



Stephen Hall
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Mission Statement

The Information Services Department provides contemporary, innovative, secure, and accessible technology in computer, media, and communication services in the most cost effective manner, enabling departments and agencies to accomplish the mission of San Bernardino County.



GOALS

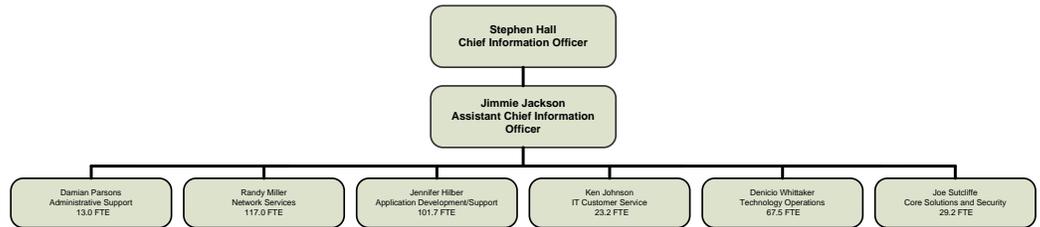
PROVIDE TECHNOLOGY SOLUTIONS THAT ENABLE DEPARTMENTS TO BETTER SERVE COUNTY RESIDENTS

IMPROVE CUSTOMER SATISFACTION BY DELIVERING PRODUCTS AND SERVICES THAT EXCEED EXPECTATIONS

IMPROVE TELECOMMUNICATION & DATA TRANSMISSION CAPABILITIES TO BETTER RESPOND TO EMERGENCIES AND DISASTERS

INFORMATION SERVICES

ORGANIZATIONAL CHART



DESCRIPTION OF MAJOR SERVICES

The Information Services Department (ISD) provides service in the following major areas. Each division plays an intricate role in supporting county departments to provide services that promote health, safety, well-being and quality of life for residents.

Network Services provides design, operation, maintenance and administration of the largest county-operated telecommunications phone network in the country; the county's Regional Public Safety Radio System that integrates all countywide sheriff, police and fire emergency radio dispatch capabilities; the paging system that consists of over 7,000 pagers; and the Wide Area Network (WAN) that securely joins approximately 18,000 county users for efficient use of technology.

Application Development and Support provides support for county departments as they develop, enhance, and maintain business applications on a variety of hardware and software platforms. These applications include the county's enterprise accounting, payroll, budget, personnel, document imaging, public web sites, geographical information, and many other business systems. **IT Customer Service** assists departments in achieving their technology and business objectives. The division provides a Technology Support Center to manage service requests/problem tickets and a multimedia services group to support audio/visual and multimedia business needs.

Technology Operations provides design, operation, maintenance and administration of the county's enterprise data center which supports the mainframe and includes server management for over 221 servers, integrated document imaging infrastructure, and print operations for bulk printing functions. **Core Solutions and Security** provides the county with global email, security direction, technology policies and procedures, and technical services that support desktop communications and functions countywide. The **Administrative and Fiscal** division supports all divisions by providing consolidated financial management through budget development and administration; service rate development; contract management; and accounts payable/receivable.

2007-08 SUMMARY OF BUDGET UNITS

	Operating Exp/ Appropriation	Revenue	Local Cost	Revenue Over/ (Under) Exp	Staffing
General Fund					
Application Development	16,791,086	4,693,984	12,097,102		107.5
Total General Fund	16,791,086	4,693,984	12,097,102		107.5
Internal Service Funds					
Computer Operations	19,939,665	21,610,442		1,670,777	134.1
Network Services	23,957,594	24,518,025		560,431	118.0
800 MHz - Rebanding Project	25,000	25,000		-	-
Total Internal Service Funds	43,922,259	46,153,467		2,231,208	252.1
Total - All Funds	60,713,345	50,847,451	12,097,102	2,231,208	359.6

GOALS, OBJECTIVES, AND PERFORMANCE MEASURES

GOAL 1: PROVIDE TECHNOLOGY SOLUTIONS THAT ENABLE CUSTOMERS TO BETTER SERVE THE CITIZENS OF THE COUNTY

Objective A: Provide countywide services enabling departments and their applications to communicate efficiently and effectively.

