FINAL REPORT

Performance Audit
of
CEO/Office of Information Technology

TASK I REPORT:
DOCUMENT AND VERIFY CURRENT IT RESOURCE ALLOCATIONS

December 15, 2009

Office of the
Performance Audit Director

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Executive Summary

Preface

Chair Bates and Vice-chair Nguyen, in response to the Board of Supervisors' postponement of the approval of the County Information Technology Strategic Plan in March 2009, requested that the Office of the Performance Audit Director audit the efforts and activities of the County Executive Office/Office of Information Technology (CEO/IT). To manage the sizeable scope of the audit, it was broken down into five tasks. This report covers Task I of the audit, *Document and Verify Current IT Resource Allocations*, and is primarily data-driven, with key process findings and recommendations identified where appropriate.

The foremost conclusion to be drawn from the information presented in this report is that Information Technology (IT) at the County of Orange is an immense budgetary expense that requires increased scrutiny and a more robust framework for tracking and reporting costs. This Task I report provides a foundation for this effort. The charts and tables presented herein, as well as the assembled data sets, are a panoply of decision-making information on IT activities and costs within the County. A vast amount of data was collected, validated, and analyzed to provide the Board and the public with a deeper context of Information Technology resource allocation. The audit team believes that this information will lead to several additional benefits:

- Greater transparency of IT spending Countywide, leading to more informed decision-making by policy makers

- The ability for County agencies/departments to understand the IT activities of other agencies/departments, which can promote information-sharing and dialogue

- A foundation for future analyses of Countywide IT activities and cost centers

Audit Scope and Objectives

Per Board direction, the specific objectives of this Task I report include:

1. Provide a breakdown of Countywide information technology costs according to five categories: (1) in-house staffing numbers and cost, (2) consultant staffing

      numbers and cost, (3) hardware costs, (4) software costs, and (5) on-going operations/maintenance costs, for two periods (Past: FY 05/06 – FY 08/09, Current: FY 09/10).

2. Document Key IT Projects ($250,000+) for the same period and the same categories of expenditures. In addition, these Key IT Projects will be identified as either CEO/IT-driven or Agency/Department-driven.

3. Document how many ACS employees have been hired by the County as full-time employees. In addition, document the fully encapsulated cost differential of ACS employees compared to full-time County employees.

4. Document CEO/IT's use of sole source contracts and the justifications utilized.

5. Identify any Key IT Projects that are likely to come before the Board for formal approval during the next twelve months.

Audit Methodology

Per Board direction, much of the Task I information was initially provided by CEO/IT and County agencies/departments. The primary roles of the audit team were to: (1) validate the information provided, and (2) determine any additional informative data regarding IT spending Countywide and within CEO/IT. Due to time and information constraints, the audit team focused on validating the current fiscal year (FY 09/10) IT budget detail reported by agencies/departments. In addition to validating the FY 09/10 budget data, the audit team determined early on that historical (i.e., FY 05/06 to FY 08/09) IT spending (as opposed to budgeted spending) was not available at the level requested by the Board of Supervisors, and thus the audit team, with the assistance of agencies/departments, expended significant resources to compile this critical information. This was an extraordinary, but necessary, exercise given the size of County IT operations, the diversity of IT operational practices, and the varying budgetary/accounting tracking capabilities of individual agencies/departments.

An additional key piece of data provided by CEO/IT was a complete list of sole source IT contracts procured by CEO/IT Purchasing, which included contracts for CEO/IT itself, as well as contracts procured on behalf of other agencies/departments for significant IT projects (e.g., Auditor-Controller/CAPS+, Treasurer-Tax Collector/PTMS, Assessor/ATS). The audit team verified the completeness and accuracy of each sole

source contract with a review of applicable Agenda Staff Reports, and when necessary, a review of individual official purchasing folders. During that research, some additional sole source contracts were discovered, as were some contracting practices that required further analysis.

Background Information

Due to the complex nature of IT activities, authority structures, and terminology, a brief summary of background information is provided below:

Countywide Information Technology (IT) System

The County of Orange currently manages its IT operations under a "Federated" system. In a Federated system, agencies/departments retain autonomy over program-specific IT processes, applications and systems. According to the IT Strategic Plan for the State of California, "the Federated Governance Models confirms that programmatic needs are the primary drivers for IT decisions and acknowledges the importance of IT as an enabler of agency success." CEO/IT's current role in the Orange County IT system is to (1) provide leadership in Countywide strategic IT initiatives, and (2) provide shared IT data services and telephone services. This leadership is provided in the context of a formal governance structure that includes agencies/departments as participating stakeholders.

CEO/IT Organizational and Budget Structure

CEO/IT is staffed by a total of 216 positions: 75 are County positions and 141 are IT contractors from ACS.

CEO/IT manages three IT-related budgetary components in its operation:

- *Fund 100/General Fund, Agency 017 (Units 3000 and 3050)* – This budgetary component provides IT services to all tenants of the Hall of Administration and includes the County Information Officer (CIO), Assistant CIO, the IT Program Management Office, and the Sourcing and Finance Manager.

- *Internal Service Fund 289* – This Fund is used by CEO/IT to provide and charge for a variety of IT services to County agencies/departments, such as: Internet access,

telephone services, hosting of hardware at the County Data Center, staff augmentation by contractors for IT services, and IT project management.

- *Fund 100/General Fund, Agency 038 (Data Systems Development)* – This Agency was formed to fund the planning and implementation phases of large systems development projects. Once these projects are implemented, they shift into the operations and maintenance phase, and project budgets are moved to specific agency/department operating funds for management.

Key Task I Data and Findings

Due to the volume of data in this report, the following is a representative sample of some of the informational highlights in the Task I report:

Countywide IT Costs

- Historical Countywide IT spending increased from $131.1M in FY 05/06 to $154.0M in 08/09, an overall increase of 17.4%. The accumulated total spending over this four year period was over half a billion dollars ($581.1M). The projected spending on Countywide IT in FY 09/10 is $166.0M.

- The top County agencies/department and/or funds with the highest total IT spending over the past four years are: Social Services Agency ($120.8M), CAPS/CAPS+ ($68.4M), Health Care Agency ($66.9M), Sheriff-Coroner ($49.7M), Agency 038/Data Systems Development Projects ($40.8M), Probation ($35.4M), OC Public Works ($27.1M), and Assessor ($25.2M). Of the $40.8M in Agency 038 spending, $11.7M is for operations and maintenance of the CAPS legacy system in FY 05/06.

- The two largest sources of Countywide IT expenses are IT Staffing and IT Services. In the FY 09/10 Budget, Countywide IT staffing costs represent $82.9M, or 50%, of the total IT budget; IT Services costs represent $65.3M, or 39%, of the total IT budget. A significant portion of IT Services expenditures are CEO/IT ISF 289 charges to agencies/departments for services rendered.

- The top IT Service Area charges from ISF 289 to County agencies/departments in FY 08/09 are for the County telephone system (OCTNET) ($8.0M), use of the County network ($7.2M), and Application Development staff augmentation ($6.9M).

- Individual IT Service Areas within ISF 289 may under recover (i.e., charges are less than costs) or over recover (i.e., charges are greater than costs). Over the last three years, all major Service Areas have under recovered or over recovered, depending on the year, with the exception of the OCTNET telephone systems, which has consistently over recovered in every year, for a total of $3.3M in excess charges over the three year period.

CEO/IT Costs

- CEO/IT total expenditures across its three budgetary components (Agency 017, ISF 289, and Agency 038) increased 27% in four years, from $46.1M in FY 05/06 to $58.6M in FY 08/09. In Agency 017, total IT expenditures over this period grew by $2.1M, or 144%, primarily as a result of a 198% increase in salaries and employee benefits, which was attributed to a significant increase in the number of management positions. ISF 289 grew $9.2M, or 23%, over this time period, primarily as a result of cost growth in the current Sourcing contract with ACS and increases in County salaries and employee benefits costs. Total spending in Agency 038, which was created to fund the upgrade or implementation of critical IT systems (e.g., CAPS+, ATS, PTMS), has decreased over the time period covered, due to the removal of CAPS systems costs from this Agency. The bulk of costs in Agency 038 are for professional/specialized services (e.g., consultants, software development contractors) and data processing services from ISF 289.

- CEO/IT is staffed by a total of 216 positions: 75 are County positions and 141 are ACS IT contractor positions. The total number of County positions increased 8% between FY 05/06 through FY 08/09; the number of contractors decreased 13% between FY 07/08 and FY 08/09, and is projected to again decrease between FY 08/09 and FY 09/10 (14.5%) due to current budget conditions.

- While the total County position count has remained relatively stable between FY 05/06 and FY 09/10, the composition of CEO/IT by position classification has changed significantly. The greatest change is a net increase of 11 management positions since FY 05/06. This net increase corresponds with a $2.7M, or 42.9%, increase in total CEO/IT salaries and employee benefits costs, driven largely by a 142.9% increase in management salaries and employee benefits costs.

Key IT Project Costs

Key IT Projects are IT projects whose total cost exceeds $250,000 over the life of the project.

- Actual expenditure data for agency/department-driven Key IT Projects has not been historically tracked on a consistent basis by CEO/IT. As such, only budget data could be used to quantify Countywide spending on these Key IT Projects.

- The total Countywide Key IT Project budget has varied greatly year-to-year, increasing from $11.7M in FY 05/06 to $49.3M in FY 09/10, primarily due to the CAPS+ project.

- In some cases, the full costs of CEO/IT-driven Key IT Projects are not always reported to the Board via the IT Quarterly Reporting process. What is reported to the Board, for example, are the initial costs to acquire and implement the software/system. These reported amounts exclude on-going operations and maintenance costs incurred subsequent to the implementation phase of the project, as well as actual implementation costs in some cases. One such specific example is the Electronic Government (eGov) project, where implementation costs for Phase I ($3.7M) were reported to the Board, but Phase II implementation costs and overall operations and maintenance costs (totaling $2M by the end of FY 09/10) have not been reported to the Board via IT Quarterly Reports. It is also important to note that time spent by staff from CEO/IT Agency 017 is typically not reported as a project cost to the Board.

- Of the 17 CEO/IT-driven Key IT Projects since FY 05/06, ten have used the advisory services of an outside consultant for a total of $3.1M.

- CEO/IT-driven and agency/department-driven Key IT Projects differ in the reasons or justification type for the projects. CEO/IT-driven projects are primarily for "Business Strategic Priorities" (e.g., eGov, Disaster Recovery/Business Continuity), while agency/department-driven projects are primarily for major system replacements (e.g., ATS, PTMS, CAPS+) that are reaching obsolescence.

ACS Contractor Analysis

- Although the overall use of contractors has decreased between FY 05/06 and FY 09/10 (projected), there has been growth in two IT service areas: (1) Principal subcontractors to ACS (+4 FTEs) and (2) Network Platform Services (+1 FTE).

- Over the course of the ACS contract, the County has hired 31 ACS employees. Seven of these employees are located in CEO/IT, and five of those seven are administrative manager positions. Six other agencies/departments each have one former ACS employee in an Administrative Manager position.

- ACS adds approximately 30.3% in Overhead and Profit margin to the direct salary and benefit costs of its employees.

- The County employee estimated hourly cost is lower than the ACS contractor average hourly cost in Network Platform Services (by 8%), Application Services (by 4%), and Project/Program Management (by 13%), but is greater in Help Desk Services (by 15%).

Sole Source IT Contract Analysis

CEO/IT has its own Purchasing section that is responsible for IT procurement activities for both CEO/IT and for large IT projects/systems, including the CAPS/CAPS+ (Auditor-Controller) and ATS (Assessor) projects. The audit team examined IT sole source purchases completed by CEO/IT's Purchasing section.

- A total of 47 sole source IT purchases were made between FY 05/06 and August 2009: 24 of those 47 were for CEO/IT, at a cost of approximately $4M; 23 were for agencies/departments, at a total authorized spending limit of $41.5M.

- Several of these sole source IT procurements did not adhere to the administrative requirements of the Contract Policy Manual. Several Sole Source Justification Forms did not have the required signature indicating the review and concurrence of a Deputy Purchasing Agent. A handful of these forms included a signature from a Deputy Purchasing Agent, but the sole source procurement's review/approval was deferred back to the requesting agency/department.

- Some of the sole source leases of IT equipment/software reviewed by the audit team were not taken to the Board for approval. Since the lease of IT equipment/software

is not specifically covered in the Contract Policy Manual, some agencies/departments chose not to go to the Board for approval. In contrast, there is a specific dollar threshold set for Service and Professional sole source contracts, above which Board approval is required. The County Purchasing Agent is of the opinion that IT equipment software leases should also have a specific dollar threshold specified in the Contract Policy Manual.

Identification of Major IT Projects over the Next 12 Months

- Due to the current fiscal climate, there are not many new IT projects planned for the FY 09/10. Those projects that are planned for FY 09/10 are subsequent phases of existing projects such as the CAPS+ Human Resources/Payroll Upgrade ($10.3M), the Assessment Tax System (ATS) ($6.8M), and the Property Tax Management System (PTMS) ($3.6M). Some projects, such as John Wayne Airport's Common User Passenger Processing System (CUPPS) ($16.8M), have already been presented to the Board.

- Perhaps the most significant IT issue that will be presented to the Board is the IT Sourcing Strategy proposal and RFP for the replacement of the current sourcing contract with ACS. In fact, many of the CEO's Key IT Projects (e.g., Telephone Infrastructure Refresh, Central Court WAN Migration) are on hold, pending the development and approval of the IT Sourcing Strategy.

The audit team wishes to thank both CEO/IT and agency/department staff for their cooperation in aggregating the significant amounts of data provided in this report.

Introduction

Board Chair Bates and Vice-Chair Nguyen, in response to the Board of Supervisors' postponement of the approval of the Countywide Information Technology Strategic Plan in March 2009, requested that the Office of the Performance Audit Director (Office) audit the efforts and activities of the County Executive Office/Office of Information Technology (CEO/IT) and the former Information Technology Working Group. On June 2, 2009, the Board approved the scope of work for the Performance Audit of CEO/IT.

The specific goals of the Performance Audit are to:

1. Ensure that a major Countywide expense category (i.e., information technology) is efficiently and effectively managed, especially in the current fiscal climate.

2. Ensure that CEO/IT has an information technology business model that provides clarity to the Board and agencies/departments in long term information technology planning efforts and in daily information technology decision making. Identify successful governmental information technology business models and practices. Clearly define the areas of responsibility and authority assigned to CEO/IT.

3. Identify opportunities to improve CEO/IT's management of information technology operations and projects.

4. Provide recommendations to improve CEO/IT communication to the Board, County agencies/departments, and the public.

In order to effectively manage the significant scope of work for this performance audit, the Board approved the following phased approach:

- ❑ Task I: Document and Verify Current IT Resource Allocations
- ❑ Task II: Review CEO/IT Proposed Business Model (IT Strategic Plan)
- ❑ Task III: Review CEO/IT Operational Readiness
- ❑ Task IV: Review CEO/IT Performance Measurement
- ❑ Task V: Evaluate CEO/IT Communications

Task I Scope and Objectives

This report covers the following Task I objectives and activities:

1. Provide a breakdown of Countywide information technology costs according to the following five categories: (1) in-house staffing numbers and cost, (2) consultant staffing numbers and costs, (3) hardware costs, (4) software costs, and (5) on-going operations/maintenance costs, for two periods (Past: FY 05/06 – FY 08/09, Current: FY 09/10).

2. Document Key IT Projects ($250,000+) for the same period and the same categories of expenditures. In addition, these Key IT Projects will be identified as either CEO/IT-driven or Agency/Department-driven.

3. Document how many ACS employees have been hired by the County as full-time employees. In addition, document the fully encapsulated cost differential of ACS employees compared to full-time County employees.

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Audit Methodology

Per Board direction, much of the Task I information was initially provided by CEO/IT and County agencies/departments. The primary roles of the audit team were to: (1) validate the information provided, and (2) determine any additional informative data regarding IT spending Countywide and within CEO/IT. Due to time and information constraints, the audit team focused on validating the current year (FY 09/10) IT budget detail reported by agencies/departments. In addition to validating the FY 09/10 budget data, the audit team determined early on that historical (i.e., FY 05/06 to FY 08/09) IT spending (as opposed to budgeted spending) was not available at the level requested by the Board of Supervisors, and thus the audit team, with the assistance of agencies/departments, expended significant resources to compile this critical information. This was an extraordinary, but necessary, exercise given the size of County IT operations, the diversity of IT operational practices, and the varying budgetary/accounting tracking capabilities of individual agencies/departments.

An additional key piece of data provided by CEO/IT was a complete list of sole source IT contracts procured by CEO/IT Purchasing, which included contracts for CEO/IT itself, as well as contracts procured on behalf of other agencies/departments for significant IT projects (e.g., Auditor-Controller/CAPS+, Treasurer-Tax Collector/PTMS, Assessor/ATS). The audit team verified the completeness and accuracy of each sole source contract with a review of applicable Agenda Staff Reports, and when necessary, a review of individual official purchasing folders. During that research, some additional sole source contracts were discovered, as were some contracting practices that required further analysis.

In terms of format, this Task I report primarily presents and discusses key data points and trends requested by the Board; when appropriate, key process findings and recommendations are also noted in the report.

Background Information

Countywide Information Technology (IT) System

The County of Orange currently manages its IT operations under a "Federated" system. In a Federated system, agencies/departments retain autonomy over program-specific IT processes, applications, and systems. According to the IT Strategic Plan for the State of California, "the Federated Governance Model confirms that programmatic needs are the primary drivers for IT decisions and acknowledges the importance of IT as an enabler of agency success." CEO/IT's current role in the Orange County IT system is to (1) provide leadership in Countywide strategic IT initiatives, and (2) provide shared IT data services and telephone services. This leadership is provided in the context of a formal governance structure that includes agencies/departments as participating stakeholders.

CEO/IT Organizational and Budget Structure

Organizational Structure

Presented below is a summary level Organizational Chart for CEO/IT:

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                    ┌─────────────────────────┐   ┌──────────────────┐
                    │ Deputy CEO and Chief    │   │ Executive Secretary│
                    │ Information Officer (CIO)│   │      (1/0)        │
                    │         (1/0)           │   └──────────────────┘
                    └─────────────────────────┘

        ┌──────────────┐    ┌──────────────┐    ┌──────────────────┐
        │ Assistant CIO│    │  Publishing  │    │ Chief Technology │
        │    (1/0)     │    │(Reprographics)│   │  Officer (CTO)   │
        └──────────────┘    └──────────────┘    │      (1/0)       │
                                                 └──────────────────┘
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Sourcing & Finance Manager (1/0)	Project Management Office (PMO) Manager (1/0)
Business Information Services Manager (1/0)	Enterprise Infrastructure Services Manager (1/0)
Secretary (1/0)	

IT Finance (7/0)	Portfolio Management (5/0)	IT Strategic Consulting, Planning & Architecture (0/0)	Security & Business Continuity Planning (2/0)	IT Process & Quality Assurance (0/2)
IT Contracts (5/0)	Solutions Project Management & Business Analysis (4/2)			Application Services (4/40)
				Information Resource Management (1/5)

Customer & Agency Support (22/0)
Security & Business Continuity Operations (1/6)
Network & Platform Services (2/26)
Telephone Services (8/16)
Data Center Operations (5/44)

(#/#) denotes Number of County Employees/Number of Contractor Employees

Sources: FY 09/10 SBFS; CEO/IT Organizational Chart – September 2009
Notes: Organizational structure does not include 9 ACS administrative contractors (resources that CEO/IT does not manage)

As shown, CEO/IT (excluding Reprographics) is staffed by a total of 216 positions. 75 of these positions are County positions, and 141 are provided as contract IT labor from ACS.

Budget Structure

CEO/IT manages four budgetary components in its operation:

- <u>Fund 100/General Fund, Agency 017 (Units 3000 and 3050)</u>

  Agency 017 is the main operating budget for the County Executive Office. CEO/IT controls two Units (formerly "Orgs") within Agency 017. One of the Units (3050) provides IT services to all tenants of the Hall of Administration, and the other Unit (3000) includes the CIO, the Assistant CIO, the Program Management Office, and the Sourcing and Finance Manager. The Unit 3050 includes 8 positions and Unit 3000 includes 11 positions.

- <u>Internal Service Fund (ISF) 289</u>

  This Fund is used by CEO/IT to provide a variety of IT services to County agencies/departments. The costs of these services are charged back to agencies/departments. As such, ISF 289 is meant to operate like a self-sustaining business. Specific services provided through ISF 289 include: Internet access, IT project management, hosting of hardware at the County Data Center, staff augmentation by contractors for IT services such as application development, and access to the Orange County Telephone Network (OCTNET). ISF 289 is staffed by 56 CEO/IT positions and approximately 141 contractor positions, provided through the ACS agreement.

- <u>Fund 100/General Fund, Agency 038 (Data Systems Development)</u>

  This General Fund Agency was set up by the County in April 1990 to fund the planning and implementation phases of large systems development projects. Once these projects are implemented, they shift into the operations and maintenance phase, and the project budgets are moved to the specific agency/department's operating fund for management. There are no positions that staff this Agency.

- <u>Internal Service Fund 297</u>

  This ISF is for the management of the County Reprographics function. This ISF does not provide IT services and has no IT positions; therefore, it is not included in the scope of work for this audit.

IT Strategic Plan

Beginning in December 2006, CEO/IT initiated a Countywide Information Technology strategic planning process with the assistance of two consulting groups, Pacific Technologies, Inc. and Gartner, Inc., at a total cost of $637,925. To date, the strategic plan created through this process has not been approved by the Board of Supervisors. As such, the Board noted that the sustained absence of a clear IT strategic direction has led to several concerns for the County, some of which include:

- Presentation of high dollar IT project requests to the Board without a clear framework or priority structure to guide their decisions.

- Lack of clear roles and responsibilities between CEO/IT and agency/department IT operations.

- Difficulty proceeding with a new County IT Sourcing Strategy to replace the current contract held by ACS.

An evaluation of the proposed IT Strategic Plan will be conducted by the audit team under Task II of this Performance Audit. However, this Task I report details the magnitude of IT spending in the County and underscores the importance of having a clear framework for tracking and managing this significant cost center in County operations.

Task I Data, Findings & Recommendations

The data, findings, and recommendations from the audit team's analysis in Task I are presented below. The information is organized to address the specific directives given by the Board in the Task I scope of work.

I.   Identification of IT Costs Countywide

A key component of Task I is to compile, validate, and analyze spending information for all Information Technology (IT) activities from FY 05/06 to FY 09/10 throughout the County. The Board of Supervisors also requested that this spending information be sorted into four major categories: IT Staffing, IT Services, Hardware, and Software. The table below provides a more detailed description of the types of spending that are included in these major categories.

IT STAFFING	IT SERVICES	SOFTWARE	HARDWARE
County and contract employees responsible for applications development/ maintenance, server support, networking support, desktop support, help desk, and project management among other areas. This category does not include labor costs in ISF 289.	Services included in this category include: data center and telephone charges from CEO/IT ISF 289 (including labor costs), software maintenance and support, hardware maintenance, IT training and education, and subscriptions and memberships.	Types of software include: operating system software licenses, end-user application software licenses (e.g., Microsoft Office), application development software, and security software among others.	Types of hardware include: desktop PCs, laptops, cell phones and blackberries, servers, routers, and switches among others.

Finding 1:   Information Technology is a major County cost center, but no detailed framework has been consistently implemented for the collection, analysis, and reporting of these costs, both budgeted and actual, in order to inform policy makers as they allocate scarce resources.

In November 2005, the Board of Supervisors approved a series of initiatives related to the gathering and reporting of information technology costs. One such initiative was Information Technology Cost Collection and Reporting, which was intended to: (1) establish an IT cost collection and reporting framework that creates a Countywide, executive level view of IT Costs, (2) provide a basis for analysis of IT expenditures, and (3) support strategic decision making to optimize the IT infrastructure and

expenditures. As an initial response, CEO/IT distributed a detailed IT *budget* survey for FY 05/06 to every major agency/department, and compiled the results in a report that it formally presented to the Board of Supervisors in February 2006. Since that time, an IT budget report has not been compiled or presented to the Board of Supervisors at that detailed level. In FY 06/07, CEO/IT did not collect any data, and in FY 07/08 and FY 08/09, summary level information was collected but never prepared or analyzed in a report for the Board of Supervisors. In addition, no comprehensive tracking of Countywide *actual* IT expenditures has been done by CEO/IT. Because actual spending can differ from budgeted spending for a variety of reasons, it is important to know both amounts. For example, in FY 07/08, CEO/IT's survey of Countywide budgeted IT expenditures indicated a total projected cost of $176.4M; however, the results of this performance audit indicate that the actual spending was approximately $157.2M. In order to understand growth trends and cost drivers, historical analysis of actual costs is necessary.

The lack of detailed tracking, analysis, and reporting of IT costs Countywide has been validated in Task I of this performance audit and implicitly by the Board of Supervisors' request for more comprehensive information about IT costs. The work done by the audit team, in conjunction with agencies/departments, represents a foundation on which to build a more robust framework for collecting, synthesizing, and presenting this important decision-making information to the Board, Countywide management, and the public.

> **Recommendation 1: CEO/IT should work with County agencies/departments to develop a budget to actual database to track all information technology costs in the County. The analysis of this information needs to be conducted at least annually, the results of which should be formally presented to the Board of Supervisors. Any cost-related performance measures identified through this process should be incorporated in the County's ongoing Balanced Scorecard initiative.**

The section below details the current budgeted amounts (FY 09/10) of IT spending across the County, and the subsequent sections present historical trends in actual IT expenditures (FY 05/06 to FY 08/09).

FY 09/10 Total Countywide Budgeted IT Expenditures

As previously mentioned, weeks prior to the commencement of this audit, CEO/IT prepared and distributed a detailed survey to agencies/departments in order to capture a variety of IT budget and staffing data. The audit team reviewed the survey and determined that it was sufficient to obtain the information required by the Board of Supervisors in the scope of this audit. The audit team compiled the survey results and then met with individual agencies/departments to review the responses and to request supporting documentation for a sample of the data provided in the survey response. This validation process was a significant undertaking and led to the identification of some errors (both major and minor), which were then corrected in the response database. Most importantly, this process provided the audit team with a reasonable level of confidence that these costs are a fair representation of the IT expense budget in the County of Orange. Though Countywide IT budget data has been compiled in previous years, this audit was the first time that such information was validated. The chart below shows the budgeted expenditures, by IT category, for each agency/department and the entire County in FY 09/10.

AGENCY/DEPARTMENT	TOTAL FY 09/10 IT EXPENDITURE BUDGET (PROJECTED SPENDING)				
	HARDWARE	IT SERVICES	IT STAFFING	SOFTWARE	TOTAL SPENDING
SSA	$366,796	$18,698,126	$14,817,125	$28,832	$33,910,879
CAPS	$694,201	$2,564,747	$23,092,975	$1,925,258	$28,277,180
Health Care Agency	$7,179,166	$6,213,237	$8,270,680	$1,222,360	$22,885,442
Sheriff	$460,590	$3,692,953	$8,228,617	$460,000	$12,842,159
Data Systems Development Projects	$0	$8,336,132	$0	$0	$8,336,131
OC Public Works	$496,160	$2,645,736	$3,926,108	$433,800	$7,501,803
Probation	$308,960	$2,997,415	$3,624,967	$106,200	$7,037,540
OC Community Resources	$276,400	$1,842,386	$2,218,492	$40,000	$4,377,277
District Attorney	$341,200	$1,498,282	$1,952,600	$463,000	$4,255,081
IBM Mainframe	$0	$3,982,365	$0	$0	$3,982,364
Clerk-Recorder	$113,360	$1,064,934	$2,654,070	$57,200	$3,889,563
Assessor	$438,000	$1,693,878	$1,687,816	$40,000	$3,859,693
Child Support Services	$21,000	$1,547,665	$1,869,284	$220,548	$3,658,496
CEO	$269,000	$408,676	$2,718,295	$0	$3,395,970
Public Defender	$249,200	$1,903,973	$1,054,682	$0	$3,207,854
Auditor-Controller	$75,410	$973,110	$2,085,900	$65,562	$3,199,981
Treasurer-Tax Collector	$118,600	$1,853,334	$1,193,334	$20,700	$3,185,967
John Wayne Airport	$365,000	$1,000,929	$987,334	$220,000	$2,573,262
Orange County Waste & Recycling	$174,261	$562,292	$1,010,257	$195,000	$1,941,809
Registrar of Voters	$9,550	$649,195	$611,913	$97,020	$1,367,677
Human Resources	$17,662	$93,070	$630,548	$72,500	$813,779
Clerk of the Board	$7,000	$359,853	$325,638	$7,000	$699,490
Public Administrator/Public Guardian	$8,000	$226,687	$0	$6,080	$240,766
County Counsel	$6,180	$143,306	$0	$31,679	$181,164
Children & Family Commission	$0	$130,766	$0	$0	$130,765
Internal Audit	$0	$55,824	$0	$1,500	$57,323
Other (Dept. w/< $50K of Total IT Spending)	$0	$190,254	$0	$1,500	$191,753
Grand Total	**$11,995,696**	**$65,329,125**	**$82,960,634**	**$5,715,739**	**$166,001,193**

In FY 09/10, the total budget for IT in the County is $166.0M. The table above illustrates that the bulk of proposed IT spending Countywide is in IT Staffing ($82.9M or 50%) and IT Services ($65.3M or 39%). In addition, there are four agencies/departments that constitute the majority (59.0%) of Countywide IT projected spending: the Social Services Agency ($33.9M or 21.3%), the Auditor-Controller (A-C) CAPS System ($28.3M or 17.7%), the Health Care Agency ($22.9M or 14.4%), and the Orange County Sheriff's Department ($12.8M or 8.1%). Lastly, agencies/departments budget IT resources in different ways across major categories of expenditure. For example, the majority of projected spending on the CAPS System is for IT Staffing ($23.1M of $28.3M). Conversely, the majority of IT spending in the Social Services Agency ($18.7M of $33.9M) is for IT Services, which includes charges from CEO/IT for Internet connectivity and telephone services, as well as software maintenance, hardware maintenance, and other IT professional services.

Historical Countywide IT Expenditures

In addition to compiling and validating current (FY 09/10) Countywide IT budget amounts, the Board of Supervisors also directed the audit team to compile and analyze historical Countywide IT spending. The audit team worked closely with agencies/departments to aggregate this information consistently over time and across agencies/departments. However, the historical expenditure data provided by agencies/departments was not validated by the audit team due to time and information constraints.

