastern Avenue campus with a few phones at Downey. Ultimately, VoIP may use substantial Enterprise Network bandwidth as departments deploy it.
- ISD is converting its ISDN video conferencing systems at Downey and Eastern Avenue to IP.
- ISO has a number of wireless access points. Some are for general use by authorized (SecurID Card) personnel. Others have been deployed specifically to support the Automated Fleet Management Information System. However, we do not have any plans to expand into other locations.

### **Web-Based Applications**

- ***BASIS*** – The Department has added new Web functionality to the mainframe-based BASIS system, providing customers with online query capabilities via the Internet.
- ***TMS*** – ISD has implemented a new Web-based training management system (TMS) from Thing to assist in scheduling training classes, seminars, workshops, classrooms, and instructors. The new TMS provides on-line class catalogues and allows for on-line registration and approvals.
- ***Service Center & Asset Center*** – ISD is implementing Web-enabling software for its Peregrine Service Center and Asset Center systems.
- ***Request Tracking II (RTII)*** – This application allows customer departments to submit Customer Applications Branch service requests via the intranet directly to CAB division. As documented elsewhere in this BAP, we plan on expanding this capability to allow customer departments to submit Service Requests for ITSSMA amendments directly to ISO Contracts.
- ***ITSSMA Tracking*** – This application, written in Microsoft Access, is used by ISO Contracts to track ITSSMA work orders. It will be re-written to be Web-based (Microsoft .Net/SQLServer, COGNOS reporting) to allow the application to be accessed by CAB managers and eventually to customer departments. This will provide better visibility regarding the status and financial status of ITSSMA work orders.

### **FY 2006-2007 IT Objectives**

- Implement eProcurement, replacing CAMIS by *November 30, 2006*.
- Evaluate the feasibility of replacing BASIS with eCAPS by *September 30, 2006*.



- Evaluate the approach for integrating ALCS and FAMIS timekeeping into eCAPS Time Keeping system *by December 31, 2006*.
- Evaluate the options for upgrading FAMIS to a browser-based platform. This could be the Tririga system being implemented for the CAO Real Estate Management System or another system as selected by the Sheriff's Facilities Management procurement *by December 31, 2006*.
- Complete rewrite of the ITSSMA Tracking system *by August 30, 2006*.
- Complete the enhancement to RTII to provide ISD customers the ability to send service requests for ITSSMA amendments electronically to ISD Contracts *by July 31, 2006*.
- Complete the development of a digital dashboard for ISD "Performance Counts!" supporting the ISD's Program Areas *by August 15, 2006*.

## **6.2 General Government Services IT Objectives**

### **6.2.1 Agricultural Commission/Weights & Measures**

#### **Telecommunications and Network Initiatives**

- GIS applications will be taking a greater role in the Department programs and may necessitate the movement of larger amounts of data.
- Consolidate phone systems and explore, with the help of ISD, VoIP solutions, along with non-VoIP solutions.
- Explore the use of wireless technologies as additional staff are added.

#### **Geographic Information Systems (GIS)**

- The Department is currently investigating pilot programs utilizing GIS and GPS technologies. The Weed Abatement Division will use GPS to overlay the Assessor's parcel maps to track parcel clearing, planning and scheduling work locations.
- Purchased a copy of the Assessor's parcel maps for working with the Weed Abatement application, and the Department would like to expand the use of this technology. They have also explored using the County eDAPTS program, and have contacted Regional Planning regarding their GIS work.

#### **Web-Based Applications**

- The Department has a Website with forms for end-user fill in. It allows the public to register store complaints, problems with scanners or gas stations, and allows structural pesticide companies to submit notices of applications. It provides a wealth of consumer information to



the public with E-mail questions/comments targeted to specific programs. Applications under active development include an employee contact database.

### **FY 2006-2007 IT Objectives**

- Continue development of relational databases to include inventory.
- Maintain current operations.

## **6.2.2 Animal Care and Control**

### **Telecommunications and Network Initiatives**

- Schedule the Department's Phase II e-Commerce license renewal project for active use by the fourth quarter of 2007. This project will increase bandwidth use between the Web portal and the application server. Three servers, which are absolutely critical to accommodate this project, have been purchased thanks to grant funding provided by the Chief Information Office Information Technology Fund (ITF).
- Plan for the expansion of VoIP implementations in all facilities to capitalize on the positive impacts of bandwidth use.
- Evaluate the Department's use of wireless technology in many areas.

### **Geographic Information Systems (GIS)**

- Investigate the feasibility and costs associated with GIS technology as resources become available. The Department has not utilized this technology yet. It is their belief that GIS technology could benefit customer response times.

### **Web-Based Applications**

- Provide online license renewal capabilities in 2006-2007. Customer forms for communications, complaints and other animal control services will also be Web available in 2007.

### **FY 2006-2007 IT Objectives**

- Anticipate the completion of all of the components which will lead to pet owners being able to renew licenses online.
- Increase outreach efforts to the public by making departmental forms, opportunities, and additional program information easily available through the Department's Website.
- Anticipate the implementation of a VoIP system within all six County Animal Shelters and the Administrative Headquarters.





## 6.2.3 Assessor

### **Telecommunications and Network Initiatives**

- Spearhead the reengineering project which will create the largest increase in bandwidth use. Current secured property applications are largely batch processing. This new application will increase transaction volume perhaps ten-fold by 2009. The growth of Internet property tax filings has led to some measurable increase in external incoming traffic. The Department has started to download data from the IBM Mainframe onto a SQL server for ad hoc reporting and updating the department GIS/Sales Website. Due to this effort, the public's use of this data has significantly increased.
- Partnered with the Auditor-Controller and Tax Collector to create a Taxpayer Voice Response System for property tax information. This system is periodically evaluated for its effectiveness and changes are made as needed to improve public service.
- Deployed video on the Department's Website to introduce the Assessor and provide information on the Department's services and responsibilities. The Department plans to provide video conferencing in the future. Also, the Assessor has implemented the Pictometry product, which provides aerial photos of properties in the County.
- Investigate the proposed use of wireless technology to enhance the reengineering solution. Specific details including costs are unknown at this time.

### **Geographic Information Systems (GIS)**

- Achieved a fully-implemented GIS system that is integrated with the Property Database and provides information regarding parcel boundaries, street center lines and several district layers.
- Enhance the Department's Website which provides a GIS/Sales System that lists the sales in the general area for a given address. A total rewrite of this system is in progress to meet the increased volume of public access and improve response time.

### **Web-Based Applications**

- Provide the public increased access to information and services by supporting the expanded use of Internet applications. The current Website for the office provides a GIS/sales system. This application allows the public to display either a GIS map or parcel map for any given address within Los Angeles County, and list of sales in the general area. Two other applications for filing Possessory Interest lease information and Business Property Statements through the Internet have also been implemented. In collaboration with other departments, the Assessor has recently implemented a new property portal Website.
- Developed an intranet environment for in-house use. The Department has developed several division Websites. An administrative site has become critical to the timely deployment to staff on new legislative bills which impact the Department's business process





or general budget information. A personnel site has provided staff with the ability to download all personnel forms or be kept abreast on job openings. A reengineering site has provided regular status information on progress being made on this project. Several new applications are now deployed through the intranet. These include the Time and Volume System, the Major Exemptions System, Paperless Transfer System, FAR Tracking System, and the Legal Entity Ownership Program.

### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- Replaced the Ownership Imaging System hardware with SAN technology. The Department plans to acquire additional SANs to address current and future growth issues of data storage.

### **FY 2006-2007 IT Objectives**

- ***AABS Data Management System and Reporting*** – Utilize the downloaded data from the AABS Board 2000 System to create a database for the creation of reports to meet the appraisal needs in preparation for the AABS hearings.
- ***Business Continuity Planning*** – Continue efforts in the development of a plan of action that follows the directives of the countywide Business Continuity Plan to sustain automated operations for the Department's critical business operations in the event of a disaster.
- ***Computer Room Upgrade*** – Improve the Assessor's Computer Center to conform to disaster and security regulations and policies. Upgrade the facility to meet fire code regulations, provide staff security, accommodate production printing, and provide a dust free environment for the computer equipment.
- ***Disaster Recovery Plan*** – Continue to ensure that midrange computer systems and Local Area Networks support the Assessor's appraisal business functions. These platforms have minimum protection from a major disaster. The Department has purchased Hot-Site services and Off-Site data storage to include the IBM AS/400 and all the Imaging and District Offices LAN backups. Testing of these services must be coordinated to assure proper precautions have been taken.
- ***EDAPTS - Access to DPW*** — Ensure Internet access to the enterprise permit tracking system. The Office of the Assessor, in conjunction with Regional Planning, Fire, Office of Environmental Health, and the Department of Public Works, has enabled authorized personnel of the departments to have access to EDAPTS in order to facilitate the exchange and processing of information that pertains to the assessment of real properties within the County of Los Angeles.
- ***Electronic Forms Control System*** – Create a centralized depository and tracking system for the Assessor's department forms templates with multi-platform publishing and retrieval. Provides development, testing, and version control.
- ***E-mail Archiving*** – Consolidate the Department's E-mail using an SMTP server to manage Internet and intranet E-mail and establish an archiving system to address E-mail retention.



- **Employee Database** – Create an on-line directory that should be available to the Department's employees. Accounts should be setup for designated staff with administrative rights to maintain the database.
- **File Transfer Protocol and Deed Storage Import Report (FTP & DSI)** – Create a monthly report for Ownership Division. The program will utilize data from various sources to be used to track all deed processing and to assure transfers are completed within the 60 day processing period.
- **Hardware Upgrades** – Explore possible hardware upgrades for central clerical processing, executive offices and administration and major properties.
- **Human Resources Site (Phase II)** – Provide for the successful implementation of Phase II which will allow staff to communicate directly with Personnel on a variety of procedures. It will also enable staff to submit forms online. Phase I of the HR site involved the posting of all personnel forms, where individuals could print the forms but would need to fill them out and send them in hardcopy. It also provided the ability to inform the staff about employment opportunities.
- **Internet/Intranet Research On-Line Form Filing** – Make roughly 35 forms available for download on Website and create an application to allow online filing of exemptions information and other form filings.
- **Automate LAN Backups** – Automate the back-up process for the Assessor District LANS with the use of high speed communication lines and centralize the back-up at HOA using storage area network.
- **Learning Management System** – Conform to the standards set by the CIO by utilizing the County's enterprise Learning Management System and implementing the training database for the Department's use.
- **Legal Entity Changes Discovery and Notification Procedures (LEOP)(Phase II)** – Develop an intranet database for Legal Entity Changes. Information Technology Division will coordinate with Ownership Services, Major Real Property Appraisals and Internal Audit Section (Appraisals Standards) to develop a shared Assessor intranet database that all staff would have access to for reporting potential changes in control or ownership of legal entities. The database would also enable Assessor staff to better track BOE ongoing corporate transfer investigations and determine current assessment processing status.
- **Mapbook Scanning** – Scan maps, including historical maps, filed in the Blue Books that are utilized to provide information to the public in Room 225. A blue book is also known as the Assessor's Map Book (AMB) and is utilized by Mapping Services, Ownership Division and appraisal staff.
- **Microfiche Conversion** – Continue efforts for the elimination of microfiche as proposed by the Information Technology Division. The Department has been contracting out microfiche creation to a vendor. A study was initiated to analyze the Department's microfiche requirements. Review of third party vendor software is in progress.



- **Multi-Functional Devices Deployment** – Complete the study to determine feasibility of replacing regular scanners, copiers, printers, and faxes with multifunctional devices (MFDs). Upon completion of the study, ITD will work with Facilities to replace the regular copiers to MFDs as each copier is retired from its old lease agreement.
- **Network Auxiliary Storage for Development** – Provide a network auxiliary storage environment for all ITD in-house development projects for application development and testing.
- **Ownership Imaging Application Replacement** – Initiate a project that will investigate the business redesign opportunities that the imaged deeds will allow the Department. Recommend an application and software solution to implement the redesign. Incorporate additional data elements from various non-PDB systems that will facilitate application development.
- **Paperless Transfer System (Phase II)** – Develop a system that will streamline the process and valuation of Single Family Residential (SFRs) and Condominium Transfers, including a basic workflow module that will let Supervisors assign, reassign and approve work. The Valuation module will be based on the Market Approach. The system will also generate basic management and statistical reports.
- **Parcel Change Detail List (PCDL)** – Phase I: Develop an application which will create and transport the information of the PCDL from Mapping Services to Ownership Division. The application will replace and mimic the current handwritten form, reducing redundancy and errors. The application must allow for the printing of the PCDL form and allow for review and editing. Phase II: Continue the development of the Phase I application so that it will create PDB Ready mainframe transactions, thereby eliminating the current batching and data entry requirements.
- **Permit Management System (PERMS)** – Develop a new system called PERMS to track all permit information the Department receives from the cities and Department of Public Works. The system is intended to improve the tracking of all permits and to provide more timely information to appraisers. It will also provide summary reports by assessment year and retain multiple years of history.
- **Reengineering Phase I - RFP Publication** – Continue Phase I efforts which focuses on the replacement of core systems to support the Real Property valuation process. An ITSSMA solicitation process was used to identify and qualify third party consulting assistance. The selected vendor has completed work with the Assessor to develop contemporary requirements and processes for the appraisal and administration of Real Property (Phase I). Phase II will be the RFP solicitation and evaluation process with a start date of March 2006.
- **Remodel Project** – Continue efforts to remodel various divisions within the department. With the requirements of the customer division, the remodeling projects will need IT support in planning the IT requirements for computer equipment, data and voice communication that is mandated by the CIO.



- **Scanning for Special Investigation and Exemptions** – Acquire appropriate software to meet the Department's needs in the area of basic scanning of documents and retrieval. In an effort to reduce massive storage of paper and provide the ability to easily access documents submitted by the public and created for internal use, develop a standard scan and retrieval system that can be easily deployed for various imaging needs.
- **Security Policies Departmental** – Conform to the IT Security Policy adopted by the Board of Supervisors by developing policies that exceed and/or expand to cover areas of IT security. The Department is in the process of acquiring a Department Information Security Officer I. This new position will assure that the Department's security policies and procedures are in line with countywide standards.
- **Servers - Assessor Hall of Administration Upgrade** – Respond to the continual changing requirements of hardware and software by upgrading the Hall of Administration (HOA) servers and software to stay current with the business and maintain software compatibility with other organizations.
- **Server Upgrades to Expand to Gigabit Ethernet Speed** – Upgrade the connectivity to gigabit Ethernet speeds between servers to improve the processing between servers and desktops within the organization. Upgrades will take place at all district offices and at the HOA.
- **Storage Auxiliary Network Implementation** – Meet the growing requirement for data storage at the HOA and district offices. The initial storage auxiliary network must be expanded to fully implement the infrastructure for high quality service and minimization of downtime due to maintenance and back-up issues. The Department will expand the storage auxiliary network phases to complete the HOA upgrade and start extending the technology to the district offices over a two-year period.
- **Suggestion Award Intranet Website** – Develop an intranet application that will keep track of suggestions that have been submitted to the Assessor's Office. This will reduce duplication of suggestions submitted. The database will provide inquiry access for all employees. Suggestions will be entered and updated by the Suggestion Award Committee.
- **Time and Volume (Phase II)** – Enhance the existing Phase I application to provide enhanced reporting capability as well as additional business features for Personnel Division functionality.

## 6.2.4 Consumer Affairs

### Web-Based Applications

- Explore the feasibility of making the Department's databases available on the Web. This will allow consumers to monitor the status of their case on a 24/7 basis by using the Internet instead of making a telephone call or relying on the mail. This will also allow both complainants and respondents in a complaint to submit additional information via the



Department's Website, which will then update case information in Consumer Affairs databases.