Objective B: Assist departments in identifying and implementing cost effective business solutions.

Objective C: Deliver innovative 800 MHz Radio communications solutions including design, configuration, implementation, and ongoing maintenance by moving 800 MHz Radio systems hardware and software to a vendor supported platform.

Objective D: Build and sustain a robust hardware and software support infrastructure to deploy countywide technology solutions.

Objective E: Make more efficient use of the county owned network to reduce telecommunication costs.

Objective F: Implement WAN backbone redesign to increase capacity for additional throughput and redundancy.

MEASUREMENT	2005-06 Actual	2006-07 Actual	2007-08 Target	2007-08 Estimate	2008-09 Target
1A. Complete migration of ISD user accounts to Active Directory and offer Active Directory to other county departments.	75%	100%	N/A	N/A	N/A
Complete Migration of ISD customer departments in Active Directory to Microsoft Exchange 2003.	20%	100%	100%	N/A	N/A
1B. Percentage of customers requesting application upgrades deployed that are compatible with Windows Vista and Microsoft Office 2007.	N/A	N/A	100%	100%	N/A
1C. Percentage of 800 MHz site controllers moved to digital capable, vendor supported platform.	N/A	N/A	50%	25%	N/A
Percentage of total projected RED radios online (1200 red channel radios)	10%	100%	N/A	N/A	N/A
1D. Percentage decrease of Windows physical servers. (150 servers in 2005-06)	N/A	13%	20%	20%	N/A
Percentage of all physical servers virtualized.	N/A	N/A	New	8%	8%
1E. Percentage of Internet Protocol (IP) based connections established for telephone usage between the county's main telephone locations.	N/A	10%	100%	100%	N/A
Percentage of IP based connections established for telephone usage between county's main telephone locations and outlying areas.	N/A	N/A	50%	20%	75%
1F. Percentage of network reconfigured to fully utilize new link and bandwidth.	N/A	N/A	75%	10%	N/A
Implement phased WAN backbone redesign to increase throughput capacity and redundancy.	N/A	N/A	N/A	N/A	50%

2006-07 ACCOMPLISHMENTS

- ❖ Implemented wireless crash cart to establish data transmission at FELAC-Fire Emergency Local Agency Center



FELAC Support

- ❖ Provided State of Louisiana with version of the Coroner's case management system after Hurricane Katrina
- ❖ Assessment of the Economic Development Agency's information technology infrastructure
- ❖ Installation of radio site to improve coverage in Lower Desert
- ❖ Replacement of both enterprise printers
- ❖ Installation of phones, wireless microwave connectivity, WAN bandwidth, & 800 MHz radio infrastructure at 303 Third St. facility
- ❖ Replacement of two microwave links to improve capacity to relay emergency calls between dispatch centers and field officers
- ❖ Received National Association of Counties award for modernizing Jail Information Mgmt System Web Front End used to process and manage inmates

Status

- 1A. The ISD business plan continues to focus on keeping the county up-to-date with supported platforms and systems security. The department successfully achieved objective 1A, as all 315 user accounts were migrated to Active Directory in 2006-07. The Active Directory allows ISD to assign policies, deploy software, and apply critical updates to Windows based computers. In addition, all ISD customers who were in Active Directory at the start of 2007-08 have been migrated to the latest Microsoft Exchange environment. This migration will enable these customers to fully utilize product features consisting of electronic mail, calendaring, contacts and tasks, and support for mobile and web-based access to information, as well as data storage. In 2008-09, ISD intends to initiate processes to upgrade from Active Directory 2003 to Active Directory/Server 2008 and from the Exchange 2003 environment to Exchange 2007 contingent upon Microsoft's release of these products. The future migration of customers to these newer platforms will be dependent upon ISD conducting a suitability assessment of their applications to run on these platforms. This upgrade will enable ISD to maintain vendor supported platforms and facilitate the migration to Windows Vista operating systems and new releases of Microsoft Office. Migrating to these new platforms will not result in additional costs.
- 1B. The Application Development division continues to consult with customers to identify cost effective ways of conducting business from an information technology perspective, including cost analysis and recommendations for the acquisition and integration of new systems. As a result, 100% of customer requested application upgrades in 2007-08 will be compatible with Windows Vista and Microsoft Office 2007. This will enable departments to continue to move to newer, supported operating platforms and software in a timely manner, reducing costs associated with non-supported platforms and software.