COUNTYWIDE HISTORICAL IT SPENDING, BY MAJOR CATEGORY, FY05/06 TO FY 09/10
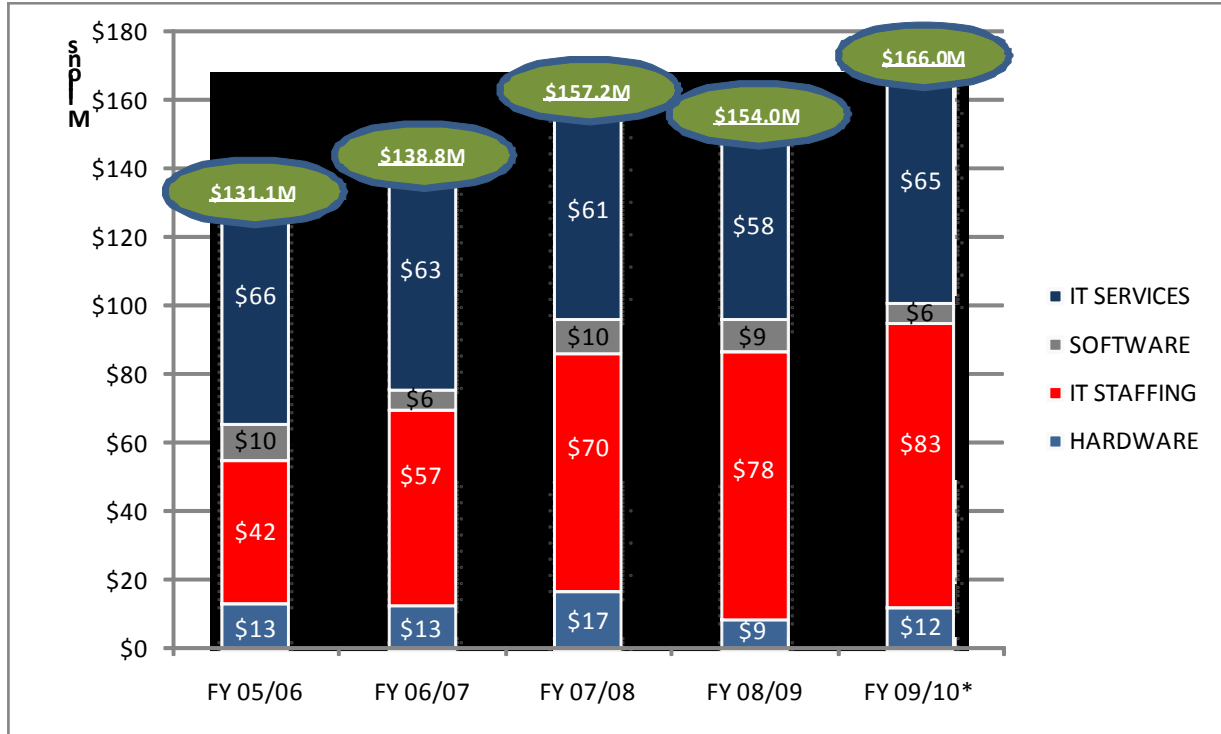
*FY 09/10 data are budgeted amounts, not actual expenditures

Countywide IT spending increased by 17.4%, from $131.1M in FY 05/06 to $154.0M in FY 08/09. The graph above clearly indicates that the primary driver for increases in Total Countywide IT spending is IT Staffing. Staffing costs increased from $41.9M in FY 05/06 to $78.2M in FY 08/09, a total percentage increase of 86.5% in four years. The audit team determined that there are multiple reasons for this increase, including: (1) a greater number of County IT employees, (2) salary and benefit cost increases, and (3) a significant increase in the use of IT contract staff. Conversely, both Hardware and IT Services spending decreased from FY 05/06 to FY 08/09, by 33.4% and 12.2%, respectively. It is important to note that the reduction in IT Services costs has not come from decreases in charges to agencies/department from CEO/IT ISF 289 for IT services. ISF 289 charges, which comprise the majority of IT Services costs for most agencies/departments, increased from $41.0M in FY 05/06 to $45.5M in FY 08/09. Reductions in IT Services have come mostly from other areas, including software and hardware maintenance costs. ISF 289 charges and expenditures are discussed in detail in the *Internal Service Fund 289 Charges* section of this report.

Additionally, even if the IT staffing count remains constant going forward, IT staffing costs will likely continue to increase, not only because of negotiated salary increases (cost of living adjustments and step raises), but also because of the substantial expected

increases in retirement costs. As with most retirement systems, the Orange County Employees Retirement System (OCERS) lost a significant portion of its assets in the recent financial decline. Consequently, for general IT employees, over the next five years the County will increase its contribution to OCERS from 21 cents for every dollar of salary to almost 34 cents for every dollar of salary (an increase in total retirement cost of 62%). Similarly, IT managers' retirement costs to the County will increase from approximately 27 cents for every dollar of salary to nearly 40 cents for every dollar of salary (an increase in total retirement cost of 48%). Contributions from employees, as a percent of salary, are also projected to increase over this time, in addition to the increased County contributions.

In summary, due to (1) the significant increases in IT staffing costs Countywide between FY 05/06 and FY 08/09, (2) the looming increases in IT staffing costs driven by rapidly escalating retirement contribution, and (3) the substantial costs paid by agencies/departments to CEO/IT ISF 289 for IT services ($45.5M, or 29.5% of the $154.0M total spending, in FY 08/09), the current development of a new IT Sourcing Strategy is critically important to the County's efforts to control costs in the area of information technology. Finding a balance between greater efficiency through newer/less costly industry sourcing models and agencies'/departments' ability to deliver quality service is perhaps the single most important endeavor the County will undertake related to IT in the near future.

Historical Agency/Department IT Expenditures

The trend of increased staffing costs has not been uniformly experienced by all agencies/departments. Total IT spending at agencies/departments has grown at variable rates over the last several years, as have the component categories. Not surprisingly, the agency/department that has contributed the most to Total Countywide IT spending growth since FY 05/06 is the Auditor-Controller CAPS System (which also includes the cost for the CAPS+ Upgrade). In FY 05/06, the CAPS System was funded through the Data Systems Development Projects (Agency 038). Of the $15.3M of spending in Agency 038 for FY 05/06, approximately $11.8M was related to the CAPS System. Beginning in FY 06/07, with the commencement of the CAPS+ Upgrade, all CAPS-related costs were moved to a separate accounting agency (CAPS or Agency 014). As the costs of the CAPS+ Upgrade began to accrue, the total spending on the A-C CAPS System (Agency 014) increased as well, such that by FY 08/09, Total IT spending in the CAPS department (Agency 014) was $28.3M.

						FY 05/06 to FY
AGENCY/DEPARTMENT	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FOUR-YEAR TOTAL	08/09 % Change
CAPS (incl. CAPS+ Upgrade)	$0	$15,672,599	$24,410,616	$28,323,244	**$68,406,460**	N/A
SSA	$34,698,014	$28,992,014	$31,442,019	$25,677,546	**$120,809,592**	-26.0%
Health Care Agency	$15,791,236	$16,520,228	$18,062,643	$16,529,407	**$66,903,514**	4.7%
Sheriff	$12,886,641	$12,315,833	$12,810,249	$11,748,095	**$49,760,818**	-8.8%
Data Systems Development Projects (Agency 038)	$15,250,702	$6,954,274	$8,609,343	$9,992,107	**$40,806,426**	-34.5%
Probation	$7,974,382	$9,725,672	$9,237,251	$8,466,176	**$35,403,481**	6.2%
OC Public Works	$6,417,878	$7,282,064	$7,567,616	$5,873,925	**$27,141,483**	-8.5%
OC Community Resources	$2,530,096	$3,714,768	$2,981,421	$4,533,643	**$13,759,928**	79.2%
District Attorney	$3,535,492	$4,192,920	$5,605,691	$4,483,511	**$17,817,614**	26.8%
IBM Mainframe	$0	$0	$0	$4,325,955	**$4,325,955**	N/A
Auditor-Controller	$3,696,211	$4,349,092	$4,252,353	$4,017,086	**$16,314,742**	8.7%
Clerk-Recorder	$2,056,917	$1,805,935	$3,667,121	$3,725,425	**$11,255,397**	81.1%
CEO	$1,613,442	$2,158,655	$3,358,979	$3,704,275	**$10,835,351**	129.6%
Assessor	$6,371,573	$7,343,845	$7,814,408	$3,704,010	**$25,233,836**	-41.9%
Child Support Services	$5,155,906	$3,849,043	$3,499,445	$3,422,639	**$15,927,033**	-33.6%
Treasurer-Tax Collector	$3,956,883	$3,819,483	$3,320,213	$3,363,081	**$14,459,660**	-15.0%
Registrar of Voters	$1,511,799	$2,100,521	$1,495,540	$3,216,927	**$8,324,787**	112.8%
Orange County Waste & Recycling	$2,271,662	$2,207,445	$2,069,833	$2,591,513	**$9,140,454**	14.1%
Public Defender	$1,853,633	$2,147,181	$2,847,158	$2,247,705	**$9,095,677**	21.3%
John Wayne Airport	$1,556,898	$1,560,257	$1,702,005	$1,442,727	**$6,261,887**	-7.3%
Human Resources	$433,067	$533,447	$928,126	$968,595	**$2,863,235**	123.7%
Clerk of the Board	$579,094	$679,299	$686,276	$822,109	**$2,766,778**	42.0%
Internal Audit	$151,584	$133,981	$91,216	$88,643	**$465,424**	-41.5%
County Counsel	$322,957	$354,146	$300,263	$197,375	**$1,174,741**	-38.9%
Public Administrator/Public Guardian	$163,458	$161,546	$169,037	$179,480	**$673,521**	9.8%
Children & Family Commission	$44,177	$48,637	$111,461	$151,009	**$355,284**	241.8%
Miscellaneous (Internal Service Funds)	$62,765	$57,862	$53,595	$90,586	**$264,808**	44.3%
CEO-IT ISF	$176,698	$0	$0	$0	**$176,698**	-100.0%
Other (Dept. w/< $50K of Total IT Spending)	$84,485	$88,682	$102,316	$128,489	**$403,972**	52.1%
Grand Total	**$131,147,651**	**$138,769,429**	**$157,196,194**	**$154,015,282**	**$581,128,556**	**17.4%**

COUNTYWIDE HISTORICAL IT SPENDING

Other agencies/departments have changed their total IT spending over time at variable rates, as well. SSA, for example, decreased its Total IT spending from $34.7M in FY 05/06 to $25.6M in FY 08/09 (a reduction of 26%), while HCA increased its Total IT spending from $15.8M in FY 05/06 to $16.5M in FY 08/09 (an increase of 4.7%). Agencies/departments with significant growth in Total IT spending from FY 05/06 to FY 08/09 include: CEO/IT (130%), Registrar of Voters (113%), and Human Resources (124%). The details behind the growth of spending in CEO/IT are discussed in the CEO/IT Budget Section of this report; however, the reasons behind such changes in other agencies/departments were not included in the scope of this audit, and thus were not examined.

There is no question that IT is a major cost center for the County; this conclusion is corroborated by the fact that the County spent over half of a billion dollars ($581.2M) on Information Technology during the period FY 05/06 to FY 08/09.

The tables that follow show the longitudinal trends, by agency/department and/or fund, in the major categories of IT spending.

IT STAFFING COSTS

AGENCY/DEPARTMENT	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FY 09/10*	% Change FY 05/06 to FY 08/09
COUNTYWIDE IT STAFFING COSTS						
CAPS	$0	$9,541,072	$18,356,258	$25,011,855	$23,092,975	N/A
SSA	$12,014,288	$12,899,822	$13,582,871	$13,377,732	$14,817,125	11.3%
Health Care Agency	$6,806,117	$7,942,088	$8,977,793	$8,569,703	$8,270,680	25.9%
Sheriff	$2,731,944	$3,220,888	$3,483,447	$3,475,560	$8,228,617	27.2%
OC Public Works	$2,841,703	$3,157,283	$3,604,016	$3,665,048	$3,926,108	29.0%
Probation	$3,111,019	$3,566,148	$3,582,054	$3,752,876	$3,624,967	20.6%
CEO (Not Incl. ISF 289)	$892,589	$1,421,646	$2,144,740	$2,657,538	$2,718,295	197.7%
Clerk-Recorder	$977,721	$997,870	$1,112,802	$1,291,069	$2,654,070	32.0%
OC Community Resources	$1,318,247	$1,416,829	$1,526,421	$2,042,112	$2,218,492	54.9%
Auditor-Controller	$2,446,053	$3,027,085	$2,889,574	$3,110,097	$2,085,900	27.1%
District Attorney	$1,689,803	$1,696,693	$1,871,609	$2,017,254	$1,952,600	19.4%
Child Support Services	$1,788,936	$1,702,407	$1,496,175	$1,552,335	$1,869,284	-13.2%
Assessor	$1,188,188	$1,452,896	$1,467,367	$1,722,124	$1,687,816	44.9%
Treasurer-Tax Collector	$891,974	$987,682	$1,143,099	$1,170,239	$1,193,334	31.2%
Public Defender	$711,644	$812,222	$899,035	$1,070,336	$1,054,682	50.4%
Orange County Waste & Recycling	$808,819	$991,291	$1,071,282	$1,190,166	$1,010,257	47.1%
John Wayne Airport	$553,275	$587,891	$666,717	$672,662	$987,334	21.6%
Human Resources	$313,770	$441,639	$733,452	$833,252	$630,548	165.6%
Registrar of Voters	$467,787	$485,931	$523,156	$557,099	$611,913	19.1%
Clerk of the Board	$277,059	$390,621	$429,035	$451,126	$325,638	62.8%
Data Systems Development Projects (Agency 038)	$9,000	$0	$0	$0	$0	-100.0%
Internal Audit	$84,952	$43,968	$0	$0	$0	-100.0%
Grand Total	**$41,924,887**	**$56,783,973**	**$69,560,903**	**$78,190,183**	**$82,960,634**	**86.5%**
ISF 289 County and ACS Labor Costs (Included under IT Services)	$26,988,604	$32,459,162	$35,682,705	$32,902,557	N/A	21.9%

*FY 09/10 data are budgeted amounts, not actual expenditures

As noted earlier, IT Staffing costs have increased significantly over the period examined, driven primarily by the staff up for the CAPS+ Upgrade. Other agencies/departments that have had sizeable percentage increases (45%+) in staffing costs from FY 05/06 to FY 08/09 include: CEO/IT (not including ISF 289) at 198%, OC

Community Resources at 55%, Assessor at 45%, Public Defender at 50%, OC Waste & Recycling at 47%, Human Resources at 166%, and Clerk of the Board at 63%. It should be noted that the increase in the OC Community Resources Department is the audit team's and the Department's best estimation of IT Staffing costs over time, but may not be entirely consistent year over year, in light of the major reorganization that occurred in FY 08/09. Labor costs for CEO/IT employees and ACS contractors in ISF 289 are shown at the bottom of the chart and are not incorporated in the IT Staffing totals; though these are labor costs, they are charged to agencies/departments as a service, and thus are instead included in the totals for IT Services (shown below).

IT SERVICES COSTS

COUNTYWIDE IT SERVICES COSTS						
AGENCY/DEPARTMENT	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FY 09/10*	% Change FY 05/06 to FY 08/09
SSA	$20,183,044	$13,447,323	$12,096,863	$10,224,001	$18,698,126	-49.3%
Data Systems Development Projects	$14,304,621	$5,860,071	$6,983,974	$8,714,811	$8,336,132	-39.1%
Health Care Agency	$5,267,798	$5,293,446	$5,998,515	$5,759,708	$6,213,237	9.3%
IBM Mainframe	$0	$0	$0	$4,325,955	$3,982,365	N/A
Sheriff	$2,805,348	$6,848,174	$6,310,140	$6,705,005	$3,692,953	139.0%
Probation	$4,756,970	$5,100,040	$5,639,034	$4,654,291	$2,997,415	-2.2%
OC Public Works	$2,701,731	$2,750,848	$2,595,453	$1,904,115	$2,645,736	-29.5%
CAPS	$0	$5,399,405	$4,237,847	$992,545	$2,564,747	N/A
Public Defender	$462,515	$411,260	$571,670	$723,787	$1,903,973	56.5%
Treasurer-Tax Collector	$2,806,319	$2,584,192	$2,007,563	$1,921,338	$1,853,334	-31.5%
OC Community Resources	$942,130	$1,175,506	$1,066,271	$1,435,768	$1,842,386	52.4%
Assessor	$3,858,919	$5,556,516	$5,616,588	$1,873,300	$1,693,878	-51.5%
Child Support Services	$1,755,552	$1,828,210	$1,561,051	$1,584,918	$1,547,665	-9.7%
District Attorney	$903,362	$1,457,105	$1,608,923	$1,820,129	$1,498,282	101.5%
Clerk-Recorder	$521,416	$261,982	$361,640	$984,280	$1,064,934	88.8%
John Wayne Airport	$406,365	$481,548	$430,595	$482,028	$1,000,929	18.6%
Auditor-Controller	$1,070,806	$1,179,766	$1,229,423	$748,830	$973,110	-30.1%
Registrar of Voters	$780,088	$1,318,692	$751,004	$651,675	$649,195	-16.5%
Orange County Waste & Recycling	$834,478	$648,819	$788,687	$696,798	$562,292	-16.5%
CEO	$349,549	$497,658	$350,999	$391,884	$408,676	12.1%
Clerk of the Board	$268,290	$264,342	$244,611	$356,987	$359,853	33.1%
Public Administrator/Public Guardian	$163,458	$161,546	$169,037	$179,480	$226,687	9.8%
County Counsel	$230,868	$241,380	$205,692	$167,715	$143,306	-27.4%
Children & Family Commission	$44,177	$48,637	$111,461	$151,009	$130,766	241.8%
Human Resources	$53,903	$27,808	$139,364	$80,143	$93,070	48.7%
Internal Audit	$30,795	$58,260	$87,237	$62,116	$55,824	101.7%
CEO-IT ISF	$176,698	$0	$0	$0	$0	-100.0%
Other (Dept. w/< $50K of Total IT Spending)	$147,250	$146,544	$155,911	$219,075	$190,254	48.8%
Grand Total	**$65,826,449**	**$63,049,078**	**$61,319,553**	**$57,811,691**	**$65,329,125**	**-12.2%**

*FY 09/10 data are budgeted amounts, not actual expenditures

A significant portion of IT Services expenditures for agencies/departments are the charges that CEO/IT ISF 289 charges to them for services rendered, the most common of which are Internet connectivity and telephone services. Total ISF 289 Charges were $41.0M (31.3% of total Countywide IT spending), $45.2M (32.6%), $47.6M (30.3%), and $45.5M (29.5%) in each year from FY 05/06 to FY 08/09, respectively. Agencies/departments that contributed to the decrease in IT Services spending from FY 05/06 to FY 08/09 include, SSA ($10.0M decrease), Assessor ($2.0M decrease), and Treasurer-Tax Collector ($885K decrease), among others.

HARDWARE COSTS

COUNTYWIDE HARDWARE COSTS					
AGENCY/DEPARTMENT	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FY 09/10*	% Change FY 05/06 to FY 08/09
Health Care Agency	$1,699,309	$1,617,866	$1,794,361	$1,431,183	$7,179,166	-15.8%
CAPS	$0	$22,455	$122,249	$451,645	$694,201	N/A
OC Public Works	$443,873	$883,481	$863,899	$103,148	$496,160	-76.8%
Sheriff	$2,929,692	$1,925,560	$2,243,960	$452,604	$460,590	-84.6%
Assessor	$1,303,219	$334,433	$616,895	$80,853	$438,000	-93.8%
SSA	$1,452,908	$1,575,577	$5,278,351	$1,204,481	$366,796	-17.1%
John Wayne Airport	$490,141	$407,685	$464,643	$29,383	$365,000	-94.0%
District Attorney	$676,859	$638,573	$1,633,354	$230,518	$341,200	-65.9%
Probation	$106,393	$1,059,484	$16,163	$27,284	$308,960	-74.4%
OC Community Resources	$217,878	$1,052,505	$359,436	$927,516	$276,400	325.7%
CEO	$145,264	$191,497	$166,510	$37,115	$269,000	-74.4%
Public Defender	$440,126	$632,093	$828,907	$217,107	$249,200	-50.7%
Orange County Waste & Recycling	$24,962	$267,719	$100,303	$598,819	$174,261	2298.9%
Treasurer-Tax Collector	$152,606	$211,772	$121,705	$52,066	$118,600	-65.9%
Clerk-Recorder	$364,529	$341,270	$86,702	$564,821	$113,360	54.9%
Auditor-Controller	$141,689	$136,607	$56,822	$71,284	$75,410	-49.7%
Child Support Services	$1,261,284	$134,728	$208,631	$114,815	$21,000	-90.9%
Human Resources	$26,573	$22,721	$17,110	$17,000	$17,662	-36.0%
Registrar of Voters	$77,392	$59,385	$48,622	$706,685	$9,550	813.1%
Public Administrator/Public Guardian	$0	$0	$0	$0	$8,000	N/A
Clerk of the Board	$12,415	$17,783	$12,630	$7,443	$7,000	-40.0%
County Counsel	$14,121	$70,292	$91,925	$3,598	$6,180	-74.5%
Data Systems Development Projects	$937,081	$1,094,203	$1,625,369	$1,277,296	$0	36.3%
Internal Audit	$26,533	$31,752	$3,978	$20,795	$0	-21.6%
Grand Total	$12,944,847	$12,729,440	$16,762,525	$8,627,460	$11,995,696	-33.4%

* FY 09/10 data are budgeted amounts, not actual expenditures

Between FY 05/06 and FY 08/09, most agencies/departments reduced their spending on hardware, resulting in an overall 33.4% decrease. Most agencies/departments are planning to further reduce their spending on hardware in FY 09/10, with the notable exception of the Health Care Agency, which has a significant hardware purchase planned to upgrade the Agency's Integrated Records Information System (IRIS), which, at the time the FY 09/10 IT survey was collected, was estimated to cost $5M (which is included in the $7.1M in the HCA FY 09/10 hardware spending amount). It should be

noted that subsequent to the collection of the survey, HCA was able to procure the upgrade for less than $2M, which will significantly reduce the actual amount spent on hardware by HCA in FY 09/10.

Orange County Waste and Recycling is one agency that has significantly increased its spending on hardware, from $25K in FY 05/06 to $598K in FY 08/09. As noted previously, the major reorganization that impacted OC Community Resources makes it difficult to do a consistent longitudinal analysis, though the data does indicate a significant increase in hardware spending over the period examined. In addition, the 813% increase in hardware spending for the Registrar of Voters is driven by a significant one-time purchase of election-related computer hardware in FY 08/09.

SOFTWARE COSTS

COUNTYWIDE SOFTWARE COSTS						
AGENCY/DEPARTMENT	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FY 09/10*	% Change FY 05/06 to FY 08/09
CAPS	$0	$709,667	$1,694,262	$1,867,199	$1,925,258	N/A
Health Care Agency	$2,018,012	$1,666,828	$1,291,974	$768,813	$1,222,360	-61.9%
District Attorney	$265,468	$400,549	$491,805	$415,609	$463,000	56.6%
Sheriff	$4,419,657	$321,212	$772,702	$1,114,927	$484,000	-74.8%
OC Public Works	$430,571	$490,452	$504,248	$233,339	$409,800	-45.8%
Child Support Services	$350,134	$183,698	$233,588	$170,571	$220,548	-51.3%
John Wayne Airport	$107,118	$83,133	$140,051	$258,654	$220,000	141.5%
Orange County Waste & Recycling	$603,403	$299,616	$109,561	$105,730	$195,000	-82.5%
Probation	$0	$0	$0	$0	$106,200	N/A
Registrar of Voters	$186,532	$236,513	$172,758	$1,301,468	$97,020	597.7%
Human Resources	$38,821	$41,279	$38,200	$38,200	$72,500	-1.6%
Auditor-Controller	$37,663	$5,634	$76,534	$86,875	$65,562	130.7%
Clerk-Recorder	$193,251	$204,812	$2,105,977	$885,256	$57,200	358.1%
Assessor	$21,248	$0	$113,558	$27,733	$40,000	30.5%
OC Community Resources	$51,841	$69,928	$29,293	$128,247	$40,000	147.4%
County Counsel	$77,968	$42,474	$2,646	$26,062	$31,679	-66.6%
SSA	$1,047,774	$1,069,292	$483,933	$871,331	$28,832	-16.8%
Treasurer-Tax Collector	$105,985	$35,837	$47,847	$219,438	$20,700	107.0%
Clerk of the Board	$21,330	$6,553	$0	$6,553	$7,000	-69.3%
Public Administrator/Public Guardian	$0	$0	$0	$0	$6,080	N/A
Internal Audit	$9,305	$0	$0	$5,732	$1,500	-38.4%
Other (Dept. w/< $50K of Total IT Spending)	$0	$0	$0	$0	$1,500	N/A
CEO	$226,040	$47,854	$696,730	$617,738	$0	173.3%
Public Defender	$239,348	$291,607	$547,546	$236,474	$0	-1.2%
Grand Total	**$10,451,467**	**$6,206,938**	**$9,553,213**	**$9,385,949**	**$5,715,739**	**-10.2%**

*FY 09/10 data are budgeted amounts, not actual expenditures

Countywide spending on software has remained relatively flat (between $9.4M and $10.5M) over the time period examined, with the exception of a drop in spending for FY 06/07 (to $6.2M) and a planned reduction in FY 09/10 (to $5.7M). Despite overall stability in spending on software Countywide, individual agency/department spending on software fluctuated notably. For instance, HCA reduced its spending on software from $2.0M in FY 05/06 to $769K in FY 08/09, yet it plans to spend $1.2M in FY 09/10. As with hardware, several agencies/departments reduced their spending on software between FY 05/06 and FY 08/09, including the Sheriff's Department (-75%), Child Support Services (-51%), OC Waste and Recycling (-82%), County Counsel (-67%), and Clerk of the Board (-69%). In light of the budgetary constraints experienced in FY 08/09, it is not surprising to see a reduction in these more easily controlled IT expense categories (i.e., hardware and software), as opposed to other more fixed costs, such as IT staffing.

Internal Service Fund 289 Charges

Due to the significance of ISF 289 and its impact on County agency/department IT operations and expenses, the audit team included this more detailed analysis of the fund. As previously noted, ISF 289 is used to account for information technology services that are provided by CEO/IT to agencies/departments for a fee. The primary IT services provided through ISF 289 are network services (e.g., Internet connectivity and access to the Wide Area Network) and telephone services (including OCTNET Monthly Recurring Charges). Other IT services available to agencies/departments via ISF 289 include, but are not limited to:

- Application Development
- Help Desk
- Server Maintenance
- IT Project Management
- Network Storage

For each IT service, CEO/IT sets a rate for that service at the beginning of each fiscal year based on anticipated agency/department demand. During the course of the fiscal year, CEO/IT will adjust rates, if needed. Like all internal service funds, ISF 289 is meant to be self-balancing (i.e., expenses incurred for IT services must be equal to revenues collected from agencies/departments). However, due to operating reserve requirements, changing agency/department demand throughout the fiscal year, and the use of retained earnings from previous years, revenues often do not equal expenditures in a given year.

IT projects and systems (e.g., CAPS+) can also incur ISF 289 charges. Examples include the use of servers that are housed in the County Data Center by the CAPS+ project and the use of Application Development services to develop eGov. Also, many large IT projects that are initially funded by Agency 038 Data Systems Development Projects during implementation are later funded through ISF 289 once they move into the operations and maintenance phase.

The audit team examined historical ISF 289 financial data provided by CEO/IT, including total ISF 289 charges by agency/department and historical per unit rates for the period FY 05/06 through FY 09/10.

Total ISF 289 Charges

The chart below shows that overall ISF 289 charges to agencies/departments increased 16.1% between FY 05/06 and FY 07/08, but decreased (4.3%) between FY 07/08 and FY 08/09.

TOTAL 289 ISF CHARGES
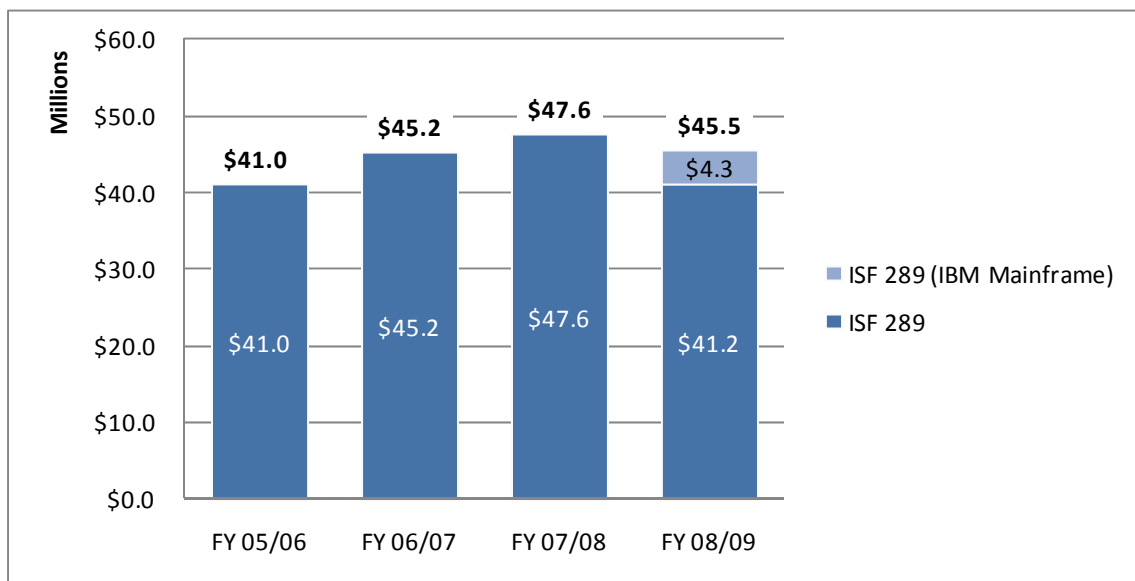
Source: CEO/IT "SB-58 CAFR Y-E Revenue" reports
Note: (1) Does not include charges allocated to Central Justice Center (non-County), (2) In FY 08/09, as agencies/departments moved off the IBM Mainframe, mainframe costs were incurred but were not charged to agencies/departments that were no longer using the mainframe

Key reasons for the overall increase in total ISF 289 charges include: the CAPS project's usage of IT services (which increased from $0 in charges in FY 05/06 to $9.8M in FY 06/07 and $9.6M in FY 07/08), Countywide IT initiatives such as eGov, and the ramp up of other large IT projects (e.g., ATS, PTMS). The decrease in total charges between FY

07/08 and FY 08/09 are the result of Countywide budget cuts impacting IT expenditures and significant reductions in Application Development contractors to adjust for the decreased demand for ISF 289 services. One of the key reductions in ISF 289 Application Development charges in FY 08/09 was initiated by the Assessor, who decided to directly procure the services of ACS application developers for the ATS project, rather than via the intermediary of CEO/IT. In doing so, the Assessor was able to obtain the same services without paying the 12% indirect fee that CEO/IT charges to agencies/departments to administer ISF 289 services.

The following table shows that five IT Service Areas account for 73.4% of total Countywide ISF 289 charges. As previously mentioned, OCTNET and County Network Services (which is the charge for connectivity to the Internet and the Countywide Wide Area Network) are two of the top service charges for ISF 289.

TOP IT SERVICE AREAS (FY 08/09)

IT Service Area	Total Countywide Charges	Percent of Total Countywide Charges
OCTNET Monthly Recurring Charge (MRC)	$ 8,012,845	19.4%
County Network Services	$ 7,238,735	17.6%
Application Development	$ 6,926,037	16.8%
Other Pass Through Charges	$ 4,494,687	10.9%
Non - OCTNET Pass Through Charges	$ 3,582,001	8.7%
TOTAL	**$ 30,254,305**	**73.4%**

Source: CEO/IT "Revenues by Customer 08-09 093009"

Notes: (1) "Other Pass Through Charges" are charges for IT staff that are administered through CEO/IT. For example, for CAPS Agency 014, pass through charges are for subcontractor GCAP Professional Services provided through the ACS contract; for Child Support Services, pass through charges are for CEO/IT staff stationed at DCSS. (2) "Non-OCTNET Pass Through Charges" are for voice/telephone network services that do not connect to the County's central OCTNET service but are administered through CEO/IT. Users of non-OCTNET telephone services are charged a 12% indirect fee for CEO/IT to administer the services. (3) The total against which these percentages were calculated does not include IBM Mainframe costs that are not charged to agencies/departments.

