Chapter 7
Statewide Operations

The state government’s common administrative functions of budgeting, information technology, procurement and personnel are fragmented throughout the bureaucracy and have few standard policies and strategies. The state must coordinate these fundamentally important systems to create a government that is relevant in the 21st century.

The lack of coherent leadership and management in the state’s administrative functions has resulted in a host of problems symptomatic of poorly performing organizations: redundant and costly record keeping; inconsistent and confusing rules and procedures; incompatible data and computer systems; expectations of low productivity; and inefficient purchases of goods and services.

Modern solutions to these problems are available and have been applied in many cases in both the public and private sectors. These solutions include:

- Standardizing budgeting and accountability, with funding based on performance and desired outcomes
- Using state of the art information and communications technologies to deliver services to the public and within state government
- Creating a flexible, human resources system to recruit, select, compensate and train the best and brightest to serve in the state workforce
- Designing procurement policies and practices that enable the state to leverage its tremendous purchasing power to obtain the best value in goods and services

The pages that follow describe the current environment in the state’s administrative functions and recommend changes to align these functions and remedy organizational inefficiencies.
Chapter 7
A. Information Technology

California’s state government is a massive operation, yet its information technology is decades behind the private sector, hindering the productivity of state workers. The state must fundamentally change the way it manages its technology to meet the needs of a modern workforce and properly govern California’s vast and diverse economy.

Despite California’s status as the sixth largest economy in the world and the birthplace of the tech revolution, the state government has no common technology standards and it cannot exchange information reliably between—or even within—its 79 departments. Yet the technology to transform California’s state government into a model 21st century organization is available and proven. To achieve the level of productivity needed to successfully perform government functions, the state must accomplish the following three tasks:

1. Consolidate and align the management of state information technology
2. Use technology to support California’s citizens and businesses
3. Standardize technology platforms to efficiently manage common, internal business functions

The flexibility and productivity of California’s state government has been severely restricted by fundamental technology policy failures. The state has no ability to reliably report current or historical information—it cannot report the exact number of employees it has or the number of vehicles it owns. State workers waste large amounts of time working with incompatible systems and basic computer problems—state workers spend over 90,000 hours per year updating desktop computer programs. There are no incentives to change and there is no common understanding of the value of technology improvements—projected savings from IT projects are preemptively cut from department budgets. The state’s mismanagement of contracts and vendors led to two infamous implementation failures. Due to these failures, which had significant budgetary and political consequences, departments statewide are cautious to the point of inaction and do not even attempt to obtain approval for IT projects over a certain financial threshold. In emergencies, the state is practically blind—it does not know where its emergency personnel and equipment are at all times.

CPR recommends a series of general and specific actions that should be taken to bring the state’s information technology to a level appropriate for such a dynamic economy. The following chart summarizes these recommendations.
Exhibit 1
Information Technology Proposals

Technology Governance
Organizational Alignment

Enterprise Applications
- Human Resources
- Financial Management
- Training/Examinations
- Asset Management
- Workers’ Compensation
- Travel Claim Payments

Service Consolidation
- IT Contract Consolidation
- Consolidate Data Centers
- Consolidate Email
- Central IT Help Desk
- Centralized Competitive Sourcing
- Computer Code Library

New/Improved “Smart” Services
- Electronic Law Libraries
- Digital Photography
- Open Source Software
- E-Payment portal
- Design State Portal
- Portal Funding Strategies
- Automated Drivers Testing/Training
- IP Video Conferencing
- Wireless 311 Non-Emergency Call Centers
- 911 Emergency Call Center Improvements

Infrastructure
- Data Management Standards
- Statewide Radio Network
- Enterprise Architecture
- Statewide Fiber Optic WAN
- VoIP
- Wi-MAN
- Wi-Fi
- Security
Technology Alignment: Overhauling the Organization and Management of the State’s Technology Programs

Summary
California’s vital technology programs are in crisis. They are distributed across hundreds of agencies with no statewide strategic direction or alignment with overarching statewide goals. There is no overall coordination of the state’s use of technology, resulting in functions that are poorly organized, duplicative and inefficient from a statewide perspective. California’s technology programs have been diminished by the current budget deficit, restricted by stove-piping and burdened by archaic, bureaucratic processes. All this is occurring while the state stares at an inevitable and momentous loss of a skilled technology workforce, with no plan in place to mitigate the resulting risks.

To confront these challenges requires a mandate for statewide technology leadership, strategic planning and cross-agency coordination. The state must address its core technology administration and operations functions, while optimizing the organization and management of its distributed technology programs.

Background
The application of technology in California is significant; it permeates nearly all aspects of state government. It is multifaceted, supporting a plethora of missions, and it is evolving in response to new and ongoing needs. Furthermore, the very ability of state agencies to manage their resources and deliver services to citizens is inextricably linked to the effectiveness and efficiency derived from technology.