As part of ISD's efforts to deploy countywide technology solutions, the Application Development division will implement a pilot application that demonstrates capabilities and identifies standards for the development and optimization of website applications on mobile devices, resulting in more effective utilization of mobile devices.

In addition, the division will implement a pilot project that will demonstrate capabilities and identify standards for the development and optimization of an enterprise Microsoft Office SharePoint Server solution. This application is utilized to facilitate collaboration, provide content management features, implement business processes, and supply access to information that is essential to organizational goals and processes. It can be used to quickly create SharePoint sites that support specific content publishing, content management, records management, or business intelligence needs. It facilitates effective searches for documents and data, participates in forms-driven business processes, and is able to access and analyze large amounts of business data. This project will enable ISD to determine the best enterprise-wide strategies for deploying the SharePoint solution.

- 1C. The Network Services division has replaced 25% of the 800 MHz site controllers with digital capable and vendor supported controllers. This project is currently under review pending a consultant study of the entire radio system replacement/upgrade. ISD will submit revised performance measures regarding the 800 MHz radio system in subsequent business plans based on recommendations resulting from the consultant study. In 2006-07, all 1,200 red channel radios were deployed.
- 1D. To meet the objective of building and sustaining a robust hardware and software support infrastructure to deploy countywide technology solutions, ISD will continue utilization of server virtualization technology for server consolidation. Virtualization technology enables a single physical resource, such as a server, to appear to function as multiple servers. The benefit of virtualization is a decrease in costs associated with server maintenance and staff support. The decision to obtain physical servers is not controlled by ISD, therefore the actual number of physical servers changes regularly. As a result, the department is replacing performance measurement 1D "Percentage decrease of Windows physical servers" with the following "Percentage of all physical servers virtualized." ISD will develop a business practice to review all new server requests for the potential to be virtualized and make recommendations to customers accordingly. There is no additional cost associated with continuing virtualization technology.
- 1E. ISD expects to meet performance measure 1E by establishing 100% of Internet Protocol (IP) based connections established for telephone usage between the county's main telephone locations in 2007-08. However, due to increased requests from county departments for unplanned telephone related projects, ISD anticipates completing only 20% of the "Percentage of IP based connections established for telephone usage between county's main telephone locations and outlying areas" performance measure. The department expects to establish the remaining IP connections to outlying locations in 2008-09. The estimated cost increase over current year spending to establish these remaining IP connections is \$100,000 and will be funded by the dialtone rate.

1F. Demand for WAN bandwidth continues to increase resulting from: increased deployment of web-based applications and the need to remotely back-up data; desires to increase public access to information via offering multimedia content over the internet; and ISD's implementation of an alternative disaster recovery site. The Network Services division conducted an analysis to identify a solution for the current bandwidth capacity issues and to allow for growth. This analysis resulted in recommendations for a WAN backbone redesign to more efficiently utilize bandwidth throughout the county. ISD is replacing the 2007-08 objectives to "Develop a high-capacity alternate route between the San Bernardino Valley and the High Desert to accommodate high-speed data traffic" and "Percentage of network reconfigured to fully utilize new link and bandwidth" performance measurement with "Implement WAN backbone redesign to increase capacity for additional throughput and redundancy." The previous objectives will be subcomponents of the new objective and thus will be realized when the WAN redesign project is completed in 2009-10. The estimated one-time cost to implement the WAN redesign is \$740,000. Ongoing costs are estimated at approximately \$720,000 per year. These costs are comprised of new telephone company circuit costs and new hardware to replace end-of-life network hardware.

In addition to the redesign of the WAN, ISD has begun a formal review of how multimedia content will be delivered across the WAN. This review will lead to the development of policies to guide departments desiring to disseminate multimedia content across the WAN.