It is interesting to note that some major IT Service Areas significantly under recover their operating costs, while others significantly over recover each fiscal year. The table on the following page demonstrates these differences.

Over Recover/(Under Recover)

| Service Area	FY 06/07	FY 07/08	FY 08/09
Business Information Systems			
(Application Development Services/Application Architecture/Web Development/Quality Assurance/Project Management)	$ 88,085	$ (1,731,998)	$ (1,507,820)
Enterprise IT Shared Services (EISS)			
Mainframe (Print/DASD/Microfiche/Data Entry/IBM/CD Rom)	$ (283,871)	$ 262,630	$ 50,314
Network Platform Services (Security/SLA/NPS/WAN/SAN)	$ (762,969)	$ (324,875)	$ 971,867
Telephone (Non-OCTNET/Norstar/OCTNET/OCTNET Billable)	$ 754,453	$ 801,430	$ 1,744,446
Customer Support			
(Onbase/Scanning/DCSS)	$ 2,816	$ (8,522)	$ (9,300)

Source: CEO/IT "Actuals Expenses and Revenues by Service Unit"
*The net total of the amounts included in this chart will not necessarily equal zero, as this chart only covers the major IT Service Areas of ISF 289.

The chart above demonstrates that Mainframe and Network Platform Services under recovered in FY 06/07 by over $1M combined, and Business Information Systems (which is primarily application related services) under recovered in FY 07/08 and FY 08/09 by $1.7M and $1.5M, respectively. It is interesting to note that the Telephone Service Area has consistently over recovered in each of the years examined, for a three year total of $3.3M. In light of this fact, the current discussion regarding a Countywide transition to Voice over Internet Protocol (VoIP) should incorporate the impacts to the operating revenues of ISF 289.

The audit team also examined historical ISF 289 IT service rates. The chart below details rates for the OC Telephone Network (OCTNET) Monthly Recurring Charges (MRCs) and County Network Services, which comprise approximately 40% of total FY 09/10 projected ISF 289 charges. Rates for these services have increased since FY 05/06 overall (12.4% for OCTNET MRCs and 23.6% for County Network Services). It is important to note that in the first quarter of 2008, CEO/IT modified the type and description of IT services offered to agencies/departments (i.e., added, removed, or renamed services). Therefore, of the major IT service charge categories, historical rates could only be analyzed for two charge types presented below.

ISF 289 OCTNET AND NETWORK SERVICES MONTHLY RATES
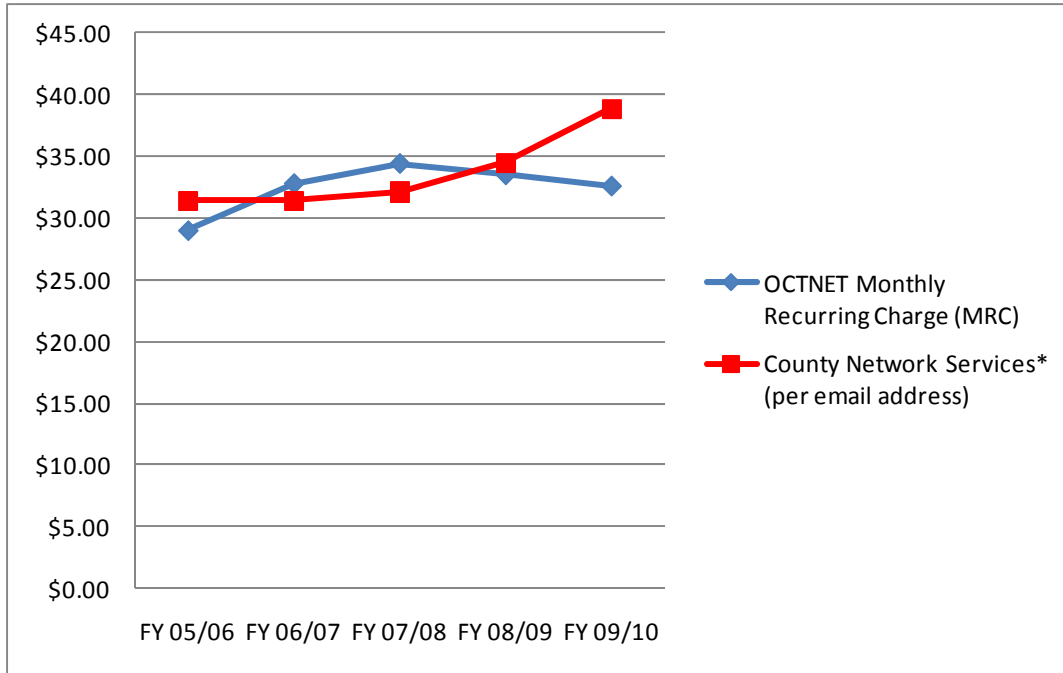
Source: CEO/IT "Rates Comparison FY04 – FY09" Report
* In FY 07/08, CEO/IT switched from a per IP address charge to a per email address charge

Rates are impacted by a number of factors such as forecasted demand for services, the number of ISF 289 staff (County and contractors) providing services, and the number of Countywide IT initiatives funded through ISF 289 (e.g., eGov, network upgrades).

Agency/Department ISF 289 Charges

The chart below shows annual ISF 289 charges in FY 05/06 and FY 08/09 for the 13 agencies/departments that were charged approximately $1M or more in FY 08/09. As demonstrated in the chart, ISF 289 charges vary significantly across these 13 agencies/departments. Agencies/departments that are large (i.e., have a high number of employees) and/or have IT intensive operations (e.g., use major IT systems or the Data Center in day-to-day operations) tend to have higher average ISF 289 charges.

HISTORICAL ISF 289 CHARGES TO TOP AGENCY/DEPARTMENT USERS
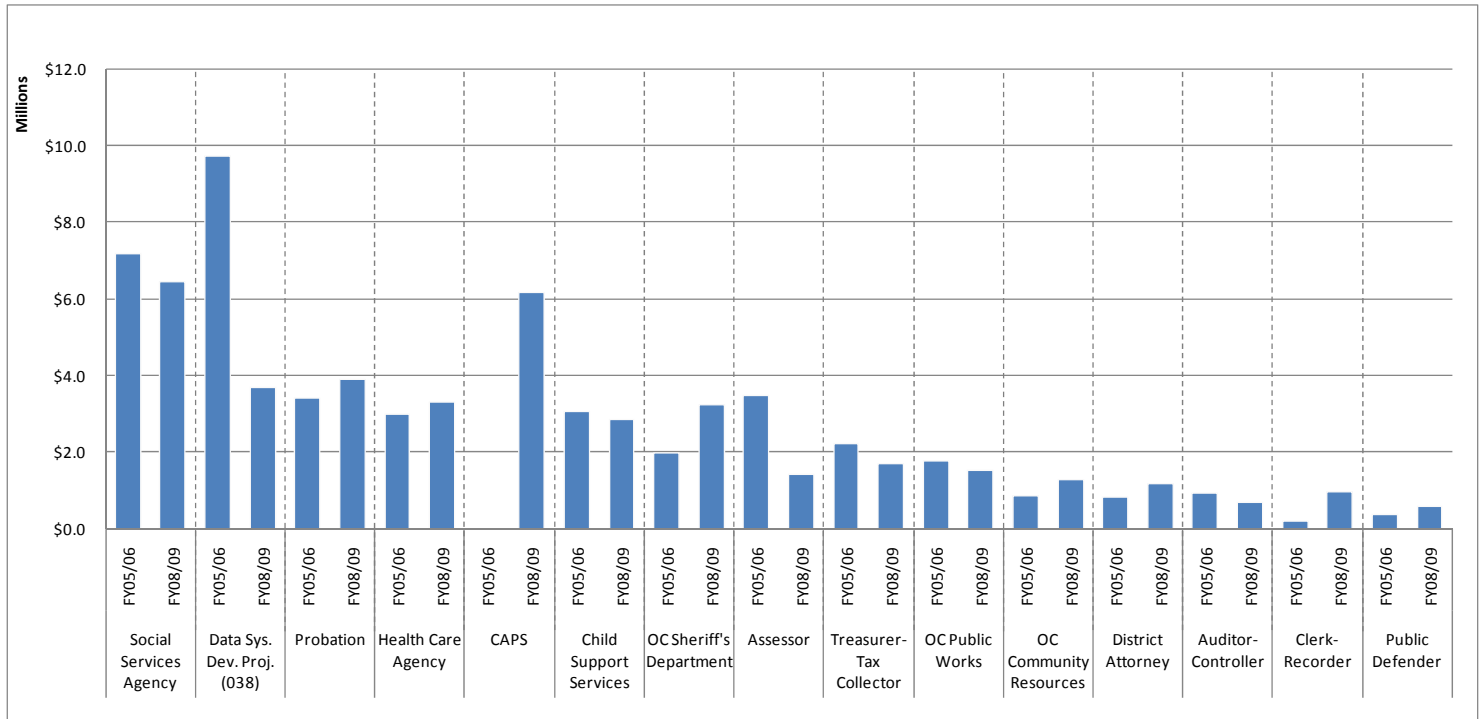
Source: CEO/IT "SB-58 CAFR Y-E Revenue" reports
Note: in FY 05/06, there had not yet been an agency developed for CAPS

Excluding CAPS and Data Systems Development Projects (Agency 038) which fluctuate significantly based on large IT initiatives, some agencies/departments have experienced a decrease in total ISF 289 charges from FY 05/06 to FY 08/09 (e.g., SSA), while others have experienced an increase (e.g., OC Sheriff's Department).

The 13 agencies/departments listed above comprise 75% of the total Countywide ISF 289 charges in FY 08/09, and the table below details the top IT services used by each of these agencies/departments. The table demonstrates that there are varying cost drivers across these 13 agencies/departments. Some have OCTNET monthly charges as their highest cost area (e.g., SSA, HCA), while others have County Network Services as their highest cost area (e.g., OC Public Works).

TOP ISF 289 CHARGES BY IT SERVICE AREA (FY 08/09)

Agency/Department	Total Agency / Department Charges	Top IT Services Used by Agency/Department	IT Service Charges	Percent of Total Agency / Department Charges
Social Services Agency (SSA)	$6,449,165	OCTNET Monthly Recurring Charges (MRCs)	$2,497,059	38.7%
		County Network Services	$1,522,609	23.6%
		Application Development	$1,023,095	15.9%
CAPS	$6,165,849	Other Pass Through Charges	$2,646,677	44.7%
		Application Development	$1,217,295	20.5%
		Application Database Design	$448,248	7.6%
Data Systems DevelopmentProjects (Agency 038)	$3,693,784	Application Development	$2,245,364	60.5%
		Business Analysis	$350,046	9.4%
		Enterprise Architecture / Special Services	$335,178	9.0%
Assessor	$1,416,876	Application Development	$430,246	30.8%
		IBM Mainframe Charges	$202,584	14.5%
		OCTNET Monthly Recurring Charges (MRCs)	$177,107	12.7%
Probation	$3,906,674	Application Development	$764,537	19.6%
		County Network Services	$691,192	17.7%
		OCTNET Monthly Recurring Charges (MRCs)	$684,400	17.5%
Health Care Agency (HCA)	$3,291,727	OCTNET Monthly Recurring Charges (MRCs)	$1,368,376	41.6%
		County Network Services	$1,175,841	35.7%
		Non-OCTNET Pass Through Charges	$606,484	18.4%
Dept. of Child Support Services	$2,852,953	Other Pass Through Charges	$1,532,873	53.7%
		Application Development	$459,057	16.1%
		OCTNET Monthly Recurring Charges (MRCs)	$352,767	12.4%
OC Sheriff's Department	$3,216,956	County Network Services	$1,472,662	48.1%
		OCTNET Monthly Recurring Charges (MRCs)	$924,627	30.2%
		Non-OCTNET Pass Through Charges	$531,716	17.4%
Treasurer-Tax Collector	$1,693,849	IBM Mainframe Charges	$1,073,308	63.4%
		Application Development	$252,473	14.9%
		Server Maintenance	$127,617	7.5%
OC Public Works	$1,538,285	County Network Services	$581,785	46.6%
		Non-OCTNET Pass Through Charges	$342,713	27.5%
		OCTNET Monthly Recurring Charges (MRCs)	$215,621	17.3%
District Attorney	$1,156,777	OCTNET Monthly Recurring Charges (MRCs)	$471,077	41.3%
		County Network Services	$383,548	33.6%
		Non-OCTNET Pass Through Charges	$199,584	17.5%
OC Community Resources	$1,268,779	Non-OCTNET Pass Through Charges	$495,997	39.1%
		OCTNET Monthly Recurring Charges (MRCs)	$305,571	24.1%
		County Network Services	$249,632	19.7%
Auditor-Controller	$686,619	Server Maintenance	$1,816,187	64.4%
		Platform Project Support	$512,624	18.2%
		IBM Technical Support	$148,869	5.3%
TOTAL			$30,836,643	

Source: CEO/IT "Revenues by Customer 08-09 093009"

CEO/IT Budget and Organizational Statistics

As part of Task I, the audit team examined CEO/IT's budget and actual expenditures for the three budgetary components that cover IT services: Agency 017 (Units 3000 and 3050), ISF 289, and Agency 038.

CEO/IT Total Expenditures

The table below illustrates the total spending of CEO/IT-controlled funds/agencies. ISF 289 charges both Agency 017 and Agency 038 for services, and thus these costs are pulled out separately (italicized) to avoid double counting.

	FY05/06	FY06/07	FY07/08	FY08/09	FY09/10*	% Change FY05/06 to FY08/09
Agency 017 Expenditures (excluding ISF 289 Charges)	$1,350,622	$1,794,996	$3,144,558	$3,447,598	$3,587,398	155%
ISF 289 Charges to Agency 017	*$73,897*	*$132,283*	*$38,948*	*$30,597*	*$28,000*	*-59%*
ISF 289 Expenditures (excluding charges to Agency 017 and Agency 38)	$29,456,888	$44,647,230	$46,907,184	$45,082,935	$45,659,054	53%
ISF 289 Charges to Agency 038	*$10,038,158*	*$3,177,747*	*$4,266,153*	*$3,693,784*	*$1,415,733*	*-63%*
Agency 038 Expenditures (excluding ISF 289 charges)	$5,212,544	$3,776,527	$4,343,190	$6,298,323	$6,920,399	21%
TOTAL	$46,132,108	$53,528,782	$58,700,032	$58,553,236	$57,610,584	27%

Note: A substantial portion of Agency 038 spending is for non-CEO/IT driven projects, such as CAPS (in FY 05/06), and ATS/PTMS (FY 06/07 through FY 09/10)

* FY 09/10 data are budgeted amounts, not actual expenditures

Total spending for CEO/IT-controlled funds/agencies grew from $46.1M in FY 05/06 to a high of $58.6M in FY 08/09, an increase of 27%. The bulk of expenditure growth (approximately $9.3M) occurred in ISF 289, which spent a total of $39.6M in FY 05/06, then $48.8M in FY 08/09. The significant decrease in ISF 289 charges to Agency 038 occurred because the Auditor-Controller (A-C) CAPS System was funded through Agency 038 in FY 05/06, but was subsequently moved into its own agency (Agency 014, controlled by the Auditor-Controller) with its own general fund allocation.

Detailed expenditure analyses for each of the three different CEO/IT-controlled funds/agencies are provided in the sections that follow.

CEO/IT Agency 017 (Unit 3000 and 3050)

TYPE OF EXPENDITURE	FY05/06	FY06/07	FY07/08	FY08/09	FY09/10*	% Change FY05/06 to FY08/09
TOTAL SALARY AND EMPLOYEE BENEFITS	$892,589	$1,421,646	$2,144,740	$2,657,538	$2,645,778	198%
PROFESSIONAL/SPECIALIZED SVCS	$111,384	$33,516	$617,819	$592,073	$587,679	432%
RENTS AND LEASES - EQUIPMENT	$73,148	$90,482	$74,286	$68,750	$95,000	-6%
SPECIAL DEPARTMENTAL EXPENSE	$106,854	-$7,034	$140,376	$3,606	$84,500	-97%
OFFICE EXPENSE	$59,335	$98,503	$59,230	$33,227	$68,000	-44%
DATA PROCESSING SERVICE CHARGES	$73,897	$132,283	$38,948	$30,597	$28,000	-59%
OTHER	$107,311	$157,883	$108,107	$92,405	$106,441	-14%
TOTAL	**$1,424,518**	**$1,927,279**	**$3,183,506**	**$3,478,194**	**$3,615,398**	**144%**

* FY09/10 numbers are budget amounts

** Totals include all Agency 017 planned expenditures <u>including</u> ISF 289 charges

Between FY 05/06 and FY 08/09, total IT expenditures in the Agency 017 component of CEO/IT grew by $2.1M, or 144%. As shown in the table above, the largest cost in the Agency 017 portion of CEO/IT is Salaries and Employee Benefits, which grew from $893K in FY 05/06 to $2.7M in FY 08/09, an increase of 198%. This trend is consistent with the significant increase in the number of management positions in CEO/IT Agency 017. In addition, spending on Professional/Specialized Services grew from $111K in FY 05/06 to $592K in FY 08/09, an increase of 432%. This increase is driven primarily by the cost for the Emergency Mass Notification System "Alert OC" (approx. $562K annually), which CEO/IT implemented in FY 07/08.

ISF 289

TYPE OF EXPENDITURE	FY05/06	FY06/07	FY07/08	FY08/09	FY09/10*	% Change from FY 05/06 to FY 08/09
PROFESSIONAL/SPECIALIZED SVCS	$24,112,772	$28,129,602	$30,497,258	$27,755,090	$23,662,837	15%
TOTAL SALARY AND EMPLOYEE BENEFITS	$4,840,291	$5,399,273	$5,993,570	$6,554,607	$6,111,163	35%
TELEPHONE & TELEGRAPH - OTHER	$5,037,305	$5,312,076	$3,537,680	$3,691,479	$5,675,700	-27%
RENTS AND LEASES - EQUIPMENT	$1,548,796	$2,554,078	$3,059,358	$3,095,851	$3,674,543	100%
CWCAP CHARGES	$1,022,205	$1,326,613	$733,391	$1,076,160	$1,445,177	5%
UTILITIES-PURCHASED ELECTRIC	$587,043	$853,538	$918,369	$1,168,528	$1,414,500	99%
RENTS & LEASES-BLDGS & IMPROVS	$592,172	$692,825	$764,262	$855,436	$1,125,679	44%
MAINTENANCE - EQUIPMENT	$712,957	$967,144	$968,790	$1,088,093	$911,416	53%
EQUIPMENT	-$337,579	$77,058	-$11,421	-$7,367	$802,628	-98%
OFFICE EXPENSE	$442,859	$373,538	$408,507	$215,764	$367,034	-51%
MAINTENANCE - BLDGS & IMPROV'S	$467,896	$271,340	$304,468	$393,631	$250,000	-16%
MINOR ALTERATIONS AND IMPROV'S	$185,139	$425,690	$379,028	$331,030	$196,006	79%
MIN OFFICE EQ TO BE CONTROLLED	$18,404	$183,707	$214,312	$215,975	$10,000	1074%
OTHER	$338,682	$1,390,776	$3,444,710	$2,373,037	$1,456,104	601%
TOTAL	$39,568,942	$47,957,259	$51,212,284	$48,807,315	$47,102,787	23%

* FY 09/10 data are budgeted amounts, not actual expenditures
Notes: (1) Totals include all ISF 289 expenditures including those to Agency 017 and Agency 038, (2) Totals include Central Justice Center charges

The largest expenditure line for the ISF 289 operation is Professional/Specialized Services, the bulk of which are costs related to the ACS contract (e.g., $26.6M of the $27.8M in FY 08/09). As noted in previous sections of this report, ACS provides the County with IT staff resources for a variety of activities including Mainframe Computing Services ($3.1M in FY 08/09), Network Platform Services ($5.2M in FY 08/09), and Help Desk ($681K in FY 08/09), all of which occur at the County Data Center. In addition, ACS also provides staff for Application Services, which was the highest cost portion of the ACS contract in FY 08/09 at $8.6M. ACS also charges the County for services provided by its Principal Subcontractors (a cost of $4.2M in FY 08/09), the most significant of which is AT&T which provides staff in support of the OCTNET system. In addition to these direct costs, ACS is paid a fixed profit percentage each year (7.75%), based on the expected, not actual, charges for that year, according to the contract. In FY 08/09, the fixed profit paid to ACS was approximately $1.9M.

In addition to staff provided via the ACS contract, ISF 289 also pays for a number of CEO/IT staff, including the Chief Technology Officer, CEO/IT Finance staff, CEO/IT Procurement staff, CEO/IT staff that are stationed at Child Support Services, as well as a variety of other line and management staff. These Salary and Employee Benefit costs grew from $4.8M in FY 05/06 to $6.6M in FY 08/09, an increase of over 35%. As with the Agency 017 portion of CEO/IT, these increases are consistent with the addition of new management personnel to the CEO/IT organization, which occurred in ISF 289, as well.

Other significant expenditure line items for ISF 289 include Telephone & Telegraph – Other ($3.7M in FY 08/09) and the Rent and Lease of Equipment (which grew from $1.5M in FY 05/06 to $3.1M in FY 08/09). Countywide Cost Allocation Program (CWCAP) charges are also significant costs for ISF 289, consistently around $1M for each of the last four years, and projected to increase to $1.4M in FY 09/10. Another key cost to note is Electricity purchases, which increased from $587K in FY 05/06 to $1.2M in FY 08/09. Many of the equipment, maintenance, and facility costs pertain to the operation of the County Data Center.

CEO/IT Agency 038 (Data Systems Development Projects)

TYPE OF EXPENDITURE	FY05/06	FY06/07	FY07/08	FY08/09	FY09/10*
PROFESSIONAL/SPECIALIZED SVCS	$3,509,652	$2,431,808	$2,470,937	$4,908,000	$6,920,399
DATA PROCESSING SERVICES	$10,023,989	$3,157,711	$4,264,416	$3,693,784	$1,415,733
EQUIPMENT	$0	$0	$0	$1,076,349	$0
RENTS AND LEASES - EQUIPMENT	$744,932	$1,016,396	$1,346,652	$131,376	$0
MAINTENANCE - EQUIPMENT	$745,410	$260,455	$238,621	$108,090	$0
OTHER	$226,719	$87,904	$288,717	$74,508	$0
TOTAL	**$15,250,702**	**$6,954,274**	**$8,609,343**	**$9,992,107**	**$8,336,132**

* FY 09/10 data are budgeted amounts, not actual expenditures
** FY 09/10 numbers include all Agency 038 expenditures <u>including</u> ISF 289 charges

Agency 038 spending is funded entirely by the County General Fund, and is meant to support the upgrade or implementation of critical, major IT systems (e.g., CAPS, ATS, PTMS). Since FY 05/06, CEO/IT has expanded the use of Agency 038 to fund several smaller system or non-systems projects/initiatives including, but not limited to, eGov ($3.7M), Disaster Recovery/Business Continuity ($2.3M), Active Directory ($1.3M), 311 Call Center ($458K), Regional Wireless ($200K), and the IT Strategic Plan ($638K). CEO/IT determines when a project has reached the end of the "implementation" phase, and should move into the "operations and maintenance" phase, at which point the continued cost of the project begins to be funded via ISF 289. As an example, both eGov and the Clarity Portfolio Management System are no longer funded via Agency 038, but rather through ISF 289. This issue is discussed in further detail in the *Key IT Projects* section of this report, and will also be reviewed in subsequent phases of this audit.

As shown in the table above, the bulk of the costs in Agency 038 are for Professional/Specialized Services (e.g., consultants, software purchases) and Data Processing Services (i.e., data systems charges from ISF 289 for the use of ACS contractors and/or data processing capacity at the County Data Center). Prior to FY

08/09, there was no purchase of equipment in Agency 038, but only the rent or lease of equipment for specific projects. However, in FY 08/09, CEO/IT purchased over $1M of equipment, all with money appropriated for Disaster Recovery/Business Continuity.

CEO/IT Position Count Analysis

The chart below details the number of County and contractor FTE positions in the CEO/IT organization. The total number of County positions has remained relatively steady from FY 05/06 through FY 09/10; the number of contractor FTEs, however, decreased significantly between FY 07/08 and FY 08/09, and again between FY 08/09 and FY 09/10 due to budget constraints. In addition, over time, the chart shows that the proportion of Agency 017 positions has grown relative to ISF 289 CEO/IT positions. In FY 05/06, Agency 017 positions comprised 5.4% of total CEO/IT staff count; that percentage increased to 8.8% in FY 09/10. This percentage change is primarily due to the increase in the number of Agency 017 FTE positions, the decrease in the number of contractors, and the deletion of vacant positions in ISF 289 at the end of FY 08/09.

CEO/IT TOTAL POSITIONS (COUNTY AND CONTRACTOR)
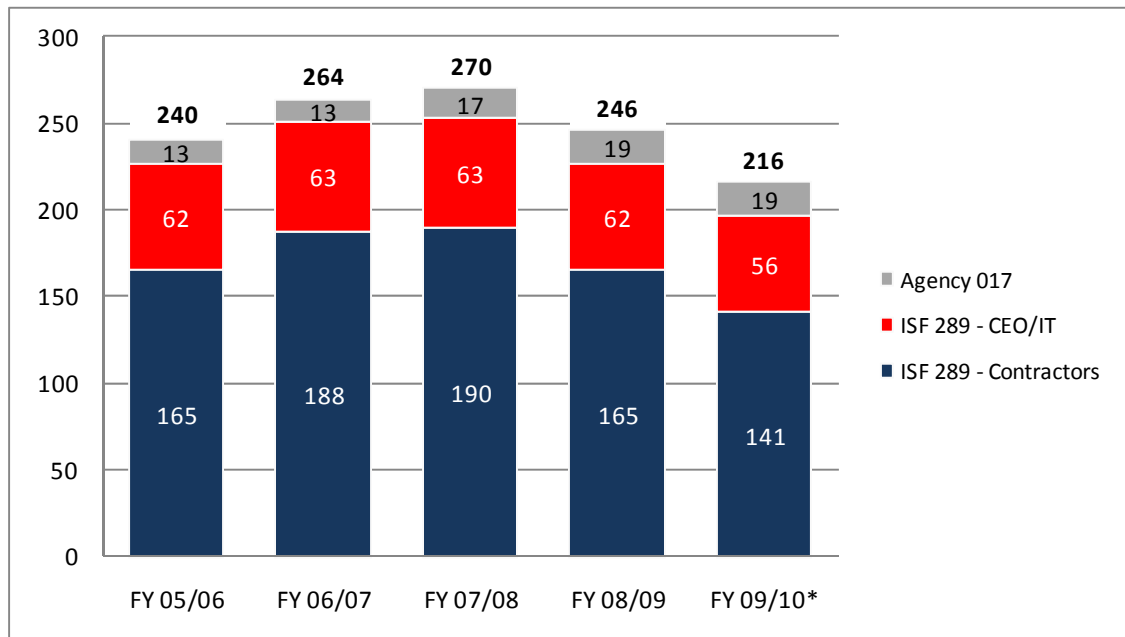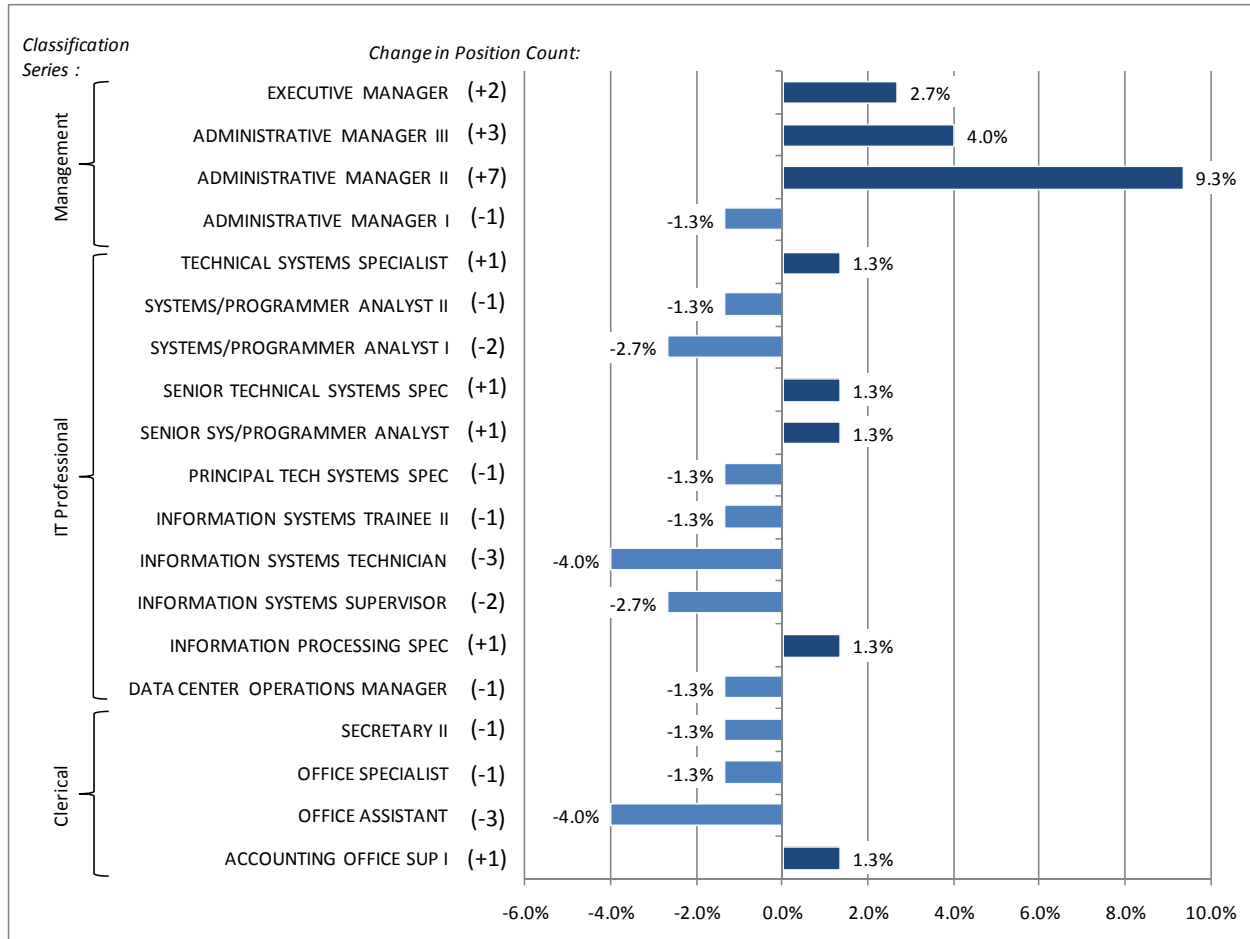

Sources: CEO/IT SFBS, ACS invoices
*The number of contractors for FY 09/10 is based on current contractor positions (CEO/IT, September 2009)

The audit team examined in-house position trends in CEO/IT in the following chart, which illustrates the change in the composition of CEO/IT staff over the past five years. For more detail on contractor FTEs, see the ACS Contractor Analysis on page 50.