### **FY 2006-2007 IT Objectives**

- ***ITSS Feasibility Study*** – Undertake a feasibility study to determine whether or not the IT Shared Services (ITSS) plan for network support services warrants the Department's participation. Currently ISD/ITS/ISSD staff provides this support on an as-needed basis because the Department does not have IT staff to maintain its server and workstation environment.
- ***ITSS Migration*** – Actively participate in the migration/conversion process, in the event that the Department decides to contract with ITSS. The tentative estimated completion date for this objective is *December 31, 2006*.
- ***Assessor Property Ownership Information Access*** – Establish an account to access property ownership database from the County Assessor's office *by July 2007*.
- ***Lexis-Nexis Access Through ISAB*** – Obtain enhanced and multiple-user access to Lexis-Nexis through partnership with the Information Systems Advisory Body (ISAB) *by September 2006*.
- ***Website Redesign and Release*** – Release redesigned and restructured Department Website *by December 2006*.

## **6.2.5 Public Works (DPW)**

### **Telecommunications and Network Initiatives**

- Continue to implement eGovernment initiatives that will increase transaction volumes. For example, DPW plans to make e-DAPTS available to the public in late 2006. Additionally, transaction volumes will increase as they update or expand existing applications. Examples of these applications include Project Information Website and various GIS applications.
- Continue to assess Voice over IP (VoIP) technology and VoIP-enabled applications in FY 2006-2007. While DPW currently does not run VoIP for telephone services, their headquarters' main telephone switch is VoIP-capable.
- Enable Department to receive video (satellite down link) and transmit audio conferencing. The Department implemented a video conferencing system between the Headquarters building and three Road Maintenance field offices without affecting the EN bandwidth.
- Connect remote mountaintops, ISD and some yards to Headquarters using Wireless high-density microwave systems. In addition, the Department employs wireless bridges to connect remote buildings to the main office at several field facilities.
- Continue to test and evaluate wireless mobile networking technologies. In tandem with ISD, more high density microwave paths will be added as needed to improve communications to





those facilities. Wireless telemetry systems are in use throughout the County linking remote monitors for data analysis.

- Use PDAs and tablets to collect inspection results which are downloaded into eDAPTS. DPW will test a wireless connection for PDAs and tablets with eDAPTS in the future.

### **Geographic Information Systems (GIS)**

- Convert the graphic data of Public Works maintained infrastructure such as sewer lines, flood control facilities, and streets to GIS to develop a geodata network model. Since the Department manages and maintains these infrastructures throughout Los Angeles County, the geodata network model developed by the Department adds intelligence and business logic to the data so that it can be mapped geographically as well as modeled to determine the behavior of the systems. DPW will continue to maintain infrastructure/GIS data.
- Continue efforts to implement and enhance several GIS applications within the Department. The applications assist in identifying locations of infrastructure assets including roads, bridges, flood control facilities, street lighting, etc. The Web-based map tool will help identify problem areas and assist with planning of future projects. The applications will streamline the work processes in performing spatial analysis, generating maps, and producing reports of infrastructure assets in the County serviced areas.
- Consolidate information and facilitate information retrieval of related project information by continuing to integrate GIS with existing systems such as graphics to other departmental systems.

### **Web-Based Applications**

- Implemented Web authoring and management tools to empower business divisions to manage their own Web content and ensure that it is kept current.
- Replace the Department's legacy permit system with a Web-based application to enable developers and homeowners to apply for building and construction permits, check status and receive permits online. This worthwhile project represents one of the Department's largest Internet initiatives.
- Implemented an E-mail notification service for the public as well as employees to facilitate the dissemination of information.
- Developed the Road Closure Website to provide citizens with timely access to much needed information about local emergencies. The Website was developed within days following record-breaking rainfall that damaged over 130 roads in Los Angeles County. The Department's prompt action represents their ongoing commitment to finding quick, innovative solutions to keep the public informed.
- Implemented a Business Services Website to better serve the business community. The Website offers local businesses a simple, easy-to-use resource that provides access to the various online services offered by the Department.



### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- Employed SAN technology to increase data backup performance between several servers that have large volumes of data on external EMC storage systems and the tape library.
- Discontinued utilization of NAS technology since it did not meet the Department's goal to consolidate servers.

### **FY 2006-2007 IT Objectives**

- ***Electronic Development and Permit Tracking System (eDAPTS) Expansion*** – Implement eDAPTS by *August 2006*.
- ***Solid Waste Information Management System (Phase II/IV)***– Upgrade the existing system to integrate the solid waste management and planning functions. *Milestones to be determined.*
- ***Customer Information System (CIS):***
  - Select vendor and draft contract by *July 2006*.
  - Execute contract by *August 2006*.
  - Implement CIS *within 18 months*.
- ***Sub regional Traffic Forum Intelligent Transportation System*** – Implement various ATMS and ATIS within sub regional areas countywide. Milestones to be determined by project.

## **6.2.6 Regional Planning**

### **Telecommunications and Network Initiatives**

- Continue to work on initiatives that will increase bandwidth requirements on the Enterprise Network. These initiatives relate to the Department's GIS and aerial imagery databases.
- Deployed secure wireless LANs, consistent with the protocols defined in the County's Wireless Strategy, at three locations in the department headquarters. The LANs were implemented in conjunction with the Kiva/e-DAPTS project. The department is also exploring the possibility of utilizing broadband wireless telecommunication data services for mobile staff.

### **Geographic Information Systems (GIS)**

- Developed the Zoning Administration Database which covers all of the Department's major tasks of operations, based on ESRI's ArcGIS software (integrated with a relational database management system-RDBMS through MSSQL).





- Acquired another product from Latitude Geographics called the Internet Mapping Framework (IMF) whose distribution of spatial information is based on ESRI's ArcIMS software using standard Web techniques (HTML, XML, Java and JSP). This technology allows for the rapid deployment of highly functional GIS Web mapping applications. The main objectives of the implementation of GIS technology in the coming years are for the following:
  - Maintain and update the Zoning Administration Database (created from the ZCIP)
  - Ensure integration of the GIS database with Kiva.
  - Develop procedures for systematic updates of all spatial information based on cooperation with the Assessor's Office and the Department of Public Works.
  - Manage the update of the LAR-IAC project after successful completion of the first iteration.
  - Continue to expand and enhance the County's ortho, oblique and digital terrain datasets.

### **Web-Based Applications**

#### *Existing Web-enabled Applications:*

- **GIS-NET** - Department intranet and limited County intranet access to Regional Planning's GIS data. Application provides for custom mapping solutions and integrates high-quality aerial imagery for the entire County.
- **Public GIS-NET** - Internet version of GIS-NET streamlined and setup for ease-of-use for the public.
- **E-NET** - Department intranet access similar to GIS-NET; emphasizes environmental layers.
- **Z-NET** - Department intranet access similar to GIS-NET; emphasizes zoning administration database layers (complex zoning and base map symbology).
- **SUB-NET** - Department intranet access similar to GIS-NET; emphasizes subdivision activity data, links to the subdivision activity database. Integrates scanned parcel and tract maps for overview and analysis.
- **Electronic Field Study (EFS)** - Oblique Aerial Digital Imagery (OADI) viewer application. Department intranet for access to oblique imagery and GIS data overlays. Data housed in department server and accessed via the Enterprise Network.
- **Kiva/e-DAPTS** - Internet access to online permitting, zoning information, case tracking, etc. This case tracking system allows staff access to permit information over the Internet. A future rollout will make this data available to the public via the Internet.



### *Future Web-enabled Applications*

- **GP-NET** - Internet application similar to the Public Version of GIS-NET in scope showing general plan categories from 1980 and the proposed plan categories for the General Plan Update Program. Will also have base information for easy comparison of what is being proposed in new update program.

### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- Consider the possibility of using SAN and NAS technology to address the Department's storage needs. The Department currently does not utilize these storage devices.

### **FY 2006-2007 IT Objectives**

- **IT Strategic Objectives**

- Create updating procedures for Zoning Administration Database layers and programs.
- Deploy "Printing Center" to LDCC (Front Counter) for selling large format maps to the public to be ready within minutes (instead of days). This application will also provide access to all archived scanned HNMs, Index and Wall Sheet Maps and all scanned Zone Changes.
- Expand business unit GIS Web mapping applications as needs arise.
- Complete Web portal implementation of Kiva/e-DAPTS project.
- Commence department document management initiative.

- **Maintenance/Enhancement Objectives**

- Maintain Local Area Network (LAN), which provides network connectivity to every computer in the Department with state-of-the-art management techniques and software.
- Maintain and upgrade desktop LAN clients through biennial replacement program.
- Maintain computer servers that house almost 8 TB of data.
- Maintain four large format plotters and two scanners for GIS application.
- Maintain map storage system and maps for the storage of 2500+ new zoning maps and zoning index maps (housed at LDCC – Front Counter).
- Continue to maintain the DRP Family of GIS Web Mapping Applications after initial implementation.
- Continue to provide application/hardware support for departmental network and Internet services, approximately 1200 incidents annually.
- Maintain and enhance departmental Web page.
- Continue to represent Department on TSAB, ISC, GISAB, CAMS, LAR-IAC.



- Coordinate service with consultants for computer hardware and software maintenance and support.

## 6.2.7 Registrar-Recorder/County Clerk (RRCC)

### Telecommunications and Network Initiatives

- Determined that transaction volumes for each of the operational areas of the Department are stable within a wide range over the course of a year and are not anticipated to exceed their historical ranges. The department's internal communications network was implemented in 1998 and is still operating at less than half the bandwidth capacity of the system.
- Initiated a Telephone Replacement Project which is evaluating alternatives from Cisco and Verizon. Vendor selection is expected by September 2006, with installation commencing in December 2006.

### Geographic Information Systems (GIS)

- Began efforts to develop a **GIS database** that will have countywide application for every department.
- Completed the **District Mapping** project to upgrade the existing District Plot application to the latest software technologies.
- Implemented a new Web-based GIS application using ESRI's ArcIMS Internet map server software. The ArcIMS Website now provides more robust and scalable polling place location functionality, especially during major elections, and will also give RRCC the ability to dynamically create and display district maps over the Internet. This **Online District Mapping Application** is scheduled to go into production by July of 2007.
- Led a multi-department project to replace TUS with a new system for maintaining Los Angeles County street alignment and address data. The **Countywide Address Management System (CAMS)** will not only leverage ESRI's state-of-the-art GIS technology to support multi-user, distributed editing of CAMS data, it also establishes a new address data standard that more accurately models real world addressing, includes the ability to store individual address points, and creates an opportunity for the County to assume full ownership of its address data and gain independence from private GIS data vendors.
- Continue participation in the **Los Angeles Region Imagery Acquisition Consortium (LARIAC)** project. LARIAC is a coalition of County departments and cities that will pool financial resources to purchase countywide digital orthophotos, oblique aerial imagery, digital elevation model data models and other raster datasets.

### Web-Based Applications

- Enhance Internet site to allow users to view and print district maps online and to query locations on a map by address, street, or intersection. The Internet site currently allows the voter to access a list of current precinct maps in PDF format for any district encompassing



the address input by the voter. During elections, voters can request, view and print Internet maps to polling places based on an address input by the voter.

- Provide web-based applications for election services to allow voter to register to vote online, view his/her sample ballot, determine the correct polling location based on the voter's specific address, and view a map of the poll location. The voter may also view his/her political districts and elected representatives, and election results are shown in graphic detail on the Website.
- Provide web-enabled recorder services so that the public may search the fictitious business name index, request and pay for a copy of a birth, death or marriage certificate.

### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- Identify HP's EVA (Enterprise Virtual Array) as the Department's current and foreseeable future enterprise-level data storage solution.

### **FY 2006-2007 IT Projects**

- ***Replace Birth, Death, Marriage, Certificate System*** – Migrate the Vital Records Indexing system off the ISD mainframe and on to a network server/PC-based platform. Integrate with the vital records imaging system to provide an enhanced ordering/copy issuance system. Analyze the business processes with the intent to maximize their efficiency and public service through enhanced automation. The system will include an order fulfillment component and PCs in the public area for completion of certified copy applications *by January 2008*.
- ***Upgrade Property Document Recording System*** – Upgrade the antiquated mainframe property document system, taking advantage of new PC/LAN-based technology and providing enhanced flexibility to accommodate the differentiated document recording businesses *by October 2008*.
- ***GIS Desktop Application Software Upgrade*** – Convert historical GIS mapping and data manipulation programs done in ARC/INFO, ArcView 3.x, and MapObjects to the new object-oriented ArcGIS/ArcObjects programming platform and to the ArcSDE geodatabase *by June 2008*.
- ***Countywide Address Management System*** – Replace the existing Transportation Updating System with a new street address maintenance system using modern data processing tools on a wide area network with other departments *by June 2007*.
- ***ArcIMS Implementation*** – Continue implementing ESRI's ArcIMS software to support existing and new Web-based mapping services, scheduled for completion *by December 2006*.
- ***Campaign Finance System*** – Replace the original ISD-ITS developed Campaign Finance System with a network-based vendor developed system. The Internet-based system will allow campaigns to electronically file campaign reports online. It will also allow the public to view campaign finance reports and run ad hoc queries against the data.



- **Telephone Replacement** – Replace the Department's telephone switch with an integrated Voice over Internet Protocol (VoIP) enabled switch. The replacement switch will provide the Department with dynamic capability in assigning staff to work groups and flexibility in modifying menu selections and responses in an integrated interactive voice response system.

## 6.2.8 Treasurer and Tax Collector

### Telecommunications and Network Initiatives

- Ensure that the LAPIS system replacement will include the capability for wireless connectivity to support the inventory of estates.

### Web-Based Applications

- Applied web-based applications on the Department's Website to provide general information as well as specific information for the Tax Defaulted Auction Book, Secured Current and Defaulted Due and Pay Status, Unsecured Current Payment Status, Investor Information, and Board of Supervisors correspondence and reports.
- Implemented a *Web-enabled* document imaging system to access images and electronically move documents.
- Implemented the Vcheck system which is an application providing taxpayers the ability to make payments over the Internet.
- Ensure that the LAPIS replacement system will be *Web-enabled*.
- Pursue capabilities to allow payment of Secured Property Taxes over the Internet.

### Storage Area Network (SAN)/Network-Attached Storage (NAS)

- Continue to utilize Storage Area Network (SAN) technology to store images of all checks and payment stubs processed by TTC.

### FY 2006-2007 IT Objectives

- **LAPIS Replacement Project**
  - Review and update the statement of work *by April 2006*.
  - Review, update, and finalize contract *by May 2006*.
  - Finalize and publish a new RFP *by May 2006*.
  - Complete evaluation of proposals *by September 2006*.
  - Complete negotiations with vendor *by December 2006*.
  - Finalize agreement and submit to Board for approval *by February 2007*.



- **Expand Payment Capabilities**
  - Complete program specifications to expand Vcheck application to include secured defaulted payments and submit to ISD *by February 2006*.
  - Complete testing of application *by April 2006*.
  - Implement Vcheck expansion *by May 2006*.
  - Complete negotiations with e-Commerce vendor *by January 2006*.
  - Submit final agreement to Board for approval *by February 2006*.
  - Enhance shopping cart Web page and develop interface Web page to include credit card option *by June 2006*.
- **Conduct End-user and IT Professional Training**
  - Appropriate training funds for FY 2006-2007 Budget *by September 2006*.
  - Assess training requirements for all employees *by October 2006*.
  - Develop a training plan *by November 2006*.
  - Augment the training program accordingly throughout FY 2006-2007.
- **Maintenance of Existing IT Environment**
  - Perform all tasks necessary to the existing IT environment to maintain its current level of effectiveness and/or apply mandated enhancements, throughout FY 2006-2007.
  - Replace 190 PCs *by June 2007*.