In 2007-08, the Network Services division will deploy enterprise wireless solutions to allow centralized monitoring of wireless access points throughout the county. The benefit of implementing this technology is that it will enable the department to readily provide wireless connectivity to requesting customers and provide better security capabilities for wireless access points. The estimated cost for hardware is \$45,000 and will be funded through the WAN rate.

GOAL 2: IMPROVE CUSTOMER SATISFACTION BY DELIVERING BUSINESS PRODUCTS AND SERVICES THAT EXCEED CUSTOMER EXPECTATIONS

Objective A: Improve business processes to meet customer product and service expectations and inform departments of ISD's products and services.

Objective B: Create an understandable funding/billing plan.

Objective C: Redeploy existing resources to improve the success rate of applications deployed to production.

MEASUREMENT	2005-06 Actual	2006-07 Actual	2007-08 Target	2007-08 Estimate	2008-09 Target
2A. Satisfaction rating from random product and service satisfaction surveys.	N/A	0%	75%	75%	75%
2B. Satisfaction rating from yearly billing satisfaction surveys.	N/A	N/A	75%	75%	75%
Evaluate new rate metrics for WAN and circuit related cost recovery.	N/A	N/A	N/A	N/A	100%
2C. Success rate of applications deployed to production after review by quality assurance.	N/A	N/A	98%	98%	99%

Status

To meet the goal of improving customer satisfaction by delivering products and services that exceed expectations, ISD is continuing to survey its customers to obtain feedback and make adjustments in its business processes as necessary. Survey results for the first quarter of 2007-08 indicate that ISD should meet its estimated 75% satisfaction rating.

As part of the implementation of the new internal IT Operational Support System, the Administrative and Fiscal division is in the process of developing easy to understand billing statements and invoices for customers. The division has developed a survey to obtain a baseline satisfaction level regarding billing processes by which future performance can be compared. Survey feedback will be incorporated into the design of new billing statements and invoices. Survey results for the first quarter of 2007-08 indicate that ISD should meet its anticipated 75% satisfaction rating for this area.

The 2007-08 objective to reorganize ISD to provide better service has been eliminated as this is an ongoing effort and changes are implemented regularly to improve efficiency and overall service.

In addition, ISD is continuing to review its cost recovery methodologies to improve service rate accuracy. The department is evaluating new metrics by which the cost for utilization of WAN and circuits can be recovered. The new metrics are designed to recover costs for these services based on actual usage, as opposed to billing for these services based on the number of email accounts held by a customer. The resulting benefit is that costs will be more accurately recovered and departments will be inclined to monitor their usage due to potential financial impact. In addition, this approach may mitigate the bandwidth capacity issues across the WAN. ISD will present the new metrics and impacts to the County Administrative Office in 2007-08 to determine implementation feasibility and timeline.

ISD continues to focus on improving business processes and service expectations. The department is implementing policies and procedures to enable specific Application Development teams to utilize the newly created Quality Control unit. By utilizing this unit to review applications prior to implementation, Application Development programmers can avoid duplication of effort resulting in greater efficiency. The main function of the Quality Control unit is to test and debug applications prior to their deployment, minimizing issues and costs associated with deploying new applications. ISD anticipates 98% success rate for all applications reviewed by the Quality Control unit in 2007-08.

GOAL 3: IMPROVE TELECOMMUNICATION AND DATA TRANSMISSION CAPABILITIES TO RESPOND TO EMERGENCIES AND DISASTERS

Objective A: To obtain and implement a mobile disaster recovery unit with telephone and data transmission capabilities to be utilized in emergencies.

Objective B: To increase the 911 calling line identification accuracy at 22 county campuses.

MEASUREMENT	2005-06 Actual	2006-07 Actual	2007-08 Target	2007-08 Estimate	2008-09 Target
3A. Implementation of a mobile disaster recovery unit.	N/A	N/A	N/A	N/A	100%
3B. Implement enhanced 911 calling line identification software and hardware.	N/A	N/A	N/A	N/A	100%

Status

Due to the recent fire emergencies in the county, and those over the past several years, ISD has identified the need to rapidly deploy communication infrastructures to support county emergency services and facilitate the ability of other county, state, and federal agencies to administer services. The estimated cost for the mobile unit, electronic hardware and software components is \$180,000 and will be funded via the WAN and dialtone rates.