CHANGE IN CEO/IT FTE COMPOSITION
(BETWEEN FY 05/06 AND FY 09/10, IN PERCENTAGE POINTS)

Classification Series:

Change in Position Count:

Classification	Count	Percentage
EXECUTIVE MANAGER	(+2)	2.7%
ADMINISTRATIVE MANAGER III	(+3)	4.0%
ADMINISTRATIVE MANAGER II	(+7)	9.3%
ADMINISTRATIVE MANAGER I	(-1)	-1.3%
TECHNICAL SYSTEMS SPECIALIST	(+1)	1.3%
SYSTEMS/PROGRAMMER ANALYST II	(-1)	-1.3%
SYSTEMS/PROGRAMMER ANALYST I	(-2)	-2.7%
SENIOR TECHNICAL SYSTEMS SPEC	(+1)	1.3%
SENIOR SYS/PROGRAMMER ANALYST	(+1)	1.3%
PRINCIPAL TECH SYSTEMS SPEC	(-1)	-1.3%
INFORMATION SYSTEMS TRAINEE II	(-1)	-1.3%
INFORMATION SYSTEMS TECHNICIAN	(-3)	-4.0%
INFORMATION SYSTEMS SUPERVISOR	(-2)	-2.7%
INFORMATION PROCESSING SPEC	(+1)	1.3%
DATA CENTER OPERATIONS MANAGER	(-1)	-1.3%
SECRETARY II	(-1)	-1.3%
OFFICE SPECIALIST	(-1)	-1.3%
OFFICE ASSISTANT	(-3)	-4.0%
ACCOUNTING OFFICE SUP I	(+1)	1.3%

Management: EXECUTIVE MANAGER, ADMINISTRATIVE MANAGER III, ADMINISTRATIVE MANAGER II, ADMINISTRATIVE MANAGER I
IT Professional: TECHNICAL SYSTEMS SPECIALIST through DATA CENTER OPERATIONS MANAGER
Clerical: SECRETARY II, OFFICE SPECIALIST, OFFICE ASSISTANT, ACCOUNTING OFFICE SUP I

Axis: -6.0% -4.0% -2.0% 0.0% 2.0% 4.0% 6.0% 8.0% 10.0%

Source: CEO/IT SBFS and CAPS Data Warehouse
Note: Positions that did not net a change in count between FY 05/06 and FY 09/10 are not included in the chart

As illustrated above, the greatest increase has occurred in the management position classifications, with a net increase of 11 management positions since FY 05/06. The chart below provides additional detail on the addition of management positions in CEO/IT.

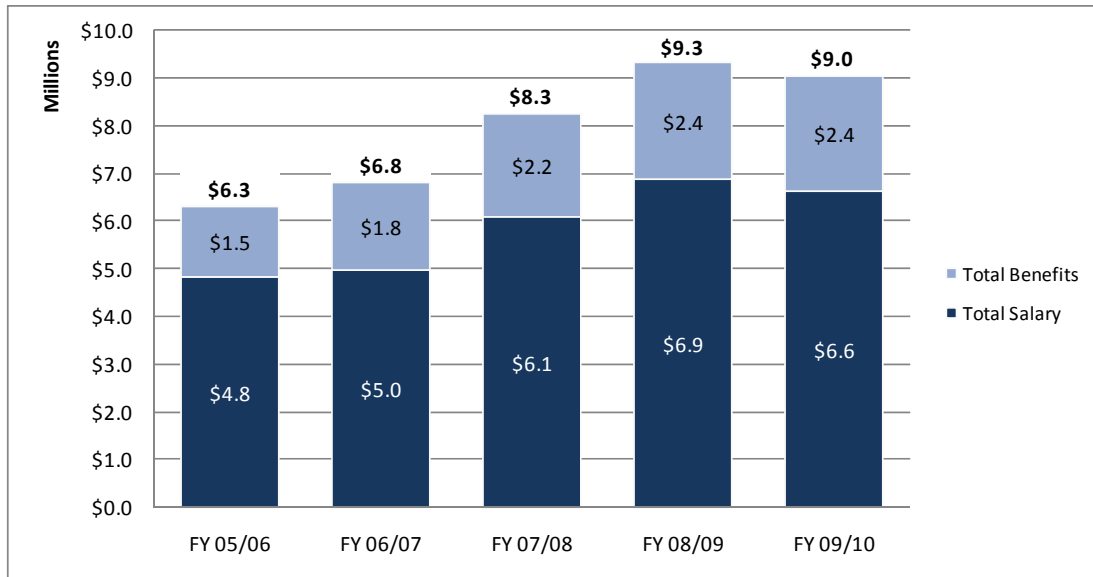## NUMBER OF CEO/IT ADMINISTRATIVE AND EXECUTIVE MANAGERS
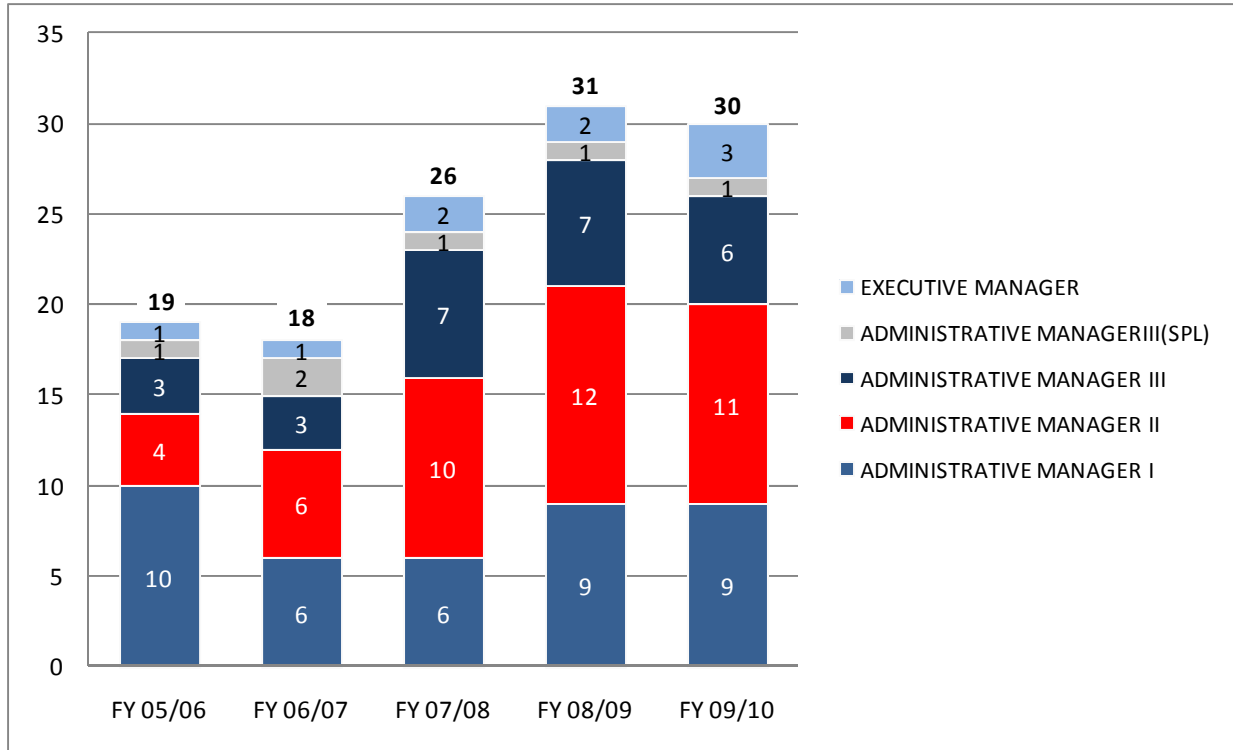
Source: CEO/IT SBFS

As illustrated in the chart, the total number of Administrative and Executive Managers has increased 57.9% since FY 05/06. Management positions added over the last five years were primarily allocated to IT Project/Portfolio Management and eGov.

Compensation Expenses

The chart below details Salaries and Employee Benefits (S&EB) expenses for CEO/IT FTE positions from FY 05/06 to FY 09/10. Results show an overall 47.5% increase in S&EB for CEO/IT from FY 05/06 to FY 08/09, and a projected 3.1% decline in FY 09/10 due to recent IT budget cuts and layoffs.

TOTAL CEO/IT SALARIES AND EMPLOYEE BENEFITS EXPENSE

Source: CEO/IT SBFS

As demonstrated earlier, the majority of the S&EB expense increase is the result of an increase in management positions. The chart below illustrates the Administrative and Executive management subset of total CEO/IT S&EB expenses, which shows a 142.9% increase between FY 05/06 and FY 09/10.

**CEO/IT ADMINISTRATIVE AND EXECUTIVE MANAGEMENT
SALARIES AND EMPLOYEE BENEFITS EXPENSE**
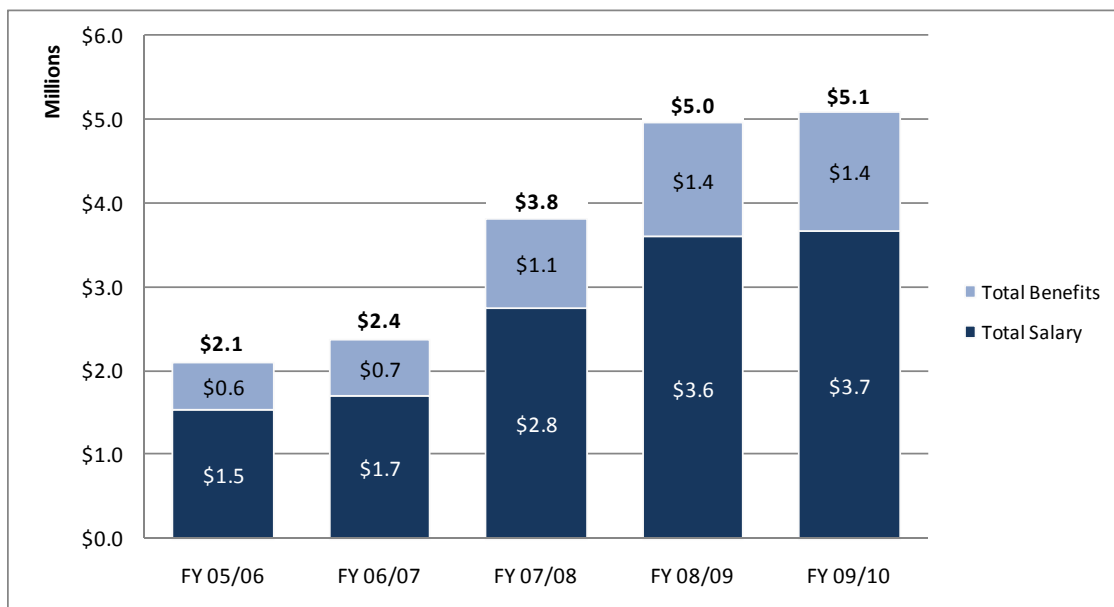
Source: CEO/IT SBFS

For comparison purposes, the audit team also examined the hourly rates of CEO/IT management employees with those of agency/department IT management employees. (Note: no comparisons could be made for Administrative Manager III(SPL) and Executive Manager positions, since CEO/IT is the only County agency/department with those classifications in an IT function). For those that could be compared (Administrative Manager I-III), summary results show the ranking of CEO/IT positions relative to those of agency/department IT management positions:

Management Classification	CEO/IT Ranking
Administrative Manager I	1
Administrative Manager II	10
Administrative Manager III	2

Source: SBFS, FY 09/10

HOURLY SALARIES OF ADMINISTRATIVE MANAGEMENT CLASSIFICATIONS (IN IT FUNCTIONS)

AGENCY / DEPT	ADMINISTRATIVE MANAGER I			ADMINISTRATIVE MANAGER II			ADMINISTRATIVE MANAGER III		
	Avg. Hourly Rate	Ranking	No. Positions	Avg. Hourly Rate	Ranking	No. Positions	Avg. Hourly Rate	Ranking	No. Positions
Assessor							$ 57.38	8	1
Auditor-Controller	$ 42.33	3	1				$ 65.06	4	2
CEO/IT	$ 44.57	1	9	$ 54.15	10	10	$ 67.46	2	6
Clerk-Recorder				$ 50.79	13	1			
Child Support Services				$ 59.27	4	1			
District Attorney				$ 61.59	1	1			
Health Care Agency				$ 58.02	5	5	$ 73.05	1	2
John Wayne Airport				$ 57.78	6	1			
OC Community Resources				$ 54.37	9	2			
OC Public Works				$ 57.27	7	1	$ 64.55	5	1
OC Sheriff's Department				$ 53.17	12	2			
OC Waste & Recycling	$ 40.98	4	1	$ 59.89	3	1			
Public Defender				$ 60.91	2	1			
Probation				$ 53.22	11	1	$ 60.75	7	1
Registrar of Voters	$ 40.95	5	1	$ 49.01	14	1			
Social Services Agency	$ 43.81	2	4	$ 57.14	8	7	$ 66.15	3	1
Treasurer-Tax Collector							$ 64.48	6	2
Overall	$ 43.79		16	$ 55.90		35	$ 66.17		16

Source: SBFS, FY 09/10
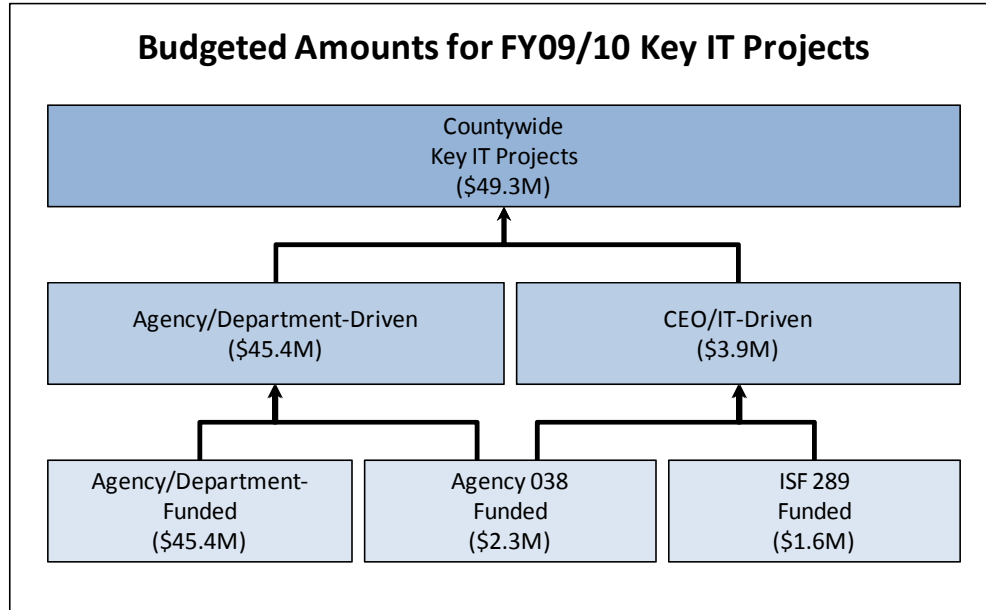
II.   Key IT Projects

Gathering Key IT Project information is included in the scope of work for Task I to gain an understanding of how much money the County has spent on large IT projects and how they have been funded. For the purposes of this audit, "Key IT Projects" are defined as CEO/IT and agency/department IT projects that cost $250,000 or more over the lifetime of the project.

Funding Sources

Key IT Projects are driven by either agencies/departments or CEO/IT. Agencies/department-driven Key IT Projects are funded either through Agency 038 Data Systems Development Projects, which are general funds controlled by the CEO's office, or through individual agency/department funding sources. Key IT Projects driven by CEO/IT are funded by either Agency 038 or ISF 289.

Projects funded by Agency 038 undergo review by and require approval from the CEO/Budget and CEO/IT offices. Agency/department-funded projects that cost $150,000 or more also undergo review by the CEO/Budget and CEO/IT offices, but do not require approval. In January 2009, CEO/IT instituted a project review process that includes submitting a formal proposal to the IT Project Review Board, a project governance body consisting of CEO/IT and agency/department business and IT management. This process requires agencies/departments to provide an additional business justification for the request. Because ISF 289 acquires its funding through charges to agencies/departments, Key IT Projects funded through ISF 289 should have Countywide (or "enterprise") benefits. Examples of ISF 289-funded projects are telephone and network upgrades. These Key IT Projects are typically reported to the Board via IT Quarterly Reports.

The diagram on the following page provides a summary of how agency/department and CEO/IT Key IT Projects are funded, using the FY 09/10 budget as an example.

Budgeted Amounts for FY09/10 Key IT Projects

```
                    ┌─────────────────────────┐
                    │      Countywide         │
                    │    Key IT Projects      │
                    │       ($49.3M)          │
                    └─────────────────────────┘
                         ▲               ▲
              ┌──────────┴──────┐  ┌─────┴──────────┐
              │ Agency/Department│  │   CEO/IT-Driven │
              │    -Driven       │  │    ($3.9M)      │
              │    ($45.4M)      │  │                │
              └──────────────────┘  └────────────────┘
                    ▲                 ▲            ▲
         ┌──────────┴──┐  ┌──────────┴──┐  ┌──────┴─────┐
         │Agency/Dept- │  │ Agency 038  │  │  ISF 289   │
         │  Funded     │  │   Funded    │  │  Funded    │
         │  ($45.4M)   │  │   ($2.3M)   │  │  ($1.6M)   │
         └─────────────┘  └─────────────┘  └────────────┘
```

Sources: CEO/IT "Key projects FY 05/06 thru FY 08/09 over $250K"; "ATS Re-engineering Board of Supervisors Update #6, October 6, 2009"

To identify the types of Key IT Projects, the audit team grouped projects by the "justification types" that were established by the IT Project Review Board. Justification types include: Business Strategic Priority, Business Process Improvement / Automation, Obsolescence, Maintenance and Operations, and Mandate. The audit team defined each justification for use in this audit, as outlined in the table below.

Justification Type	Description
Business Strategic Priority	Projects driven primarily by their alignment to a strategic priority or goal, as identified in the Countywide IT Strategic Plan or Agency/Department Strategic Plan
Business Process Improvement / Automation	Projects that have the primary objective of improving business processes through automation or other technology improvements
Obsolescence	Projects that replace technology that is nearing or has reached end-of-life
Maintenance and Operations	Projects related to the maintenance and operations of existing technology, including the maintenance of aging hardware and routine improvements to technology
Mandate	Projects initiated to meet government mandates and regulations

The section that follows discusses Countywide Key IT Project spending overall, and subsequent sections present these projects as CEO/IT-driven and agency/department-driven, per Board direction.

Countywide Key IT Project Budget

The chart below shows the total County Key IT Project budget over the past five years.

COUNTYWIDE KEY IT PROJECT BUDGET
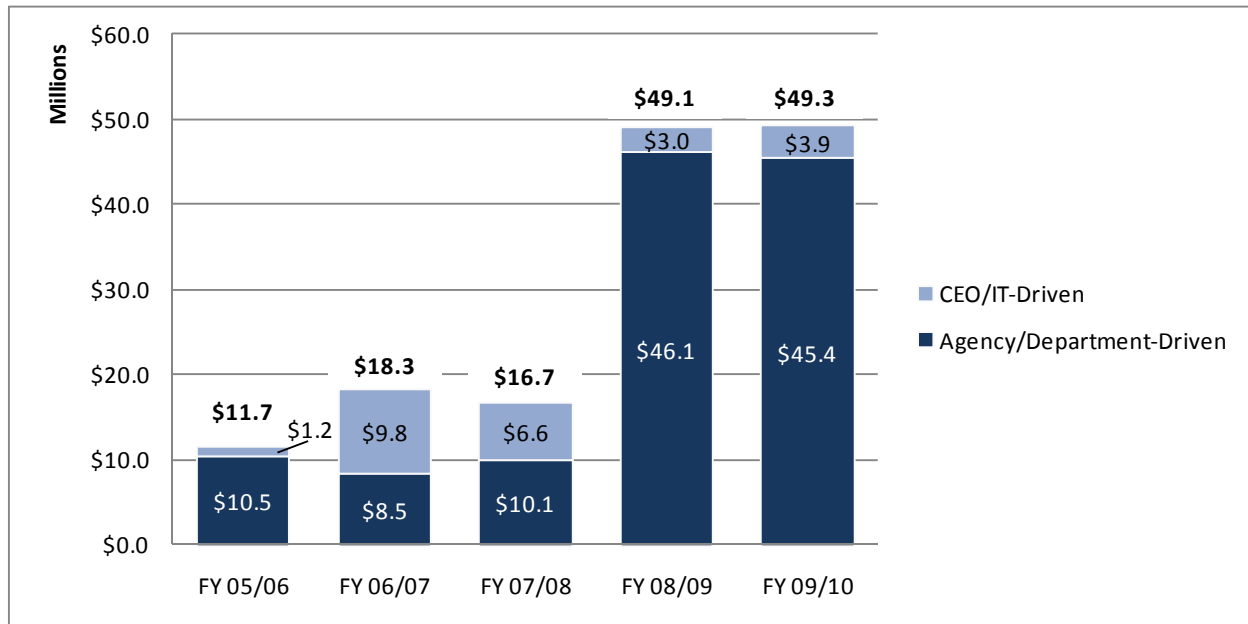
Sources: CEO/IT "Key projects FY 05/06 thru FY 08/09 over $250K"; "ATS Re-engineering Board of Supervisors Update #6, October 6, 2009"

Note: (1) Historical actual expenditures are not available for Key IT Projects funded by individual agency/department sources; (2)the chart above does not include CAPS legacy system operations and maintenance costs

As illustrated above, the total Countywide Key IT Project budget has varied greatly, with highs of $49.1M in FY 08/09 and $49.3M in FY 09/10, primarily due to the CAPS+ project. A master list of Countywide Key IT Projects for all years (FY 05/06 – FY 09/10) is included in Appendix A of this report.

The audit team was unable to obtain actual expenditure data for agency/department-driven Key IT Projects as this information has not been consistently tracked by CEO/IT over the period covered in this audit. As such, Countywide Key IT Project actual spending could not be compiled without this missing agency/department data element. More recently, through the IT Quarterly Report, CEO/IT has been gathering this data. In addition, with the purchase of the new Clarity IT project portfolio software in FY 06/07, CEO/IT acquired a tool for gathering this important information.

Also, although the Board of Supervisors directed the audit team to document Key IT Projects by staffing, consultant, hardware, software, and ongoing

operations/maintenance costs, this data was not uniformly available, for both CEO/IT-driven and agency/department-driven Key IT Projects.

### CEO/IT-Driven Key IT Project Expenditures

Finding 2: **In some cases, the full costs of CEO/IT-driven Key IT Projects are not always reported to the Board via the IT Quarterly Reporting process.**

In examining CEO/IT-driven Key IT Project costs, the audit team found that in some cases, reported amounts do not always reflect the full costs. What is reported to the Board via IT Quarterly Reports, for example, may only include the initial costs to acquire and implement the software/system (often funded through Agency 038). These reported amounts exclude on-going operations and maintenance costs incurred subsequent to the implementation phase of the project, as well as actual implementation costs in some cases. These operations and maintenance costs are often funded through ISF 289 retained earnings. Furthermore, the determination of when a project reaches the end of the implementation phase can often be subjective, with additional implementation expenses incurred following the formal closing of the implementation phase. Lastly, it is important to note that time spent by staff from CEO/IT Agency 017 is typically not reported as a project cost in the IT Quarterly Report to the Board.

One such example is the Electronic Government (eGov) project. The primary purposes of eGov include: (1) developing a consistent and user-friendly look and feel for all County web sites, (2) implementing more effective tools for finding information across agencies and departments, and (3) improving the ability of agencies and departments to better manage their own websites.

The diagram below illustrates the audit team's initial research to ascertain all costs associated with the eGov project to date, which is approximately $5.8M. Only $3.7M (Phase I only) of this amount has been reported to the Board via IT Quarterly Reports. The costs to implement Phase II of the project (i.e., conversion of the remaining agency/department websites) and operations and maintenance costs of eGov, both of which are funded through ISF 289 retained earnings, have not been included in IT Quarterly Reports to date. According to CEO/IT the estimated annual operations and maintenance cost for eGov is approximately $1M/year. Lastly, there will be additional implementation costs for eGov Phase III (creation of an enhanced employee intranet portal), which is still in the planning stages.

TOTAL EGOV PROJECT COSTS TO DATE, FY 06/07 – FY 09/10
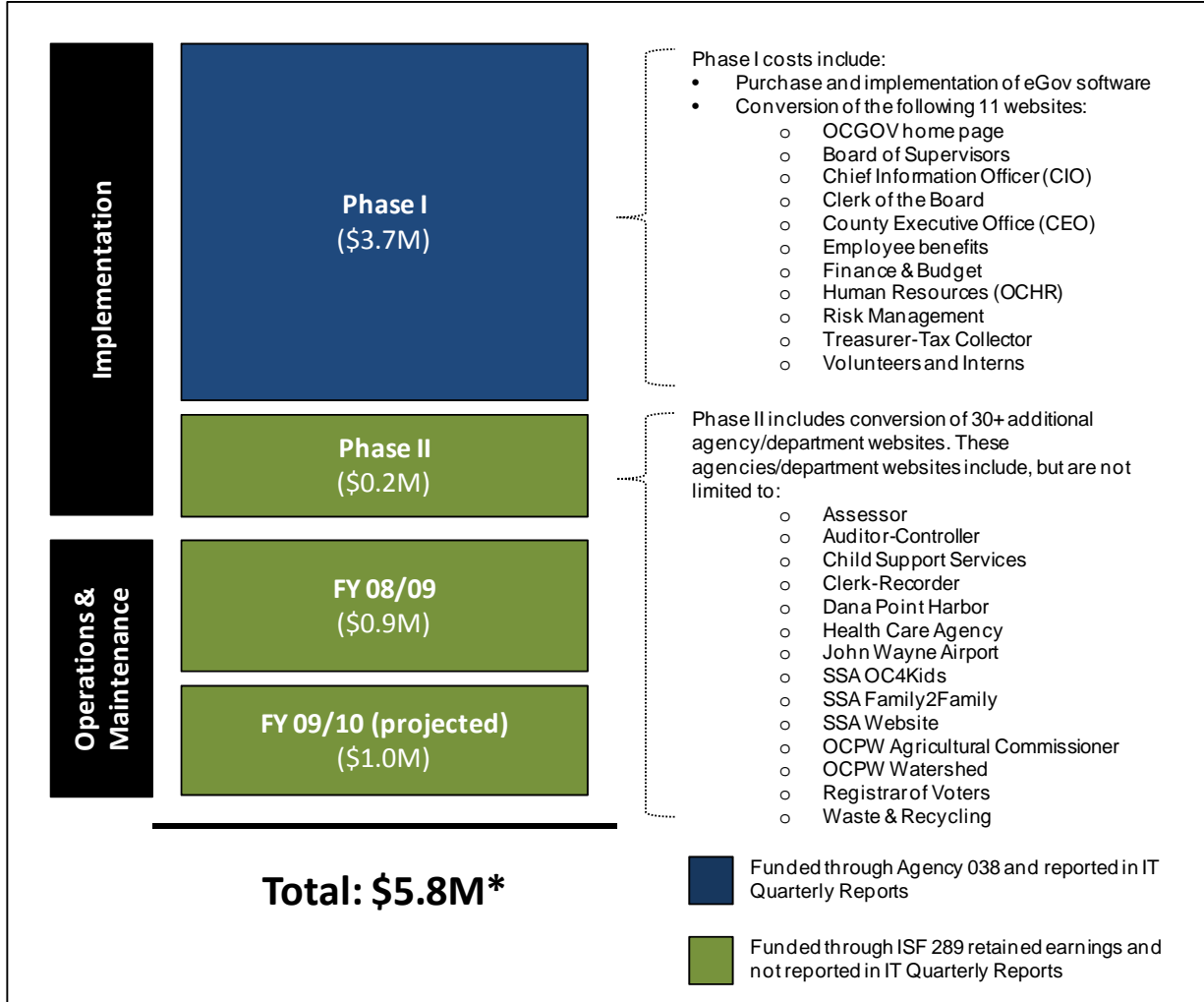
Source: CEO/IT Quarterly IT Status Reports (FY 06/07 – FY 08/09), CEO/IT ISF 289 Retained Earnings report
*Does not include Agency 017 staff costs (i.e., time spent on eGov by project managers and
developers funded through Agency 017); FY 09/10 Operations and Maintenance cost is projected cost

As a result, the amounts provided below by CEO/IT for its Key IT Projects may not necessarily reflect the full costs of the projects/initiatives. Some of these CEO/IT-driven Key IT Projects will be reviewed in more detail as case studies in subsequent phases of this audit. These case studies will document full project costs and assess the reporting of those costs to the Board.

Recommendation 2: CEO/IT should compile the full costs for all ongoing CEO/IT-driven Key IT Projects and report this information via the IT Quarterly Report process.

Notwithstanding the aforementioned caveats, the chart below illustrates approximate spending on CEO/IT-driven Key IT Projects.

CEO/IT-DRIVEN KEY IT PROJECT ACTUAL EXPENDITURES
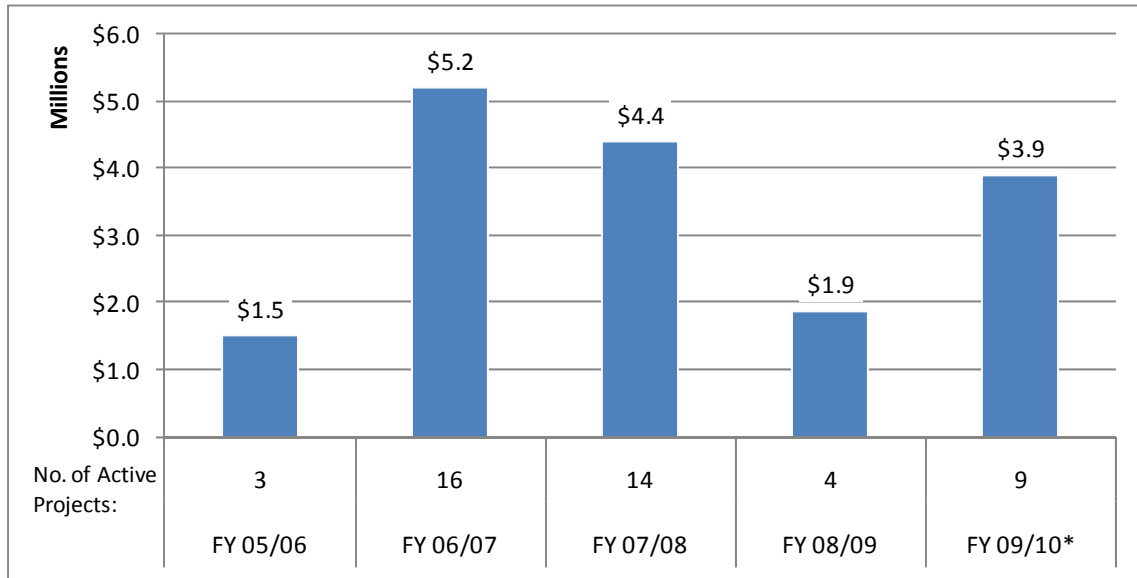
Source: CEO/IT "Key projects FY 05/06 thru FY 08/09 over $250K"
Note: Expenditures include both Agency 038 and ISF 289 projects
*FY 09/10 data are budgeted amounts, not actual expenditures

The chart demonstrates that approximate spending on CEO/IT-driven Key IT Projects over the past five years has varied from year to year, depending on the number of projects. The 247% increase from FY 05/06 to FY 06/07 is attributed to projects such as Disaster Recovery/Business Continuity ($0.6M in FY 06/07), the IT Strategic Plan ($0.6M in FY 06/07), the Data Center Co-Location Study ($0.5M in FY 06/07), and the eGov project ($1.3M in FY 06/07). The decrease in FY 08/09 is due to an intended reduction in IT spending as a result of current financial conditions. The majority ($2.6M) of the projects planned for FY 09/10 are currently on hold pending the IT Sourcing Strategy development and approval by the Board of Supervisors.