## 6.3 Human Services IT Objectives

### 6.3.1 Child Support Services Department (CSSD)

#### Telecommunications and Network Initiatives

- Prepare for the El Segundo office's planned move into a new County-owned building in 2007. This will be the Department's first introduction to VoIP.
- Worked with ISD to install 15 Kiosk systems that utilize video streaming. In addition, the Department has two video conferencing systems that use a separate ISDN network. They will continue to work with ISD to connect these units through the Enterprise Network, fiber optic, or a high-speed wireless link.
- Advance plans to employ wireless networks by connecting 5500 and 5770 South Eastern Avenue with an 802.11a system.





## **Web-Based Applications**

- **Los Angeles County Intranet:**
  - Financial reporting related to Allocations/Collections/Distributions of funds as well as numerous miscellaneous reports from the Unisys mainframe.
  - Paternity Establishment utilities such as POP (Paternity Opportunity Program) and a reference to a third party Genetics Testing Lab Website.
  - CSSP (Child Support Compliance Program) Web Application ensures that those who benefit from CSSD financially are in compliance with the Child Support laws.
  - Web-enable publications that keep employees informed about CSSD Current Events such as newsletters, mandated policies, and procedures.
  - Provide numerous links to Internet resources that would benefit CSSD employees.
- Formed a Website Steering Committee to oversee the following activities available on the **public Internet site:**
  - Update the graphical design and layout of the Website.
  - Review the functionality of the site--making it more user friendly, adding links to various other sites.
  - Update and categorize the most commonly asked questions and add relevant documents for review.
  - Provide the capability of manipulating forms on-site.
  - Determine the feasibility of a suggestion box.
  - Add fields to the "E-mail Us" site.

## **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- Installed a Dell/EMC Cx500 SAN with a total of 1.4TB of SCSI disk drives and two chassis each with 3.2TB ATA drives.
- Plan for the addition of three low cost Network Attached Storage (NAS) units each with about 1 TB of storage.

## **FY 2006-2007 IT Objectives**

- **CCSAS and ARS Enhancements**
  - Provide the Registrar Recorder Electronic Interface to other Counties outside of the ARS Consortium *by December 31, 2006.*
  - Convert ARS Forms to Output Designer (JetForm) *by December 31, 2006.*
  - Multiple DAC Project *by January 31, 2007.*
  - Conduct CCSAS Post-Increment2 (I2) Guideline Calculation *by February 28, 2007.*





- CCSAS V2 Legacy Data Clean-Up *by June 30, 2007.*
- CCSAS V2 Legacy Data Archive Validation *by June 30, 2007.*
- CCSAS V2 Data Validation *by June 30, 2007.*
- CCSAS Federal Certification *by June 30, 2007.*
- OCSE 157 Report Changes *ongoing until October 31, 2009.*
- Call Center IVR Redesign *by April 30, 2006.*
- Outbound Calling Campaigns *by August 31, 2006.*
- **Human Resource Applications**
  - Exam Appeals *by June 30, 2006.*
  - Performance Evaluation *by December 30, 2006.*
  - Organizational Charting based on Item Control *by March 30, 2007.*
  - Exit Interviews *by September 31, 2007.*
  - Special Step Placement *by April 30, 2008.*
- **Management and Administrative Services**
  - Training System *by August 31, 2006.*
- **Computer Networking Objectives**
  - Migration to Microsoft NOS *by June 30, 2006.*
  - SAN Expansion *by June 30, 2006.*

### **6.3.2 Children and Family Services (DCFS)**

#### **Telecommunications and Network Initiatives**

- Implementation of additional Web-based applications, video conferencing, e-learning, and ever expanding use of E-mail may impact network capacity with expected transaction volume increased in future years.
- Phase out Novell following the successful move of many file servers to the Windows 2003 operating system.
- Pilot a document imaging solution following completion of network infrastructures upgrades required to support the network bandwidth for this application.
- Opened two new offices equipped with VoIP in Palmdale and Glendora. The Department will potentially open three additional new office sites that utilize this technology in FY 2006-2007.



- Worked with ISD to complete the installation of video conferencing in seven sites in recent years. Video conferencing will be added to 10 more existing sites in FY 2006-2007.
- Implemented the BlackBerry Enterprise solution used by Technical Support staff and Executive Management.
- Plan for the implementation of Wireless Hot Spots in each DCFS Office. These Hot Spots will be used by departmental staff who are telecommuting or are considered a Mobile Worker.

### **Geographic Information Systems (GIS)**

Planned GIS applications include:

- **Placement Inquiry System:** A Web-based application that will be used to identify vacant foster homes closest to the child's original home and school attendance area.
- **Referral Intake System:** An interactive mapping system to support the Child Protective Hotline staff in the validation of referral addresses and assignment of referrals to the appropriate Service Planning Area (SPA) or DCFS Office.
- **Placement Resource Planning System:** System that uses GIS to evaluate the gap in resources and services in different geographical areas to determine where the funding and allocation of resources and services are needed most.

### **Web-Based Applications**

- Work in concert with the Chief Information Office and Internal Services to create a searchable Web-based application to display pictures and key information about all children under the jurisdiction of the Department who have been abducted or run away from care.
- Participated in the County's LA Helps Project scheduled for implementation in March 2006.
- Continue efforts to develop a more robust and thorough public adoptions Website.
- Deploy a Web-based Structured Decision Making program to improve assessment, design, and evaluation processes relating to actions taken on behalf of at-risk children.
- Work in concert with the Inter-University Consortium to upgrade the learning management system to include electronic and distance-learning applications to provide Web learning. Timeline is currently under development.
- Purchased and installed a Web-based survey software for the Department's research unit to use in designing, developing, deploying, and tabulating Web-based surveys.
- Oversee a joint District Attorney, DCFS and Sheriff E-SCARS Project targeted for development in FY 2007-2008.



- Implemented an intranet and Internet site (LAKids) as part of the Los Angeles County portal plan.

### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- Continue efforts to deploy NAS technology which will be used as primary backup media for all department management critical application data with tape as the secondary backup media.
- Completed implementation of the first phase of the department-wide SAN solution. The first phase of the project replaces current obsolete data warehouse and Web application servers. DCFS will expand this SAN architecture to their Windows 2003/Exchange environment.

### **FY 2006-2007 IT Objectives**

- **Develop and improve Web-based applications** to expand use of technology for solutions to business needs, to provide tools for decision making and to provide public information on missing DCFS children. The following projects will be developed and implemented during FY 2006-2007:
  - Adoption Assistance Payments Conversion
  - Automated Eligibility Determination
  - Automated Payment Provider System Redesign
  - Caregiver Agreement Management/Performance Measurement System
  - Clearance Tracking System
  - Concurrent/Permanency Planning Tracking System
  - Countywide Court Report Document Imaging Phase I
  - Contract Management and Performance Monitoring System
  - DCFS Reporting System
  - ECAPS DCFS Reporting Interface
  - Integrated Financial System Phase II (CS & Enhancements)
  - JADE/CWS/CMS Integration
  - Kinship Document Imaging
  - LAKids Redesign
  - Master Roster System (MRS)
  - My SCSW
  - Revenue Enhancement Closed Case Document Imaging
  - Timestudy Claiming System



- Collaborate with the Chief Administrative Offices (CAO) Service Integration Branch (SIB), Chief Information Office (CIO), other County departments and the State in the **development of two new systems to solve joint business needs**. One system will track services provided by both DCFS and Probation to eligible youths and assess their outcomes. The second will provide a simple County service information and referral system to the public. These efforts are expected to be completed during FY 2006-2007:
  - Adoption Promotion and Support Services
  - Electronic Suspected Child Abuse Reports (E-SCARS)
  - Emancipation Services/Independent Living Program (ES/ILP)
  - Family Support Services
  - Los Angeles County HELPS System
  - View-Only Access to all CWS/CMS Data for Probation
- Expand the use of the Knowledge Center to provide sophisticated decision-making reports integrating the data with GIS technology. The Department plans to develop and implement a **Web-based placement inquiry system** that will provide a tool to appropriately place children in foster care homes within the school's attendance area. This is the third year of a five-year project.
  - Foster Home Compliance Tracking & Alert System
- **Continue to upgrade, enhance, and consolidate the Department's network infrastructure**. Maintaining the infrastructure is an on-going, long-term effort.
  - Infrastructure Upgrade
  - Citrix
  - Cisco Network Admission Control (NAC)
  - ID Management
  - Item Control Tracking System
  - Live Scan Store and Forward
  - Output Optimization
  - Installation Phase I
  - Wireless Hot Spots
  - Workstation Upgrade



### 6.3.3 Community and Senior Services (CSS)

#### Telecommunications and Network Initiatives

- Support the County's shared services initiative by transitioning to ISD's IT Shared Services (ITSS) effective July 1, 2006. ISD will provide the Department with operational and user support.

#### Web-Based Applications

- **Community Connections Website** – Collaborate with ISD's Internet Development Division (IDD) to enhance the Community Connections Website, an Internet-based resource center for the elderly and disabled.
- **Adult Protective Services (APS)** – Develop a new system written in the MS.Net environment and that can be remotely accessed by all APS field staff. APS is currently under development by ISD.
- **Area Agency on Aging (AA)** – Resume development of AA in February 2006. The new system is written in the MS.Net environment and will be remotely accessed by all AA field staff, supporting contractors and remote Senior Service Centers.
- **Board Letter Tutorial (BLT)** – Enhance the Department's BLT which originally resided on their intranet site. In December 2005, the Executive Board in conjunction with ISD/IDD began efforts to enhance the BLT so that all County departments can utilize a common tutorial for the creation of Board letters. CSS will pilot the new development effort prior to full countywide implementation.

#### FY 2006-2007 IT Objectives

- **Computer Replacement** – Ensure that computing devices meet the minimal computing requirements in order to transition to ITSS as defined in ISD's policy *by June 2006*.
- **IT Shared Services Transition** – Transition to ISD's ITSS for support in the area of desktop, E-mail/instant messaging and file/print sharing services. The transition is scheduled *effective July 1, 2006*.
- **IT Function Transfer** – Transfer IT staff to ISD *effective July 1, 2006*.
- **Adult Protective Services (APS) 5.0**
  - Target *June 2006* as the anticipated completion date for the Phase I development effort.
  - Obtain ISD time/cost estimate for the Phase II development effort by *April 2006*.
  - Note that as of this writing, the implementation date for the complete rollout of APS is contingent upon ISD's time/cost estimate for the development effort and cannot be determined.



- **Contracts Monitoring System (CMS)** – Perform a gap analysis of two countywide Contracts Systems *by October 2006*. Contingent upon the gap analysis between CSS' CMS and the two external Contracts Systems, CSS may transition to one of the two countywide Contracts Systems or request that functional requirements be included in the countywide system.
- **Time Card Collection System (TCCS)** – Complete additional system functionality and correct workflow deficiencies *by September 2006*.
- **“Performance Counts!”: Workforce Development Reports Automation**
  - Require ISD/IDD to complete the first phase of report requirements *by October 2006*.
  - Complete COGNOS training for the MIS Division *by December 2006*.
- **Area Agency on Aging (AA)** – Gather system specifications to identify the remaining 40% of the development effort that includes the Integrated Care Module and approximately 15 ancillary modules *by April 2006*.
- **Workforce and Community Services Client Tracking Project** – Develop an action plan, project charter and scope of work that defines deliverables and work tasks. Review ISD's prior analysis and request for ITF funds *by June 2006*.
- **Domestic Violence "Alice " Application (DV)** – Place the DV effort to implement “Alice” application on hold due to legal and management issues.
- **Community Connections Website**
  - Obtain a time/cost estimate to complete the Website upgrades and enhancements from ISD *by March 2006*.
  - Proceed with the development effort contingent upon ISD's time/cost estimate. An implementation time cannot be established as of this writing.
- **Communication Portal** – Design and develop a communication portal where CSS employees can gain access to departmental information. As of this writing, the Department expects the communication portal site to be included in their intranet site.

### 6.3.4 Health Services (DHS)

#### Telecommunications and Network Initiatives

- The following DHS initiatives will impact enterprise network bandwidth capacity:
  - Sametime
  - Web
  - PACS
  - VoIP



- Increased use of E-mail
  - Secure messaging
  - eCAPS
  - Managed Care System
- Replace a number of obsolete PBX systems at several facilities over the next three-year horizon. ISD's recommendation is to replace the PBXs with Voice over Internet Protocol (VoIP) hardware since this is clearly the industry's direction. Current plans include HSA, Harbor-UCLA Medical Center, Rancho Los Amigos, LAC+USC, and Public Health.
  - Continue efforts to equip HSA with video conference accessibility to remote DHS facilities and third party presentations. A higher reliance of video conferencing technology at DHS facilities is expected since it enables the convenience and availability of face-to-face meetings without the expense of travel.
  - Support Public Health's initiative to provide field staff with wireless remote access to information systems. Several DHS hospitals and the Bioterrorism program within Public Health presently use wireless networking.

### **Geographic Information Systems (GIS)**

- Continue the process of developing and implementing Geographic Information Systems that will allow DHS Emergency Medical Services to obtain real-time mapping of multi-victim incidents. The Department is also working in conjunction with USGS to map fault lines under Los Angeles County and the location of base stations and home addresses of Emergency Medical Services first responders.

### **Web-Based Applications**

- Established Web-based applications as the Department standard and ensured exceptions are made only where there are no acceptable Web-based applications that deliver the necessary functionality (mostly in the area of patient care delivery).
- Targeted internal applications for Web-enabling that will primarily be developed through the DHS Web-centric IT architecture strategy. The strategy for implementing the Web-enabling of internal applications in FY 2006-2007 will continue at the level of enabling technology infrastructure. Phase II will include opening [www.myladhs.org](http://www.myladhs.org) to all DHS employees and will include several *Web-enabled* HR applications, a collaborative environment with messaging and Web conferencing (SameTime) and E-mail (Novel GroupWise). Several other applications/projects such as COGNOS and eCAPs may be considered for inclusion within the portal.
- Continue to focus on providing quality health services to the public since most services are delivered through direct contact with the public. *Web-enabled* services are secondary and mostly at the level of providing information, not enabling transactions.





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## **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- Completed an inventory of existing SAN hardware developed in conjunction with a County CIO-sponsored infrastructure optimization study. The Department will adopt an Information Lifecycle Management approach toward storage, the implementation of which will continue over several years.