Against this backdrop of dependency is the fact that the state’s technology programs are distributed across hundreds of state agencies, with little or no statewide strategic direction, coordination, guidance and oversight. The Executive Branch, as a whole, has never had broad and cohesive technology policies, standards or methodologies to provide an organizing logic that directs the activities of technologists as they build or acquire new systems or functionality. As a result, even though there have been many positive advances in technology over the last decade, the state has failed, as a whole, to take advantage of these developments.

Since the early 1980s the state has tried several successive attempts to govern its technology investments. Each has come under criticism for inadequate management and oversight stemming from large information technology project failures. The state has twice before...
established responsibility for information technology management in the Department of Finance, with neither effort proving effective.4

Public sector trends in organization and governance emerge from the studies of states considered exemplary in their management of information technology; Illinois, New York, Pennsylvania, and Virginia.5 By consolidating the technology operations of 91 state agencies into the Virginia Information Technology Agency, the State of Virginia estimates an eventual savings of nearly $100 million a year.6 Similarly, the U.S. National Performance Review recommended a data processing consolidation and modernization initiative citing industry experience suggesting operational savings of between 30 percent and 50 percent.7 These and private sector examples provide a framework for comparative study and recommendations for optimizing the organization and management of technology programs within the Executive Branch.

**The state of the state’s technology programs: distributed, uncoordinated, inefficient and without statewide focus**

*Statewide Vision, Strategic Planning and Coordination:* In October 1995, the California State Senate enacted Senate Bill 1 establishing the Department of Information Technology. The Director of the Department of Information Technology was given responsibility for providing leadership, guidance and oversight of information technology, including the development of plans and policies to support and promote the effective application of information technology in state government.8 While SB 1 transferred IT leadership to the department, the Department of Finance retained financial authority in a newly created Technology Investment and Review Unit. This dispersion of responsibilities, along with intermittent support from the Governor’s Office and minimal involvement in key technology projects was seen by some as a lack of confidence in the Department of Information Technology’s ability. The Legislature allowed the department to sunset in 2002.9

Subsequently, a new special advisor for information technology was appointed in September 2002 to function as the State Chief Information Officer and to assist in identifying a permanent solution to the issue of information technology governance.10 However, the new Chief Information Officer is little more than an advisor on technology and a figurehead from an authority perspective, responsible for providing leadership on technology policy and collaboration with other technology leaders in the state, but with no oversight or control responsibilities for state technology initiatives.11

In the absence of empowered leadership, agencies operate without a statewide blueprint for technology initiatives. There are little or no useful planning criteria, no specific options for how to meet an agency’s technology needs, no library of lessons learned from past initiatives, and no cost-benefit analysis guidance to assist in the selection of best technology strategies.12 The state cannot produce a complete inventory of its technology assets and cannot account for the total amount of money being spent on technology, making it very difficult to plan for
system obsolescence, find redundancies or measure excess capacity. In summary, there is no strategic focus on technology efficiency across the Executive Branch.

*Policy and Standards Development:* The Legislative Analyst’s Office cites deficiencies in state technology policies and review procedures, and is critical of inadequate departmental and Department of Finance oversight, departmental project management, and Department of Finance project approval and oversight requirements.

The State Administrative Manual requires agencies to establish specific technology policies and standards for application within each respective agency. Yet, the requirements are without provisions for the coordination of policy and standards development from a statewide perspective. Little or no work has been completed to establish a set of standards for the development of technology applications and the determination of the appropriate degree of centralization or consolidation of technology services for the overall benefit of the state. The absence of a state “enterprise architecture” (the holistic expression of an organization’s key business, information, application and technology strategies) leaves the state without the means to effectively coordinate technology initiatives, simplify integration, build a consistent infrastructure and generally allow greater efficiencies in the development of technology solutions.

*Project Initiation, Review and Approval:* Today, assessing the merit of proposed technology projects is a complex and convoluted process with the Department of Finance having singular authority, delegating only limited authority to the agency and department levels. The budgeting for information technology initiatives is complicated by what is essentially a dual Department of Finance approval requirement. This occurs when the Department of Finance initially prepares the Governor’s Budget, which includes funding for programs and their technology initiatives, but individual projects still must receive approval from the Department of Finance Technology Investment and Review Unit prior to initiation. The Technology Investment Review Unit exercises what amounts to a line item control to independently make cuts to project funding or staffing.

There is mounting frustration over the time and cost required to complete feasibility study reports and obtain approval and funding for technology projects. Frustration with the budgeting and approval processes has motivated some agencies to limit exposure in order to control phases of the project development processes because they have become increasingly arduous and mired in mistrust. The project initiation and approval processes administered by the Department of Finance are grueling. They can cause delays and introduce risks that system requirements and technology may change by the time a project receives funding, causing projects to automatically breach change thresholds that require updated project approvals.

The Institute of Electrical and Electronics Engineers, Inc. (IEEE) Standard 1362, provides a framework for addressing the essential information needed to support a decision to approve
and fund exploration of a project. Standard 1362 and other process standards are published and maintained by the IEEE for the information technology industry. They are easily adaptable to use by the state, thereby avoiding the necessity of developing and maintaining lengthy regulatory language such as currently contained in the State Administrative Manual and the State Information Management Manual.