ISD intends to implement enhanced 911 calling line identification to the county's 22 campus telephone environments. This will enable dispatchers to accurately pinpoint where emergency callers are located, improving emergency response times at these locations. The estimated cost of implementing enhanced 911 software and hardware is \$120,000 and will be funded through the dialtone rate.



ISD Help Desk



ISD Help Desk



ISD Product Support

APPROVED ADDITIONAL GENERAL FUND FINANCING (POLICY ITEMS)

Brief Description of Policy Item	Budgeted Staffing	Appropriation	Dept. Revenue	Local Cost
1. In 2006-07, the department received 2.0 additional positions and \$475,155 in ongoing general fund financing to support the enhanced functionality of the new Geographic Information System (GIS). In 2007-08, the department received \$85,000 in ongoing funding to support GIS.	2.0	560,155	-	560,155
2. In 2006-07, the department received \$95,997 in ongoing general fund financing for the addition of 1.0 Programmer Analyst III to support the Employee Management and Compensation System (EMACS).	1.0	95,997	-	95,997
3. In 2007-08, the department received \$758,723 in one-time, and \$143,311 in ongoing funding for the design and implementation of an off-site disaster recovery system.	-	902,034	-	902,034
4. In 2007-08, the department received 1.0 position and \$65,711 in ongoing general fund financing to enhance multi-media services to facilitate public access to information.	1.0	65,711	-	65,711

MEASUREMENT	2005-06 Actual	2006-07 Actual	2007-08 Target	2007-08 Estimate	2008-09 Target
P1. Percentage of data conversion from the existing coverage format to the latest Spatial Database Engine format that has been completed.	N/A	75%	75%	100%	N/A
Percentage of applications upgraded to newest ESRI software platform. (currently 30)	N/A	N/A	N/A	N/A	25%
P2. Percentage of EMACS backlog projects completed (40 as of 2006-07).	N/A	N/A	10%	10%	10%
P3. Percentage of disaster recovery site completed.	N/A	N/A	100%	100%	N/A
P4. Percentage of multi-media service projects completed on time.	N/A	N/A	N/A	N/A	95%

Status

With the 2.0 additional Programmer Analyst positions received in 2006-07 and the funding for software licensing and hardware in 2007-08, the department was able to process the 2007 aerial imagery and exceed the 2007-08 target performance measure of data converted to the latest Spatial Database Engine for GIS. As this performance measure has been met, ISD intends to utilize these two positions to begin upgrading the existing library of GIS applications. This process will entail updating vendor software and building a GIS framework to improve overall performance, standardize GIS development, and better protect the county from future lengthy and costly upgrades. ISD will start updating GIS applications to use the new vendor software and framework beginning in 2008-09, and the new performance measurement will be implemented.

The department also received ongoing funding for a Programmer Analyst to support EMACS in a joint policy item with the Human Resources Department and the Auditor/Controller-Recorder, for the purpose of improving payroll processing accuracy and to help alleviate project backlogs. The department experienced difficulty recruiting an applicant possessing knowledge of the PeopleSoft application, and the position was not filled until the end of 2006-07. ISD anticipates meeting the performance measure to have alleviated 10% of backlog projects by the end of 2007-08.

ISD anticipates meeting the performance measure to have 100% of the alternative disaster recovery site completed in 2007-08. In 2008-09, the department plans to conduct integration disaster recovery testing to ensure the alternative disaster recovery site is functioning as intended. Depending on completion of the WAN redesign, ISD will seek to geographically cluster servers at its Gilbert street location and the alternative disaster recovery site to provide for fail-over and redundancy capabilities. ISD will also conduct a disaster recovery analysis for stand alone servers and make recommendations to their correlating departments and the County Administrative Office. There are no additional costs associated with the 2008-09 disaster recovery efforts.