## **FY 2006-2009 IT Strategies**

*Note: DHS provided a lengthy and detailed list of FY 2006-2007 objectives in its BAP. In the interest of keeping the IBAP concise, the higher-level DHS strategies are presented below.*

- Continue to **implement an electronic medical record** that provides clinical and administrative patient data that are available department wide by building on the QuadraMed/Affinity foundation in use throughout DHS patient care delivery sites:
  - Acquire and implement selected modules from QuadraMed's Quantim suite of products, including Electronic Document Management (EDM).
  - Complete the implementation of the federated model of the Laboratory Information System at Olive View-UCLA and MLK.
  - Acquire and implement an Enterprise Pharmacy Information System.
  - Continue the strong implementation of the Affinity *Web-enabled* clinical workstation for care providers.
  - Implement Enterprise Picture Archiving and Communications System (PACS) and interface them to their respective facility.
- Use information technology to assist DHS in transitioning to an integrated health services delivery system and to provide functionality and secure access to data across facilities and programs. This is an ongoing strategy to **comply with HIPAA mandates** and enable secure transmission of information throughout Health Services, especially patient information through the increased use of virtual private network (VPN), single sign-on for care providers, and continued participation on countywide security-related committees.
- Continue to improve the **sharing of information between Personal Health and Public Health**. This is an ongoing strategy that will improve delivery of personal health services to individuals, as well as improve identification of public health issues and events.
- Continue to develop an **architecture** that is more independent of any single application, **Web-based, and aligned with communications standards**, such as HL-7, to affect more interoperability of applications and functions. This is an ongoing strategy, which includes the continued development of the DHS Web portal and single-sign on capability.
- Implement **practice-based security strategies and plans** to improve the DHS security posture over time. By implementing these practice-based solutions, DHS can institutionalize good security practices, making them part of the way it routinely conducts business, integrating information security issues into the business strategy of DHS. This will require:



- Identifying information security risks using a defined evaluation process.
  - Implementing the results of information security risk evaluations.
  - Setting up the ability to manage information security risks over time.
  - Implementing security strategies and plans that follow the DHS IT Security Policies and County Board of Supervisors Information Technology and Security Policies.
- Enhance the reporting of the **DHS Data Repository** as an enterprise-wide decision-making tool for clinical, administrative and financial data. The Oracle Healthcare Transaction Base suite of capabilities can reduce the time needed to build and deliver a healthcare application from scratch – the more complex the clinical data, the more benefit is available from the product. Project duration is estimated to require 18 months to complete.
  - Enhance the **formal IT governance structure** to provide strategic direction and fiscal leadership. This will focus resources and attention on the priority projects and activities, and assist in their completion.
  - Use a **consistent methodology for evaluating and selecting information technology opportunities** to pursue based on their business value and the management of risks and resources. This is an ongoing strategy that enables the prioritization of projects and activities to ones that will be supported and benefit the Department the most.
  - Continue to **standardize project management and implementation methodologies** enterprise-wide that will be used throughout the project life cycle of approved projects, including:
    - An appropriate executive sponsor.
    - Clear definition of the scope, goals, expected benefits.
    - Availability of appropriate resources both centrally and at the impacted facilities and programs.
    - Use of IT staff trained in project management and business analysis.
    - Performance indicators and post install evaluation.
  - Conduct **targeted recruitment for critical IT positions** by including appropriate selection requirements and candidate evaluation methodologies in each job bulletin to ensure that only qualified applicants are placed on an eligibility list and candidates are assessed and rated appropriately according to their qualifications for the specific job at hand.
  - Work with DHR and the CAO to **develop appropriate job classifications** with competitive salaries for critical health informatics positions which are common in the healthcare industry but do not exist in the County today. These positions require a blend of IT and healthcare knowledge, skills, and abilities.
  - **Improve data center operations** through the adoption of Information Technology Infrastructure Library (ITIL) best practices.



- **Improve the EN-DHS network infrastructure** through the development of an Identity Vault. This is the first step in providing Identity Management and User Provisioning for DHS workforce members. The Identity Vault provides a comprehensive solution for dealing with the many problems associated with granting secure and appropriate access to users for DHS enterprise applications.

### 6.3.5 Human Relations

#### Web-Based Applications

- Utilized virtual private network (VPN) technology in conjunction with requirements for development of the Commission's Annual Hate Crime Report.
- Dedicated Commission IT staff to develop an electronic "bulletin board" that will provide both intranet and Internet capability for communication of Commission work, projects and educational/informational items to and between its staff and the public.
- Placed on hold, pending further development discussions, the Commission's plans to migrate all Microsoft intranet applications to include membership databases applications for tracking members of their Media Image Coalition Program and Corporate Advisory Committee.

#### FY 2006-2007 IT Objectives

- Maintain operational efficiency and integrity of current system:
  - Ensure compliance with system maintenance protocols.
  - Initiate systems updates on a timely basis.
  - Review and adjust Business Continuity Plan as required.
  - Establish formal agreements for system repairs as required.
- Provide in-service and vendor provided staff training opportunities to maintain/upgrade desktop computer skills.
- Review operational requirements for and availability of off-the-shelf desktop software applications and purchase as needed.
- Upgrade Commission Website to accommodate Youth Website program requirements *by August 2006*.
- Ensure the full implementation of Goldmine contacts database utilization and validate that Commission staff receives follow-up training to ensure ongoing proficiency.



## 6.3.6 Mental Health (DMH)

### Telecommunications and Network Initiatives

- Begin the next major task of improving accessibility to the data for authorized users since the data warehouse is now reliably in production. DMH is implementing the COGNOS Business Intelligence suit of tools. DMH is also developing an Executive Dashboard that will provide DMH Leadership with the information they need on a daily basis to more effectively manage their part of the organization.
- Deploy a VoIP-based call center for the IT help desk and continue planning efforts for implementing another one at the DMH information referral and emergency operation center (ACCESS). All new DMH sites will be VoIP-based.
- Use Live Meeting and Macromedia Captivate for selected online meetings and video content broadcasting.
- Use BlackBerry technology to enable approximately 300 executives and managers to stay connected. DMH is also using wireless broadband technology for users who need remote Internet or intranet access.

### Web-Based Applications

- It is the Department's strategy to Web-enable all internally-developed applications and acquire *Web-enabled* commercial products, when available products meet the Department's functional needs.
- DMH will be redesigning its Internet Website which will provide improved services to the community by making mental health information and resources easier to identify.
- The DMH redesigned Website will also include a link to a new DMH-sponsored resource called Network of Care in partnership with Trilogy Integrated Resources LLC.

### Storage Area Network (SAN)/Network-Attached Storage (NAS)

- Continue utilization of SAN/NAS technology. The Department currently uses SAN technology for enterprise backup. They rely on NAS technology to provide DHCP, print, and file services to remote sites with too few users to justify a server.

### FY 2006-2007 IT Objectives

- Obtain Board approval of a contract with a commercial vendor for an Integrated Behavioral Health Information System *by December 31, 2006*.
- Ensure that all projects in the FY 2006-2007 BAP have an identified executive sponsor, project manager, project charter, and project plan in MS Project Enterprise Server *by December 31, 2006*.



- Conduct tests to Department's first system at the identified Disaster Recovery Backup Site *by December 31, 2006.*
- Conduct a successful test of the DMH Disaster Emergency Dispatch Tracking and Reporting System *by June 30, 2007.*
- Arrive at a decision regarding a business document imaging solution *by September 30, 2006.*
- Obtain a Board approved contract for a business document imaging solution *by December 31, 2006.*
- Develop the capability to forecast data storage needs at least one budget cycle into the future *by June 30, 2007.*
- Reduce the number of open issues from the Fox Security report by 50 percent *by June 30, 2007.*
- Develop the capability to accurately forecast hardware and standard productivity software needs at least one budget cycle into the future and manage hardware turnover to become more cost effective *by June 30, 2007.*
- Eliminate dropped calls and improve workflow at the ACCESS Center to allow it to support changes to its role as the result of MHSA *by June 30, 2007.*
- Identify and correct DMH network infrastructure performance deficiencies and reliability problems, particularly obsolete equipment, and correct them *by June 30, 2007.*
- Specify an initial set of reports for a DMH Executive Dashboard and put them into production use *by September 30, 2006.*
- Obtain legal clearance to develop a Foster Care DMH/DCFS Master Person Index using existing County-owned software and test a Foster Care DMH/DCFS Master Person Index *by September 30, 2006.*
- Replace or eliminate DMH custom developed applications written in languages CIOB that the Department is no longer able to appropriately support *by June 30, 2007.*
- Consolidate the clinical and administrative modules of the Integrated System and simplify the end-user interface and workflow *by September 30, 2006.*

### **6.3.7 Military and Veteran Affairs**

#### **FY 2006-2007 IT Objectives**

- Establish a publicly accessible **Internet Reservation System** for Bob Hope Patriotic Hall to improve the responsiveness to requests for space needs and the efficiency of departmental operations. The system will also develop and deploy E-Commerce applications (ability for credit card payments from clients).



- Integrate the current Bob Hope Patriotic Hall reservations system with an **accounting system** that will create invoices for account receivables and contain an automated deposit system.
- Migrate to ISD's **Information Technology Shared Services** to support the Department's E-mail, desktops and file shares.
- Improve the in-house **Veterans Program (VETPRO)** computer system to a Web-based system which can allow PDF capabilities.

### 6.3.8 Public Social Services (DPSS)

#### **Telecommunications and Network Initiatives**

- Monitor network utilization and provide projections to network engineering when such data is available. As part of the SAN initiative, DPSS is currently centralizing workload at the Downey Data Center and secondarily at the Crossroads Administrative Campus. This will place larger volumes of traffic on the EN and WAN TI circuits. DPSS will provide network engineering with forecasts as it did for the CAST project.
- Deploy distance learning to its training academy which will require multi-cast media content during selected time intervals. The Department will provide data forecasts to network engineering as it becomes available.
- Completed the first major installation of a VoIP system at the Southwest Special District 08 with the guidance of the Internal Services Department (ISD). The Call Center project calls for the second VoIP implementation.
- Implement a proof of concept video conferencing software/equipment to the Information Technology Division (ITD) and DPSS Headquarters. This will connect the two offices for the numerous executive meetings.
- Utilizes Cisco wireless technology (access points and clients) for locations where physical network expansion is cost prohibitive or unsafe. Such examples are sites that potentially contain asbestos material.

#### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- Continue to operate EMC CX700 SANs at the Downey Data Center, Crossroads Administrative Campus and at the Information Technology Facility in Norwalk, which will utilize an EMC CX300.

#### **Web-Based Applications**

- **Current Internet/Intranet Services That Improve Delivery of Services to the Public:**
  - **DPSS Kiosk:** A standalone Kiosk with touch screen technology located in each of DPSS district/GAIN offices. The Kiosk describes services provided by our DPSS and





information about other public agencies such as EDD, the Social Security Administration, Child Care Services, etc.

- **Human Resources Division (HR) Kiosk:** A standalone Kiosk with touch screen technology is located at the Human Resources Division office. The Kiosk system provides information on employment opportunities and a hardcopy print out of current job opportunity exam bulletins. The Kiosk is located in the lobby and provides easy access, without the need of seeing a personnel representative.
- **DPSS Portal:** The DPSS portal provides Internet access to information about DPSS/countywide services. Intranet access provides information to employees and serves as a centralized gateway to the Department's Web-enabled applications.
- **Business Applications That Are Web-enabled:**
  - **Q5i:** A Quality Control Database Program that stores data for QC and QA audit results.
  - **Public Sector Budgeting:** The DPSS Budget Management System.
  - **HRMS Item Control:** The Human Resources Managements System/Item Control application that tracks allocation/vacancies of item throughout the DPSS.
  - **Program Time Study:** Administrative staff time tracking system for state claiming purposes.
  - **Random Moment Time Study:** Eligibility staff time tracking system for state claiming purposes.
  - **Claiming Systems:** This billing system is used to track the billing for DPSS for some state and federal expenditures.
  - **IEVS:** This system tracks the Income and Eligibility Verification Systems reports to identify unreported income.
  - **CAST:** The QR7 Automated Scanning and Tracking System ensures the timely processing of case changes that participants report on the QR7 form.
  - **PECS:** Performance Evaluation Control System (PECS) tracks/ensures that all DPSS employees have an evaluation completed on time and filed with HR timely.
  - **GROW Inquiry:** Provides access to historical information from the GROW system.
  - **JOBSmart:** The JOBSmart system matches participants to jobs submitted by employers based on participant skills.
  - **LEADER Help Desk:** The system tracks LEADER problems to combine duplicate problems so that they can be prioritized for resolution.
  - **Health & Nutrition:** This application is a call tracking system that records the primary language of the caller, the reason for the call and how they heard about the IHSS hotline. It also tracks the District referrals with a turnaround time for a resolution response from the districts.





- **ESA:** The Employee Suggestion Awards system tracks employee suggestions from submission to potential implementation.
- **Software Training:** The software training application automates scheduling of employees for software training. It also tracks invoices for payment.
- **ASH MEDS:** Automates the ASH Unit logging, tracking, notification and decisions related to appeals filed by participants responding to adverse Notice of Action (NOAs) resulting from the MEDS Reconciliation process.
- **On-Line Personnel Manual Application:** A Human Resources Division (HRD) application for publishing of the DPSS Personnel Manual, allowing employees quick and easy access to personnel policies and procedures.
- **HRD Website:** Human Resources Division's intranet site containing static information and links to the DPSS Personnel Manual and Bulletin Exams.
- **Business Applications Targeted for Web-Enabling:**
  - **DPSS E-Mail System**
  - **Academy Purchased Training:** This system tracks contracted employee training hours for invoicing and payment.
  - **Welfare Fraud Linkage Analysis Database System (WFLADS):** The system identifies inconsistencies in case data that can lead to potential welfare fraud.
  - **Technical Support Center Ticket Tracking:** The system tracks requests for equipment repair and installation.
  - **Call Center:** This application will assist the participant to obtain specific case-related information pertaining to their case records.

### **FY 2006-2007 IT Objectives**

- **Disaster Recovery:** The Downey Data Center has been equipped with DPSS server and SAN components to provide a failover for central applications and data. A cross-recovery pattern has been established with the SAN at the Crossroads Administrative campus, providing the department with two-way recovery. A plan to migrate Oracle applications to Internal Services Department (ISD) Downey Data Center is in process. The disaster recovery plan will be limited to applications hosted by ISD.
- **Digital Imaging:** The Department continues to electronically capture and index historical status reports. The monthly CW 7 report has been changed to reflect the new quarterly report (QR 7's). This project uses the successful CAST technology framework. Images are available on-line by Welfare Fraud for release to the District Attorney.
- **Voice Over IP Project:** DPSS has used Voice over Internet Portal (VoIP) telephony at ITD for two years. The decision to expand this technology throughout the Department was ratified by the County selection of Cisco AVVID as the standard platform for VoIP. In cooperation with ISD, DPSS completed the VoIP deployment at its new Southwest location



at 120th and Western Avenue. The Call Center Pilot project will be the next major site to apply VoIP.

- **Data Security/Cyber-Terrorism:** The countywide Cyber-Terrorism initiative requires all departments to maintain prudent security practices to protect County resources. To this end, DPSS has engaged in a multipoint plan to address this issue. This includes host intrusion detection, enforcement of countywide policies approved by the Board in July 2004, annual distribution of the DPSS Computer Password Policy, completion of the Portable Computer Equipment Policy and "Security" topic added to the LA Bulletin Board in Lotus Notes for easy accessibility of security information to staff.

## 6.4 Public Protection IT Objectives

### 6.4.1 Alternate Public Defender (APD)

#### Telecommunications and Network Initiatives

Work with ISAB to implement Inmate Videoconferencing at eight branch locations. Four locations are now on-line. APD will seek funding for four additional units.