Research and Development: California is the cradle of the information technology industry. Yet, collaborative exploration and exploitation of emerging technologies is extremely rare within state government. Though some innovation takes place, the benefits are generally limited to specific programs within isolated agencies, with little or no value to the state as a whole.

The Statewide eGovernment Initiatives Office, administered by the Department of General Services, was created in July 2000, to serve as a catalyst for California’s state and local government agencies seeking to improve customer relationships through online services. The Office, commonly known as the eInitiatives Office, researched and developed pilot projects that demonstrated how the Internet can help state agencies better serve their customers. With the resignation of the state’s former Director of eGovernment in early 2002, the eInitiatives Office lost the vision and executive sponsorship that contributed to its success and the national recognition of California’s emerging eGovernment activities. Subsequently, the organization was relegated to a role of maintaining applications resulting from earlier pilot projects. The Department of Finance has proposed the elimination of the eInitiatives Office from the Fiscal Year 2004–2005 budget, transferring positions and a portion of these activities to the Department of Consumer Affairs. This leaves no particular agency to provide leadership in establishing California as a showcase of e-governance to reflect California’s high-tech accomplishments as advocated by the Little Hoover Commission.

Technology Acquisitions: The state spends about $2 billion annually on information technology. The rules governing technology acquisitions are extremely complex and cumbersome. The Department of General Services has struggled with procurement reform for over two years. Despite improvement efforts, frustration continues regarding the amount of time and cost to conduct major complex procurements, obtaining contracts that meet the state’s needs and that non-performing vendors continue to receive state business.

Within delegations granted by the Department of General Services, agencies rely on leveraged procurement vehicles such as the California Multiple Award Schedules (CMAS) and Master Service Agreements (MSA) for procuring many technology-related goods and services. Though CMAS and MSA have introduced improvements in the complex procurement process, both programs lack information with respect to the performance and capability of technology vendors. In addition, the absence of technology standards limits the states ability to realize the maximum benefit of volume, aggregated procurements of technology goods and services that could be achieved through strategic sourcing.
Project Management and Oversight: In 2002, the Department of Finance Technology Oversight and Security Unit released its Information Technology Project Oversight Framework. Within this framework and the delegation authorities granted by the Department of Finance, departments are responsible for the management of those projects carried out within their delegation.

Despite this framework, the Legislative Analyst Office remains critical of inadequate departmental and Department of Finance oversight, departmental project management and Department of Finance project approval and oversight requirements. The Legislative Analyst Office said more than half of information technology projects were not getting adequate oversight, and most were experiencing significant changes in scope, costs and schedules, which indicate they are not being properly managed. Departments are preparing poor estimates for project budgets and schedules, and the Department of Finance change approval process risks project continuity and cost escalation while departments wait lengthy periods for approval.

Many departments have worked independently to establish structured project management practices, and in some cases establish technology project management offices, as has been done within the Employment Development Department, Department of Motor Vehicles and the Health and Human Services Data Center. In the end, the benefits of these efforts have been generally limited to the respective agency, with little or no value to the state as a whole through cross-organization project management collaboration.

Portfolio Management: Portfolio management recognizes the need to view new technology initiatives in the context of an agency’s total operations. It is a compilation of information about an agency’s investments in its technology infrastructure, organized to show how the investments support its mission and programs and to demonstrate relationships among current and planned investments.

According to Thom Rubel of the META Group, “The institutionalization of portfolio management responsibility can begin to build relationships across the government enterprise that effectively bring budget and finance offices and IT organizations into better understanding and consensus on strategic IT investments during fluctuating budget cycles. Creating portfolio management awareness within government can begin to build the bridge of understanding between IT and budget organizations and program agencies to more effectively and strategically invest in executive branch and legislative public-policy priorities.”

Despite its value to the state, there are currently no statewide policies, guidelines or evidence of adoption of best practices for technology portfolio management practices. For the most part, policy-makers are still not thinking of technology projects as a portfolio of investments for achieving a shared vision for how the state should serve the people, as pointed out by the Little Hoover Commission in 2000.
Infrastructure Management: Technology infrastructure is critical to carrying out the missions of government. It encompasses the telecommunications and data communication networks and components that support all government activities. Infrastructure is the columns and girders that support the entire structure of government operations.

A failure of infrastructure has widespread and devastating impacts. The infamous August 2003 blackout affected 50 million people in the Northeastern U.S. and Canada, causing economic losses estimated to exceed $5 billion. The blackout was not only the largest in U.S. history, but also the first of its scale since the rise of the commercial Internet and the World Wide Web. While the very largest provider networks (the Internet backbones) were apparently unaffected by the blackout, many thousands of significant networks and millions of individual Internet users were off line for hours or days. Banks, investment funds, business services, manufacturers, hospitals, education institutions, Internet service providers, and federal and state government units were among the affected organizations.38

A more excruciating illustration of the importance of infrastructure is an event recorded on September 11, 2001: “New York Police Department Aviation radioed in immediately that the South Tower had collapsed. At 10:08 a.m., an aviation helicopter pilot advised that he did not believe the North Tower would last much longer. There was no ready way to relay this information to the fire chiefs in the North Tower.”39