The following table details individual CEO/IT-driven Key IT Projects over the past four years.

CEO/IT-DRIVEN KEY IT PROJECTS, FY05/06 TO FY 08/09

Project Name	Description	Justification Type	Funding Source	Budget	Actual EXP/ENC	Project Duration	Authorized Spend on Professional Consulting Services
ELECTRONIC GOVERNMENT*	Development of a new County web interface and search engine based to improve online delivery of County Services	Business Strategic Priority	Agency 038	$ 3,697,576	$ 3,680,861	FY 06/07 - FY 07/08	$ 49,820
DISASTER RECOVERY / BUSINESS CONTINUITY	Establishment of strategies to mitigate the impacts of an emergency or a disaster	Business Strategic Priority	Agency 038	$ 3,499,984	$ 2,300,763	FY 06/07 - FY 08/09 (continues in FY 09/10)	$ 633,900
ACTIVE DIRECTORY	Alignment of countywide IT groups so that groups can better communicate, leverage resources, align to a common technology road map	Business Process Improvement / Automation	Agency 038	$ 750,000	$ 1,330,714	FY 05/06 - FY 06/07	$ -
NETWORK UPGRADE	Network upgrade to support user requirements and growing demands from agency and new enterprise applications (CAPS+, ATS, PTMS)	Maintenance and Operations	ISF 289	$ 1,750,000	$ 719,359	FY 07/08 - FY 08/09	$ -
IT STRATEGIC PLAN	Development of a multi-year countywide IT Strategic plan	Business Strategic Priority	Agency 038	$ 1,044,854	$ 637,925	FY 06/07 - FY 07/08	$ 637,925
IT POLICY REVIEW	Includes purchase of an enterprise-level IT project portfolio management system (Clarity), IT Classification Study (CPS), and IT Sourcing Contract Review (PA Consulting)	Business Process Improvement / Automation	Agency 038	$ 722,740	$ 609,751	FY 06/07 - FY 07/08	$ 185,850
COUNTYWIDE IT SECURITY AUDIT & THREAT ASSESSMENT	Assessment of countywide information technology security	Business Strategic Priority	Agency 038	$ 887,211	$ 574,853	FY 06/07 - FY 07/08	$ 337,450
DATA CENTER CO-LOCATION STUDY	Assessment of the technical, business and financial feasibility of co-locating six Departments/Agencies' (IWMD, RDMD, SSA, RoV, JWA, and HCA) data centers to the Orange County Data Center	Business Process Improvement / Automation	Agency 038	$ 508,000	$ 513,748	FY 06/07	$ 81,562
REGIONAL 311 CUSTOMER SERVICE CENTER	Development of a business case for a County-wide 311 customer service center	Business Strategic Priority	Agency 038	$ 2,832,764	$ 458,161	FY 06/07 - FY 07/08	$ 390,925
IT INTERNAL PROCESS STANDARDIZATION TRAINING	Training for County Agency Information Technology staff on standardizing IT processes	Business Process Improvement / Automation	Agency 038	$ 500,000	$ 437,443	FY 06/07 - FY 07/08	$ 407,000
TELEPHONE SWITCH UPGRADE	Upgrades to Nortel software and SL100 phone switch memory	Obsolescence	Agency 038	$ 400,000	$ 400,000	FY 05/06	$ -
SERVER CONSOLIDATION ASSESSMENT	Migration and creation of new configurations for 40 servers at the Enterprise Data Center (EDC)	Business Process Improvement / Automation	Agency 038	$ 500,000	$ 279,307	FY 06/07	$ -
BALANCED SCORECARD SOFTWARE	Implementation of software that will enable the tracking, updating, and reporting of performance metrics for various organizational levels within each agency/department	Business Strategic Priority	Agency 038	$ 450,000	$ 255,508	FY 06/07 - FY 07/08	$ -
SECURE EMAIL NEEDS ASSESSMENT	Needs assessment and pilot for secure transmission of e-mail in support of on-going HIPAA security compliance efforts	Mandate	Agency 038	$ 300,000	$ 232,850	FY 06/07	$ -
REGIONAL WIRELESS BROADBAND	Review of municipal wireless case studies and business models and assessment of local government, businesses and residents' interest in regional wireless	Business Strategic Priority	Agency 038	$ 700,000	$ 199,910	FY 06/07 - FY 07/08	$ 199,910
GEOGRAPHIC INFORMATION SYSTEMS (GIS)	Definition of business requirements of County Agencies/Departments for use of GIS	Business Strategic Priority	Agency 038	$ 500,000	$ 196,404	FY 06/07 - FY 07/08	$ 194,300
IDENTITY MANAGEMENT AND SINGLE-SIGN ON	Development of a Countywide Identity Management and Single-Sign-On to systems	Business Process Improvement / Automation	ISF 289	$ 550,000	$ 142,774	FY 07/08 - FY 08/09	$ -
GRAND TOTAL				**$19,593,129**	**$12,970,331**		**$3,118,641**

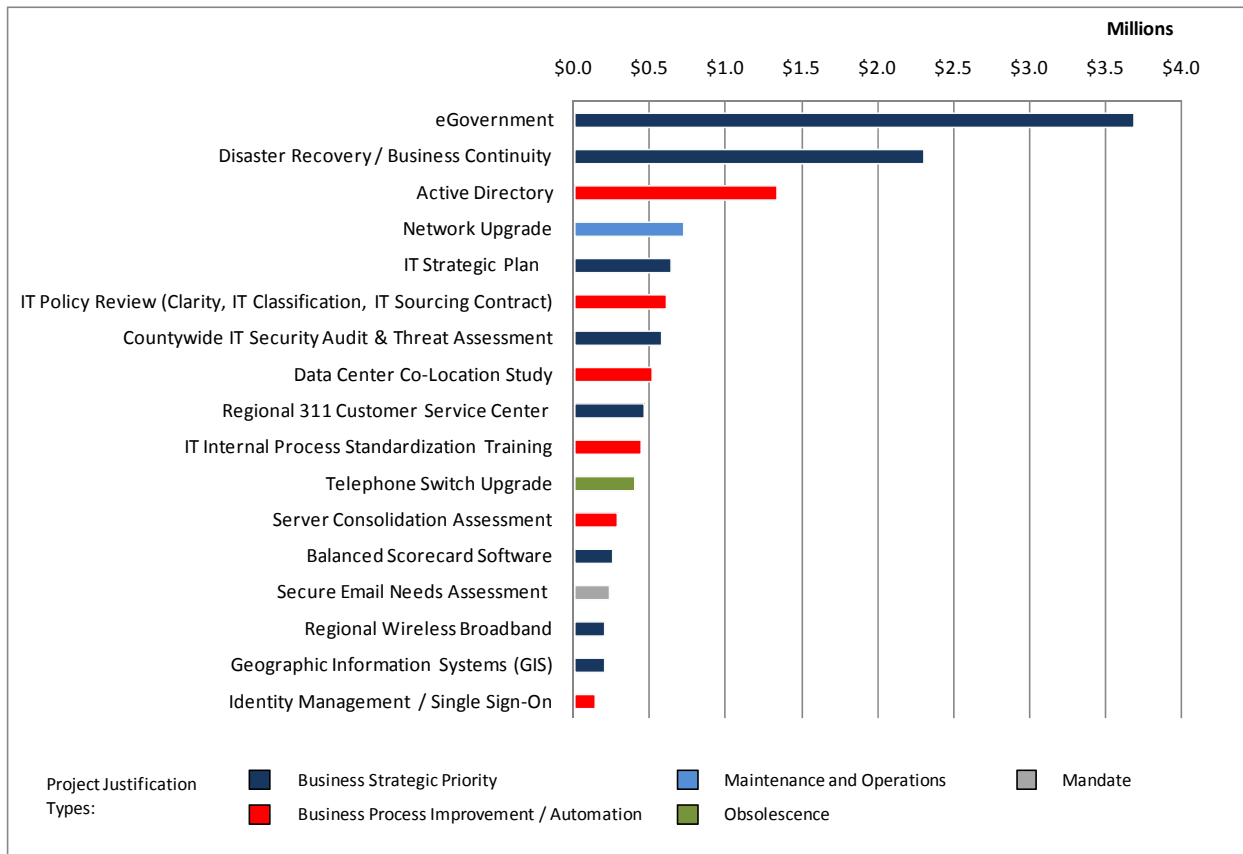Source: CEO/IT "Key projects FY 05/06 thru FY 08/09 over $250K"

*Electronic Government expenditures are for Phase I only

One interesting finding is the use of professional consulting services by CEO/IT. Of the 17 CEO/IT-driven Key IT Projects from FY 05/06 to FY 08/09, 10 projects have used the advisory services of an outside consultant for a total of $3.1M. This does not include additional money spent on consultant/advisory services that are not directly related to one of the Key IT Projects. Such examples would include, but are not limited to, $575,000 to develop the IT Sourcing Strategy, $292,000 on general project management

training, and $80,800 for the development of a Strategic Plan for the County Network / Voice Infrastructure.

The next chart details CEO/IT-driven Key IT Project actual expenditures by project and justification type over the past four years.

### 4-YEAR CEO/IT-DRIVEN KEY IT PROJECT ACTUAL EXPENDITURES, FY 05/06 – FY 08/09

Source: CEO/IT "Key projects FY 05/06 thru FY 08/09 over $250K"
Note: The costs presented in this chart may not reflect full project costs (e.g., eGov), due to the caveats noted earlier in the report.

The chart shows that the two highest spending Key IT Projects have been "Business Strategic Priority" initiatives: eGov project ($3.7M, with caveats noted above) and Disaster Recovery / Business Continuity ($2.3M).

The next chart compares CEO/IT-driven and agency/department-driven Key IT Projects by justification type.

KEY IT PROJECT PERCENTAGE BY JUSTIFICATION TYPE
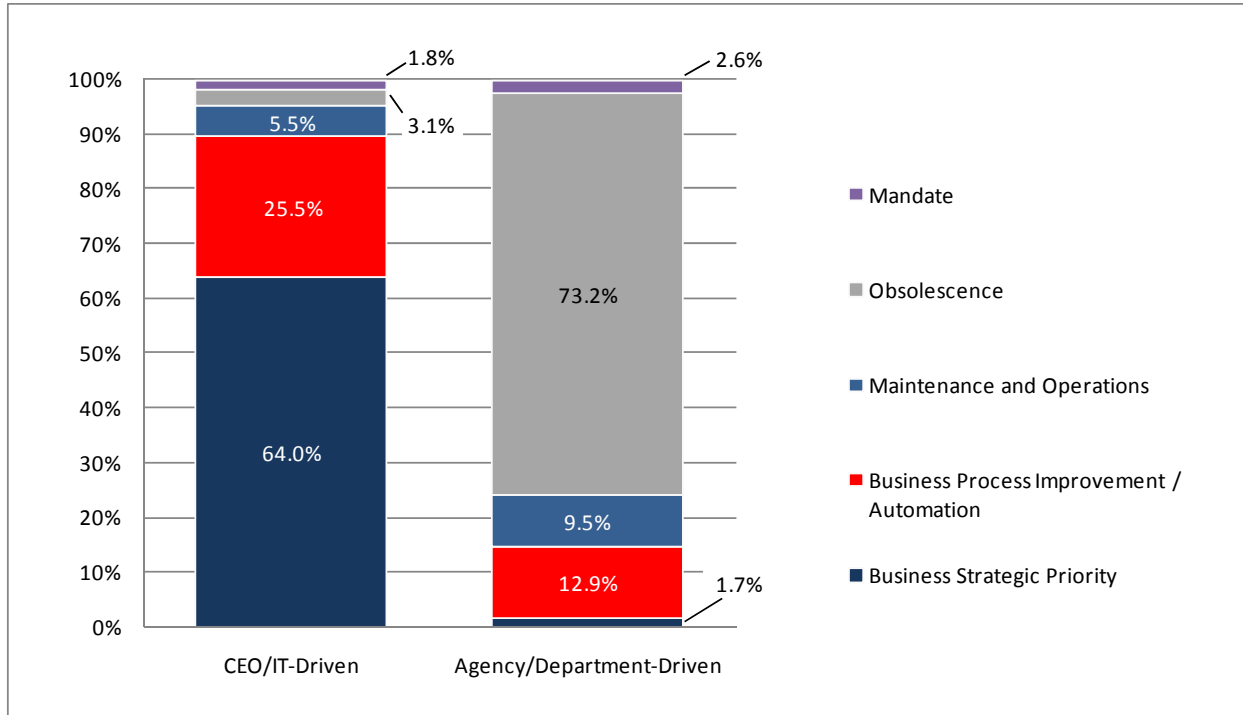
Sources: CEO/IT "Key projects FY 05/06 thru FY 08/09 over $250K"; "ATS Re-engineering Board of Supervisors Update #6, October 6, 2009"

Note: Based on 4-year CEO/IT actual expenditures and 4-year agency/department budgets; historical actual expenditures not available for Key IT Projects funded by individual agency/department sources but percentages would not be expected to differ significantly.

Results indicate that CEO/IT and agencies/departments differ in the reasons for Key IT Project spending. CEO/IT-driven projects are primarily for "Business Strategic Priority" initiatives (e.g., eGov, Disaster Recovery/Business Continuity), while agency/department-driven projects are primarily for direct operational needs such as major systems replacements (e.g., ATS, PTMS, CAPS+).

The following is a breakdown of CEO/IT-driven Key IT Projects by funding source. As a note, prior to FY 07/08, Key IT Projects were funded only in Agency 038, as CEO/IT used the Fixed Asset (4000) Object for all other projects.

CEO/IT-DRIVEN KEY IT PROJECT ACTUAL EXPENDITURES BY FUNDING SOURCE
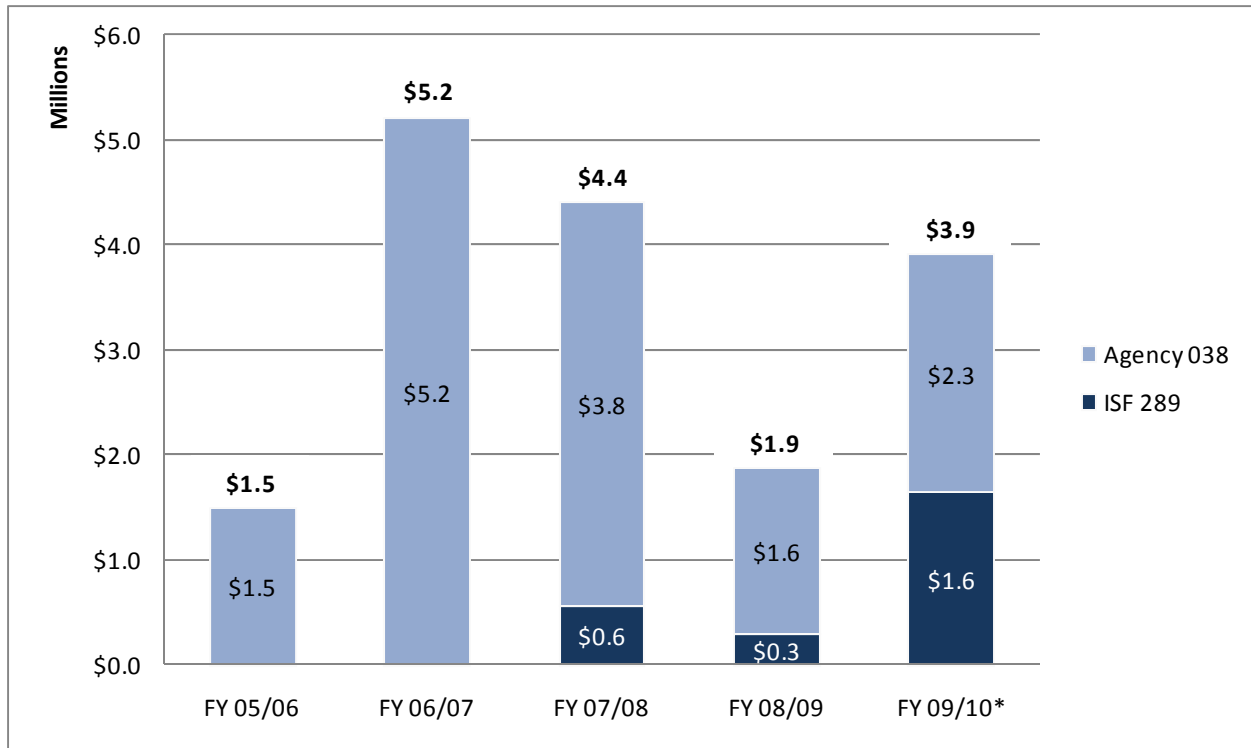
Source: CEO/IT "Key projects FY 05/06 thru FY 08/09 over $250K"
* FY 09/10 data are budgeted amounts, not actual expenditures

Key IT Projects funded by ISF 289, as a percentage of total CEO/IT-driven Key IT Project spending, has increased since FY 07/08 (from 12.9% in FY 07/08, to 15.6% in FY 08/09, to 42.0% in FY 09/10). It should be noted that $2.6M of CEO/IT-driven Key IT Projects in FY 09/10 are on hold pending the results of the IT Sourcing Strategy effort.

Agency/Department-Driven Key IT Projects

As previously noted, actual expenditures for agency/department Key IT Projects are not readily available. As a result, the chart below provides budgeted amounts.

AGENCY/DEPARTMENT-DRIVEN KEY IT PROJECTS (BUDGETED)
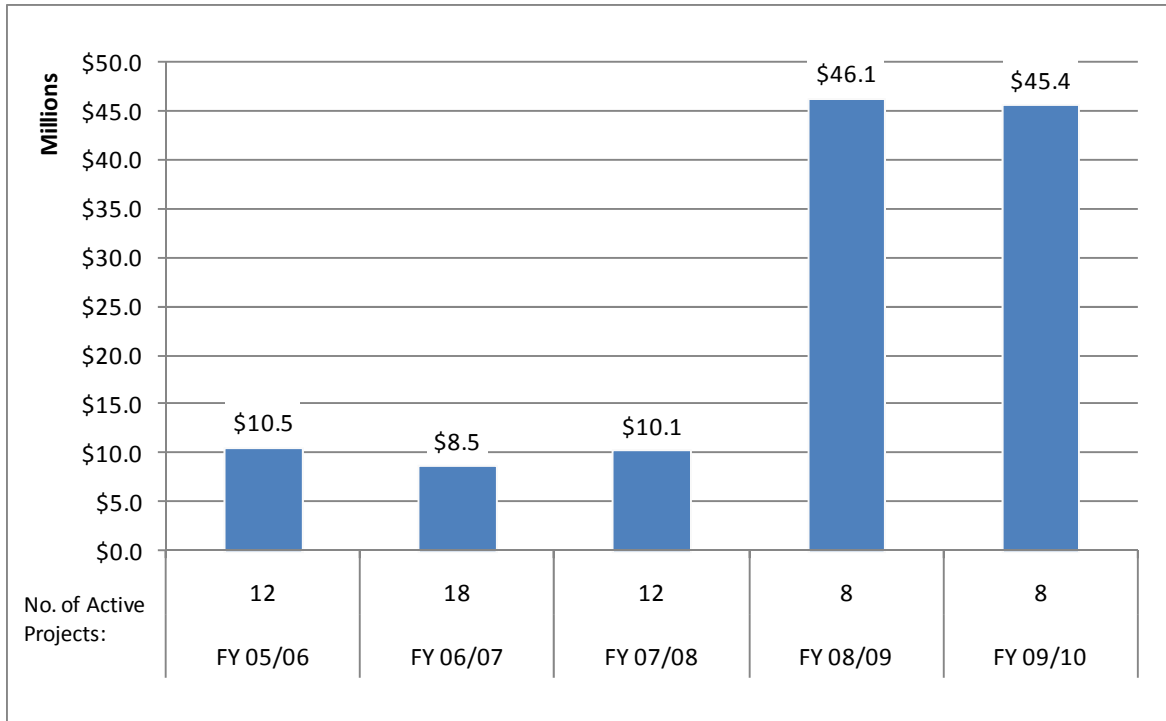
Sources: CEO/IT "Key projects FY 05/06 thru FY 08/09 over $250K"; "ATS Re-engineering Board of Supervisors Update #6"
Note: (1) Does not include CAPS legacy system operations and maintenance costs; (2) Expenditures include both Agency 038 and individual agency/department-funded Key IT Projects

While the total Key IT Project budget has varied year-to-year, the higher amounts in FY 08/09 and FY 09/10 are attributed to the CAPS+ and ATS/PTMS projects.

The chart on the following page details agency/department-driven Key IT Project budgeted amounts by specific project over the past five years.

5-YEAR AGENCY/DEPARTMENT-DRIVEN KEY IT PROJECTS (BUDGETED), FY05/06 TO FY 09/10
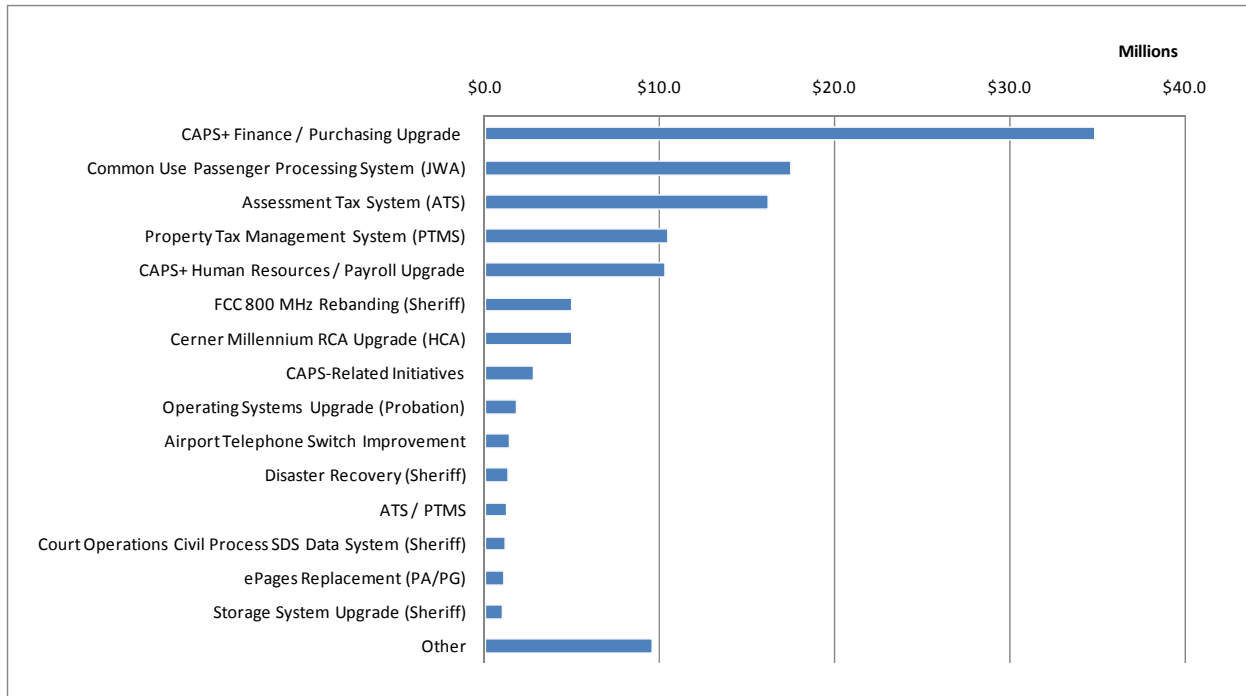

Sources: CEO/IT "Key projects FY 05/06 thru FY 08/09 over $250K"; "ATS Re-engineering Board of Supervisors Update #6, October 6, 2009"

Note: Does not include CAPS legacy system operations and maintenance costs

A further breakdown of the top agencies/departments ($2M+ in total budgeted expenditures between FY 05/06 and FY 09/10) by fiscal year and budget is provided in the table on the following page.

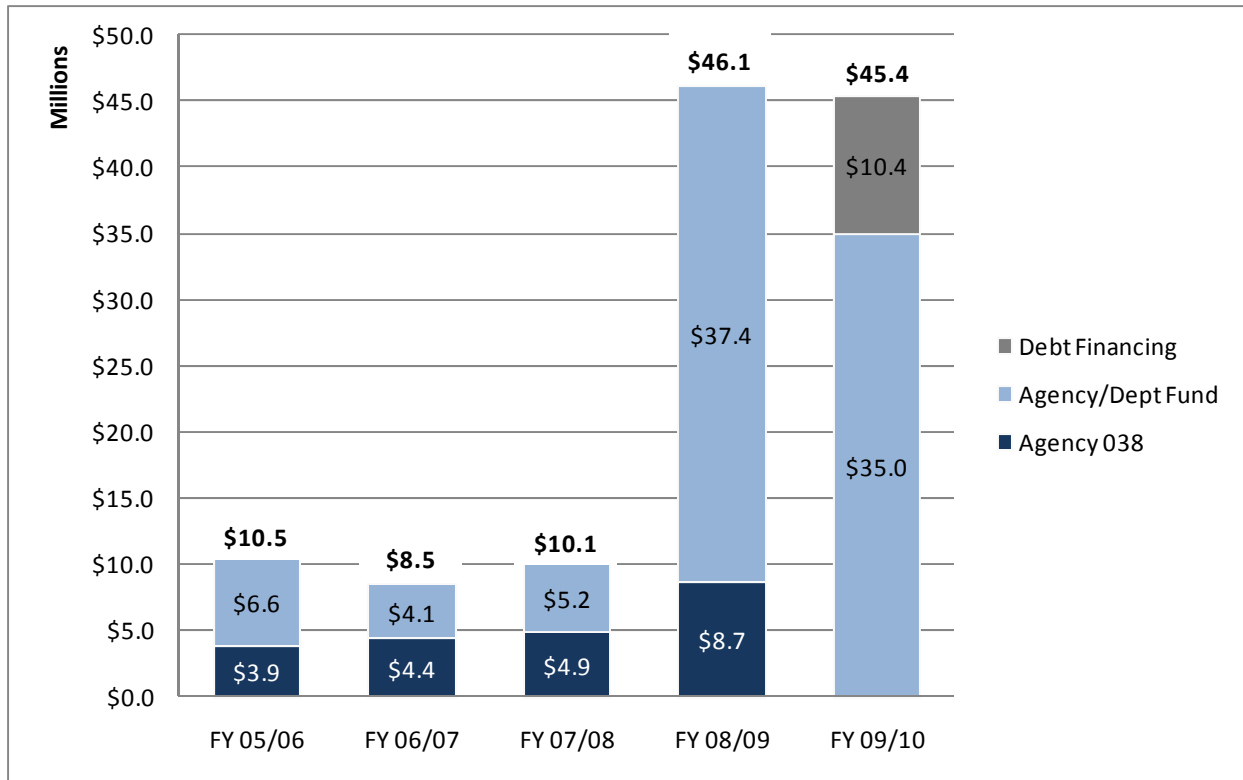## TOP AGENCY/DEPARTMENT-DRIVEN KEY IT PROJECTS (BUDGETED), FY05/06 TO FY 09/10

Fiscal Year	Agency/Department	Project Name	Budget
FY05/06	Auditor-Controller	CAPS IP3 PILOT AT IWMD	$ 1,273,000
		CAPS HR WORKFLOW IMPLEMENTATION	$ 951,000
		CAPS ONGOING ENHANCEMENTS	$ 575,000
		INVOICE MANAGEMENT AND VENDOR SELF-SERVICE	$ 425,000
	Auditor-Controller Subtotal		*$ 3,224,000*
	Assessor	ASSESSMENT TAX SYSTEM RE-ENGINEER	$ -
	A/C, TTC, COB	ATS RE-WRITE (PTMS)	$ 482,844
	OC Sheriff's Dept	FCC 800 MHZ REBANDING	$ 5,000,000
		CONSTRUCTION PROJECT MANAGEMENT SOFTWARE PROGRAM (PROJECT 8I)	$ 605,000
	OC Sheriff's Dept Subtotal		*$ 5,605,000*
	Probation	AUTOMATION OF OFFENDER RISK/NEEDS ASSESSMENT	$ 315,105
FY05/06 Total			**$ 9,626,949**
FY06/07	Auditor-Controller	INVOICE MANAGEMENT AND VENDOR SELF-SERVICE	$ -
	John Wayne Airport	COMMON USE PASSENGER PROCESSING SYSTEM (CUPPS) SUPPORTING INFRASTRUCTURE	$ 700,000
		AIRPORT TELEPHONE SWITCH (PBX)	$ 425,000
		COMMUNICATION INFRASTRUCTURE IMPROVEMENT PROJECT	$ 300,000
		WIRELESS COMMUNICATIONS - TERMINAL BUILDING	$ 250,000
	John Wayne Airport Subtotal		*$ 1,675,000*
	Assessor	ASSESSMENT TAX SYSTEM RE-ENGINEER	$ 980,000
	A/C, TTC, COB	ATS RE-WRITE (PTMS)	$ 2,470,000
	OC Sheriff's Dept	FOOD SERVICES MANAGEMENT SOFTWARE	$ 300,000
		COMPUTER REPLACEMENT	$ 260,000
		AUTOMATED FIELD REPORTING	$ 250,000
	OC Sheriff's Dept Subtotal		*$ 810,000*
	Health Care Agency	WIRELESS MODEM W/ GPS SYSTEM FOR FIELD SERVICES	$ 297,620
		COMMUNICABLE DISEASE REPORTING, CASE MANAGEMENT AND SURVEILLANCE SYSTEMS (WEBCMR)	$ 296,618
	Health Care Agency Subtotal		*$ 594,238*
FY06/07 Total			**$ 6,529,238**
FY07/08	John Wayne Airport	AIRPORT TELEPHONE SWITCH (PBX)	$ 500,000
	Assessor	ASSESSMENT TAX SYSTEM RE-ENGINEER	$ 2,792,541
	A/C, TTC, COB	ATS RE-WRITE (PTMS)	$ 845,232
	OC Sheriff's Dept	STORAGE SYSTEM UPGRADE	$ 975,000
	Probation	OPERATING SYSTEMS UPGRADE	$ 1,800,000
		ELECTRONIC FIELD BOOK	$ 688,000
	Probation Subtotal		*$ 2,488,000*
FY07/08 Total			**$ 7,600,773**
FY08/09	Auditor-Controller	CAPS+ FINANCE AND PURCHASING SYSTEM UPGRADE	$ 34,841,200
	John Wayne Airport	TELEPHONE UPGRADE	$ 500,000
	Assessor	ASSESSMENT TAX SYSTEM RE-ENGINEER	$ 5,619,195
	A/C, TTC, COB	PROPERTY TAX MANAGEMENT SYSTEM (PTMS)	$ 3,020,000
	OC Sheriff's Dept	DISASTER RECOVERY SOLUTION FOR ENTERPRISE STORAGE AREA NETWORK	$ 1,300,000
	Health Care Agency	ELECTRONIC MEDICAL CHART SYSTEM	$ 274,085
FY08/09 Total			**$ 45,554,480**
FY09/10	John Wayne Airport	COMMON USE PASSENGER PROCESSING SYSTEM (CUPPS)	$ 16,795,060
		TELEPHONE SYSTEM UPGRADE	$ 450,000
	John Wayne Airport Subtotal		*$ 17,245,060*
	Auditor-Controller / Human Resources Dept	CAPS + Human Resources / Payroll Upgrade	$ 10,281,704
	Assessor	ASSESSMENT TAX SYSTEM	$ 6,801,935
	A/C, TTC, COB	PROPERTY TAX MANAGEMENT SYSTEM (PTMS)	$ 3,643,018
	OC Sheriff's Dept	COURT OPERATIONS CIVIL PROCESS SDS DATA SYSTEM	$ 1,200,000
	Health Care Agency	CERNER MILLENNIUM RCA UPGRADE	$ 5,000,000
FY09/10 Total			**$ 44,171,717**
Top Agency/Department Total			**$ 113,483,157**

Sources: CEO/IT "Key projects FY 05/06 thru FY 08/09 over $250K"; "ATS Re-engineering Board of Supervisors Update #6, October 6, 2009"

Note: (1) Historical actual expenditures not available for Key IT Projects funded by inidividual agency/department sources; (2) does not include CAPS legacy system operations and maintenance costs

A breakdown of agency/department-driven Key IT Projects by funding source is presented in the graph on the following page.