#### Web-Based Applications

Host terminal emulation software by utilizing two Web-based applications, the APD's public Web page and Netmanage Rumba Web. The APD has targeted these applications for intranet Web enabling:

- Case Management System (CMS)
- Legal Resource Motion Bank
- Training Information

#### FY 2006-2007 IT Objectives

- **Inmate Video Conferencing:** Implement inmate video conferencing in cooperation with ISAB. This will allow the APD to participate in ISAB's inmate video conferencing program and create substantial cost efficiencies by eliminating wasted drive time to County jail facilities. *Approximate Duration: 12 months. Approximate Cost of \$280,000.00.*
- **Training:** Continue assessing current staff competency in mission critical applications and training staff to a minimum level of competency. *Approximate Duration: Ongoing. Approximate Cost: \$15,000.00-\$20,000.00 per year.*
- **Implement Web-Based Systems:** Make substantial commitments to develop Web-based technology. The APD will design and implement an APD intranet Web page for the sharing of mission critical information with all staff. An APD intranet will allow for the more efficient



sharing and accessing of critical departmental information. *Approximate Duration: 24 months. Approximate Cost: \$10,000.00 for Phase I.*

- Phase I envisions an APD public Web page (now complete) and the implementation of the Department's intranet (in progress).
- Phase II will focus on converting existing applications, such as the Department's Oracle/VB-based Case Management System, to browser-based, intranet deployed applications.
- **Maintain and Upgrade Case Management System:** The APD Case Management System provides all court calendar management, statistical analysis, conflict checking, and most of the case file electronic document creation. The APD will continue to make necessary upgrades to facilitate the tracking and reporting of mission critical information for both internal use and pursuant to Board of Supervisors and CAO requests for statistical analysis and information. *Approximate Duration: 12 months. Approximate Cost: \$300,000.00.*
- **General Maintenance:** Continue to maintain and upgrade existing equipment and infrastructure on an as needed basis. *Approximate Duration: Ongoing. Approximate Cost: \$80,000.00 per year.*
- **ISAB Initiatives**– Continue to work with ISAB to identify areas of common interest where resources and costs may be shared. Specifically, the APD will develop an implementation plan utilizing previously designed and implemented document imaging and storage technologies. *Approximate Duration: Ongoing. Approximate Cost: Unknown.*
- **APD Workload Difficulty Index (WDI):** Developed its own unique data system for the tracking and measuring of attorney workload within the Department as part of the County's "Performance Counts!" initiative. Phase I comprised the development and implementation of the WDI for felony attorney workload. Phase I is complete. WDI was recently recognized for its excellence by the County of Los Angeles Quality and Productivity Commission, with several awards, including the Silver Eagle Award. Phase II will now begin and includes the expansion of WDI into misdemeanor, juvenile and investigator workloads. *Approximate Duration: 8 months. Approximate Cost: \$10,000.00.*

## 6.4.2 Coroner

### Telecommunications and Network Initiatives

- Obtained ITF Committee approval for the Department's application to implement a content management system (digital archive). This project is expected to begin in FY 2006-2007. The Department envisions the integration of an image/document management system into the CME System. This will increase overall transaction volume, retrieval time and storage requirements.
- Identified funds in November 2004 for a VoIP, Cisco-based solution to replace the legacy PBX phone system. As part of this project, the physical network infrastructure will be



upgraded to support the voice and data traffic via the TCP/IP protocol. The Department anticipates project completion in March 2006.

- Move existing videoconferencing equipment to the Coroner's Sylmar or Antelope Valley offices and install new videoconferencing equipment in the Department's Headquarters office. The relocation, planned for FY 2006-2007, will increase the capabilities of the videoconferencing equipment in primary locations and will also allow the Department to communicate easily with remote workers.

### **Geographic Information Systems (GIS)**

- Submit an ITF application for GIS services to the CIO for review and approval of project funding. This grant will allow the Department to integrate the Coroner's CME system with the GIS infrastructure maintained by the CAO's Urban Research Division.

### **Web-Based Applications**

- Began collaborative efforts with the CME System developer, VertiQ Software in November 2004 to complete a feasibility study and requirements for Web-enabling the CME System. The Department anticipates that the Web-based front end will decrease programming, maintenance, testing overhead, and provide a more efficient platform in which to conduct County business.

### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- Utilized NAS strategy to store a variety of documents and images.

### **FY 2006-2007 IT Objectives**

- **Web-Enable CME System:** Work jointly with the developer in the application conversion from a Visual Basic platform to an Internet-based application. The developer will perform 100% of the conversion effort. *The Department expects approximate project duration of one year.*
- **Content Management (Digital Archive):** Commence in FY 2006-2007 integration of the Department's CME application with the Global 360 Content Management system implemented and maintained by the Information System Advisory Body (ISAB).
- **Shared Services:** Target second half of FY 2006-2007 as the timeframe to explore the feasibility of migrating to the IT Shared Services (ITSS) environment provided by ISO. This will allow Coroner staff to focus on the continued improvement of the Coroner's CME system and the Coroner's Internet and intranet Websites and will also allow ISO to support the personal computers and the server infrastructure. Migration to the ITSS environment is dependent on receiving an ITF grant (or other funding) to upgrade existing personal computers to a level that is supported by ITSS.



- **Technical Resources/Computer Training:** Expand knowledge base of current IT staff by continuing education, and provide computer training to non-IT staff in order to increase productivity and business-related efficiency.

### 6.4.3 District Attorney (DA)

#### Telecommunications and Network Initiatives

- Continue to support the DA's Digital Archive Project focused on increasing the amount of data crossing the network as more case files are imaged and accessed by staff. Work also continues with the ISAB LADOX project which will eventually include the distribution of documents to the criminal justice community both in PDF, XML, Word and images.
- Received a grant to expand video conference capabilities from one site to four. Currently, all four sites are operational. Once the Enterprise Network is capable of handling the required bandwidth, ISDN will be phased out.
- Work jointly with ISAB, CIO and ISD to explore and test viable wireless technologies in accordance with the County's Wireless LAN Guidelines. The Department has recommended that the CJIS Wiring Project be expanded to include wireless access.

#### Web-Based Applications

- Committed to Web-enabling all existing applications where appropriate. Presently, the Department's main mission critical application, PIMS, is *Web-enabled* including Juvenile, Adult and Inquiry.

#### Storage Area Network (SAN)/Network-Attached Storage (NAS)

- Support the Department's overall document management strategy by purchasing and installing primary and back-up EMC Centera network-attached storage devices. These devices are used to store electronic versions of DA case files. The Department plans to eventually store all of its case files on these devices. As part of its ECM strategy, the Department will also be exploring other technological solutions to deal with managing and storing other types of media including photographs, video and voice recordings.

#### FY 2006-2007 IT Objectives

- **Replace the existing District Attorney's Office intranet site** with a new portal that provides for a single user interface and integrates existing reference information and databases *by January 2007*.
- **Maintain and enhance existing applications:**
  - Enhance the **Prosecutor's Information Management System (PIMS)** Adult Case Management, Juvenile Case Management, Subpoena Management, Online Reports and Court Case Number Management to meet the changing needs of users and to comply with legislative changes *by June 30, 2007*.



- Reinstigate the Department's **Business Intelligence** (data warehouse) initiative to consolidate/integrate databases, implement new hardware/software and redesign the Department's current data warehouse. The first project involves the consolidation of jury trials data and is targeted for completion *by December 31, 2006*.
- Convert existing administrative systems to new/updated software platforms. Also, complete programming *by December 2006* of the first module of the new **Employee Management System** that will replace the existing Employee Data and Information Tracking (E.D.I.T.) application.
- Continue to work with the Sheriff's Department, Superior Court, Probation and other County Departments as necessary to ensure **data transfer between justice systems, ongoing throughout the fiscal year**.
- Continue to work with ISAB and other criminal justice agencies on expanding the **LADOX** project to share documents and images, *ongoing throughout the fiscal year*.
- **Maintain and upgrade PC hardware and software** as appropriate to meet the changing needs of the office. Complete the upgrade of older PCs and operating system software for the Juvenile Offices *by June 30, 2007*.
- **Train department staff on new software and applications:**
  - Schedule and conduct in-house **training for attorney and support staff** as well as provide vouchers for outside training, *ongoing throughout the fiscal year*.
  - Provide **Systems Division Analyst/Programming staff** with additional training enhancing their ability to keep up with changing technologies and to work in a changing environment, *ongoing throughout the fiscal year*.
- Continue work on the Department's electronic **Active DA Case File Project**, finalizing technological solutions and beginning implementation of Project Plan elements *by October 2006*

#### 6.4.4 Fire Department (Fire)

##### Telecommunications and Network Initiatives

- Continue progress of several projects that will affect the bandwidth capacity. Because most of these projects are replacement systems to existing legacy systems, the net effect on bandwidth will not be clear until some of these projects have been implemented.
- Combine efforts of the Telecommunication Section and Information Management Division to study the feasibility of VoIP.
- Implement wireless networks in a pilot phase. Some of the administrative sites will receive wireless coverage to provide mobile access to end-users. The Department is also studying the feasibility of public sector only wireless frequencies.





### **Geographic Information Systems (GIS)**

- Upgrade the existing GIS infrastructure to ArcSDE, which will allow for more efficient storage of spatial information and will facilitate faster retrieval.
- Continue to make progress on the Department's Geofile Maintenance Program which is considered a mission critical system designed to keep current addressed-based digital street networks. Phase I of the program, the Geofile Editing System, will be completed in the FY 2005-2006. Phase II will be to register the digital base to a more precise base, such as the digital parcel layer. Once the street base is spatially accurate it then can be used in Automated Vehicle Location (AVL) systems.
- Continue to develop a new series of maps that reflect assessor tract and parcel subdivision.

### **Web-Based Applications**

- Replace legacy systems with Web-enabled solutions to keep in line with the Department's overall strategic plan. Existing *Web-enabled* applications include the Fire Records Management System (also known as NFIRS), the Warehouse Shopping Cart and the Warehouse Inventory Control System which is an off-the-shelf solution developed by MRO.

### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- Continue conversion of existing Novell/Groupwise systems to Windows Active Directory/Exchange systems. Part of that implementation is the installation of a new SANS system. Currently, the Department is evaluating several SANS units from HP and Dell.

### **FY 2006-2007 IT Objectives**

- ***Promote and sustain management and stakeholder involvement.***
  - Continue to work closely with Executive staff in the prioritization of IT initiatives, collaborating to ensure initiatives are aligned with Departments business and MAPP goals.
  - Implement Business Intelligence Tool – By *May 2007* implement the Microsoft Reporting service included in the MS SQL Server 2005.
- ***Support business needs.***
  - Infrastructure Migration:
    - » Complete migration study by *August 2006*
    - » Complete the implementation of Active Directory by *February 2007*
    - » Complete the implementation of Exchange by *February 2007*
  - Application Consolidation and Migration:
    - » Evaluate existing applications for commonality and functional consolidation by *August 2006*





- » Complete plan to normalize data *by December 2006*
- » Prioritize applications for migration and porting to new environment *by April 2007*
- GIS Mapping Upgrade:
  - » Complete the migration of GIS data to ArcSDE *by January 2007*
- “Performance Counts!”:
  - » Complete the research to determine the benefits of implementing an interim COTS solution to provide “Performance Counts!” data *by July 2006*
  - » Begin reporting “Performance Counts!” data utilizing the consolidated departmental data and business intelligence platform *by June 2007*
- Provide effective maintenance and support for existing applications:
  - » eDAPTS – Continue to work with the Department of Public Works, Department of Regional Planning, Office of Environmental Health (DHS) and the Chief Information Office on the enterprise-wide implementation issues.
  - » Warehouse Inventory and Bar Coding – Provide a recommendation for the implementation of a bar coding system to mitigate discrepancies with receiving, picking and issuing inventory *by January 2007*
  - » Identify legacy applications that share common functionality to be consolidated and ported to new infrastructure *by April 2007*
- **Implement solutions to staffing issues.**
  - Train staff in new IT technologies:
    - » Complete infrastructure training *by October 2006*
    - » Complete business analyst training *by August 2006*
    - » Complete developer training *by December 2006*
  - Consolidate all Departmental IT positions under Information Management Division:
    - » Obtain approval to consolidate IT positions independently performing IT function under the direction and leadership of the Information Management Division *by September 2006*
    - » Submit budget request to move positions to IMD organizational unit *by January 2007*
- **Implement Web-based services.**
  - Re-design the Department's intranet site for the purpose of distributing information in an efficient and independent manner. The goal is to allow users from various departmental sections the ability to post new information utilizing portal technology and standard content management systems (CMS). Currently users must submit information to the technical section of the department *by June 2007*.



- Provide the public with the ability to view maps that display incident related data such as fire perimeters and evacuation routes *by June 2007*.
- Complete the feasibility and benefits study related to providing the public to conduct business with the Fire Department via the Internet *by June 2007*. Utilizing eCommerce technology will provide the public with incident reports, payment of permits, and other fee collection.

### **6.4.5 Ombudsman**

#### **Web-Based Applications**

- Implemented the final component of the revised Web page which downloads the complaint information from the Website to the client tracking system in FY 2004-2005. The Website includes a page for the public to initiate a complaint concerning the Sheriff's Department, Office of Public Safety or any other County Department. The confidential nature of the Ombudsman's work limits the need for additional Web-based applications.

#### **FY 2006-2007 IT Objectives**

- Migrate 100% of the Department's desktops and E-mail/calendaring services to the Internal Services Department's Information Technology Shared Services Division (ITSSD) by June 30, 2007. The migration is a primary goal for FY 2006-2007 and will be achieved with the coordination and cooperation of ISD and the CIO.

### **6.4.6 Probation**

#### **Telecommunications and Network Initiatives**

- Implemented a number of large Web-based systems that generate significant network traffic. The new Enterprise Document Management System (EDMS) is a Web-based system workflow and document management system with over 1,000 users generating traffic on the Enterprise Network.
- Continue participation in the Information Systems Advisory Body's (ISAB) Video Conferencing project. In FY 2005-2006, the Department expanded the project to Juvenile Camps. Probation is interested in making video conferencing available at every departmental desktop.
- Utilize wireless technology for access to mainframe systems from desktop workstations and laptops. The Department has a major initiative to expand this service and provide increased Wide Area Network wireless access to their network and systems.



### **Geographic Information Systems (GIS)**

- Initiate a GIS project once the countywide strategy is adopted. The Department has a need to deploy GIS solutions for improved data analysis to better evaluate its service delivery model and effectiveness and enhance its resource allocation planning.

### **Web-Based Applications**

- Integrate all existing and new Probation applications into a single standards-based Web technology framework. Probation's Web-based information technology strategy focuses on the development of an **Enterprise Information Architecture based on Web technologies**.
- Enhance the Department's **Juvenile Caseload Management System (JCMS)**, a Web-based application. A new Web-based module has been added that allows Community Based Organizations to directly provide data to Probation. In regard to the adult Probation systems, the Department plans to consolidate two pretrial systems into a new Web-based application to improve system functionality, eliminate duplicate data entry, improve data sharing and reduce cost.
- Implement the same integration strategy for the Department's **adult Probation systems**. Probation plans to consolidate two pretrial systems into a new Web-based application to improve system functionality to the users, eliminate duplicate data entry, improve data sharing, and reduce costs. In addition, the Department plans to Web-enable their existing mainframe Adult Probation System (APS) to accomplish greater integration and data sharing with other departmental and County systems.
- Develop system interfaces between the **Probation Enterprise Document Management System (PEDMS)** and other departmental juvenile and adult systems. The development of PEDMS will provide a centralized repository of all criminal justice documents and related workflow functionality.
- Enhance data sharing with other county departments and agencies. Probation plans to implement **XML/Web Services** systems interface architecture. The Justice XML standards will be implemented in collaboration with the ISAB.
- Augmented **Probation's Website** to provide timely information to the community on departmental services including information for victims of crime, various community-based services available to juveniles, and departmental contact information.
- The Department's **intranet (ProbNet)** has improved communications and dissemination of information with many documents online including policies and procedures, directives and notifications, systems user manuals, personnel and payroll forms, training catalog and telephone directory.

### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- Probation is utilizing new storage technologies in a number of different areas and using Content Addressable Storage (CAS) technologies for its digital imaging and document



storage system. In addition, we are planning to implement a small SAN for a cold temporary backup site.

### **FY 2006-2007 IT Objectives**

- ***Application Projects:***

- Provide support to the new Web-based Probation Enterprise Document Management System (PEDMS) to serve as a centralized repository of all departmental criminal justice documents.
- Enhance the PEDMS system to support digital imaging functionality for archived files and replace the existing microfilm-based process.
- Initiate the expansion of the Probation Case Management System (PCMS) system to integrate adult case management functionality.
- Enhance the functionality of the departmental intranet (ProbNet) to improve information access and dissemination.
- Enhance the Department's Website to improve service delivery to the public and improve data sharing and collaboration with other County departments and community-based organizations.