Today, management of the state’s technology infrastructures is generally distributed across all agencies, with few statewide implementation standards and little or no coordination of activities among agencies. Though the state’s data centers serve as the principal source of reliable wide-area network and Internet services for the majority of state agencies, the state does not have an integrated Intranet providing the essential foundation for collaboration and efficient, secure data sharing between agencies.40

The Department of General Services, Telecommunications Division has been a primary provider of telecommunication services to the major public safety agencies. Over the past fifty years many public safety agencies have established independent telecommunication service operations to manage telecommunication within their respective agencies. As a result, the predilection to eliminate telecommunication positions during a period of financial constraints is very high. In the event of elimination, the maintenance and support for key components of the state’s telecommunications infrastructure serving public safety agencies will be at risk.41

Industries have brought about a convergence of information and telecommunications technologies, but the state has not addressed this convergence in its management of technology. Performance improvements and cost reduction opportunities have motivated other private and public sector organizations to administratively centralize and in some cases physically consolidate their core technology infrastructures. The states of Pennsylvania, Florida, Iowa, Washington and Texas, and companies such as IBM, Intel, Microsoft and
Hewlett-Packard have all adopted infrastructure consolidation and integration initiatives. California should recognize the strategic importance of its technology infrastructure and take measures to establish a converged and integrated statewide infrastructure.

Data Center Management: The state’s data centers specialize in the management of centralized data processing and network facilities that store, process and disseminate information in support of agencies’ decision-making and business process needs. The Stephen P. Teale Data Center and the Health and Human Services Data Center are general purpose data centers with broad service missions. Though other data centers exist, they are considered single-agency, dedicated-use data centers rather than consolidated data processing centers.

Studies show data center consolidations as a means of reducing operating costs while increasing the efficiencies and security of technology services. The State of Florida estimates it will reduce its data center costs by 10 to 15 percent annually ($4–$6 million) through consolidation. IBM Corporation with 350,000 employees in 1,700 sites is an organization similar in size and complexity to California state government. Its consolidation efforts reduced 31 networks to one, consolidated 155 data center sites to 10 and 16,000 applications to less than 4,900. Oracle Corporation consolidated 40 data centers into one and 97 e-mail systems into two, thereby saving $250 million out of $500 million it was spending on IT support prior to consolidation.

In a February 2003 analysis of the 2003–2004 Budget Bill, the Legislative Analyst’s Office recommended a consolidation of the state’s two general purpose data centers. As required by Chapter 225, Statutes of 2003 (AB 1752), the Department of Finance was to submit by December 1, 2003, a plan describing the consolidation of the two centers in 2004–2005, including the identification of consolidation activities that result in savings of no less than $3.5 million in General Fund in FY 2004–2005. The Legislative Analyst’s Office reports that the Legislature has not received the progress report, and withholds recommendation on the two data centers’ expenditure authority pending receipt and review of the administration’s consolidation proposal.

Systems and Storage Management: To support the automation of business processes, agencies rely on a wide assortment of systems and storage devices that include: file and print servers, application and database servers; Internet and Intranet servers; Network Attached Storage and Storage Attached Network Systems. The management of these systems is intended to ensure that data is physically stored, retrieved, archived and deleted as needed to support business functions. Outside of the state’s data center environments, the management of systems and storage technologies is distributed across all agencies.

The proliferation of distributed systems and storage devices has brought with it the necessity to manage increasingly complex environments. The total cost of ownership is inevitably higher in a complex environment. Gartner Research shows that 40 percent of all application
unavailability experienced by end users is caused by human error, errors likely to occur in complex environments. Centralized management and the careful consolidation of systems and storage devices offer the state numerous benefits that include: reduced complexity and support costs, lower error rates, better support for new business applications, improved security, improved business continuity protection, and improved scalability and performance.51

Security Management: The State Administrative Manual (SAM) currently requires that each agency provide for the proper use and protection of its information assets.52 Though the SAM provides a framework of security policy, there is little in the way of state-level audits, incident response coordination, education and outreach, operational procedures, activities and coordinated security monitoring that ensure optimum security over the state’s technology and information assets as a whole.

The role of State Information Security Officer (ISO) currently rests with the Department of Finance and serves primarily as a conduit through which occasional security alerts are distributed to departmental ISOs and Chief Information Officers. The California Highway Patrol (CHP) serves as the investigative arm of the Executive Branch. In response to the growing number of computer-related crimes and threats to the state’s technology infrastructure, the CHP Computer Crimes Investigation Unit was formed on February 1, 2003.53

Despite these important measures, there is no evidence of operational guidelines, procedures or coordination of information security functions across Executive Branch agencies. As a result, agencies independently carry out these responsibilities relying on a wide variety of systems, policies and processes resulting in varying levels of security protection.