The addition of 1.0 Multi-media Coordinator position has enabled the department to meet all project deadlines within time schedules requested by customers. Multimedia services related requests have increased by 30% and ISD has been able to successfully meet this increased demand as a result of this additional position.

2008-09 REQUESTS FOR ADDITIONAL GENERAL FUND FINANCING (POLICY ITEMS), INCLUDING NEW CAPITAL IMPROVEMENT PROGRAM (CIP) PROJECTS, OR BUSINESS PROCESS IMPROVEMENT (BPI) RESERVE FUNDS

Brief Description of Policy Item, CIP, or BPI reserve funds request	Budgeted Staffing	Appropriation	Dept. Revenue	Local Cost
1. Obtain ongoing funding for annual digital imagery of the entire county to provide accurate GIS services. (Policy Item) The county's populated areas and landscapes change from year to year resulting in necessary updates to GIS data. This data is collected by aerial photography taken by flyovers of the county. The information is used to produce various maps including flood zones, fire areas, etc. This policy item supports ISD's goal of "Providing technology solutions that enable customers to serve the citizens of the county." Updated annual digital imagery will ensure the county can readily respond with accurate information to daily requests, and emergency situations as needed.	-	75,000	-	75,000
2. Obtain one-time funding for the design and implementation of a multimedia services studio at the County Government Center. (CIP Request) To support the Board of Supervisors' efforts to make information readily available to citizens of the county, ISD is requesting \$100,000 in CIP funding for the design and construction of a multimedia studio. Implementing the county's own multimedia studio will facilitate the various requests for public service announcements, training videos, etc. from the Board of Supervisors and county departments. This will allow for timely production of quality and professional multimedia products and services and reduce the time and costs associated with traveling to an outside studio.	-	100,000	-	100,000
3. Obtain one-time funding for multimedia equipment, and ongoing funding to support the new multimedia services studio at the County Government Center. (Policy Item) To support the Board of Supervisors' efforts to make information readily available to citizens of the county, ISD is requesting \$150,000 in one-time policy item funding to purchase and install multimedia equipment in the new studio. ISD is also requesting \$44,000 in ongoing funding to support the studio and refresh equipment as needed. Implementing the county's own multimedia studio will facilitate the various requests for public service announcements, training videos, etc. from the Board of Supervisors and county departments. This will allow for timely production of quality and professional multimedia products and services and reduce the time and costs associated with traveling to an outside studio.	-	194,000	-	194,000
4. Set aside ongoing funding of \$20 million per year for the replacement of the county's 800 MHz radio system. (Policy Item) The county's regional public safety radio system that integrates countywide sheriff, police and fire emergency radio dispatch capabilities is approximately 18 years old and is no longer supported by the vendor. The current system operates on an analog platform and all new system platforms are digital. Moving to a digital platform will ensure future interoperability with both internal and external public safety organizations, and minimize support issues, costs, and potential service outages. A preliminary estimate to replace the existing system is \$250 million, which is not included in the current 800 MHz radio access rate.	-	20,000,000	-	20,000,000

MEASUREMENT	2005-06 Actual	2006-07 Actual	2007-08 Target	2007-08 Estimate	2008-09 Target
P1. Installation of updated digital imagery on county GIS system.					100%
P2. Completion of the multimedia studio at the County Government Center.					100%

2008-09 PROPOSED FEE ADJUSTMENTS

DESCRIPTION OF FEE REQUEST

ISD maintains board approved contracts for major services, however, the department provides other services on a fee for service basis without a contract. ISD will be incorporating fees for these services into the County Fee Ordinance, based on Board approved rates.

SERVICE IMPACTS

Implementation of these fees will not impact ISD, as the department has been receiving payment for services under the existing rate structure for all services which will now be included in the County's Fee Ordinance.

If there are questions about this business plan, please contact Stephen Hall, Chief Information Officer, at (909) 388-5501.



Installation of 800 MHz radio antennae



Alignment of microwave transport antennae



Technology Operations Enterprise Monitoring Center



Technology Operations Automated Tape Library Subsystem