- ***Infrastructure Projects:***

- Provide secure wireless Wide Area Network access to probation officers and support staff.
- Implement enterprise-wide measures to protect the integrity of the Department's data network and information systems assets. Continue to work with the County Information Security Officer to enhance the Department's information systems security architecture and develop an improved comprehensive data, systems, and network security model.

- ***Management & Planning Initiatives:***

- Update and maintain a dynamic Department-wide Information Technology Plan to ensure that systems required to satisfy the Department's current and future information processing needs are properly planned and budgeted.
- Conduct an evaluation of the Department's data center needs and develop a plan for strengthening security, uptime, reliability, disaster recovery, and service quality.
- Evaluate and initiate planning for utilizing business intelligence and data warehousing solutions to improve case planning, data analysis, decision making, and data reporting.
- Maintain and update the current Information Technology Training Plan that covers both technical and end-user training for departmental personnel and utilize Web-based training (both IT and business) to enhance workforce productivity and efficiency.
- Provide management of all development projects both in-house and those supported by contractor services.



- **Operations & Maintenance:**

- Manage and maintain Probation Department's data network from data center to each user's desktop and/or mobile device. Evaluate and plan for upgrading the Department's network and desktop operating systems.
- Provide timely support and maintenance services based on user requests for all systems in production. The Department is planning to implement a Call Tracking system, and is studying the feasibility of a Call Distribution System.
- Ensure acceptable service levels by monitoring and reviewing all help desk requests.

### **6.4.7 Public Defender (PD)**

#### **Telecommunications and Network Initiatives**

- Implement regionally placed back-up servers to save mission critical and other significant data for its 1,100 staff members located in 38 offices countywide, as resources allow.
- Participate in countywide VoIP committee meetings.
- Continue to augment PD's videoconferencing capabilities and added 1 unit this year for a total of 11 units, as resources allow.

#### **Web-Based Applications**

- Reviewed existing applications and determined that there are no opportunities to create Web front ends accessible to the public for these systems because of a need for attorney-client confidentiality.
- Created a Web page accessible to the public which resides on the ISD Internet server. The Department is currently working on enhancements that will further expand the pages of information accessible by the public.

#### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- Obtained Resource Advisory Group (RAG) approval for Department plans to implement a SAN. The proposed plan will be initiated as staffing allows.

#### **FY 2006-2007 IT Objectives**

- **Enhancement and Support of the Departmental Network:**

- Provide hardware and software maintenance for approximately 1,200 networked PCs at 38 locations countywide.
- Begin Zen Works enhancement effort next Fiscal Year with new servers and upgraded software.



- Determined that a more aggressive plan for the replacement of outdated systems is necessary, and an allocation of funds expressly for this purpose is needed. At a minimum, 25% of all machines should be upgraded annually.
- Continue implementation and enhancement of regional servers which are being used to back up PD staff data files and initiate migration to Microsoft server software.
- Work with ISAB to provide remote access to justice agency applications.
- **Enhance the Public Defender Internet Page on the ISD Internet Server** – Work with ISD technical staff to enhance the Department’s existing Web page located on the ISD Internet server that provides public access to the Department’s Mission, services provided, locations, phone numbers, etc.
- **Implement Video Conferencing** – Work in conjunction with ISAB to continue video conferencing implementation. Schedule of implementation to be determined by ISAB.
- **Enhance Legal Library Access** – Partner with ISAB to continue legal library enhancement. Schedule of implementation to be determined by ISAB.
- **Implement ERP for Administrative Services** – Perform CIO mandated ERP development work activities (for administrative work functions) per CIO schedule.

## 6.4.8 Office of Public Safety (OPS)

### Telecommunications and Network Initiatives

- Work with ISD to setup VPN access to OPS’ network infrastructure in FY 2006-2007. VPN access is critical in efforts to optimize response times to support calls.
- Evaluate the feasibility of installing VoIP technology at the Department’s new communications center. VoIP will offer the interoperability and flexibility needed to maximize existing communication capabilities.
- Plan for the introduction of video conferencing in the future. This will allow the Department to bring senior management from different site locations online to conduct staff meetings.
- Enhance Internet connectivity by employing wireless technology. The Department’s mobile command post currently has wireless capability; one standard midrange 802.11 access point allows field units to gain Internet connectivity via wireless access in cases of emergencies or standard operational drills.

### Storage Area Network (SAN)/Network-Attached Storage (NAS)

- Explore SAN options to electronically store large amounts of data needed for efficient records management. With development of an RMS, this will be a key area of focus during the next three fiscal years.





## **FY 2006-2007 IT Objectives**

- ***Collaborate with Los Angeles County Sheriff's Department to gain access to Sheriff's Data Network CAD System*** – At present LACOPS is utilizing a CAD developed on a pervasive SQL platform. Though this system has served its purpose, it lacks the functionality needed to distribute, store and retrieve data at the volume required to support the new consolidated LACOPS Dispatching Center. LACOPS has entered into negotiations with the LA County Sheriff's Department to gain access to the CAD system on the Sheriff's Data Network infrastructure; thus complying with LA County's strategic vision of an interoperable business model. The Department is in the contract development phase of this project and hope to be operational *by December 2006*.
- ***Asset/Inventory Management System*** – Comply with current LA County ICCP requirements by implementing an automated asset capturing solution to manage county procured assets. To achieve compliance, it is recommended that OPS seek to develop and implement an Asset/Inventory Management System *by April 2007*. Project kickoff will be scheduled *for August 2006*.
- ***Contract Monitoring System*** – Develop an automated business solution for the Contract Monitoring Unit to efficiently address operational needs and augment process. At present, Contract Monitors gather audit related data manually, entering very complex and confidential information via written annotations on hardcopy forms. Currently, the Information Systems Division has submitted an RFP to the ISD Information Technology Service Master Agreement (ITSMA) Division to engage a team of developers to address this data management need. Project kick off is scheduled *for December of 2005* and should be completed *by April of 2006*.
- ***Infrastructure Expansion Initiative*** – Continue efforts to expand the Department's logical infrastructure in FY 2006-2007. Phase I of this initiative has thus far included connectivity of 10 of the 26 Department of Public Social Services (DPSS) facilities. Next fiscal year OPS will continue efforts to gain connectivity to DHS and Mental Health Facilities.

## **6.4.9 Sheriff's Department**

### **Telecommunications and Network Initiatives**

- Implemented VoIP systems at several locations. Further implementation of VoIP is planned for the Communication & Fleet Management Bureau, Lakewood Sheriff's Station, and La Mirada Sub Station. All new Sheriff's facilities will be designed and equipped with VoIP technology (i.e., the new Palmdale and Lancaster Stations, as well as SEB location). All VoIP systems are installed and managed by DSB/SDN.
- Conduct research on TCP/IP video conferencing to minimize travel. The Department has formulated plans for automation of the Department's video library, and research is being conducted on Distance Learning programs, both with the objective of minimizing user travel.
- Deployed wireless LANs at all Sheriff Administration buildings and at all custody facilities.





### **Geographic Information Systems (GIS)**

- Implemented GIS for crime analysis including new full color, 11x17, Reporting District maps.
- Utilize GIS for the Law Enforcement Information Sharing (LEIS) program which includes: 1) geo-coding in data entry forms; 2) download of query results to a user specified file in an XML format; and 3) mapper and grapher for displaying information in an electronic pin map or bar chart.

### **Web-Based Applications**

- Employed web-based applications on the Sheriff's Data Network (SDN) to provide complete electronic mail (Microsoft Outlook) and Web services.
- Web-enabled Replicated AJIS (RAJIS) and Public AJIS (PAJIS), in-house developed applications.
- The Sheriff's Integrated Records Retrieval and Assembly System (SIRRAS) in cooperation with ISAB's Los Angeles Document and Object Exchange (LADOX) system promotes document and object management, exchange, and workflow within the Sheriff's Department and between County agencies.
- Plan for the future expansion of web-based applications. The countywide implementation of eHR and Materials Management System will be *Web-enabled* and will provide secured Internet and intranet access to the system by employees and the public.

### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- Implemented SAN solution at both Sheriff's Headquarters (SHQ) and the Norwalk Data Center (NDC). This solution was part of the Server Consolidation Project.
- Expand existing SAN solution to accommodate an increase in Superdome partitions, and may implement a NAS solution to address remote server requirements.

### **FY 2006-2007 IT Objectives**

- ***Develop an integrated law enforcement information repository and application suite that will provide seamless access to disparate data sources for the law enforcement community within Los Angeles County:***
  - Continue the development of the Deployment Operations Center (DOC) to enable the presentation of integrated law enforcement information from disparate systems to further the Sheriff Department's mission to prevent and solve crimes. Targeted for implementation *by June 2006*.
  - Continue, if funds are identified, to enhance the Dashboard with content from additional data sources deemed necessary to enhance operations or provide executive decision support.



- Implement the Incident Reporting Information System (IRIS) *by June 2006*. IRIS will provide multi-dimensional access to integrated crime incident information from multiple systems for investigative use by detectives, crime analysts, line officers, and the Terrorist Early Warning (TEW) group.
- Continue to support the Los Angeles County Police Chiefs Association sponsored Regional Terrorism Information and Integration System (RTIIS) project by contributing, at a time still to be determined, \$2 million toward the 14 million dollar project.
- ***Begin the shared channel infrastructure build out for the Los Angeles Regional Tactical Communications System (LARTC):***
  - Retain consultant to validate technology of LARTC final plan.
  - Write bid specifications for build out plan.
  - Release and award build out plan and contract to vendor.
  - Complete UHF and portion of VHF channels.
  - Compose and begin training of Department members in emergency communications.
- ***Improve the management of custody operations through the effective application of information technology:***
  - Complete the development and implementation of Title 15 and other Phase 1.5 components of the Jail Information Management System (JIMS) *by April 2007*.
  - Maintain and enhance the Jail Health Information System (JHIS), including the implementation of PACS and Telemedicine *during FY 2006-2007*.
  - Maintain and enhance all small Custody applications *during FY 2006-2007*.
  - Complete the development, implementation, and evaluation of the Active RFID pilot project *by June 2007*.
  - Develop and implement an Automated Food Services System (AFSS) *by June 2007*.
- ***Improve the operation and management of Court Services through the implementation of new technology solutions:***
  - Maintain the Modified Automated Accounting System (MAPAS). *Ongoing process for FY 2006-2007*.
  - Initiate ACES Phase 2 project through the RFP process to procure and customize a replacement system for MAPAS *during FY 2006-2007, if funded*.
- ***Improve and enhance the functionality and business process of Human Resources, Timekeeping, Position Management, General Accounting, Cost Accounting, Budgeting, Procurement, Inventory Control and Management, and Training Records:***
  - Implementation of HR and Material Management:
    - » Participate in County level project to implement Material Management *by November 2006*.



- » Participate in County level projects for HR system requirements *by June 2007*.
- Develop Data Warehouse, if funding is approved, to capture and maintain information related to time-and-attendance, labor costs and staffing, and provide distributed user interfaces into the data repository allowing direct access to and the analysis of a consistent, integrated data source. *Completed by June 2007, if funded.*
- **Consolidated Fire Sheriff's Communications Replacement Program, if funding is approved:**
  - Replace mobile data terminals in patrol cars with computers (*18 month time period from funding*).
  - Upgrade the existing communications infrastructure to provide enhanced communications between the Sheriff's Communication Center and the patrol cars in the field (*18 month time period from start of program*).
  - Provide law enforcement software to the patrol cars in the field so as to make available to field personnel the greater functionality and efficiency offered by today's technology (*18 month time period from start of program*).
  - Prepare a request for proposal based upon findings obtained in the feasibility study prepared by our consultants (*Based on delayed County time lines for program*).
- **Implement Document Management/Object Management/Work Flow Based Systems** utilizing "VisiFlow" Enabling Software. Initiate Phase II of the Sheriff's Integrated Records Retrieval and Assembly System (SIRRAS) which includes establishment of the contracts for extraction of report information from Sheriff's MICROFILM REELS, if funding is approved. Also, includes securing additional staff and hardware for RIB for MICROFILM conversion project. *Target completion date: December 2006.*
- **Continue development of biometric identification tools based on the Los Angeles County Regional Identification System AFIS (LAFIS):**
  - Implement "reverse" latent search capability *by 4<sup>th</sup> quarter of FY 2006-2007*.
  - Complete contract with Cogent Systems to provide a less than three minute response time on tenprint inquiries *by 3<sup>rd</sup> quarter of FY 2006-2007*.
- **Finish installation and complete enhancements to the Livescan system:**
  - Final equipment installation *by 1<sup>st</sup> quarter of FY 2006-2007*.
  - Non-criminal individual registration *by 2<sup>nd</sup> quarter of FY 2006-2007*.
  - "Coroner Registration" functionality *by 4<sup>th</sup> quarter of FY 2006-2007*.
- **Develop, Implement, and Maintain Medium to Small Scale Information Technology and Communications Programs and Projects that are significant to the Department:**
  - Migrate in-house developed Oracle applications from Client Server to a *Web-enabled architecture by December 2006*.



- Improve and enhance the Department's Evidence and Property management and tracking. Begin system development, procurement and/or customization process through a request for proposal/quote *by June 2007, if funded.*
- Improve and enhance the Department's Facilities Service management. Begin system procurement and customization process through a request for proposal *by June 2007, if funded.*
- Complete Application Tracking/Career Pathing and Specialized Position Search System (ATCP) *by March 2007.*
- **Maintain and Enhance the Sheriff Department's Information Technology Infrastructure:**
  - Continue to provide centralized systems administration, maintenance, management, and coordination of services for all of the Department's existing information systems housed in the Data Center or directly integrated with these systems.
    - » Extend HP's OpenView Command Theater implementation Department-wide in a phased and cost-effective approach. *Target date of completion: January 2007.*
    - » Increase the number of partitions on existing Superdome frame to accommodate an initial implementation of COPLink. *Target date of completion: December 2006.*
    - » If funding approved, complete the implementation of a hot-site for disaster recovery purposes *by June 2007.*
    - » If funding approved, implement an enterprise disk to disk backup operation along with database archiving *by June 2007.*
  - Maintain and enhance the Sheriff's network infrastructure and operations as part of the support for the Departments Systems - Continue to provide management, troubleshooting, maintenance, and coordination of network expansion services for all the Department's existing data networking requirements.
  - Maintain PC desktop and server support as part of the support for the Department's systems.
  - Enhance all security functions as part of the support for the Department's mission critical systems:
    - » Complete the development of an additional seven Information Technology Security policies *by September 2006.*
    - » Lead the implementation of new technologies to fight viruses, spam, and spyware *by August 2006.*
    - » Provide ongoing support in responding to security incidents and IT security investigations.



- **Maintain and enhance the Sheriff Department's wireless and telephone communication services as part of the ongoing support to the Department's operations:**
  - Telecom Maintenance Project:
    - » Improve and enhance the maintenance, management, and coordination services for all the Department's existing hard-wired telephone lines and infrastructure.
  - Wireless Communication Services:
    - » Continue to monitor cellular telephone expenses and service. Ongoing throughout the fiscal year.
    - » Continue to seek funding and support for a comprehensive, Department-wide, automated inventory system.

## 6.5 Recreation and Cultural Services IT Objectives

### 6.5.1 Beaches and Harbors

#### Telecommunications and Network Initiatives

- Implement a document imaging/management system for departmental use.