While many security functions can be performed at an agency level, the ability to analyze and correlate events across the state enterprise can not. Centralizing security management can rationalize the distribution and application of security measures across the enterprise, and is consistent with ISO 17799 (International Organization for Standardization—Code of Practice for Information Security Management).54

Back-office Applications Management: Nearly all agencies use software applications to support back-office business processes and provide access to program required information. Examples of back-office applications include budgeting and accounting, human resource, asset and procurement management, e-mail and collaboration software, security and anti-virus tools, and directory services.

Agencies currently exercise complete autonomy with respect to the selection and use of back-office applications. The procurement and management of these applications is less than optimized from a statewide viewpoint, and aggregated reporting and auditing of back-office
data are difficult since data maintained by these applications is constrained within programmatic stovepipes. The state currently lacks uniform automated business processes across all agencies, preventing the Executive Branch from functioning as a single, unified organization.55

The hosting and management of back-office applications should be singularly and centrally managed as shared services. Priority should be given applications such as e-mail, security and anti-virus tools, and directory services, which can be provided cost effectively on a large scale. These “utilities” should be followed by a suite of budgeting and accounting, human resource, asset and procurement management applications that will provide the backbone for business management statewide. The resulting standardized practices and compatible data will provide a common foundation to operating units and assist decision making.56

**Tactical Application Development:** There is no overall inventory of the state’s development and integration of tactical applications.57 These activities are generally performed within individual agencies, sometimes at many levels within an agency. In the absence of statewide development and integration policies, standards and guidelines, the state’s tactical assets can be duplicative, lacking uniformity and the ability to interoperate. Yet, unlike the management of back-office applications, tactical application development is most successful when aligned closely with the entity that best understands the business objectives and functional requirements and when proper systems development and project management methodologies are employed.58

The sustainability and interoperability of the state’s tactical applications portfolio is at greatest risk from development activities executed outside the framework of skilled developers, development policies, standards and guidelines. According to Forrester Research, Inc., the equivalent of 5 to 15 percent of an organization’s information technology budgets are spent on “ghost IT” projects. Security, sustainability and interoperability are greatly improved when rogue development activities are brought under the control of an entity with overall responsibility for an agency’s technology strategies and operations, and subject to uniform application development methodologies.59

**Data and Database Management:** Data administration is the process of managing data in order to provide reliable, accurate, secure and accessible data. Database management ensures the definition, operation, protection, performance, and recovery of a database. To guarantee accessibility to the information needed for their business functions, agencies independently determine how data is created, captured, stored and accessed by employees and applications. In the absence of uniform data management policies, the state’s data assets are generally isolated within agencies and difficult to integrate and aggregate. As a result, the vertical and horizontal flow of data is restricted, fact-based decision making is often impeded and duplicate data collection and storage exists across all agencies.
Desktop Computing and Helpdesk Management: Collectively, desktop computing and helpdesk functions encompass those activities necessary to receive, track, and resolve technology problems within the desktop computing environment. These functions are most successful when the computing environment is simplified through the application of computing hardware and software standards. As with most other technology functions, desktop computing and helpdesk management are distributed across all agencies with no statewide policy, standards or guidelines to ensure consistency, maximum efficiency and cost effectiveness from a statewide perspective.  

Conclusion

Gartner Dataquest states that a combination of budget deficits, internal skills shortages, homeland security and other factors are creating a challenge for local and state governments they call “the perfect storm.” To weather these key challenges the state must implement measures that include:

- Establish governance, enterprise architecture, interoperability and standardization;
- Consolidate technology resources;
- Initiate cost recovery measures such as technology aggregation;
- Identify areas for strategic sourcing; and
- Create incentives for data sharing and interagency cooperation.

The state can benefit from aligning its technology functions with industry best practices and to establish an appropriate degree of centralization of technology services. By relinquishing the management of specific technology functions, agencies are able to focus on their missions and operating program functions. An enterprise approach to the management technology offers other significant advantages, including:

- Improvement in technology research to ensure the state remains on the technology forefront;
- Improvement in technology project management, oversight and accountability;
- Reduced redundancy and variation within the state’s technology infrastructure;
- Reduction in cost for common infrastructure services;
- More efficient, standardized systems capable of supporting multiple agencies;
- More effective management and allocation of technology personnel that may, in part, minimize the disruption that will be caused by large numbers of IT employees that are anticipated to retire in the near future;
- More efficient use of limited funding resources;
- More cost-effective procurement of technology goods and services;
- Improved core technology support for small agencies and departments; and
- Enhanced security and privacy measures for the storage and distribution of electronic data.
California’s Executive Branch is not prepared for the “perfect storm” looming on the horizon. Preparation will require systemic change, and a measured exercise of logic, discipline and control. The California Performance Review recommendations have this in mind and are designed to:

- Challenge all agencies to make their primary organizational goal the establishment of a single, unified Executive Branch;
- Establish the appropriate degree of centralization and consolidation of technology services for the overall benefit of the state;
- Improve the efficiency, cost effectiveness, and quality of all technology functions; and
- Enable agencies to focus on their missions and operating program functions while sharing core technology functions that do not directly provide the services under the agency’s charter.