AGENCY/DEPARTMENT-DRIVEN KEY IT PROJECTS BY FUNDING SOURCE (BUDGETED)

Sources: CEO/IT "Key projects FY 05/06 thru FY 08/09 over $250K"; "ATS Re-engineering Board of Supervisors Update #6, October 6, 2009"
Note: (1) Historical actual expenditures not available for Key IT Projects funded by inidividual agency/department sources; (2) does not include CAPS legacy system operations and maintenance costs

Results show that the primary funding source for agency/department-driven Key IT Projects is individual agency/department funding. As previously mentioned, the high budgeted expenditure amounts in FY 08/09 and FY 09/10 are primarily due to the CAPS+ project. In FY 09/10, a portion of the spending for the ATS project will be funded via internal County borrowing of OC Waste and Recycling Department money instead of through General Fund revenues or reserves.

It is also important to note that, like the costs reported for CEO/IT-driven Key IT Projects, the costs reported for agency/department-driven Key IT Projects do not always reflect full project costs. As previously mentioned, what is reported to the Board via IT Quarterly Reports, for example, may only include the initial costs to acquire and implement the software/system and excludes on-going operations and maintenance costs. One such example is the Health Care Agency's Cerner Health Management Information System. The operations and maintenance costs (approximately $1M annually) are not included in the reported Key IT Project costs.

III. ACS Contractor Analysis

In order to provide additional context for the specific ACS-related questions asked by the Board in the scope of work for this Task, the audit team determined the approximate number of full-time equivalent (FTE) ACS contractors (based on actual hours vs. contractor positions) utilized during each of the fiscal years from FY 05/06 through FY 08/09, organized by the type of services they provided. The results of this effort are presented below.

CEO/IT ACS CONTRACTOR FTES BY TYPE OF IT SERVICE
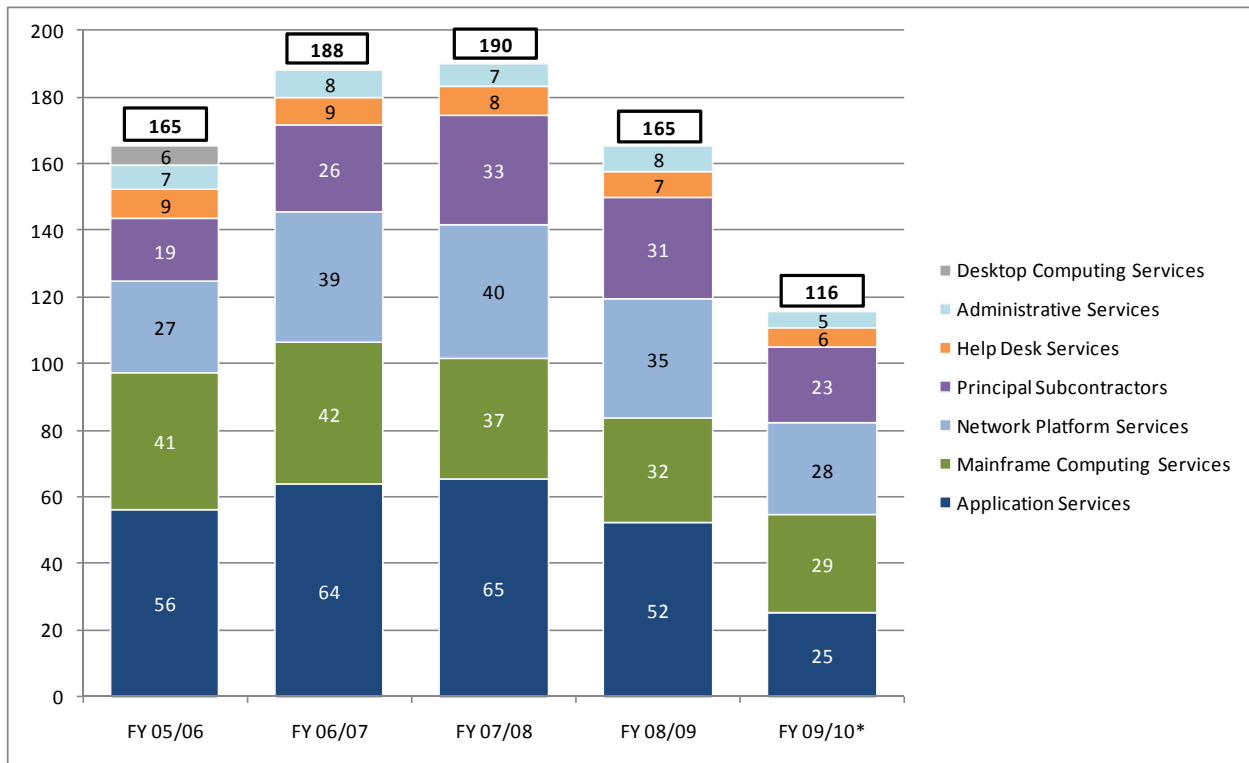
Source: ACS Invoices
* FY 09/10 FTE numbers were extrapolated based on year-to-date hours (July through October 2009); this is not the point in time count of contractor positions (141) noted earlier in this report

The chart above illustrates that total contract services peaked in FY 07/08 at approximately 190 FTEs, but then declined to 165 in FY 08/09 due to budget constraints and the movement of applications contractors to a direct agreement with the Assessor. Based on the first four months of FY 09/10, it appears there will be an additional significant reduction in Application Services contractors for the current fiscal year. The two highest growth service areas between FY 05/06 and FY 09/10 are Principal Subcontractors (+4 FTEs) and Network Platform Services (+1 FTE). The growth in Principal Subcontractors can be attributed, in part, to the staffing up of GCAP, who was

a contractor for the CAPS+ Upgrade. As expected, there was a decline in the staffing for Mainframe Computing as agencies/departments moved off of the IBM Mainframe.

As part of Task I, the Board of Supervisors also specifically directed the audit team to: (1) determine the number of ACS employees hired by the County, and (2) validate and document the fully encapsulated costs differential between ACS contractors and County IT employees.

In response to the first directive, CEO/IT informed the audit team that during the length of the ACS contract (beginning in FY 00/01), the County has hired 31 ACS employees. The Auditor-Controller has ten former ACS employees on staff, the CEO has seven on staff, and OC Public Works and SSA each have three employees on staff. The other eight employees are all located in different agencies/departments. Of the seven employees located in CEO/IT, five are in Administrative Manager positions. Six other agencies/departments (Auditor-Controller, Human Resources, Health Care Agency, John Wayne Airport, OC Public Works, and OC Waste & Recycling) each have one former ACS employee in an Administrative Manager position.

The analysis that follows is in response to the Board's second directive regarding ACS contractors.

ACS vs. County Staffing Cost Analysis

Methodology

The audit team worked directly with ACS to obtain and validate the actual hourly salary and cost information for ACS employees. Prior to this audit, CEO/IT had requested but not received access to the detailed cost of ACS contractors. According to the data provided by ACS, for each category of employee the average salary and benefit cost is increased by 30.3% to account for ACS Corporate Overhead and Profit. ACS informed the audit team that examples of expenses that may be covered in the Overhead portion are training, payroll, recruiting costs, employee relocations, subscriptions, employee severance, among other costs. Practically speaking, however, though Overhead and Profit are charged to the County in slightly different manners, both are flat rates, and it is the prerogative of ACS Corporate to determine how to allocate the aggregate of these two amounts. It is also important to note that the Overhead amount does not include general administrative support for the County of Orange account, which ACS charges directly to the County in monthly invoices.

To obtain County employee costs, the audit team utilized the validated Countywide FY 09/10 IT Survey results to estimate the average salary and benefit hourly costs of County employees who are fulfilling various IT responsibilities. The averages at each major IT Service Area (e.g., Mainframe, Network Platform Services) are weighted by the number of people in the various subcategories (e.g., Network Engineers). An additional 9% was added to these hourly costs to account for Countywide overhead and training costs. This overhead estimate was based on a review of staff-based Countywide Cost Allocation Program (CWCAP) charges to ISF 289, as well as historical and current ISF 289 training expenses.

Analysis Limitations

There are a number of limitations to the comparisons that need to be acknowledged and considered, as "County Classifications" are not always a one-for-one comparison with "ACS Classifications". These limitations include the following:

- The analysis does not incorporate differences in seniority/average tenure between ACS contractors and County employees fulfilling similar roles

- The analysis does not incorporate differences in training/skill/technical certifications between ACS contractors and County employees fulfilling similar roles

- The analysis does not incorporate different levels of responsibility that may exist between ACS contractors and County employees in similar IT categories

- The analysis does not incorporate the anticipated increase in retirement costs on the County side that is expected to be realized over the next several years. To provide a sense of scale, between FY 09/10 and FY 14/15, the retirement costs for County General IT Employees and County IT Managers are projected to increase by 62% and 48%, respectively (according to Orange County Employees Retirement System projections)

- There are no major mainframe operations in agencies/departments staffed by County employees that would afford a comparison to the ACS contractors servicing the County Mainframe at the Data Center

Despite these limitations, the data shown in the chart that follows represent the closest comparisons of ACS and County staffing costs completed to date.

Data Observations

As is apparent in the chart that follows, there are several important observations:

- The County Employee Estimated Hourly Total Cost is lower than the ACS Contractor Average Hourly Total Cost in Network Platform Services (by 8%), Application Services (by 4%), and Project/Program Management (by 13%), but is greater in Help Desk Services (by 15%).

- Typically what drives the ACS Contractor Average Hourly Total Cost higher than the County Employee Total Cost are the overhead and profit components.

- In terms of Salary and Benefit Costs, ACS Contractor Hourly Costs are lower than the County Employee Hourly Cost in every major category (e.g., Mainframe, Network Platform Services) where a comparison was possible, and in all subcategories of comparison as well, except for Network Security and Network Database Administration (under Network Platform Services).

- It is important to note there may be some instances where the County may be willing to pay higher rates to fill a role with an ACS contractor:

  - The contract employee has a special skill set or certification that would be very difficult/costly for the County to fill by recruiting and hiring on its own

  - The contract employee brings a skill set that will only be needed for a short period of time

- In the case of Help Desk Services, the data clearly indicates that it is less costly to utilize an ACS contractor than to hire a full-time County employee.

The table on the following page provides a detailed comparison of ACS hourly costs to the County relative to fully burdened County employee hourly costs.

ACS HOURLY COSTS vs. COUNTY FTE HOURLY COSTS

MAINFRAME OPERATIONS

ACS CLASSIFICATION	ACS AVERAGE HOURLY SALARY AND BENEFIT COST TO COUNTY	ACS AVERAGE HOURLY OVERHEAD AND PROFIT COST TO THE COUNTY	ACS AVERAGE HOURLY TOTAL COST TO COUNTY	COUNTY CLASSIFICATION	COUNTY AVERAGE HOURLY SALARY AND BENEFIT COST	COUNTY ESTIMATED HOURLY OVERHEAD COST	COUNTY ESTIMATED HOURLY TOTAL COST	ACS/COUNTY % DIFFERENCE
Computer Operators (16)	$24.46	$7.40	$31.86	N/A	N/A	N/A	N/A	N/A
Facilities Engineers (3)	$24.09	$7.29	$31.38	N/A	N/A	N/A	N/A	N/A
Production Support (5)	$28.94	$8.76	$37.70	N/A	N/A	N/A	N/A	N/A
Technical Support (4)	$50.35	$15.24	$65.59	N/A	N/A	N/A	N/A	N/A
Data Base Administration (3)	$52.38	$15.85	$68.23	N/A	N/A	N/A	N/A	N/A
AVG. MAINFRAME OPS.	**$31.19**	**$9.44**	**$40.63**		**N/A**	**N/A**	**N/A**	**N/A**

NETWORK PLATFORM SERVICES

ACS CLASSIFICATION	ACS AVERAGE HOURLY SALARY AND BENEFIT COST TO COUNTY	ACS AVERAGE HOURLY OVERHEAD AND PROFIT COST TO THE COUNTY	ACS AVERAGE HOURLY TOTAL COST TO COUNTY	COUNTY CLASSIFICATION	COUNTY AVERAGE HOURLY SALARY AND BENEFIT COST	COUNTY ESTIMATED HOURLY OVERHEAD COST	COUNTY ESTIMATED HOURLY TOTAL COST	ACS/COUNTY % DIFFERENCE
Network Engineers (17)	$47.33	$14.33	$61.66	Networking Support (22)	$53.65	$4.83	$58.48	5%
N/A			N/A	Server Support (22)	$55.48	$4.99	$60.47	N/A
Telecommunications (5)	$43.37	$13.13	$56.50	N/A	N/A	N/A	N/A	N/A
Network Security (6)	$57.73	$17.48	$75.21	Security Monitoring and Compliance (13)	$53.76	$4.84	$58.60	22%
Network Data Base Administration (3)	$53.52	$16.20	$69.73	Database Support (11)	$54.27	$4.88	$59.15	15%
AVG. NETWORK PLATFORM SVCS.	**$49.31**	**$14.92**	**$64.23**		**$54.36**	**$4.89**	**$59.25**	**8%**

APPLICATION SERVICES

ACS CLASSIFICATION	ACS AVERAGE HOURLY SALARY AND BENEFIT COST TO COUNTY	ACS AVERAGE HOURLY OVERHEAD AND PROFIT COST TO THE COUNTY	ACS AVERAGE HOURLY TOTAL COST TO COUNTY	COUNTY CLASSIFICATION	COUNTY AVERAGE HOURLY SALARY AND BENEFIT COST	COUNTY ESTIMATED HOURLY OVERHEAD COST	COUNTY ESTIMATED HOURLY TOTAL COST	ACS/COUNTY % DIFFERENCE
Business Application Program Analysts (12)	$46.58	$14.10	$60.68	Business Analysis/Requirements Development (17)	$51.35	$4.62	$55.97	8%
Software Architects/Engineers (10)	$52.64	$15.93	$68.57	Applications Development (42)	$60.12	$5.41	$65.53	4%
N/A			N/A	Applications Maintenance (68)	$54.39	$4.90	$59.29	N/A
Web Developers (2)	$43.20	$13.08	$56.28	Web Designer/Web Development/Support (3)	$67.26	$6.05	$73.31	-30%
AVG. APPLICATION SVCS.	**$48.82**	**$14.78**	**$63.60**		**$56.15**	**$5.05**	**$61.21**	**4%**

HELP DESK SERVICES

ACS CLASSIFICATION	ACS AVERAGE HOURLY SALARY AND BENEFIT COST TO COUNTY	ACS AVERAGE HOURLY OVERHEAD AND PROFIT COST TO THE COUNTY	ACS AVERAGE HOURLY TOTAL COST TO COUNTY	COUNTY CLASSIFICATION	COUNTY AVERAGE HOURLY SALARY AND BENEFIT COST	COUNTY ESTIMATED HOURLY OVERHEAD COST	COUNTY ESTIMATED HOURLY TOTAL COST	ACS/COUNTY % DIFFERENCE
Help Desk Services (8)	$30.09	$9.11	$39.20	Help Desk (48)	$42.08	$3.79	$45.87	-17%
N/A			N/A	Printer Support (25)	$40.57	$3.65	$44.22	N/A
N/A			N/A	Desktop Support (9)	$40.11	$3.61	$43.72	N/A
AVG. HELP DESK SVCS.	**$30.09**	**$9.11**	**$39.20**		**$41.40**	**$3.73**	**$45.13**	**-15%**

PROJECT/PROGRAM/ADMINISTRATIVE MANAGEMENT

ACS CLASSIFICATION	ACS AVERAGE HOURLY SALARY AND BENEFIT COST TO COUNTY	ACS AVERAGE HOURLY OVERHEAD AND PROFIT COST TO THE COUNTY	ACS AVERAGE HOURLY TOTAL COST TO COUNTY	COUNTY CLASSIFICATION	COUNTY AVERAGE HOURLY SALARY AND BENEFIT COST	COUNTY ESTIMATED HOURLY OVERHEAD COST	COUNTY ESTIMATED HOURLY TOTAL COST	ACS/COUNTY % DIFFERENCE
Project/Program Management (13)	$62.24	$18.84	$81.09	Project Management (19)	$64.68	$5.82	$70.50	13%
N/A			N/A	Administrative Management (23)	$78.35	$7.05	$85.40	N/A

IV.   Sole Source IT Contracts

The Board also directed the audit team to validate and report on CEO/IT's use of and justification for sole source contracts. CEO/IT has its own Purchasing section that is responsible for all IT procurement activities (including sole source agreements) for both CEO/IT and large IT projects/systems, including the Auditor-Controller, Treasurer-Tax Collector, and Assessor (e.g., CAPS/CAPS+, ATS, PTMS projects).

County Sole Source Procurement Policy

The County *Contract Policy Manual* (CPM) specifies the Board of Supervisors' directives to all County agencies/departments regarding procurement practices. The sole source procurement section (Section 4.4) of the CPM states:

Policy

"It is the policy of the County of Orange to solicit competitive bids and proposals for its procurement requirements. Sole source procurement shall not be used unless there is clear and convincing evidence that only one source exists to fulfill the County's requirements. All sole source purchases requiring Board of Supervisors approval shall be justified as meeting the sole source standard in the Agenda Staff Report. The Agenda Staff Report shall clearly state the procurement is a sole source procurement. The Sole Source Justification, as described below, shall be attached to or included within the Agenda Staff Report."

Sole Source Justification

"…A sole source justification will be prepared by the user agency/department and approved by the agency/department head or designee. The Purchasing Agency or Deputy County Purchasing Agent shall retain a copy of this justification as part of the contract file. As part of the sole source justification, the requestor shall clearly explain:

- Why the particular source is the only one capable of providing the required good or services;
- If any other sources have been contacted and why they cannot fill the County's requirements;
- If the price and contract conditions being offered are within market guidelines; and

- How the County would fulfill its requirements if this source were not available.

Valid sole source requirements require strong technological or strong programmatic justifications…"

Service Contracts Sole Source Requests
"…Sole source requests for any service contracts…exceeding $50,000 will require Board approval."

For the purposes of documenting sole source requests, the County Purchasing Agent has established a Sole Source Justification Form that requires the information detailed above, as well as a department head or designee signature and the review and signature approval of a Deputy Purchasing Agent. (See Appendix E)

Review of Sole Source Procurements

The audit team requested and reviewed information provided by CEO/IT with respect to IT sole source purchases for both CEO/IT and other County agencies/departments from FY 05/06 to August 2009. A Master List of all 47 sole source IT procurements is provided in Appendix B and C. In addition, this information is also sorted by vendor in Appendix D. The total value of all 47 sole source contracts from FY 05/06 to August 2009 is $45.5M.

CEO/IT Sole Source IT Procurement Review

Of the 47 sole source procurements completed by the CEO/IT Purchasing staff, 24 of those procurements (at a cost of approximately $4.0M) were for IT services and supplies utilized by CEO/IT. Appendix B provides the details of each of these sole source procurements. The audit team examined each of the 24 sole source procurements in detail, and noted the following findings and recommendations.

Finding 3:	Several CEO/IT sole source procurements did not adhere to the administrative requirements of the Contract Policy Manual.

Of the 24 CEO/IT sole source contracts, 13 do not have a signature on the Sole Source Justification Form to show that the procurement was reviewed and approved by a Deputy Purchasing Agent. In addition, for three of the 24 contracts, a Deputy Purchasing Agent reviewed the Sole Source Justification Form, but deferred approval

back to CEO/IT. The audit team conducted interviews with CEO Purchasing staff in an attempt to ascertain the reason for the deferral. The most common reason presented was the Deputy Purchasing Agent believed he/she did not have the required expertise necessary to make an informed determination/approval on the sole source justification provided.

This situation requires correction. The CEO/IT Purchasing unit was established to process and manage the procurement aspects of large and complex IT purchases. As a result, there should be sufficient experience to assess the legitimacy of a sole source IT procurement and to document that assessment as required by the CPM.

> **Recommendation 3: CEO/IT should follow all sole source procurement policy requirements, including ensuring that every Justification Form is reviewed and signed. In addition, Deputy Purchasing Agent review should not be delegated back to department management for approval, but referred to the County Purchasing Agent for review, if necessary.**

Finding 4:   Some sole source leases of IT equipment/software procurements are not taken to the Board for approval.

Of the 24 CEO/IT sole source contracts examined, five were for leases of IT equipment/software. These contracts included:

Vendor	Price Agreement	Description	Authorized Cumulative Limit	Placed on Board Agenda
Elixir Technology	Y1000000892	Software for development of forms	$39,750	no
Storage Technology	Y1000001034	Lease of hardware and software for automated Data Center mainframe tape library lease system	$350,000	no
Storage Technology	Y1000001155	Lease of hardware and software for automated Data Center mainframe tape library lease system	$687,749	no
CPS Systems	Y1000001073	Active Directory synchronization software	$60,969	no
Openiam	Y1000001426	Software source code purchase and maintenance services	$48,250	no

In researching this issue, the audit team was informed that the lease of IT equipment/software is not covered in the Contract Policy Manual, and as a result, some agencies/departments do not go to the Board for approval. In contrast, there is a specific dollar threshold set for Service and Professional sole source contracts that determines whether or not the contract must go the Board for approval. The CPM sets this threshold at $50,000. As highlighted above, there were three sole source IT leases

(totaling over $1M) above the $50,000 threshold that did not go to the Board for approval.

The audit team confirmed that the County Purchasing Agent is of the opinion that equipment/software leases should also have a dollar threshold specified in the CPM. As a result, purchases above the set threshold would require approval of the Board of Supervisors.

> **Recommendation 4: The County Purchasing Agent, in consultation with the CEO and County Counsel, should recommend to the Board of Supervisors a specific dollar threshold above which sole source equipment/software leases require Board approval.**

Finding 5:	The current contract with ACS is unnecessarily vague with respect to ACS's ability to purchase/lease IT software/equipment for County agencies/departments.

On June 20, 2004, the Board approved Amendment 12 to the ACS contract. Part of that amendment (*Exhibit C – Pricing*) was revised to reduce the procurement costs of equipment/software for County agencies/departments. The "finders-fee" for ACS was reduced from an automatic 15% to a maximum of 15%, with the final amount to be negotiated by the County Information Officer (CIO) and ACS.

However, a new last paragraph of *Section 7 Equipment* was added, the last part which is unnecessarily vague (underlined below). It reads:

> "Contractor shall not obtain software or equipment for the use and benefit of the County which would be required to be competitively bid under the County of Orange policies and procedures <u>or Contractor shall acquire the software or equipment as if it had been acquired under the direction and supervision of, or under the authority of, the County.</u>" (underline added)

The context of the Agenda Staff Report in which this proposed amendment was written appears to indicate that ACS cannot purchase/lease IT equipment/software for the County in such a way that would trigger a competitive bid process. If that interpretation is indeed the case, this section should be rewritten to specifically clarify this intent. This would close any loop-hole for a County agency/department to use ACS

to purchase IT equipment/software beyond the CPM thresholds which would trigger Board of Supervisors review.

Recommendation 5: CEO/Purchasing, with County Counsel assistance, should negotiate a re-write of this portion of the ACS contract.

Review of Sole Source Procurement Activities Performed by CEO/IT for Other County Departments

As previously indicated, CEO/IT Purchasing staff also conducts IT purchases for other County agencies/departments such as Auditor-Controller, Assessor, and Treasurer-Tax Collector. These include high dollar IT procurements related to CAPS, the CAPS+ Upgrade, ATS, and PTMS. Overall, from FY 05/06 to the present, CEO/IT procured 23 such sole source contracts for a total authorized spending limit of $41.5M.   Appendix C details each of these procurements.

Finding 6:   Several IT sole source procurements performed by CEO/IT Purchasing for other County agency/departments did not adhere to the administrative requirements of the Contract Policy Manual.

Similar to the review of CEO/IT-initiated contracts, a review of all 23 sole source contracts performed by CEO/IT Purchasing for other County agencies/departments, showed that eight of the procurements do not have a signature on the Sole Source Justification Form indicating the review and/or approval of a CEO/IT Deputy Purchasing Agent. In addition, there were three contracts in which the CEO/IT Deputy Purchasing Agent deferred approval to the IT program expertise of the department.

Recommendation 6: CEO/IT Purchasing and the initiating agency/department should ensure that all sole source procurement policy requirements are followed, including ensuring that every Justification Form is reviewed and signed. In addition, Deputy Purchasing Agent review should not be delegated back to the soliciting department but referred to the County Purchasing Agent for review, if necessary.

V.   Identification of Major IT Projects over the Next 12 Months

The last part of the Task I scope of work is to identify Key IT projects coming before the Board over the next 12 months. The table below details these projects, many of which have already been presented to the Board. They include projects related to ongoing initiatives such as ATS, PTMS, CAPS+, and John Wayne Airport's Common Use Passenger Processing System (CUPPS).

Key IT Projects, FY 09/10

Project Name	Description	Type of Project / Justification	Agency / Dept	Funding Source	Budget
COMMON USE PASSENGER PROCESSING SYSTEM (CUPPS)	Installation of a Common Use Passenger Processing System (CUPPS) as part of the Airport Improvement Project and the construction of Terminal C	Business Process Improvement / Automation	JWA	JWA Funding	$ 16,795,060
CAPS+ HUMAN RESOURCES / PAYROLL UPGRADE	Upgrade of the CAPS Human Resources and Payroll (HR/Payroll) system from CGI's Advantage 2.x software to the 3.8 release	Obsolescence	A/C, HRD	014	$ 10,281,704
ASSESSMENT TAX SYSTEM (ATS)	Replacement of the Assessor's portion of the Assessment Tax System	Obsolescence	Assessor	Debt Financing	$ 6,801,935
CERNER MILLENNIUM RCA UPGRADE	Upgrade to the IRIS Millenium system, allowing the agency to ensure billing systems are in compliance with all regulatory requirements	Obsolescence	HCA	HCA Funding	$ 5,000,000
PROPERTY TAX MANAGEMENT SYSTEM (PTMS)	Re-write of the County's Property Tax Administration (PTA) Departments – Assessor, Auditor-Controller, Clerk of the Board, and the Treasurer-Tax Collector portion of the Assessment Tax System (ATS)	Obsolescence	A/C, TTC, COB	Debt Financing	$ 3,643,018
UNISYS MAINFRAME COMPUTER	Purchase of Unisys Dorado 4080 mainframe computer and hardware/software maintenance fees	Obsolescence	SHERIFF	Sheriff Funding	$ 2,169,538
ATS & PTMS DEBT SERVICE PAYMENTS (6 MOS)	N/A	N/A	N/A	General Fund	$ 1,252,616
COURT OPERATIONS CIVIL PROCESS SDS DATA SYSTEM	Modification of the current SDS application to meet system requirements resulting from changes in the Civil and Gov't. codes and the Code of Civil Procedure	Mandate	SHERIFF	Sheriff Funding	$ 1,200,000
DISASTER RECOVERY IMPLEMENTATION	Identification of gaps and development of appropriate DR solutions for new County systems that come online	Business Strategic Priority	CEO/IT	038	$ 866,640
REPLACE OBSOLETE VOICE MAIL SYSTEM (ON HOLD PENDING IT SOURCING STRATEGY DEVELOPMENT)	Replacement of Call Pilot voice mail system that has reached End of Life (EOL)	Obsolescence	CEO/IT	038	$ 576,520
TELEPHONE HUB (SL100) MITIGATION (ON HOLD PENDING IT SOURCING STRATEGY DEVELOPMENT)	Installation of a Voice Over Internet Protocol (VOIP) telephone switching system	Obsolescence	CEO/IT	038	$ 524,000
TELEPHONE INFRASTRUCTURE REFRESH (ON HOLD PENDING IT SOURCING STRATEGY DEVELOPMENT)	Upgrade to telephone systems and equipment that have reached End of Life	Obsolescence	CEO/IT	289	$ 450,000
TELEPHONE SYSTEM UPGRADE	Upgrades airport-ownded telephone system to include number mobility and Voice over IP, which is required as part of the CUTE system	Business Process Improvement / Automation	JWA	JWA Funding	$ 450,000
REFRESH NETWORK INTRUSION PROTECTION HARDWARE AND SERVICES (ON HOLD PENDING IT SOURCING STRATEGY DEVELOPMENT)	Replacement of obsolete Intrusion Detection Systems	Obsolescence	CEO/IT	289	$ 417,219
COMPUTER OPERATIONS AUTOMATION	Automation of manual Orchestration process to meet the business needs of the newly deployed distributed systems	Business Process Improvement /	CEO/IT	289	$ 382,190
CENTRAL COURT WAN MIGRATION (ON HOLD PENDING IT SOURCING STRATEGY DEVELOPMENT)	Elimination of risks due to aging hardware and environmental issues	Maintenance and Operations	CEO/IT	038	$ 298,997
COUNTYWIDE IT & TELEPHONE BILLING (ON HOLD PENDING IT SOURCING STRATEGY DEVELOPMENT)	Consolidation and automation of billing process	Business Process Improvement / Automation	CEO/IT	289	$ 200,000
WAN BACKBONE HIGH AVAILABILITY (ON HOLD PENDING IT SOURCING STRATEGY DEVELOPMENT)	Installation a secondary router at each of these three locations to build a self healing County network backbone to remedy single point of failure issue	Maintenance and Operations	CEO/IT	289	$ 188,517
FY09/10 TOTAL					**$ 51,497,954**

Sources: CEO/IT "Key projects FY 05/06 thru FY 08/09 over $250K"; "ATS Re-engineering Board of Supervisors Update #6, October 6, 2009"; November 11, 2009 ASR 09-001714

Perhaps the most significant IT issue that will be presented to the Board is the IT Sourcing Strategy proposal and RFP for the replacement of the current sourcing contract with ACS. Indeed, many of the CEO's Key IT Projects are on hold, pending the development and approval of the IT Sourcing Strategy. Information on the IT Sourcing Strategy development was previously communicated to the Board by the Office in an October 16, 2009 memo.