#### Geographic Information Systems (GIS)

- Utilize GIS to provide and analyze spatial information; e.g., distances, areas, locations, etc. for the beaches and the Marina. The GIS also is used to integrate and analyze newly acquired data on the Marina's seawalls. While the Department is not planning to develop and/or implement any GIS systems, there is some investigation of possibly using the Department of Regional Planning's GIS system for use by our Asset Management Division.

#### Web-Based Applications

- **Beach Use Permits** — Allows the public to submit applications for the use of County beaches.
- **Right of Entry** – Allows the public to submit applications for access to County property.
- **Department's Web Page** – Provides current information for users around the world. The site provides information for the County beach facilities and Marina Del Ray. The DBH Internet site received over 4 million hits in the last fiscal year.

#### Storage Area Network (SAN)/Network-Attached Storage (NAS)

- Employs Networked Attached Storage (NAS) technology for storage of graphics and legacy system data.



- Anticipate implementation of an entry-level SAN this fiscal year as storage needs expand and to maintain maximum flexibility for future upgrades.

### **FY 2006-2007 IT Objectives**

- Refresh older desktops, install and maintain Windows XP on desktops.
- Upgrade Microsoft Office Suite to the latest version.
- Begin the implementation of a Document Management System (DMS).
- Upgrade the technical level of all IS staff.

## **6.5.2 Parks and Recreation**

### **Telecommunications and Network Initiatives**

- Implement a VoIP system, pending the availability of funding and recommendations of equipment to purchase from the Voice over IP Architecture and Implementation Committee.
- Plan for future implementations. With the purchase and installation of a facility management application, and the implementation of exchange Web access for remote retrieval of E-mail, the Department plans to add access points only where needed and to use cellular wireless connectivity with ISD secure access VPN to access the information from most of our sites.

### **Geographic Information Systems (GIS)**

- Integrate the Department's new Website with the County's mapping/routing server to provide the locations and amenities of the Department's parks and facilities within a specified geographical area, including driving directions to the selected site. The Department is also implementing a geographic information system to accurately map and provide up-to-date information on County trails for hikers and other County departments.

### **Web-Based Applications**

- Focus efforts to **enhance the Department's Web presence**. The benefit to the public is another avenue to learn about the Department and the services it provides, such as recreational programs promoting healthy lifestyles, educational classes, sporting events, special events, and other useful information.
- Expand project to also include a **central reservations system** that will include facility reservation software and league-scheduling software, with a credit/debit card payment processing feature. This project is contingent upon available funding.
- Continue planning efforts to purchase a **facility management application** that would be both *Web-enabled* and have GIS functionality.





- Implement a **document imaging system** for document archival and retrieval. As part of this process, the Department plans to integrate public documents in the archival system into a Web-based application that will allow the public to access and print public files.

### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- Consider employing NAS for workgroup and remote office services and for the Department's document imaging project.

### **FY 2006-2007 IT Objectives**

- ***Extend LA Net to regional facilities, recreation district offices*** – Work with ISD and AT&T to complete installations of ten additional sites to LA Net *by June 30, 2007*.
- ***Provide Web-enabled services to the public:***
  - Complete Phase I of the Website Revision Project *by the end of February 2006*.
  - Apply for an Information Technology Funding (ITF) grant for Phase II of the Website Revision Project *by July 2006*,
- ***Continue the expansion and maintenance of the Internet Access Centers for the public*** – Add eleven additional sites, if funding is available, *by the end of June 2007*.
- ***Document Imaging:***
  - Complete installation and implementation of the document imaging software *by the end of February 2006*.
  - Complete staff training *by the end of December 2006*.
- ***Maintain new and existing systems:***
  - Continue replacement of old, antiquated computers and printers – Ongoing.
  - Continue to work with other departments for equipment donations to replace computers at the public Internet access centers and after school computer clubs – Ongoing.
- ***Intranet Website*** – Pilot the site to selected managers and staff for comments and site improvement recommendations *by March 2007*.
- ***Facility Management*** – Begin the bidding process for the Facility Management application (pending additional staff) *by the end of September 2006*.

## **6.5.3 Public Library**

### **Telecommunications and Network Initiatives**

- Implement a public access WiFi network at all 84 community libraries and add additional public access computers to support new homework centers at a number of locations. In





addition, the Department will utilize push technology for patch management software distribution for computers located at 87 facilities and expand the use of wireless technology. The Public Library is also offering public access to downloadable e-books and audio-books via the Department's Website. All of these programs will increase traffic on the County's data network.

- Equip five new library facilities and the Public Library Headquarters with VoIP telephone systems.
- Exploring the feasibility of using IP video conferencing to connect the Department's five regional libraries and administrative offices with Department headquarters. The Department plans to pilot IP video conferencing at two locations in FY 2006-2007.
- Begin to phase in public access wireless networks to accommodate customers who wish to use their personal laptops and other mobile computing devices to access the Internet and online library resources in FY 2005-2006. A secure network will also be established to accommodate staff use of wireless devices and staff from other County departments will be able access their networks from County libraries using a VPN connection.
- Pilot the use of satellite technology to provide bookmobile access to the Integrated Library System and the Internet in FY 2006-2007. Wide-area wireless access for the Public Library's three bookmobiles that serve the County's rural areas continues to be a challenge. Results from pilot projects using cellular, CDPD and GSM technology have been unsatisfactory.

### **Geographic Information Systems (GIS)**

- Implemented GIS using ArcView software to be used in the planning of new and expanded library facilities. The GIS includes Census demographic data and a wide variety of departmental statistical data. The system is utilized to map library services area boundaries and to conduct demographic analysis for the development of public service programs.
- Explore the feasibility and costs of adding aerial images of each library location to enhance the Department's GIS system to review potential sites for new libraries.

### **Web-Based Applications**

- **Web Catalog** — Upgrade the Library's catalog of materials which has been available as a Web-based application on the Internet since 1998. The ILS upgrade will provide additional functionality for the Web catalog including portal enabled access to online databases and other Library and County resources.
- **Photo Identification System** — Implemented a centralized *Web-enabled* photo identification system to allow the issuance of employee identification cards at Library headquarters and the five regional administrative office sites.
- **Internet Management** — Implemented an Internet Management software program which allows customers to make reservations, manages customer session time and printing, and allows parents to decide if their children's Internet sessions should be filtered. In FY 2006-



2007 the Department will explore the feasibility of providing customers with the ability to place computer reservations from home.

- **Service Center** — Enhance the Service Center help desk system used to record and track IT and facility maintenance help calls. The Department plans to expand the system through the use of a Web-based application which will provide end users the capability to search for a solution to problems in a knowledge database and submit/track trouble tickets.
- **Asset Center** — Utilize the Web-based Asset Center database system for inventory control. The system will provide end users on-line access to the inventory database.
- **Tutor.com** — Employ Web-based applications for the Tutor.com, a Web-based live homework help program which provides assistance to students in grades 4 -12 with their after school studies in English and Spanish. This Web base application is offered at all 84 community libraries and to students at home via the Public Library's Website.
- **Net-Library** — Offer customers downloadable e-books and audiobooks from the Department Website. The Department is considering adding additional titles to this popular service as funding permits.

### **Storage Area Network (SAN)/Network-Attached Storage (NAS)**

- Applied SAN/NAS technology exclusively as a backup/restore tool up to now. However, the Department's recovery process is limited to data residing on network servers. They are currently challenged with finding a solution that would allow for backing up all data from a user's workstation. The Department hopes to accomplish this with centralized workstation management combined with mirrored networked data storage.

### **FY 2006-2007 IT Objectives**

- **Integrated Library System (ILS) Replacement:**
  - Develop a comprehensive migration plan for the replacement of the Department's ILS with full implementation scheduled for FY 2007-2008.
  - Replace all remaining dumb terminals (314) and several hundred outdated Windows 2000 workstations with Windows XP workstations along with new peripherals such as barcode scanners and printers.
  - Analyze existing ILS databases for quality and standard compliance in preparation for data conversion for new system. Work with system vendor units to evaluate and correct noncompliant data. Develop a data conversion plan, conduct a test conversion and implement final conversion.
  - Conduct a comprehensive review of existing ILS policies and procedures. Compare with new ILS software and implement policy changes.
  - Develop an intranet Web page(s) to inform Department staff about ILS replacement status and key achievements. Explore using intranet for the main distribution of ILS policies and staff progress updates on the project.



- Develop a curriculum and plan to train IT staff and over 1,500 staff at 85 locations on the new ILS system.
- Acquire central site servers and coordinate installation at ISD's Downey Data Center.
- Author new public portal interfaces to Library data and other resources. Work to integrate search engines with Department's main Web page and retain uniform look and feel. Conduct preliminary acceptance test of the data conversion and system operability.
- Implement the new ILS.
- **Enhanced Library Website and Staff Intranet:**
  - Prepare design requirements for contract vendor, based on research into Web enhancement options and consultation with a group of end users.
  - Test and review re-designed Webpages; submit changes to contract vendor.
  - Inform staff and other end-users, and implement enhanced Website.
  - Research options to offer improved staff communications via an intranet platform.
  - Research federated searching features on the Library Website for improved customer satisfaction.
  - Begin process to migrate to a portal-based Website.
- **Fiscal Budget and Monitoring System:**
  - Hire an Applications Developer.
  - Continue development of the Budget and Expenditure Control System.
- **Service Center Enhancements for Staff Self-Service:**
  - Consult with ISD/ITS Service Center programming staff to determine options for customization of the Web pages for staff to enter and view their own tickets.
  - Test Webpages designed for Library ticket entry.
  - Consult with Library Public Services on procedures and workflow for staff entry of help Tickets.
  - Finalize procedures and implement the process.
- **Wireless:**
  - Continue implementation of the WiFi deployment at community libraries. Final installations will be completed in FY 2007-2008.
  - Explore the feasibility of using wireless PDAs to increase communications and productivity for field technical support staff and business communications.
  - Research the use of a satellite-based Internet access system to provide connectivity for bookmobile service in the County's rural areas.



- ***IT Customer Satisfaction Survey:***
  - Design and conduct a Web-based survey to measure community library satisfaction with IT support services.
- ***E-Commerce:***
  - Analyze the marketplace and select a vendor to provide public access print release stations and value-add cash/credit kiosks solution at 84 community libraries that is compatible with the Public Library's Internet Management System.
  - Submit printer and kiosk purchase order to ISD for approval.
  - Test vendor's printing interface with the Department's current print management system and verify compatibility with vendor's equipment and the County's e-Commerce solution.
  - Develop policies and procedures to implement paid public access computer printing and obtain Board approval.
  - Pilot e-account system and equipment at one library and make any required adjustments.
  - Develop an installation plan and complete system rollout at remaining 83 libraries.
- ***Document Management:***
  - Explore the feasibility of implementing a document management system that conforms to County standards.
- ***Information Systems Technology Planning for New Facilities:***
  - Review and update the County Library's Low Voltage Specifications Document which establishes the standards to be utilized in the design and construction of new library facilities.
  - Participate in IT planning and design for new County libraries to be constructed in the communities of Acton/Agua Dulce, La Crescenta, Lawndale, Topanga Canyon, West Hollywood and other projects as designated by the Board.
- ***Video Conferencing:***
  - Implement a pilot project using IP-based video conferencing to connect Department Headquarters in Downey with the Regional Administrative Office in Santa Clarita in order to increase staff productivity.



## **Appendix A. County IT Strategic Directions**



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## IT STRATEGIC DIRECTIONS

The following strategic goals are key statements of direction related to IT and its ability to serve as an enabler to meet the needs and goals of the County of Los Angeles. These strategic goals are intended to provide an environment in which the County can achieve its objective of high quality customer service. The goals are interrelated and meant to provide a cohesive approach to IT.

### **GOAL ONE: CONDUCT COUNTY GOVERNMENT ELECTRONICALLY**

The dramatic changes taking place in technology and in the marketplace clearly point to a future where government at all levels will need to be able to conduct business electronically. Information and services will need to be available to the general public and employees over the Internet and via telecommunications networks. Departments must continue to promote policies that will extend access to these services to citizens and employees.

#### **1. Strategy – Utilize electronic business technologies to reduce costs and improve service.**

- Adopt industry and regulatory standards for open systems computing based on the use of standards-based interfaces (e.g., Web Services and eXtensible Markup Language (XML)), Electronic Funds Transfer (EFT), electronic signatures, and Internet/intranet-based transactions. These standards will facilitate transacting business utilizing electronic means thus reducing cycle times and transaction costs.
- Establish requirements for business partners to exchange business transactions electronically. The electronic exchange of data will reduce paper processing and required inventory levels.

#### **2. Strategy – Promote use of electronic communication.**

- Maximize the use of electronic mail and workflow software to improve communication and improve service and accountability.
- Upgrade and/or implement premise LANs to conform to the County's Premise Network Standards to maximize inter-operability and manageability. The standards include a fiber optic backbone using gigabit Ethernet, Category 6 wiring, and switched 10/100 megabit to desktop.
- Use Internet/intranet for information access and dissemination, constituent services and business transactions. The Internet/intranet will be used to provide employees, citizens and business partners access to County information and also support conducting business with citizens on a 24 by 7 basis.
- Utilize Web technologies to expand access to County data.





## **GOAL TWO: PROVIDE SECURED ACCESS TO ELECTRONIC APPLICATIONS**

As the County moves its government online, it must develop comprehensive and dynamic security architecture to ensure confidentiality and security of information.

### **1. Strategy – Develop a countywide information privacy program to safeguard the management of sensitive and confidential information.**

- Review and assess efforts to identify and manage privacy concerns and the safeguards used to protect sensitive and confidential information.
- Ensure that only necessary and relevant information is collected, used, and disclosed in accordance with applicable laws, regulations and professional standards.

### **2. Strategy – Develop countywide security architecture (policies, procedures, and communication processes) and program to protect critical information assets and mitigate the impact of computer security incidents.**

- Establish countywide information security policies and procedures to promote best practices.
- Identify and train designated information security staff to support countywide security program.
- Foster departmental participation in countywide security initiatives and teams to manage and mitigate information security threats.
- Establish and conduct employee information security awareness training programs to promote and implement best practices.
- Establish a countywide business continuity program to ensure the availability of time-sensitive critical services/processes and assets in case of a major disaster or outage.

### **3. Strategy – Develop a technology infrastructure that provides secure data access to ensure confidentiality and security.**

- Develop a countywide security plan that includes public key infrastructure that utilizes digital signatures and key encryption for secure electronic transactions between citizens, businesses and employees of County government. This plan will adhere to industry standards and ensure regulatory compliance.
- Develop applications that will allow citizens and businesses to transact business securely with the County using digital signatures.
- Deploy network, server, and client technologies to detect, block and/or remediate security threats.



### **GOAL THREE: UTILIZE ENTERPRISE SOLUTIONS TO MEET COMMON NEEDS**

The Board of Supervisors has charged departments with the task of coordinating the delivery of related services and programs and information sharing. Departments must maximize opportunities for coordination and integration of IT initiatives that serve common business needs or clients. Many major business processes cross multiple department boundaries and savings can be realized by leveraging the County's IT resources.

#### **1. Strategy – Provide a high capacity, scalable, wide area network (WAN) that supports existing and planned applications.**

- Implement a single Internet Protocol (IP) WAN utilized by all County departments to provide ubiquitous access to information resources.
- Establish enterprise-wide network management support structure to ensure high availability, reliability, and maintainability. This structure will take advantage of economies of scale, maximize the utilization of very scarce technical resources, reduce training costs, and improve service delivery.