Innovative organizations have adopted “shared services” as strategic initiatives to achieve the greatest interoperability of systems and to minimize the duplication, overlap, redundancy and cost in their technology operations. The alternative is the perpetuation of “operational environments that saddle most agencies today, in which lack of integration among business operations and supporting information technology resources leads to inefficiencies and duplication.”

**Recommendations**

A. **The Governor should establish a new Technology Division to serve the common technology needs of executive branch entities with accountability to customers for providing secure services that are responsive to client needs at a cost representing best value to the state, and appoint a State Chief Technology Officer with operational oversight responsibility for the new organization.**

The Chief Technology Officer should be accountable to the state Chief Information Officer for the Division’s compliance with the state’s technology strategic plans, policies and standards and performance measures.

Specific core technology functions should be consolidated within the Technology Division, including:

1) Technology and System Acquisitions;
2) Enterprise Project Management;
3) Research and Development;
4) Statewide Networking and Telecommunications; and
5) Consolidated Technology Services; including:
   a. Information Systems and Data Center Management;
b. Shared Enterprise Services (all e-mail and collaboration software, security and anti-virus tools, directory services, budgeting and accounting, human resource, asset and procurement management applications);

c. Centralized Systems and Storage Management (all file and print servers; application and database servers; Internet and Intranet servers; Network Attached Storage and Storage Attached Network Systems);

d. Security Management (operational procedures and coordinated security monitoring, analysis and correlation of security events, and the distribution and application of information technology security measures);

e. Planning Consulting and Project Management; and


The department should operate according to a written plan of operations approved by the proposed Technology Commission, which will outline policies, procedures, financial and administrative operations, and methods of collecting fees for services provided. Fees will be based on a rate structure approved by the commission after evaluation by the Department of Finance for reasonableness.

B. The Governor should transfer the technical component of the Department of Finance State Information Security Officer (ISO) Unit to the Office of the State Chief Information Officer.

The state ISO should have a mandate for facilitating information security audits, incident response coordination, and information security education to ensure optimum security awareness and preparedness across all agencies. The state ISO should provide direction, coordination and oversight of the state’s departmental Information Security Officers functions with specific regard to ensuring the security and privacy of the state’s data and information assets. The state ISO should ensure collaboration between the Office of the CIO and other state functions responsible for technology incident investigation and reporting (CHP, DOJ) for the coordinated development and uniform application of technology security standards.

C. The Governor should transfer the technical unit of the Governor’s Office of Planning and Research to the Technology Division to establish a new statewide Research and Development Branch.

The Research and Development Branch should have a mandate for the exploration of emerging technologies, innovative and collaborative cross-agency solutions and demonstration projects intended to keep the state in the forefront of technology.65

D. The Governor should transfer the Technology Acquisition, Telecommunications Contracting and Enterprise License Procurement functions, including component
systems engineering and project management of the Department of General Services Procurement Division to the Technology Division to establish the statewide Technology and Systems Acquisition Branch.

Included in this transfer are all functions and requirements outlined in the State Administrative Manual pertaining to the procurement of these goods and services, including approval of the acquisition methods used and the establishment and interpretation of related procedures.

The Technology Division’s policies and procedures for acquisition and contracting should promote best value acquisitions and strategic sourcing, and integrate with the project management processes of the Project Management Branch and focus on providing direct support for acquisition planning, acquisition management and contract management. Notwithstanding any other provision of law, all state agencies, departments, boards, commissions, and other entities should be allowed to acquire information and telecommunication technology and services from the department, and the department may conduct procurements as an agent for its clients to enable more efficient, aggregated purchases for the state.

E. The Governor should transfer the Telecommunications Division of the Department of General Services and all existing independently operating network and telecommunication units of other departments to the new Technology Division to establish an integrated Network and Telecommunications Branch.

The Network and Telecommunications Branch should have a mandate for the planning, implementation and maintenance of a converged and integrated statewide infrastructure.

F. The Governor should consolidate the Stephen P. Teale Data Center and the California Health and Human Services Agency Data Center, excluding the Health and Human Services Agency Systems Integration Division, and transfer the consolidated data center to the new Technology Division.

The consolidated data center should be renamed the California State Data Center. Exhibit 1 illustrates the proposed multi-tiered distribution of technology authority, functions and responsibilities across the Executive Branch.
Exhibit 1
Statewide Technology Model

Exhibit 2 illustrates a proposed structure for the Technology Division and its relationship to the State Chief Information Officer and Secretary, Office of Management and Budget.
G. The State Chief Information Officer should establish and chair a working group to determine the personnel and funding resources required to support each of the centralized services and consolidated functions to be transferred to the new Technology Division and develop a plan for the phased implementation of the transferred workforce.