Appendix A: Key IT Projects Master List (Projects $250,000+)
FY 05/06 – FY 09/10

Fiscal Year	Project Name	Description	Type of Project / Justification	Agency / Dept	Funding Source	Budget	Actual EXP/ENC
FY05/06	CAPS IP3 PILOT AT IWMD	Standardization and streamlining of current procurement and disbursement processes	Business Process Improvement / Automation	A/C	038	$ 1,273,000	$ 1,170,704
FY05/06	CAPS HR WORKFLOW IMPLEMENTATION	Automation of work flow and object (document) attachment, increasing efficiency	Business Process Improvement / Automation	A/C	038	$ 951,000	$ 221,966
FY05/06	CAPS ONGOING ENHANCEMENTS	Funding for estimated costs for on-going system enhancements for the County's Financial, Purchasing, and Human Resources information systems (CAPS)	Maintenance and Operations	A/C	038	$ 575,000	$ 814,651
FY05/06	INVOICE MANAGEMENT AND VENDOR SELF-SERVICE	Implementation of a web-based invoice management and processing system to streamline workflow and reduce manual labor	Business Process Improvement / Automation	A/C	038	$ 425,000	$ 672,606
FY05/06	ATS RE-WRITE (PTMS)	Re-write of the County's Property Tax Administration (PTA) Departments – Assessor, Auditor-Controller, Clerk of the Board, and the Treasurer-Tax Collector portion of the Assessment Tax System (ATS)	Obsolescence	A/C, TTC, COB	038	$ 482,844	$ 451,384
FY05/06	ASSESSMENT TAX SYSTEM RE-ENGINEER	Replacement of the Assessor's portion of the Assessment Tax System	Obsolescence	Assessor	038	$ -	$ 574,362
FY05/06	ACTIVE DIRECTORY IMPLEMENTATION	Alignment of all County IT (Agency/Departments) so that the groups could better communicate, leverage resources, align to a common technology road map	Business Process Improvement / Automation	CEO/IT	038	$ 500,000	$ 1,100,357
FY05/06	SL-100 REPLACEMENT/UPGRADE	Upgrades to Nortel software and SL100 phone switch memory	Obsolescence	CEO/IT	038	$ 400,000	$ 400,000
FY05/06	ENTERPRISE APPLICATION DEVELOPMENT/SUPPORT TOOLS	Implementation of the Enterprise Application Development Toolset which manages project phases and tasks from project initiation through customer transition and closedown	Business Process Improvement / Automation	CEO/IT	NCC	$ 275,000	$ -
FY05/06	DIGITAL IMAGING PROJECT (CSS)	Conversion of the majority of current paper files, and all new case files, to digital images	Business Process Improvement / Automation	DCSS	State Incentive Funds	$ 250,000	N/A
FY05/06	CASE MANAGEMENT SYSTEM	Tools for the sharing of data, up to the minute activity information, appropriate documentation, statistical information	Business Process Improvement / Automation	District Attorney	038	$ 187,200	$ 1,518
FY05/06	LANDFILL INFORMATION SYSTEMS TECHNOLOGY STUDY PHASE III (LISTS)	Feasibility study to automate all landfill gas, groundwater and leachate-level monitoring	Obsolescence	OCWR	Enterprise Fund 299	$ 400,000	N/A
FY05/06	AUTOMATION RISK/NEEDS ASSESSMENT	Automation of the assessment of a juvenile or adult offender's risk to the community and the identification of the needs to be addressed	Business Process Improvement / Automation	PROB	NCC	$ 315,105	N/A
FY05/06	FCC 800 MHZ REBANDING	Reconfiguration of O.C.'s frequencies related to FCC Rebanding Plan	Maintenance and Operations	SHERIFF	Nextel	$ 5,000,000	N/A
FY05/06	PROJECT 8I PROJECT MANAGEMENT PROGRAM	Purchase of system that performs critical documentation and data retention functions rekated to construction management	Business Process Improvement / Automation	SHERIFF	14B County Public Safety Sales Tax	$ 605,000	N/A
FY05/06 TOTAL						**$ 11,639,149**	**$ 5,407,547**
FY06/07	INVOICE MANAGEMENT AND VENDOR SELF-SERVICE	Implementation of a web-based invoice management and processing system to streamline workflow and reduce manual labor	Business Strategic Priority	A/C	038	$ -	$ (260,938)
FY06/07	ATS RE-WRITE (PTMS)	Re-write of the County's Property Tax Administration (PTA) Departments – Assessor, Auditor-Controller, Clerk of the Board, and the Treasurer-Tax Collector portion of the Assessment Tax System (ATS)	Obsolescence	A/C, TTC, COB	038	$ 2,470,000	$ 1,158,700

Fiscal Year	Project Name	Description	Type of Project / Justification	Agency / Dept	Funding Source	Budget	Actual EXP/ENC
FY06/07	ASSESSMENT TAX SYSTEM RE-ENGINEER	Replacement of the Assessor's portion of the Assessment Tax System	Obsolescence	Assessor	038	$ 980,000	$ 1,167,301
FY06/07	REGIONAL 311 CUSTOMER SERVICE CENTER - FEASIBILITY STUDY	Development of a business case for a County-wide 311 customer service center	Business Strategic Priority	CEO/IT	038	$ 1,500,000	$ 67,236
FY06/07	ELECTRONIC GOVERNMENT	Development of a new County web interface and search engine based on life-events to improve online delivery of County Services	Business Strategic Priority	CEO/IT	038	$ 1,393,740	$ 1,322,375
FY06/07	COUNTYWIDE IT SECURITY AUDIT & THREAT ASSESSMENT	Assessment of countywide information technology security	Business Strategic Priority	CEO/IT	038	$ 850,000	$ 555,775
FY06/07	IT STRATEGIC PLAN	Development of a multi-year countywide IT Strategic plan	Business Strategic Priority	CEO/IT	038	$ 850,000	$ 558,791
FY06/07	DISASTER RECOVERY / BUSINESS CONTINUITY	Establishment of strategies to mitigate the impacts of an emergency or a disaster	Business Strategic Priority	CEO/IT	038	$ 655,000	$ 603,516
FY06/07	DATA CENTER CO-LOCATION STUDY	Assessment of the technical, business and financial feasibility of co-locating six Departments/Agencies' (IWMD, RDMD, SSA, RoV, JWA, and HCA) data centers to the Orange County Data Center	Business Process Improvement / Automation	CEO/IT	038	$ 508,000	$ 513,748
FY06/07	CEO-IT INTERNAL PROCESS STANDARDIZATION (COUNTYWIDE ITIL TRAINING)	Training for County Agency Information Technology staff on standardizing IT processes	Business Process Improvement / Automation	CEO/IT	038	$ 500,000	$ 437,342
FY06/07	SERVER CONSOLIDATION ASSESSMENT PILOT	Migration and creation of new configurations for 40 servers at the Enterprise Data Center (EDC)	Business Process Improvement / Automation	CEO/IT	038	$ 500,000	$ 279,307
FY06/07	REGIONAL WIRELESS BROADBAND	Review of municipal wireless case studies and business models and assessment of local government , businesses and residents' interest in regional wireless	Business Strategic Priority	CEO/IT	038	$ 500,000	$ -
FY06/07	EMAIL ARCHIVAL R & R SYSTEM	Project Cancelled	N/A	CEO/IT	038	$ 500,000	$ -
FY06/07	CONTINGENCY	N/A	N/A	CEO/IT	038	$ 483,825	$ -
FY06/07	IT POLICY REVIEW	Includes implementation of an enterprise-level IT portfolio management system (Clarity), IT Classification Study, and IT Sourcing Contract Review	Business Process Improvement / Automation	CEO/IT	038	$ 474,551	$ 401,646
FY06/07	REGIONAL ASSESSMENT GIS	Definition of business requirements of County Agencies/Departments for use of GIS	Business Strategic Priority	CEO/IT	038	$ 300,000	$ -
FY06/07	SECURE EMAIL NEEDS ASSESSMENT AND PILOT PROJECT	Needs assessment and pilot for secure transmission of e-mail in support of on-going HIPAA security compliance efforts	Mandate	CEO/IT	038	$ 300,000	$ 232,850
FY06/07	ACTIVE DIRECTORY IMPLEMENTATION	Alignment of all County IT (Agency/Departments) so that the groups could better communicate, leverage resources, align to a common technology road map	Business Process Improvement / Automation	CEO/IT	038	$ 250,000	$ 230,357
FY06/07	BALANCED SCORECARD SOFTWARE	Implementation of software that will enable the tracking, updating, and reporting of performance metrics for various organizational levels within each agency/department	Business Strategic Priority	CEO/IT	038	$ 200,000	$ -
FY06/07	DIGITAL ARCHIVE	Computerized system that allows Agency staff to access a digital copy of all printed content created during the adjudications of a case	Business Process Improvement / Automation	District Attorney	038	$ 300,000	$ -
FY06/07	CASE MANAGEMENT SYSTEM	Tools for the sharing of data, up to the minute activity information, appropriate documentation, statistical information	Business Process Improvement / Automation	District Attorney	038	$ 150,000	$ (10,000)
FY06/07	WIRELESS MODEM W/ GPS SYSTEM FOR FIELD SERVICES	Installation of a wireless system to increase efficiencies and ensure the safety of disaster teams	Business Process Improvement / Automation	HCA	60% Fees; 38% City; 2% NCC	$ 297,620	N/A
FY06/07	COMMUNICABLE DISEASE REPORTING, CASE MANAGEMENT AND SURVEILLANCE SYSTEMS (WEBCMR)	Implementation of a web-based communicable disease reporting, case management, and surveillance system	Mandate	HCA	Health Realignment	$ 296,618	N/A

Fiscal Year	Project Name	Description	Type of Project / Justification	Agency / Dept	Funding Source	Budget	Actual EXP/ENC
FY06/07	COMMON USE PASSENGER PROCESSING SYSTEM (CUPPS) (formerly CUTE) SUPPORTING INFRASTRUCTURE	Costs associated with the design, acquisition, and installation of common use passenger processing system and associated software	Business Process Improvement / Automation	JWA	Enterprise Fund 281	$ 700,000	N/A
FY06/07	AIRPORT TELEPHONE SWITCH (PBX)	Improvement of the telephone switch, resulting in more efficient call handling	Business Process Improvement / Automation	JWA	Enterprise Fund 280	$ 425,000	N/A
FY06/07	COMMUNICATION INFRASTRUCTURE IMPROVEMENT PROJECT	Establishment of high-speed data and voice transmissions	Business Process Improvement / Automation	JWA	Enterprise Fund 281	$ 300,000	N/A
FY06/07	WIRELESS COMMUNICATIONS - TERMINAL BUILDING	Installation of a wireless Internet access solution at all gate and concessions areas within the secured sections of John Wayne Airport terminals	Business Process Improvement / Automation	JWA	Enterprise Fund 281	$ 250,000	N/A
FY06/07	EPAGES REPLACEMENT	Replacement of outdated system and processes	Obsolescence	PAPG	038	$ 500,000	$ 52,393
FY06/07	FUEL FOCUS	Elimination of manual processes through purchase and integration of of Fuel Focus system (fuel management system)	Business Process Improvement / Automation	RDMD	Fund 296 - Transportation ISF	$ 250,000	N/A
FY06/07	FOOD SERVICES MANAGEMENT SOFTWARE	Replacement of FoodPro software program	Business Process Improvement / Automation	SHER	14B County Public Safety Sales Tax	$ 300,000	N/A
FY06/07	COMPUTER REPLACEMENT	Upgrade to current technology to facilitate the services and timeliness provided by Forensic Sciences	Obsolescence	SHERIFF	14B County Public Safety Sales Tax	$ 260,000	N/A
FY06/07	AUTOMATED FIELD REPORTING	Automation which allows deputies in the field to write their daily reports and submit them for approval electronically	Business Process Improvement / Automation	SHERIFF	14B County Public Safety Sales Tax	$ 250,000	N/A
FY06/07	MULTI AGENCY INTERVENTION DATA SYSTEM	Development of a browser-based application to track, monitor and report on referrals to the Wraparound Program from SSA, HCA and Probation	Mandate	SSA	Wraparound Trust Fund	$ 460,000	N/A
FY06/07	IMAGING PROJECT	Conversion of client case records from paper documents to electronic images for storage and retrieval, in response to Federal and State regulations	Mandate	SSA	Federal 50%; State 38%; County 12%	$ 300,000	N/A
FY06/07 TOTAL						$ 18,254,354	$ 7,310,398
FY07/08	ATS RE-WRITE (PTMS)	Re-write of the County's Property Tax Administration (PTA) Departments – Assessor, Auditor-Controller, Clerk of the Board, and the Treasurer-Tax Collector portion of the Assessment Tax System (ATS)	Obsolescence	A/C, TTC, COB	038	$ 845,232	$ 439,981
FY07/08	ASSESSMENT TAX SYSTEM RE-ENGINEER	Replacement of the Assessor's portion of the Assessment Tax System	Obsolescence	Assessor	038	$ 2,792,541	$ 2,815,330
FY07/08	ELECTRONIC GOVERNMENT	Development of a new County web interface and search engine based on life-events to improve online delivery of County Services	Business Strategic Priority	CEO/IT	038	$ 2,303,836	$ 2,358,486
FY07/08	REGIONAL 311 CUSTOMER SERVICE CENTER - FEASIBILITY STUDY	Development of a business case for a County-wide 311 customer service center	Business Strategic Priority	CEO/IT	038	$ 1,332,764	$ 390,925
FY07/08	NETWORK UPGRADES WAN3, ROUTER REPLACEMENT & CONVERGED INFRASTRUCTURE	Establishment of a new network infrastructure will support the County's ever-growing network communication needs.	Maintenance and Operations	CEO/IT	289	$ 1,000,000	$ 568,502
FY07/08	ENTERPRISE ARCHITECTURE	Implementation of the County's enterprise architecture and shared components across the County as delineated from the County's IT Strategic Plan	Business Strategic Priority	CEO/IT	NCC	$ 300,000	$ -
FY07/08	DISASTER RECOVERY / BUSINESS CONTINUITY	Establishment of strategies to mitigate the impacts of an emergency or a disaster	Business Strategic Priority	CEO/IT	038	$ 255,500	$ 109,627
FY07/08	IDENTITY MANAGEMENT AND SINGLE-SIGN ON	Development of a Countywide Identity Management and Single-Sign-On to systems	Business Process Improvement / Automation	CEO/IT	289	$ 250,000	$ -

Fiscal Year	Project Name	Description	Type of Project / Justification	Agency / Dept	Funding Source	Budget	Actual EXP/ENC
FY07/08	BALANCED SCORECARD SOFTWARE	Implementation of software that will enable the tracking, updating, and reporting of performance metrics for various organizational levels within each agency/department	Business Strategic Priority	CEO/IT	038	$ 250,000	$ 255,508
FY07/08	IT POLICY REVIEW	Includes implementation of an enterprise-level IT portfolio management system (Clarity), IT Classification Study, and IT Sourcing Contract Review	Business Process Improvement / Automation	CEO/IT	038	$ 248,189	$ 208,105
FY07/08	REGIONAL ASSESSMENT GIS	Definition of business requirements of County Agencies/Departments for use of GIS	Business Strategic Priority	CEO/IT	038	$ 200,000	$ 196,404
FY07/08	REGIONAL WIRELESS BROADBAND	Review of municipal wireless case studies and business models and assessment of local government , businesses and residents' interest in regional wireless	Business Strategic Priority	CEO/IT	038	$ 200,000	$ 199,910
FY07/08	IT STRATEGIC PLAN	Development of a multi-year countywide IT Strategic plan	Business Strategic Priority	CEO/IT	038	$ 194,854	$ 79,134
FY07/08	COUNTYWIDE IT SECURITY AUDIT & THREAT ASSESSMENT	Assessment of countywide information technology security	Business Strategic Priority	CEO/IT	038	$ 37,211	$ 19,078
FY07/08	CONTINGENCY	N/A	N/A	CEO/IT	038	$ 21,066	$ 17,654
FY07/08	CEO-IT INTERNAL PROCESS STANDARDIZATION (COUNTYWIDE ITIL TRAINING)	Training for County Agency Information Technology staff on standardizing IT processes	Business Process Improvement / Automation	CEO/IT	038	$ -	$ 101
FY07/08	ON-LINE FILING CONFLICT OF INTEREST FORM	Establishment of a secure process for Conflict of Interest (COI) Form 700 filers to electronically prepare and print their annual, assuming, and leaving office statements to the Clerk of the Board	Business Process Improvement / Automation	COB	038	$ 250,000	$ 233,214
FY07/08	CASE MANAGEMENT SYSTEM	Tools for the sharing of data, up to the minute activity information, appropriate documentation, statistical information	Business Process Improvement / Automation	District Attorney	038	$ 337,000	$ 337,000
FY07/08	DIGITAL ARCHIVE	Computerized system that allows Agency staff to access a digital copy of all printed content created during the adjudications of a case	Business Process Improvement / Automation	District Attorney	038	$ 200,000	$ 196,039
FY07/08	AIRPORT TELEPHONE SWITCH (PBX)	Improvement of the telephone switch, resulting in more efficient call handling	Business Process Improvement / Automation	JWA	Fund 280	$ 500,000	N/A
FY07/08	EPAGES REPLACEMENT	Replacement of outdated system and processes	Obsolescence	PAPG	038	$ 468,216	$ 466,352
FY07/08	OPERATING SYSTEMS UPGRADE	Upgrade of operating systems of the Probation Department's servers	Obsolescence	PROB	NCC	$ 1,800,000	N/A
FY07/08	ELECTRONIC FIELD BOOK	Provision of an automated, unattended form of low risk probationer reporting through the use of a KIOSK	Business Process Improvement / Automation	PROB	NCC	$ 688,000	N/A
FY07/08	KATELLA YARD MOVE	Establishment of IT infrastructure related to relocation of Agricultural Commissioner, Public works, and Transportation and Watershed staff	Maintenance and Operations	RDMD	Sale of Yard	$ 610,000	N/A
FY07/08	STORAGE SYSTEM UPGRADE	Establishment of high bandwidth network connection to the Theo Lacy, James A. Musick, Orange County Data Center, and the new Tustin Training facility	Maintenance and Operations	SHERIFF	Fund 13R	$ 975,000	N/A
FY07/08	IMAGING PROJECT	Conversion of client case records from paper documents to electronic images for storage and retrieval, in response to Federal and State regulations	Mandate	SSA	50% State; 38% Federal; 12% NCC	$ 620,230	N/A
FY07/08 TOTAL						**$ 16,679,639**	**$ 8,891,350**
FY08/09	CAPS + PHASE 1 IMPLEMENTATION (FY 07-08, 08-09)	Upgrade of the Financial and Purchasing Systems of CAPS to new 3.x release	Obsolescence	A/C	014	$ 34,841,200	N/A
FY08/09	PROPERTY TAX MANAGEMENT SYSTEM (PTMS)	Re-write of the County's Property Tax Administration (PTA) Departments – Assessor, Auditor-Controller, Clerk of the Board, and the Treasurer-Tax Collector portion of the Assessment Tax System (ATS)	Obsolescence	A/C, TTC, COB	038	$ 3,020,000	$ 2,288,704

Fiscal Year	Project Name	Description	Type of Project / Justification	Agency / Dept	Funding Source	Budget	Actual EXP/ENC
FY08/09	ASSESSMENT TAX SYSTEM RE-ENGINEER	Replacement of the Assessor's portion of the Assessment Tax System	Obsolescence	Assessor	038	$ 5,619,195	$ 5,623,161
FY08/09	DISASTER RECOVERY / BUSINESS CONTINUITY	Establishment of strategies to mitigate the impacts of an emergency or a disaster	Business Strategic Priority	CEO/IT	038	$ 1,722,844	$ 1,587,620
FY08/09	WIDE AREA NETWORK (WAN) UPGRADE	Network upgrade to support user requirements and growing demands from agency and new enterprise applications (CAPS+, ATS, PTMS)	Maintenance and Operations	CEO/IT	289	$ 750,000	$ 150,857
FY08/09	ENTERPRISE SINGLE SIGN-ON & USER PROVISIONING	Establishment of an improved method for users logging on to the County's computer system from one place	Business Process Improvement / Automation	CEO/iT	289	$ 300,000	$ 142,774
FY08/09	TELEPHONE EQUIPMENT INFRASTRUCTURE UPGRADE	Upgrade of telephone switches that are nearing obsolescence	Maintenance and Operations	CEO/IT	289	$ 200,000	$ -
FY08/09	ELECTRONIC MEDICAL CHART SYSTEM'	Enhancement of the web based Chemical Inventory System to provide detailed site/plot plans, incident action and an evacuation plan that identifies locations of critical infrastructure and regulated businesses	Mandate	HCA	CSS Admin Grant	$ 274,085	N/A
FY08/09	TELEPHONE UPGRADE	Installation of an airport owned telephone system (PBX)	Business Process Improvement / Automation	JWA	JWA Enterprise FUND 280	$ 500,000	N/A
FY08/09	ORANGE COUNTY UTILITY CUSTOMER INFORMATION SYSTEM (BILLING SYSTEM)	Development of a new Utility Customer Information System	Obsolescence	OCPW	OCPW Budget	$ 500,000	N/A
FY08/09	EPAGES REPLACEMENT	Replacement of outdated system and processes	Obsolescence	PAPG	038	$ 95,000	$ 78,653
FY08/09	DISASTER RECOVERY SOLUTION FOR ENTERPRISE STORAGE AREA NETWORK	Provision of a recoverable site in case the primary site is not recoverable in a disaster	Business Strategic Priority	SHERIFF	NCC	$ 1,300,000	N/A
FY08/09 TOTAL						**$ 49,122,324**	**$ 9,871,770**
FY09/10	COMMON USE PASSENGER PROCESSING SYSTEM (CUPPS)	Installation of a Common Use Passenger Processing System (CUPPS) as part of the Airport Improvement Project and the construction of Terminal C	Business Process Improvement / Automation	JWA	JWA Funding	$ 16,795,060	N/A
FY09/10	CAPS+ HUMAN RESOURCES / PAYROLL UPGRADE	Upgrade of the CAPS Human Resources and Payroll (HR/Payroll) system from CGI's Advantage 2.x software to the 3.8 release	Obsolescence	A/C, HRD	014	$ 10,281,704	
FY09/10	ASSESSMENT TAX SYSTEM (ATS)	Replacement of the Assessor's portion of the Assessment Tax System	Obsolescence	Assessor	Debt Financing	$ 6,801,935	N/A
FY09/10	CERNER MILLENNIUM RCA UPGRADE	Upgrade to the IRIS Millenium system, allowing the agency to ensure billing systems are in compliance with all regulatory requirements	Obsolescence	HCA	HCA Funding	$ 5,000,000	N/A
FY09/10	PROPERTY TAX MANAGEMENT SYSTEM (PTMS)	Re-write of the County's Property Tax Administration (PTA) Departments – Assessor, Auditor-Controller, Clerk of the Board, and the Treasurer-Tax Collector portion of the Assessment Tax System (ATS)	Obsolescence	A/C, TTC, COB	Debt Financing	$ 3,643,018	N/A
FY09/10	UNISYS MAINFRAME COMPUTER	Purchase of Unisys Dorado 4080 mainframe computer and hardware/software maintenance fees	Obsolescence	SHERIFF	Sheriff Funding	$ 2,169,538	N/A
FY09/10	ATS & PTMS DEBT SERVICE PAYMENTS (6 MOS)	N/A	N/A	N/A	General Fund	$ 1,252,616	N/A
FY09/10	COURT OPERATIONS CIVIL PROCESS SDS DATA SYSTEM	Modification of the current SDS application to meet system requirements resulting from changes in the Civil and Gov't. codes and the Code of Civil Procedure	Mandate	SHERIFF	Sheriff Funding	$ 1,200,000	N/A
FY09/10	DISASTER RECOVERY IMPLEMENTATION	Identification of gaps and development of appropriate DR solutions for new County systems that come online	Business Strategic Priority	CEO/IT	038	$ 866,640	N/A
FY09/10	REPLACE OBSOLETE VOICE MAIL SYSTEM (ON HOLD PENDING IT SOURCING STRATEGY DEVELOPMENT)	Replacement of Call Pilot voice mail system that has reached End of Life (EOL)	Obsolescence	CEO/IT	038	$ 576,520	N/A

Fiscal Year	Project Name	Description	Type of Project / Justification	Agency / Dept	Funding Source	Budget	Actual EXP/ENC
FY09/10	TELEPHONE HUB (SL100) MITIGATION (ON HOLD PENDING IT SOURCING STRATEGY DEVELOPMENT)	Installation of a Voice Over Internet Protocol (VOIP) telephone switching system	Obsolescence	CEO/IT	038	$ 524,000	N/A
FY09/10	TELEPHONE INFRASTRUCTURE REFRESH (ON HOLD PENDING IT SOURCING STRATEGY DEVELOPMENT)	Upgrade to telephone systems and equipment that have reached End of Life	Obsolescence	CEO/IT	289	$ 450,000	N/A
FY09/10	TELEPHONE SYSTEM UPGRADE	Upgrades airport-ownded telephone system to include number mobility and Voice over IP, which is required as part of the CUTE system	Business Process Improvement / Automation	JWA	JWA Funding	$ 450,000	N/A
FY09/10	REFRESH NETWORK INTRUSION PROTECTION HARDWARE AND SERVICES (ON HOLD PENDING IT SOURCING STRATEGY DEVELOPMENT)	Replacement of obsolete Intrusion Detection Systems	Obsolescence	CEO/IT	289	$ 417,219	N/A
FY09/10	COMPUTER OPERATIONS AUTOMATION	Automation of manual Orchestration process to meet the business needs of the newly deployed distributed systems	Business Process Improvement / Automation	CEO/IT	289	$ 382,190	N/A
FY09/10	CENTRAL COURT WAN MIGRATION (ON HOLD PENDING IT SOURCING STRATEGY DEVELOPMENT)	Elimination of risks due to aging hardware and environmental issues	Maintenance and Operations	CEO/IT	038	$ 298,997	N/A
FY09/10	COUNTYWIDE IT & TELEPHONE BILLING (ON HOLD PENDING IT SOURCING STRATEGY DEVELOPMENT)	Consolidation and automation of billing process	Business Process Improvement / Automation	CEO/IT	289	$ 200,000	N/A
FY09/10	WAN BACKBONE HIGH AVAILABILITY (ON HOLD PENDING IT SOURCING STRATEGY DEVELOPMENT)	Installation a secondary router at each of these three locations to build a self healing County network backbone to remedy single point of failure issue	Maintenance and Operations	CEO/IT	289	$ 188,517	N/A
FY09/10 TOTAL						**$ 51,497,954**	**$ -**
KEY IT PROJECT TOTAL						***$ 147,193,420***	***$ 31,481,065***

Appendix B: CEO/IT Sole Source Contracts
FY 05/06 – August 2009

Fiscal Year	Vendor Name	PA #	Description	Contract Term	Authorized Cumulative Limit	Sole Source Justification	Presented on Board Agenda	Purchasing Review of Sole Source
FY 05/06	**UCI Extension**	N1000006048	To provide IT accredited project management training	3.5 yr	$ 292,960	Required Sole Source justification form not included with any of four ASRs that went to Board, however, each ASR identifies contract as sole source. Quality training provided to County IT professionals in an effort to provide standardized countywide IT project management training program that aligns with industry best practices. The UCI Extension is the only academic PMI certified training program in Orange County areas that provides on-site training and certification.	yes	no
FY 05/06	**Elixir Technology**	Y1000000892	Form print software (notices, bills, etc.)	3 yr	$ 39,750	The Data Center currently utilizes proprietary software products provided by vendor. If this vendor is not used, CEO/IT would have to find another vendor who provides this type of service at considerable expense for such things as: purchase of new software to perform same functions, training of staff, possible upgrade of hardware components, conversion of existing form overlays, and modification to existing job streams to incorporate new software requirements.	no; less than $50K threshold	yes
FY 05/06	**Inmon Corporation**	N1000005043	Internet monitoring software	5yr; 03/04 to 07/08	$ 62,325	Required sole source form not included with ASR, however it was found in Purchasing folder. ASR also identifies this item as sole source contract for network monitoring software license designed to examine how network resources are being used.	yes	Deferred to program expertise
FY 05/06	**Statestore Inc**	N1000006779	Annual license for Interwoven Web content management software	3 yr	$ 36,408	Vendor is the only authorized reseller of Interwoven products and support. The price is comparable to other similar products. If this software is not utilized, the County would be required to find another method for website update, which could result in significant additional costs for the County.	no as below $50K threshold	no
FY 05/06	**Storage Technology**	Y1000001034	Lease of hardware and software for automated Data Center mainframe tape library lease system (ATLS)	1 yr	$ 350,000	Vendor originally leased system to County as result of competitive bid process in 1995. At the end of the original 5-year lease, vendor proposed to upgrade the equipment. There were only two vendors providing ATLS at that time, and Storage Technology was the only one of those two that could meet the County's requirements. A new 5-year lease was executed in December 2000, and current contract expired December 2005. The current ATLS environment only provides data storage for a Mainframe environment although the County now also has an "open" or server environment as well. Extending current contract with vendor will allow CEO/IT to evaluate current data storage solutions that can support both Mainframe and server environment.	no as leases are not identified in Contract Policy Manual as requiring Board approval	no

Fiscal Year	Vendor Name	PA #	Description	Contract Term	Authorized Cumulative Limit	Sole Source Justification	Presented on Board Agenda	Purchasing Review of Sole Source
FY 06/07	**CPS Systems**	Y1000001073	Active Directory synchronization software	5 yr	$ 60,969	Several vendors were considered. This vendor was the most straightforward solution, not requiring additional training or infrastructure/server purchases to implement, and was the cheapest price.	no as leases are not identified in Contract Policy Manual as requiring Board approval	Deferred to Program expertise
FY 06/07	**IBM/Infoprint**	N1000007832	Software customizations and maintenance	5 yr	$ 109,020	Required sole source form not included with ASR but in Purchasing folder. ASR states that IBM developed all custom proprietary code for the current Print Manger software package and no other vendor has rights to use or market it. Therefore, IBM is the only vendor able to provide the necessary software upgrades and to maintain those customizations.	yes	no
FY 06/07	**IBM**	N1000007852	Printer maintenance	3 yr	$ 330,173	ASR improperly labeled as not a sole source contract. This was previously identified in 2/11/09 Internal Audit Report on CEO/IT contract administration.	yes	no
FY 06/07	**Microsoft**	N1000007477	e-Government application demonstration (proof of concept)	1 yr	$ 25,000	Required sole source form not included in ASR and no sole source justification provided in ASR. Sole source form included in Purchasing folder. This contract will allow Microsoft and Avanade to work on a proof of concept, non-production, lab implementation of Avanade's eGA demonstration application. This software will allow web applications to be created by non-programming County staff to produce working web applications using Work and Visio documents. The total cost of the project is $75K; however, both Microsoft and Avanade are contributing $25K a piece, reducing the County's contribution to $25K. The County will receive the license and installation of the eGA Demo project. eGA is a proprietary product and this service is only available through Microsoft.	yes	no
FY 06/07	**Niksun Inc**	N1000006772	Network surveillance intrusion monitoring equipment	5 yrs	$ 79,226	Product is the only system that can analyze data traffic streams and very high data rates to check malicious activity, even post-event. Product is proprietary equipment to vendor and no other provider is available.	yes	no
FY 06/07	**Niksun Inc**	N1000007338	Network forensic software	2 yrs	$ 24,924	NetVCR is a proprietary product of vendor which monitors all hostile data intrusion activity against the County from the Internet and from internal events.	yes	no
FY 06/07	**GovDelivery**	N1000008042	Email subscription management services	5 yr	$ 392,060	Required sole source form not included with ASR but was found in Purchasing folder. Sole Source states that the County has multiple subscription systems for email newsletters, and the Board of Supervisors requested a solution that provides a single interface for residents to subscribe to multiple items (newsletters, press releases, and website pages). The vendor's system is the only comprehensive e-mail subscription management system that integrates seamlessly with existing websites and administrative processes. Other solutions were reviewed; however, GovDelivery offered the only comprehensive ASP solution that met the County's requirements.	yes	no