#### **2. Strategy – Ensure appropriate acquisition of IT systems, applications and services.**

- Promote procurement of technology goods and services in accordance with the County objective to leverage volume purchase and achieve economies of scale.
- Evaluate commercially available software, including integration of multiple packages, as an initial step in the business requirements process.
- Foster enterprise-wide licenses and volume purchase agreements for hardware, software and services. These enterprise-wide agreements will ensure compatibility, eliminate redundancy, reduce costs, and shorten purchasing cycle.
- Promote the use of browser-based applications as preferred application technology.
- Link IT budgets to the department's planning process. The department's BAP must link to its business plan.

#### **3. Strategy – Share technology resources.**

- Promote opportunities to consolidate data centers to achieve efficiencies and maximize scarce technical and management resources.
- Promote opportunities for an enterprise-wide LAN premise support structure to maintain and ensure high availability and reliability. This structure will take advantage of economies of scale, maximize the utilization of very scarce technical resources, reduce training costs, and improve service delivery.
- Develop strategies that enable and encourage resource sharing and promote opportunities for interoperability, reusability and portability. These standards will include the development methodologies and tools that promote resource sharing, shared training, and reduced support costs.



- Manage on-going costs by sharing support resources. Economies of scale will be employed to reduce support costs by sharing costly and limited support resources across departmental boundaries.
- Develop enterprise-wide processes to move data collection and validation to the source and reduce data duplication. Information should be shared and exchanged electronically to avoid transcribing and manual re-entry of data.

#### **GOAL FOUR: IMPROVE THE IT SKILLS OF THE COUNTY WORKFORCE**

The successful development and deployment of IT strategies, in an era of rapid technological obsolescence and scarce resources, requires a cadre of highly skilled IT professionals. Requisite skills and competencies must be identified to maintain, manage, and utilize IT programs, applications, and systems. In addition, structured training programs for employees should be developed to fully realize the benefits of IT investments.

##### **1. Strategy - Improve skills and competencies of County IT professionals.**

- Inventory of staff skill levels and knowledge to assess competencies in department functions and County strategic technologies.
- Develop training requirements to address required skill sets.
- Develop training strategies, plans and schedules to build competencies in identified skill sets.
- Measure training effectiveness and quality improvement.

##### **2. Strategy - Raise and maintain IT skill level of all County employees.**

- Inventory of employee skill levels and knowledge to assess competencies in end-user productivity tools (office automation/desktop applications such as word processing, spreadsheets, E-mail, etc.).
- Develop training requirements to address end-user needs.
- Develop training strategies, plans and schedules to build end-user skills with productivity tools.
- Measure training effectiveness and quality improvement.





## **Appendix B. Strategic IT Project Alignment Tables**



Alignment of Major IT Projects and County Strategic Goals	1. Service Excellence	2. Workforce Excellence	3. Organizational Effectiveness	4. Fiscal Responsibility	5. Children & Families	6. Community Services	7. Health	8. Public Safety
<b>1. Conduct County Government Electronically</b>								
<b>1.1. Utilize electronic business technologies to reduce costs and improve service</b>								
Electronic Commerce	X	X	X	X				
County Portal Rewrite	X		X					
Electronic Voting	X		X					
One-E-app	X	X	X	X	X		X	
Intelligent Traffic Systems (ITS)	X		X			X		
COGNOS Business Intelligence (BI) Projects	X	X	X	X				
Medical Passport	X	X	X		X		X	
<b>1.2. Promote use of electronic communication</b>								
Enterprise Content Management Strategy	X	X	X					
Los Angeles Document and Object eXchange (LADOX)	X	X	X					X
ISAB Service Oriented Architecture (SOA) & Web Services	X		X					X
Patient-related Electronic Document Imaging Management (PEDIM)	X	X	X	X	X		X	
Library Public Wireless Access	X	X	X		X			
Assessor Information Management System (AIMS)	X	X	X	X				
<b>2. Provide Secure Access to Electronic Applications</b>								
<b>2.1. Develop a countywide information privacy program</b>								
Secure Messaging	X	X	X	X	X	X	X	X
<b>2.2. Develop a countywide security architecture</b>								
Business Continuity Program (BCP)	X	X	X	X				
Privacy Legislation Compliance Program	X		X		X		X	
Information Security Awareness Program	X	X	X	X	X	X	X	X
Computer Security Incident Response Process	X	X	X	X	X	X	X	X
Application Security Guidelines	X	X	X	X	X	X	X	X
Vulnerability Assessment	X	X	X	X			X	
<b>2.3. Develop a technology infrastructure that provides secure data access</b>								
Mobile Device Information Protection Program	X	X	X					
Orange County Disaster Recovery Site	X	X	X	X				
Internet Content Filtering	X	X	X	X	X	X	X	X
<b>3. Utilize Enterprise Solutions to Meet Common Needs</b>								
<b>3.1. Provide a high capacity, scalable, wide area network (WAN)</b>								
Enterprise Network Expansion - New Carrier Agreement RFP	X		X	X				
Converged Technologies - VOIP initiatives, Video Conferencing over IP	X	X	X	X				X
Wireless Computing - Wireless LANs	X	X	X					
<b>3.2. Ensure appropriate acquisition of IT systems, applications and services</b>								
Enterprise Licenses & Service Agreements	X	X	X	X				
IT Governance Initiatives	X	X	X	X				
<b>3.3. Share technology resources</b>								
eCAPS Phase I & II	X	X	X	X				
Countywide Addresss Matching System (CAMS)	X	X	X	X				
GIS Enterprise Repository	X	X	X	X				
Los Angeles Region - Imagery Acquisition Program (LAR-IAP)	X	X	X	X		X		
Business Intelligence (BI) Enterprise Reporting Infrastructure	X	X	X	X				
County Data Center	X	X	X	X				
IT Shared Services (ITSS)	X	X	X	X				
Sheriff/Fire/Office of Public Safety Mobile Data Communications	X	X	X	X		X		X
DHS Ancillary Standardization	X	X	X				X	
DHS Healthcare Information System	X	X	X				X	
Sheriff Jail Health Information System (JHIS) Telemedicine	X	X	X	X			X	X
<b>4. Improve the IT Skills of the County Workforce</b>								
<b>4.1. Improve skills and competencies of County IT professionals</b>								
Enterprise e-Learning System	X	X	X					
<b>4.2. Raise and maintain IT skill level of all County employees</b>								
<b>COUNT</b>	<b>40</b>	<b>34</b>	<b>40</b>	<b>26</b>	<b>10</b>	<b>8</b>	<b>13</b>	<b>10</b>



### Alignment of Major IT Projects and Local Government Strategic IT Trends

IT Focus Area	Applications				Infrastructure				Service Delivery			Governance		
	Customer Relationship Management	Integrated Land Information	Field Automation	eGovernment	Enterprise Content Management	Intranet	Municipal WiFi	Server Consolidation	Network Technology Convergence	Support Consolidation	Pay Anywhere	Regionalization	Enterprise IT Standards/Processes	Centralized/Standardized IT Procurement
<b>1. Conduct County Government Electronically</b>														
<b>1.1. Utilize electronic business technologies to reduce costs and improve service</b>														
Electronic Commerce				X										
County Portal Rewrite	X			X										
Electronic Voting				X										
One-E-app	X			X								X		
Intelligent Traffic Systems (ITS)				X								X		
COGNOS Business Intelligence (BI) Projects														
Medical Passport			X	X								X		
<b>1.2. Promote use of electronic communication</b>														
Enterprise Content Management Strategy					X									
Los Angeles Document and Object eXchange (LADOX)					X							X		
ISAB Service Oriented Architecture (SOA) & Web Services						X								
Patient-related Electronic Document Imaging Management (PEDIM)			X	X	X									
Library Public Wireless Access			X	X			X			X				
Assessor Information Management System (AIMS)			X											
<b>2. Provide Secure Access to Electronic Applications</b>														
<b>2.1. Develop a countywide information privacy program</b>														
Secure Messaging														
<b>2.2. Develop a countywide security architecture</b>														
Business Continuity Program (BCP)														
Privacy Legislation Compliance Program														
Information Security Awareness Program														X
Computer Security Incident Response Process														X
Application Security Guidelines														X
Vulnerability Assessment														X
<b>2.3. Develop a technology infrastructure that provides secure data access</b>														
Mobile Device Information Protection Program														X
Orange County Disaster Recovery Site												X		
Internet Content Filtering														
<b>3. Utilize Enterprise Solutions to Meet Common Needs</b>														
<b>3.1. Provide a high capacity, scaleable, wide area network (WAN)</b>														
Enterprise Network Expansion - New Carrier Agreement RFP								X						X
Converged Technologies - VOIP initiatives, Video Conferencing over IP								X						
Wireless Computing - Wireless LANs			X											
<b>3.2. Ensure appropriate acquisition of IT systems, applications and services</b>														
Enterprise Licenses & Service Agreements														X
IT Governance Initiatives														X
<b>3.3. Share technology resources</b>														
eCAPS Phase I & II														
Countywide Addresss Matching System (CAMS)		X					X							
GIS Enterprise Repository		X		X			X		X					X
Los Angeles Region - Imagery Acquisition Program (LAR-IAP)		X									X			
Business Intelligence (BI) Enterprise Reporting Infrastructure							X							X
County Data Center							X		X					
IT Shared Services (ITSS)									X					
Sheriff/Fire/Office of Public Safety Mobile Data Communications			X						X		X			
DHS Ancillary Standardization														
DHS Healthcare Information System			X	X										
Sheriff Jail Health Information System (JHIS) Telemedicine								X						
<b>4. Improve the IT Skills of the County Workforce</b>														
<b>4.1. Improve skills and competencies of County IT professionals</b>														
Enterprise e-Learning System														
<b>4.2. Raise and maintain IT skill level of all County employees</b>														
<b>COUNT</b>	<b>2</b>	<b>3</b>	<b>7</b>	<b>8</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>4</b>	<b>1</b>	<b>7</b>	<b>8</b>	<b>2</b>





Major IT Project Graphic Summary	Primary Users			Participating Departments							Project Status		
	County	Other Agency	Public	Enterprise	Central Support	General Gov't	Human Services	Public Protection	Rec. & Cultural	Departmental	Completed	Ongoing	Initiated FY06-07
<b>1. Conduct County Government Electronically</b>													
<b>1.1. Utilize electronic business technologies to reduce costs and improve service</b>													
Electronic Commerce			X	X							X		
County Portal Rewrite			X	X								X	
Electronic Voting			X						X		X		
One-E-app	X	X	X				X				X	X	
Intelligent Traffic Systems (ITS)	X	X	X						X		X		
COGNOS Business Intelligence (BI) Projects	X			X								X	
Medical Passport	X	X					X					X	
<b>1.2. Promote use of electronic communication</b>													
Enterprise Content Management Strategy	X	X	X	X								X	
Los Angeles Document and Object eXchange (LADOX)	X	X						X				X	
ISAB Service Oriented Architecture (SOA) & Web Services	X	X					X					X	
Patient-related Electronic Document Imaging Management (PEDIM)	X								X			X	
Library Public Wireless Access	X		X						X			X	
Assessor Information Management System (AIMS)	X								X				X
<b>2. Provide Secure Access to Electronic Applications</b>													
<b>2.1. Develop a countywide information privacy program</b>													
Secure Messaging	X	X		X									X
<b>2.2. Develop a countywide security architecture</b>													
Business Continuity Program (BCP)	X			X									X
Privacy Legislation Compliance Program	X	X		X									X
Information Security Awareness Program	X			X									X
Computer Security Incident Response Process	X			X									X
Application Security Guidelines	X			X									X
Vulnerability Assessment	X			X									X
<b>2.3. Develop a technology infrastructure that provides secure data access</b>													
Mobile Device Information Protection Program	X			X									X
Orange County Disaster Recovery Site	X			X									X
Internet Content Filtering	X			X									X
<b>3. Utilize Enterprise Solutions to Meet Common Needs</b>													
<b>3.1. Provide a high capacity, scaleable, wide area network (WAN)</b>													
Enterprise Network Expansion - New Carrier Agreement RFP	X			X									X
Converged Technologies - VOIP initiatives, Video Conferencing over IP	X			X									X
Wireless Computing - Wireless LANs	X			X									X
<b>3.2. Ensure appropriate acquisition of IT systems, applications and services</b>													
Enterprise Licenses & Service Agreements	X			X									X
IT Governance Initiatives	X			X									X
<b>3.3. Share technology resources</b>													
eCAPS Phase I & II	X	X		X							X	X	
Countywide Address Matching System (CAMS)	X	X		X									X
GIS Enterprise Repository	X			X									X
Los Angeles Region - Imagery Acquisition Program (LAR-IAP)	X	X		X									X
Business Intelligence (BI) Enterprise Reporting Infrastructure	X			X							X		
County Data Center	X	X		X									X
IT Shared Services (ITSS)	X			X									X
Sheriff/Fire/Office of Public Safety Mobile Data Communications	X	X						X					X
DHS Ancillary Standardization	X								X				X
DHS Healthcare Information System	X								X				X
Sheriff Jail Health Information System (JHIS) Telemedicine	X								X				X
<b>4. Improve the IT Skills of the County Workforce</b>													
<b>4.1. Improve skills and competencies of County IT professionals</b>													
Enterprise e-Learning System	X			X									X
<b>4.2. Raise and maintain IT skill level of all County employees</b>													
<b>COUNT</b>	<b>37</b>	<b>13</b>	<b>7</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>8</b>	<b>4</b>	<b>36</b>	<b>2</b>



## **Appendix C. Preferred Enterprise IT Standards and Recommendations**



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**County of Los Angeles Preferred Enterprise IT Standards/Recommendations**  
Release 4.0 - 2006

<b>Operating Systems</b>	
Client Operating System	Windows XP SP2 or later
Enterprise Server operating system	Windows Server 2003 SP1 or later
Mid-Range/Department	AIX, HP- UX, Linux
<b>Networks</b>	
WAN	Enterprise Network, LANet
LAN	Microsoft Network
WAN/LAN Infrastructure	Cisco and TCP/IP
Wireless LAN	Cisco 802.11g
<b>Security</b>	
Antivirus	Symantec, McAfee
Patch Management	PatchLink and Altiris
Antispam	Symantec Brightmail
Network Firewall	Cisco PIX Firewalls
Desktop Firewall	MS Windows Firewall
Network Intrusion Detection and Prevention	Cisco Network Intrusion
Host Intrusion Protection	Cisco CSA and McAfee Enterecept
Internet Filtering	BlueCoat
Secure File Exchange	McAfee eBusiness Server
Vulnerability Assessment	McAfee Foundstone
<b>Remote Access</b>	
Remote Access	Enterprise Network VPN, MS Outlook Web Access
Two factor Authentication	RSA SecurID
<b>Desktop Management</b>	
Directory Services	MS Active Directory
Desktop Configuration Management	Altiris, MS System Center
Desktop Firewall	MS Windows Firewall.
<b>Office Productivity Software</b>	
Desktop Office Suite	MS Office 2003 or later
Word Processing	MS Word 2003 or later
Spreadsheet	MS Excel 2003 or later
E-mail	MS Outlook/Exchange 2003 or later
Presentation software	MS PowerPoint 2003 or later
PDF	Adobe Acrobat Professional
<b>Web Browser and Content</b>	
Browser	MS Internet Explorer 6 on Windows XP SP2 or later
Web Content Management	Revised standard to be established
Portal Software	Revised standard to be established
<i>Electronic Signature</i>	<i>Standard to be established</i>
<i>Digital Certificates</i>	<i>Standard to be established</i>



<b>Databases and Reporting</b>	
Database Architecture	SQL compliant
Database software	Oracle and MS SQL Server
Ad hoc Report Writer - Business Intelligence	COGNOS Business Intelligence Product Suite
<b>Applications</b>	
GIS	ESRI Arc Tools
Document Management	See ECM Strategy