The working group should have representation from the Department of Personnel Administration, Department of Finance, the consolidated Stephen P. Teale and Health and Human Services Data Centers and the state CIO Technology Advisory Council. The working group should be governed by the expectation that fewer resources will be required to maintain centralized services and consolidated functions, thereby allowing for a statewide realignment that appropriately balances the allocation of existing personnel and funding resources between statewide and agency specific technology support needs.
A plausible audit inventory of personnel who are not in technology or technology-allied classifications, but who work on technology-related activities should be within the scope of the working group’s study to ensure that all appropriate personnel, classifications and activities are accounted for. The working group should report its findings and recommendations to the Administration on or before November 15, 2004, with the recommendations used by the Departments of Finance and Personnel Administration for realignment of personnel and funding resources to begin January 1, 2005.

The consolidation of key technology services, functions and related support personnel should be executed in a logical, phased progression that serves to achieve the needed reforms while not disrupting the essential functions of the state. A phased implementation will realize interim savings on the way to more comprehensive reorganization and consolidation. The working group should provide its implementation plan to the Administration on or before November 15, 2004, with the milestone phases used by the Departments of Finance and Personnel Administration for the realignment of personnel and funding resources to begin January 1, 2005.

H. The Governor should optimize the organization and management of the Executive Branch’s technology programs by consolidating all technology programs at the agency and department levels.

Establish an Agency Information Officer (AIO) within each agency with a mandate for technology policy, oversight, coordination and portfolio management over all organization and program entities within the respective agency. The AIO should be directly responsible to the Agency Secretary for the implementation of the Governor’s reorganization plan across all organizations within their respective agency, and alignment of technology activities with the agency and state strategic business plans. The AIO should also be accountable to the State CIO for compliance with state technology policies, technology strategic plans, and standards and management of the agency’s overall portfolio of technology initiatives.

Establish and/or maintain a departmental Chief Information Officer within each department, with direct reporting to the AIO. Within the framework of their respective departments, the departmental CIOs should be responsible for:

1. Portfolio management of the department’s technology initiatives;
2. Alignment of all departmental technology activities with the agency and state strategic business plans;
3. Compliance with state policy and standards;
4. Operational oversight of consolidated technology functions, personnel and operations, including:
   - Web and application development;
   - Application and database management;
   - Security administration;
   - Project planning, consulting and management; and
   - Help desk and customer service management.

Performance measures should be established for AIOs and departmental CIOs to demonstrate an application of technology that improves efficiency, interoperability, program integration across organizational boundaries, accessibility, the use of shared services and common infrastructure, and the creation of a single face to their program’s customers.

Exhibit 3 illustrates a proposed structure for consolidated and centralized technology functions within each department and their relationship to the departmental CIO and AIO.

Exhibit 3
Agency Consolidation of Technology Functions
**Fiscal Impact**

All eight recommendations are organizational shifts that can be implemented within existing resources if executed in a carefully planned, logical, and phased manner. Training of some technical staff will be required; yet can be done within existing training budgets. Management of the new organizations will determine the degree to which physical relocation of staff is required. Opportunities for improved efficiencies and potential cost reductions will be found in the following areas:

**Workforce Optimization:** California has decreased its technology workforce significantly per past Executive Orders, personnel services reductions and attrition over the past two years. The logical realignment and management of technology personnel may, in part, minimize the disruption that will be caused by the potential departure of up to 34 percent of technology employees that will be eligible for retirement within the next five years.67

**Increased Efficiencies and Reductions in Operating Costs:** The state can realize operating efficiencies and cost reductions by sharing common technology services and platforms. The greater the scale of shared centralized services, the greater the cost savings as investments in technology and skills are leveraged across a larger number of agencies.68

There are many variables that will affect the actual savings to be realized through optimization, including the scope and pace of realignment, the diversity and geographic distribution of existing infrastructures, and the degree to which the physical consolidation and aggregation of infrastructures is completed. Based on an analysis of responses to a CPR survey of Executive Branch CIO’s, approximately 40 percent of the technology workforce is engaged in functions supporting common, core functions to be consolidated at the Technology Division as shared services. Based on an analysis of case studies and consultant reports, a 20 percent reduction in the workforce performing shared services is projected through productivity savings realized from organizational optimization. There are nearly 9,000 state employees in technology and telecommunications classifications.69 This suggests that about 3,600 are engaged in common core functions. An eventual 20 percent reduction in this workforce segment is possible through attrition when phased in over 5 years.
### General Fund
(dollars in thousands)

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Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Other Funds
(dollars in thousands)

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</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

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Technology Governance: Strategically Leveraging the Power of Technology to Transform State Government

Summary
California state government is in crisis. It is ironic that California is the cradle of technology, but that its state government is stuck in paper-based processes that perpetuate, even worsen the problems California faces. Smart governments are moving ahead with new, inventive digital government initiatives. The need for California to do so could not be more compelling. The synergy of statewide strategic planning and performance budgeting, applied to a new, leaner organization that has been transformed by technology, is the new imperative for 21st century California government. The technology is available and the need is urgent, but the leadership structure is not in place. It is a question of governance.

Background
California’s government has become too costly, too inefficient and increasingly unresponsive to constituent needs. Its organizational structure is “stove piped,” each department insulated from other departments, even divisions with departments insulated from other divisions. There is no incentive to collaborate across divisional or departmental lines. Years of incremental, program-based budgeting and the piecemeal accumulation of programs and layers of administration puts the state in jeopardy of financial collapse.