Fiscal Year	Vendor Name	PA #	Description	Contract Term	Authorized Cumulative Limit	Sole Source Justification	Presented on Board Agenda	Purchasing Review of Sole Source
FY 06/07	**Comcate**	N1000007996	County customer complaint tracking system	5 yr	$ 111,250	Required sole source form not included with ASR, however ASR states that other products were evaluated, and that Comcate provides the only standalone, SP-hosted application that meets Brown Act requirements. The cost was also significantly less than other evaluated products as Comcate's product is a standalone solution. The others were bundled into larger, more expensive systems that provided applications the County does not need.	yes	no
FY 07/08	**AT&T Services Inc**	N1000008805	311 non-Emergency Telephone Information Services	3 yrs	$ 67,236	AT&T is the single source vendor for this service because they own the central offices and switching equipment in areas where they are the dial-tone service provider.	yes	no
FY 07/08	**Gartner**	N1000009219	IT Strategic Advisory Speaking Engagements	1 yr	$ 42,000	On-site IT advisory services are needed to receive the proper subject matter expertise for our Enterprise Architecture Initiative. Vendor will help CEO/IT communicate the business value of Enterprise Architecture to all levels of the County and will also help improve the position of the Enterprise Architecture role. Preliminary research was conducted and it was found that vendor offered the highest quality of research and subject matter experts at the most reasonable cost.	no	yes
FY 07/08	**Kapow Technologies**	N1000009227	Software maintenance for eGov migration for County agencies	3 yr	$ 181,600	Required sole source form not included with ASR but found in Purchasing folder. ASR states that after researching this software, CEO/IT learned that there are two companies that support the technology required. Of the two, Kapow was the only vendor who responded to the County's requirement.	yes	no
FY 07/08	**Microsoft**	N1000009085	Microsoft software support services	2 yr	$ 149,780	Microsoft products are used extensively by the County. This service contract provides the County will direct and continuous access to Microsoft experts in the case of an emergency technical or operational problem. Several other Microsoft partners have been used in prior years, but they were not able to resolve our problems without contacting Microsoft. The use of intermediaries was slow and often did not resolve our exact problem. The price for this service is comparable to using second and third tier Microsoft partners, yet having a direct Microsoft connection offers a much better value to the County.	yes	yes
FY 07/08	**PlanNet Consulting**	N1000009432	IT Strategic Plan for Voice/Network infrastructure	1 yr	$ 80,800	Vendor already providing similar services to County agencies and the Courts; other vendors were contacted but many have representative relationships with infrastructure and/or equipment vendors which means they have a bias in their recommendations. Secondly, other vendors would require considerable time to get up to speed on the County's specific infrastructure. Third, many of the vendors were focused on detailed implementation and did not have the high level strategic vision, and industry road-map vision required for this engagement.	yes	yes

Fiscal Year	Vendor Name	PA #	Description	Contract Term	Authorized Cumulative Limit	Sole Source Justification	Presented on Board Agenda	Purchasing Review of Sole Source
FY 07/08	**StorageTek**	Y1000001155	Lease of hardware and software for automated Data Center tape library lease system (ATLS)	2 yr.	$ 687,749	A comprehensive solution to data storage for both the mainframe and "open" server environment was never found. As a result, CEO/IT has determined that the best course of action at this time is to address only the mainframe requirement. It is anticipated that the RFP for a data solution will be released in spring 2008. In the interim, the current vendor contract is renewed.	no as leases are not identified in Contract Policy Manual as requiring Board approval	yes but contract done in 2006 and review in 2009
FY 08/09	**Comcate Inc**	N1000009754	Constituent Case Tracking System Enhancements	5 yr	$ 36,900	This contract is for enhancements to current vendor system to add additional functionality such as phone/letter/walk-in customer complaint processing and also report generation. As Comcate is owner of system, enhancements can only be done by vendor.	No; under $50K Board threshold level	yes
FY 08/09	**PA Consulting Group**	N1000010425	Assessment of County IT data backup and password controls	1 yr	$ 40,000	The County has an urgent need for an assessment of its data backup procedures at the Data Center to ensure compliance to legal requirements that could create a significant liability for the County. The urgency of this requirement requires us to forego contacting other vendors. Sole Source justification does not indicate review by CEO/Purchasing staff.	no because under $50K Board threshold level	no
FY 08/09	Saile Technologies	N1000010844	Professional services for CUTS (telephone/utilities) replacement	1 yr	$ 48,626	CEO/IT will be replacing the telecom billing portion of the CUTS system with an automated, modular-based Telecom Billing System. Vendor has solid understanding of current CUTS system as well as new CAPS+ Advantage 3.x financial system. Existing County Master Agreements were researched but determined not to contain the unique services supplied by Saile, and are more expensive. Also, without services of knowledgeable vendor, CEO/IT will be at critical risk in ensuring a timely replacement of the Telecom billing system. This project cannot be deferred because the current CUTS system will not be available for telecom billing beginning in July 2009.	No; under $50K Board threshold level	yes
FY 09/10	**E911 Helpline**	N1000010970	Retain IT infrastructure expertise for CAPS+, ATS, PTMS	2 yr	$ 736,320	This vendor has played a vital role in designing and managing major County IT projects (e.g., CAPS+, PTMS, eGov, Disaster Recovery). There is critical need to retain the services of this vendor who knows both IT systems and agency/department IT staffs.	yes	yes
FY 09/10	**Openiam**	Y1000001426	Software source code purchase and maintenance services	1 yr	$ 48,250	The County has adopted the use of an Identify Management Software Solution called OpenIAM, proprietary software by vendor. The purchase of source code and maintenance support is much cheaper using this vendor rather than attempting to purchase generic source code modules. Other vendors have been contacted, however, their responses featured expensive hourly rates rather than fixed price for unlimited support.	no because under $50K Board threshold level	Deferred to Program expertise
Totals	**24 Contracts**				$ 4,033,326			

Notes:

1. Per the County Contract Policy Manual (CPM), it is the policy of the County to solicit competitive bids and proposals for its procurement requirements. However, the CPM also allows for Sole Source procurement when there is clear and convincing evidence that only one source exists to fill the County's requirements. The policy requires completion of the Sole Source justification form for all Sole Source procurement requests and management authorization.

2. Past and current Sole Source contract Board approval thresholds are:

2007 - Present	Prior to 2007
>$50,000	Depends on Contract type:
>2-year consecutive term	Professional Services: >$50,000 life of contract
	Consultant Services: >$25,000

Appendix C: Sole Source Contracts Procured by CEO/IT for Other Agencies/Departments
FY 05/06 – August 2009

Fiscal Year	Vendor Name	Vendor #	Department Procured for:	Description	Contract Term	Authorized Cumulative Limit	Sole Source Justification Provided	Approved by Board	Purchasing Review of Sole Source
FY 05/06	Hyland Software	X1000000274 N1000006047	All -- Master and Subordinate Contract	Conversion of paper records to electronic format	4 yrs	$474,489	Required sole source form not included in the ASR. ASR states that Hyland software is proprietary. The cost negotiated by CEO/IT is competitive with other similar software.	yes	yes
FY 05/06	Aeris Enterprises	N1000007125	Auditor-Controller	Integrated Procurement & Payables Processing Project (IP3) System	1 yr	$405,000	The IP3 software is designed as a "requisition to check" business process re-engineering project to standardize, simply, and streamline the current procurement and invoice payment processes. Vendor has unique technical expertise and experience with CAPS. Their staff included integral members of the original CAPS implementation team and supported the County in several major upgrade efforts. Vendor's level of knowledge with CAPS and the County's business processes are not available from any other vendor. There is only one other possible provider of the service, CGI. However, CGI does not perform smaller engagements. No other provider of service is available. Internal CEO/IT staff could be used on an as-available basis. However, this would slow the project and significantly increase project costs.	yes	yes
FY 05/06	Saile Technologies	N1000006705	Auditor-Controller	Functional and technical support to County purchasing module on CAPS	3 yr	$1,232,000	Required sole source form not included in ASR but, found in Purchasing folder and ASR text identifies contract as sole source. Vendor has over 20 years experience with the CAPS system, including extensive experience with the original system provider. Accordingly, vendor has become familiar with County purchasing operations and system support requirements. Vendor displays superior technical knowledge and abilities in supporting, maintaining, and enhancing those systems, support that would be difficult to obtain from an alternate source. Staffing from CEO/Purchasing surveyed the hourly market rates for similar services and found that rates for this type of service typically range between $82 and $150 per hour. Vendor has agreed to the fixed hourly rate of $74 during the entire term of the contract.	yes	yes
FY 05/06	CGI, Inc.	N1000006920	Auditor-Controller	Software maintenance for CAPS	2 yrs	$1,223,484	There is no reference to sole source agreement in this contract. Since the end of the original warranty period for CGI software in September 1991, software maintenance has been provided by CGI under four consecutive multi-year contracts, the last contract which expired 9/30/04. There have been extensive negotiations between the vendor and the County on proposed changes to the County's standard contract terms and conditions. Maintenance fees within the software industry are customarily set as a percent of the current list price of the products. The fee percent is typically between 15 - 25%; the CGI fee has been set at 20%.	yes	no

Fiscal Year	Vendor Name	Vendor #	Department Procured for:	Description	Contract Term	Authorized Cumulative Limit	Sole Source Justification Provided	Approved by Board	Purchasing Review of Sole Source
FY 06/07	Aeris, Inc.	N1000008120	Auditor-Controller	QA for CAPS+ Upgrade Fit Analysis	1 yr	$69,800	No sole source justification form included with ASR as required, however, ASR does identify contract as sole source and states that vendor has unique technical expertise and experience with CAPS and the Advantage 3.x software. Their staff included integral members of the original CAPS implementation team and supported the County in several upgrade efforts. In addition, they have worked with several other clients (Los Angeles and San Bernardino Counties, City of Anaheim) who have or are currently upgrading to Advantage 3.x. This unique knowledge of CAPS and the Advantage 3.x product and the County's business processes are not available from any other vendor.	yes	no
FY 06/07	Aeris, Inc.	N1000008520	Auditor-Controller	CAPS Purchasing Software support	1 yr	$47,500	Aeris has unique technical expertise and experience with CAPS as staff included integral members of the original CAPS implementation team. There is only one other possible provider of this service, CGI, however, they do not take smaller engagements. No other service provider is available. Aeris' hourly rate of $190 is comparable to the industry standard for these types of services.	no; less than $50K threshold	yes
FY 06/07	CGI Technologies	N1000008112	Auditor-Controller	CAPS Financial Upgrade Fit Analysis	1 yr	$729,300	Sole Source justification form not included with ASR but found in Purchasing folder. A primary requirement of the e-procurement system is that it seamlessly integrates into the CAPS CGI software. This will ensure all budget processes are addressed for each e-procurement transaction. As the ERP provider, CGI is the only firm with a complete understanding of the software and ability to quickly create the interfaces necessary. Due to the time constraints involved, no other vendor has been contacted. Bringing in another vendor would require the vendor to become familiar with the Advantage software and work closely with Ketera and CGI to ensure its operational effectiveness. The costs to provide the e-procurement pilot are very competitive.	yes	yes
FY 06/07	SouthTech Systems	N1000008434	Clerk of the Board	Software license and maintenance	1 yr	$46,512	The Fair Political Practices Commission's Statement of Economic interest is unique to the State of California. SouthTech Systems has the only off-the-shelf software application that manages the filing and tracking of California's Statements of Economic Interest.	no; less than $50K threshold	yes
FY 06/07	Steve Schultz	N1000007499	Auditor-Controller, Treasurer-Tax Collector	Project Manager for ATS Re-write	1/5/06 - 9/30/07; original contract 6 months; extended twice	$273,000	Sole Source justification form only provided for first 6 month $49,000 contract. No sole source justification forms or ASR text explaining why this was sole source contracts was provided for subsequent two time extensions and corresponding price increases cumulatively totaling $224,000. ASR Sole Source box, however, was checked "Yes". Original sole source justification states that the knowledge and experience in the property tax process is a critical concern and vendor possesses those skills. No other vendors were contacted but sole source states prices are very reasonable. Given the size, scope and importance of the ATS Rewrite Project, it deserves a full-time Project Manager. The Auditor, Clerk of the Board and Tax Collector have all pitched in their time and resources in getting the project going but as the project gets more involved, the more it has become evident that the success of the endeavor depends on having a full-time Project Manager.	yes	yes on original 6 month contract, but not on two amendments

Fiscal Year	Vendor Name	Vendor #	Department Procured for:	Description	Contract Term	Authorized Cumulative Limit	Sole Source Justification Provided	Approved by Board	Purchasing Review of Sole Source
FY 07/08	**Aeris Enterprises**	N1000009063	Auditor-Controller	Phase 1 QA for CAPS+ Upgrade	2 yrs	$769,000	Required sole source form not included in ASR. ASR text, however, identifies this as a sole source procurement stating that vendor has unique technical expertise and experience with CAPS and the Advantage 3.x products. Their staff included integral members of the original CAPS implementation team and supported the County in several major upgrade efforts. Their unique knowledge of CAPS and the County's business processes are not available from any other vendor.	yes	yes
FY 07/08	**Aeris Enterprises**	N1000010133	Auditor-Controller	CAPS+ Outbound Interface services	1 yr	$975,000	As a result of the non-performance of previous vendor, CEO/IT was required to quickly change vendors to complete both the Inbound and Outbound Interfaces between Advantage 3.x and County departments so as to not disrupt the CAPS+ schedule. The CAPS Steering Committee recommended granting sole source contracts to Aeris for Outbound Interfaces services and to CGI for Inbound Interface services.	yes	yes
FY 07/08	**Biztech**	N1000009447	Auditor-Controller	Professional services for implementation of workflow applications	1 yr	$34,650	Vendor was awarded the contact to implement a work flow process for software Captaris. This product now requires software support which is best provided by vendor who created software. Vendor's pricing schedule is within the same price range as CGI.	no; less than $50K threshold	yes
FY 07/08	**CGI Technologies**	N1000009062	Auditor-Controller	CAPS+ Upgrade implementation, software licensing, and maintenance. Contract later amended 6/24/08 to include CAPS+ Inbound Interface Services and Cost Generator creation at cost of $1.44M.	5 yrs	$21,094,994	Required sole source form not included in ASR but found in Purchasing folder. ASR text, however, identifies this as sole source procurement stating that after lengthy study and analysis, CAPS Steering recommended and Board approved upgrade of CAPS Advantage 2.x system to Advantage 3.x. The Advantage 3.x information systems are proprietary products of the vendor. Only the vendor can supply the implementation, licensing, and maintenance services necessary to upgrade the CAPS systems. Later $1.44 amendment is to provide Inbound Interface services quickly to cover for non-performance of contractor and to keep the CAPS+ Upgrade project on schedule.	yes	Deferred to Program expertise
FY 07/08	**CGI Technologies**	N1000009230	Auditor-Controller	Software maintenance and support for former CAPS Advantage 2.x software	3 yrs	$1,533,380	Original ASR and two contract amendment and pricing extension ASRs incorrectly list "N/A" in Sole Source box when contract is in fact a Sole Source. Only second amendment ASR (9/28/09) ASR includes Sole Source justification form, which states that due the proprietary nature of the products, no other vendor can provide the service. The fees are consistent with industry standards, according to the Gartner Group, Inc., which customarily run in the range of 15-25% of the vendor's current retail price for their software products. CGI has held maintenance fees constant for the past three years. For this last year, CGI is willing to hold the pro-rata share which represents the Human Resources/Payroll plus BRASS components are current levels. Assuming an annual inflation factor rate of 3.5%, this yields an effective fee of approximately 20%, which is within industry averages.	yes	no

Fiscal Year	Vendor Name	Vendor #	Department Procured for:	Description	Contract Term	Authorized Cumulative Limit	Sole Source Justification Provided	Approved by Board	Purchasing Review of Sole Source
FY 07/08	**Geometrix Data Systems**	N1000010002	Auditor-Controller	Software licenses and maintenance for CAPS+ Upgrade training	3 yrs	$160,796	The County currently has over 10,000 users utilizing Training Partners, a software product developed by vendor. Replacing this software to match the new CAPS+ environment with the current vendor product reduces conversions and provides the County with a single training solution. No other vendors were contacted since the County has such a large number of employees already using this product, as it would be cost prohibitive to replace it with a new system. The vendor's fees are comparable to similar services, and are priced accordingly to others in the industry.	yes	yes
FY 07/08	**SouthTech Systems**	N1000009376	Clerk of the Board	Create secure environment for Conflict of Interest forms	3 yrs	$215,000	Clerk currently uses proprietary software to manage the 5,000 Conflict of Interest forms. Required modifications to enhance the system can only be made by creating vendor.	yes	yes
FY 07/08	**CGI Technologies**	N1000010195	Auditor-Controller	CAPS+ HR System Fit Analysis	1 yr	$1,480,000	ASR Sole Source box incorrectly lists this as not being a sole source contract, but correctly includes sole source in text and as an attachment. On April 1, 2008 the Board directed the Auditor Controller and HR Departments to negotiate with CGI to provide fit analysis services to the proposed CAPS HR/Purchasing System upgrade. This action was based upon the Gartner and AgreeYa Solutions reports, both of which recommended that CGI could provide this service in the most cost effective manner to the County. County staff did not directly contact other vendors. AgreeYa provided this service to the County and the results of these contracts were provided in their report. In all cases their report stated that having another vendor provide this service would be more costly to the County. Having CGI perform this service allows the County to begin this project immediately and negates the need for an RFP. Experience with other CGI customers has demonstrated that an RFP of this nature could cost the County upwards of $1,000,000 to release and evaluate. Further, other CGI customers who used the RFP process chose CGI as being the best value when evaluated against other vendors'	yes	Defer to IT program expertise
FY 07/08	**Intellitime Systems**	N1000009695	Auditor-Controller	VTI Payroll system maintenance and support fees	5 yrs	$635,775	VTI was deployed in 24 County departments as payroll system in 2000. The County has now secured an enterprise licensing fee at a lower flat cost for the next five years. This cost compares favorably with the general market. A board action in San Diego County in 2005 approved $1.5 M to install an upgrade of competing software; a recent proposal for installation of competing software at OCTA for 300 employees was estimated at $457K. This contract is necessary to continue to support the VTI software.	yes	no
FY 08/09	**Hyland Software**	X1000000415	All - Master Contract	Consulting, maintenance and support services for conversion from paper records to electronic format	5 yrs	Total value for active contract subordinate is $333,788	Current contract with Hyland has been in place since June 2004 and this software has been adopted as the County standard. The cost negotiated by the County is competitive with other similar software. The contract pricing is the lowest offered by the vendor to any of its customers. A recently completed study of electronic document management systems recommended remaining with current vendor.	yes	no

Fiscal Year	Vendor Name	Vendor #	Department Procured for:	Description	Contract Term	Authorized Cumulative Limit	Sole Source Justification Provided	Approved by Board	Purchasing Review of Sole Source
FY 08/09	CGI Technologies	N100001093	Auditor-Controller	CAPS+ HR System implementation	2 yrs	$9,478,964	Required Sole Source form not included with ASR or found in Purchasing folder. However, the ASR does identify contract as sole source and states that the Advantage 3.x information system is a proprietary product of CGI. Only CGI can supply the implementation and licensing services necessary to upgrade the CAPS Human Resources/Payroll system.	yes	no
FY 08/09	IBM	N1000010166	Auditor-Controller, Treasurer-Tax Collector	PTMS software licenses and maintenance	5 yrs	$234,450	No ASR for this multi-year contract. Sole Source justification found in Purchasing folder which states that this regional software is used by PTMS to establish a standard methodology for large scale application development that manages requirements, design, development, testing, source code and change requests. The software is a proprietary product of IBM and therefore IBM is the only vendor able to provide the necessary software maintenance services. Prices are comparable to similar type products.	no	yes
FY 08/09	Saile Technologies	N1000010291	Auditor-Controller	OLB System Replacement Assessment	1 yr	$49,200	Saile has unique knowledge of CAPS and OLB. They have been used extensively to map many processes in need of change, modification, or deletion to support the CAPS Financial Systems Upgrade. No other vendors were contacted due to the short timeframes required to complete this project. Saile has consistently provided the County with a fee model as good or better than the general market. We could spend upwards of $400,000 to upgrade the current OLB system and processes to be compatible with CAPS+.	no; under $50K threshold	Defer to IT program expertise
FY 09/10	Intellitime Systems	N1000010722	Auditor-Controller	VTI Payroll System support services	1 yr	$50,000	VTI software is the proprietary software from Intellitime. Vendor provides their services at the rate of $150 per hour which is comparable. Sierra systems provided needs assessment services to the County at $190 hour. Aeris which has supported the County's financial system has billed the County at $200 per hour for similar services.	no; under $50K threshold	no
Total:		23 Contracts				$41,212,294			

Notes:

1. Per the County Contract Policy Manual (CPM), it is the policy of the County to solicit competitive bids and proposals for its procurement requirements. However, the CPM also allows for Sole Source procurement when there is clear and convincing evidence that only one source exists to fill the County's requirements. The policy requires completion of the Sole Source justification form for all Sole Source procurement requests and management authorization.

2. Past and current Sole Source contract Board approval thresholds are:

2007 - Present	Prior to 2007
>$50,000	Depends on Contract type:
>2-year consecutive term	Professional Services: >$50,000 life of contract
	Consultant Services: >$25,000

Appendix D: Sole Source Contracts by Vendor
FY 05/06 – August 2009

Vendor	FY	Price Agreement #	Department	Description	Contract Term	Authorized Cumulative Limit
Aeris Enterprises	2005/06	N1000007125	Auditor-Controller	Integrated Procurement & Payables Processing Project (IP3) System	1 yr	$405,000
Aeris Enterprises	2006/07	N1000008120	Auditor-Controller	Quality for CAPS+ Upgrade Fit Analysis	1 yr	$69,800
Aeris Enterprises	2006/07	N1000008520	Auditor-Controller	CAPS Purchasing Software support	1 yr	$47,500
Aeris Enterprises	2007/08	N1000009063	Auditor-Controller	Phase I Quality Assurance for CAPS+ Upgrade	2 yrs	$769,000
Aeris Enterprises	2007/08	N1000010133	Auditor-Controller	CAPS+ Outbound Interface services	1 yr	$975,000
Aeris Totals		**5 contracts**				**$2,266,300**
AT&T Services	2007/08	N1000008805	CEO	311 non-Emergency Telephone Information services	3 yrs	$67,236
Biztech	2007/08	N1000009477	Auditor-Controller	Professional services for implementation of workflow applications	1 yr	$34,650
CGI, Inc.	2005/06	N1000006920	Auditor-Controller	Software maintenace for CAPS	2 yrs	$1,223,484
CGI, Inc.	2006/07	N1000008112	Auditor-Controller	CAPS Financial Upgrade analysis	1 yr	$729,300
CGI, Inc.	2007/08	N1000009062	Auditor-Controller	CAPS+ Upgrade implementation, software licensing, and maintenance. Contract later amended to include CAPS+ Inbound Interface Services and Cost Generator creation	5 yrs	$21,094,994
CGI, Inc.	2007/08	N1000009230	Auditor-Controller	Software maintenance and support for CAPS Advantage 2.x software	3 yrs	$1,533,380
CGI, Inc.	2007/08	N1000010195	Auditor-Controller	CAPS+ HR System Fit Analysis	1 yr	$1,480,000
CGI, Inc.	2008/09	N1000001093	Auditor-Controller	CAPS+ HR System Implementation	2 yrs	$9,478,964
CGI, Inc. Totals		**6 contracts**				**$35,540,122**
Comcate	2006/07	N1000007996	CEO	County customer complaint tracking system	5 yrs	$111,250
Comcate	2008/09	N1000009754	CEO	Constituent Case Tracking System enhancements	5 yrs	$36,900
Comcate Totals		**2 contracts**				**$148,150**
CPS Systems	2006/07	Y1000001073	CEO	Active Directory synchronization software	5 yrs	$60,969
E911 Helpline	2009/10	N1000010970	CEO	Retain IT infrastructure expertise for CAPS+, ATS, PTMS	2 yrs	$736,320
Elixir Technology	2005/06	Y1000000892	CEO	Form print software (notices, bills, etc.)	3 yr	$39,750
Gartner	2007/08	N1000009219	CEO	IT Strategic Advisory Speaking Engagements	1 yr	$42,000
Geomatrix Data Systems	2007/08	N1000100002	Auditor-Controller	Software licenses and maintenance for CAPS+ Upgrade training	3 yrs	$160,796
GovDelivery	2006/07	N1000008042	CEO	Email subscription management services	5 yrs	$392,060
Hyland	2005/06	X1000000274 N1000006047	All -- Master Contract	Conversion of paper records to electronic format	4 yrs	$474,489
Hyland	2008/09	X1000000415	All -- Master Contract	Consulting, maintenance an support services for conversion of paper records to electronic format	5 yrs	$333,788
Hyland Totals		**2 contracts**				**$808,277**
IBM	2006/07	N1000007825	CEO	Printer maintenance	3 yr	$330,173
IBM	2008/09	N1000010166	A-C, Treasurer-Tax Collector	PTMS software licenses and maintenance	5 yrs	$234,450
IBM/Infoprint	2006/07	N1000007832	CEO	Software customizations and maintenance	5 yrs	$109,020
IBM Totals		**3 contracts**				**$673,643**

Vendor	FY	Price Agreement #	Department	Description	Contract Term	Authorized Cumulative Limit
Inmon Corporation	2005/06	N1000005043	CEO	Internet monitoring software	5 yrs	$62,325
Intellitime Systems	2007/08	N1000009695	Auditor-Controller	VTI Payroll System maintenance and support fees	5 yrs	$635,775
Intellitime Systems	2009/10	N1000010722	Auditor-Controller	VTI Payroll System support services	1 yr	$50,000
Intellitime Totals		**2 contracts**				**$685,775**
Kapow Technologies	2007/08	N1000009227	CEO	Software maintenance for e-Gov migration for County agencies	3 yrs	$181,600
Microsoft	2006/07	N1000007477	CEO	e-Government application demonstration (proof of concept)	1 yr	$25,000
Microsoft	2007/08	N1000009085	CEO	Microsoft software support services	2 yrs	$149,780
Microsoft Totals		**2 contracts**				**$174,780**
Niksun Inc.	2006/07	N1000006772	CEO	Network surveillance intrusion monitoring equipment	5 yrs	$79,226
Niksun Inc.	2006/07	N1000007338	CEO	Network forensic software	2 yrs	$24,924
Niksun Totals		**2 contracts**				**$104,150**
Openiam	2009/10	Y1000001426	CEO	Software source code purchase and maintenance services	1 yr	$48,250
PA Consulting Group	2008/09	N1000010425	CEO	Assessment of County IT data backup and password controls	1 yr	$40,000
PlanNet Consulting	2007/08	N1000009432	CEO	IT Strategic Plan for Voice/Network infrastructure	1 yr	$80,800
Saile Technologies	2005/06	N1000006705	Auditor-Controller	Functional and technical support to County purchasing module on CAPS	3 yr	$1,232,000
Saile Technologies	2008/09	N1000010291	Auditor-Controller	OLB System Replacement Assessment	1 yr	$49,200
Saile Technologies	2008/09	N1000010844	CEO	Professional Services for CUTS (telephone/utilities) replacement	1 yr	$48,626
Saile Totals		**3 contracts**				**$1,329,826**
SouthTech Systems	2006/07	N1000008434	Clerk of the Board	VTI software license and maintenance	1 yr	$46,512
SouthTech Systems	2007/08	N1000009376	Clerk of the Board	Create secure environment for Conflict of Interest forms	3 yrs	$215,000
SouthTech Totals		**2 contracts**				**$261,512**
Statestore Inc.	2005/06	N1000006779	CEO	Annual license for Interwowen Web content management software	3 yr	$36,408
Steve Shultz	2006/07	N1000007499	A-C, Treasurer-Tax Collector	Project Manager servcies for ATS Re-write	3 yrs	$273,000
Storage Technology	2005/06	Y1000001034	CEO	Lease of IT hardware and software for automated Data Center mainframe tape library lease system (ATLS)	1 yr	$350,000
Storage Technology	2007/08	Y1000001155	CEO	Lease of IT hardware and software for automated Data Center mainframe tape library lease system (ATLS)	2 yrs	$687,749
Storage Tech Totals		**2 contracts**				**$1,037,749**
UCI Extension	2005/06	N1000006048	CEO	IT Project Management Training and Certification Program	3 yr	$292,960
Totals		**47 Contracts**				**$45,579,408**

Appendix E: Sole Source Justification Form

SOLE SOURCE/PROPRIETARY REQUEST

COUNTY POLICY ON SOLE SOURCE CONTRACTS:

It is the policy of the County of Orange to solicit competitive bids and proposals for its procurement requirements. Sole source procurement shall not be used unless there is clear and convincing evidence that only one source exists to fulfill the County's requirements. All sole source purchases requiring Board of Supervisors approval shall be justified as meeting the sole source standard in the Agenda Staff Report. The Agenda Staff Report shall clearly state that it is a sole source procurement. The Sole Source Justification, as described below, shall be attached to or included within the Agenda Staff Report (CPM, Section 4.4)

SECTION I - INSTRUCTIONS FOR COMPLETING THIS FORM:

1. Formal justification is required for sole source procurements when competitive bid guidelines require pricing from competing firms.
2. A written justification will be prepared by the department and approved by the department head or designee.
3. Prior to execution of a contract, the County Purchasing Agent or designee shall approve ALL sole source requests for commodities that exceed $500,000 and services exceeding $50,000 or a two (2) year consecutive term, regardless of the contract amount.
4. Board approval is required for all sole source contracts for commodities that exceed $500,000 and services exceeding $50,000 or a two (2) year consecutive term, regardless of
5. The Deputy Purchasing Agent (DPA) shall retain a copy of the justification as part of the
6. Valid sole source requests contain strong technological and/or programmatic justifications.
7. Sole source procurements may be approved based upon emergency situations in which there is not adequate time for competitive bidding.
8. Sole source requests for Human Service contracts will be guided by the regulations of the funding source.
9. Each question in Section III of this form must be answered in detail and signed by the department head with concurrence of the Deputy Purchasing Agent.

SECTION II - DEPARTMENT INFORMATION:

Department:	Date:
Sole Source BidSync Number:	Amount:
Vendor Name:	

Type of Request:

☐ New ☐ Renewal ☐ Multi Year ☐ Amendment ☐ Increase

SECTION III - SOLE SOURCE JUSTIFICATION:

1. **Provide a description of the type of contract to be established** *(For example: is the contract a commodity, service, human service, public works, or other-please explain).*

2. **Provide a detailed description of services/supplies to be provided by the vendor.** *(This information may be obtained from the scope of work prepared by the County or the vendor's proposal that provide a detailed description of the service).*

3. **Please state why the recommended vendor is the only one capable of providing the required supplies and/or services. Include any back-up information or documentation which supports your recommendation.** *(Acceptable responses to this question will include strong programmatical/technological information that support the claim that their is only one vendor that can provide the service and or equipment).*

   Attach additional sheet if necessary.

4. **Please list any other sources that have been contacted and explain in detail why they cannot fulfill the County's requirements.** *(Responses to this section should include information pertaining to any research that was conducted to establish that the vendor is a sole source. Responses should include information pertaining to discussions with other potential suppliers and why they are no longer be considered by the County). Answers to this section may be provided by the requestor and the Deputy Purchasing Agent as appropriate.*

5. **How does recommended vendor's prices or fees compare to the general market? Attach quotes for comparable services or supplies, if available.**

6. **If recommended vendor could not provide the product or service, how would the County accomplish this particular task? Use additional sheets if necessary.**

SECTION IV - AUTHOR/REQUESTOR		
Signature:	Name:	Date:

SECTION V - DEPUTY PURCHASING AGENT CONCURRENCE		
Signature:	Name:	Date:

SECTION VI - DEPARTMENT HEAD APPROVAL		
Signature:	Name:	Date:

SECTION VII - COUNTY PROCUREMENT OFFICE
County Procurment Office review and approval required when the value of the sole source agreement exceeds $50,000. Approvals obtained electronically through BidSync.