Technology is now available to truly integrate government’s many enterprises and enable real-time, dynamic interactions between California state government and the Californians it serves, regardless of organizational boundaries or technological platforms. Software applications can integrate programs and back office business processes across organizational boundaries; there is now no longer any need for one department to have one accounting software package and another department to have a different software application to do the same thing, for example. The process can be collapsed, information can be integrated, communication can be speeded up and government, ultimately, can become more accessible, both to its citizens and to its own various parts. Information and the revolution in information technology (IT) have given state government the means to revolutionize, at a fundamental level, the way it does business.

Governance examined
Modern technology governance is mainly about leadership in effectively and efficiently managing an organization’s use of technology to meet its business needs. It includes structures and processes for setting direction, establishing standards and principles, and prioritizing IT investments to leverage technology to improve business value. It is the mechanism for
deciding who makes what decisions about technology use and creates an accountability framework that drives the desired use of technology. Effective governance also includes the processes by which key decisions are made about IT investments, and it depends on effective, ongoing communication across all levels of an organization.

Technology governance must be integrated with an organization’s business governance. It must have a set of clearly articulated goals that reflect an organization’s strategic business goals, the full participation and support from business leadership, and a clearly defined set of processes. The Legislative Analyst’s Office (LAO) defined the key objectives for IT governance to be leadership, oversight and accountability.

At the outset, it is noted that the most successful state technology governance models have had direct support from the Governor’s office and a statewide or enterprise focus. They also emphasize collaboration, and the modular, incremental development and implementation of major initiatives.

**Industry trends**

Industry and government leaders such as Intel, IBM, Hewlett Packard, the federal General Services Administration and Department of Defense have moved to unify their technology strategies, and to consolidate the management of their technology services so they can leverage their technology purchasing power. Many state governments are following this trend as well. Illinois, New York, Pennsylvania and Virginia have all been noted for their highly successful track records in their management of IT.

**California is not aligned with these trends**

California on the other hand, is struggling to establish a direction for its technology governance as reflected in several reports from the Bureau of State Audits, Legislative Analyst’s Office, and as witnessed in several recent legislative hearings on this subject. For example, The LAO says there is a need for a permanent structure, that projects may not be properly managed. The BSA says that a need still exists for an effective governance structure, that there are problems with the cost and schedule of many projects, that the approval process is too lengthy, and that the state does not have an inventory of IT equipment. These circumstances reflect an overall lack of a unified technology governance structure, and as a consequence, California lacks the ability to fully utilize the transformational potential of technology.

California has not equipped or mandated its leaders to fully utilize technology potential, and it has not aligned its technology capacity to achieve efficiencies and leverage its buying power. In California there is no overarching technology strategy for state government. As a result, technology initiatives are developed and implemented piecemeal—agency by agency, department by department or division by division—dissipating financial and technical capacity on disparate infrastructures that do not interact. Even though there have been many
positive advancements in technology over the last decade, on the whole the state has failed to leverage these developments. Information and telecommunications technologies are rapidly converging. Within state government, however, each entity operates in isolation from the other.

**Historical beginnings of today’s problem**

Since the early 1980s the state has tried several successive organizational models in an attempt to govern technology investments. Each came under criticism for inadequate project management and oversight stemming from large IT project failures. The state has twice established responsibility for IT management within the Department of Finance (DOF), with neither effort proving effective.

In 1995, Senate Bill 1 established the Department of Information Technology (DOIT) which was charged with providing leadership, guidance and oversight of IT in state government. SB 1 included a sunset provision that automatically repealed the act unless statutorily extended before January 1, 2001. While SB 1 transferred IT leadership to DOIT, DOF retained financial authority in a newly created Technology Investment and Review Unit (TIRU). This, along with the lack of active support from the Governor’s office, doomed DOIT’s ability to become truly effective and raised doubts about whether it had any real authority to provide statewide IT leadership. The controversy over DOIT’s performance mounted until the department was allowed to sunset in July 2002.

After DOIT went out of existence, IT oversight was assigned by executive order to respective departments and singular approval authority for IT projects defaulted to DOF. A new special advisor for IT was appointed in September 2002 to function as the state Chief Information Officer (CIO) and to assist in identifying a permanent solution to IT governance. While the new CIO is responsible for providing IT policy leadership and facilitating collaboration across the state, he is little more than an advisor on technology and has no real authority to oversee state technology initiatives.

More recently, LAO has identified a need to develop a permanent structure to oversee IT. In its analysis of the 2004–2005 state budget, LAO cites deficiencies in the state IT policies and review procedures, and is critical of inadequate departmental and DOF oversight, departmental project management and DOF project approval and oversight requirements. The LAO said over half of IT projects were not getting adequate oversight, and most were experiencing significant changes in scope, costs and schedules, which indicate they are not being properly managed. Departments are preparing poor estimates for project budgets and schedules and DOF change approval process risks project continuity and cost escalation while departments suffer lengthy waits for approval.

**Technology governance sorely needed**

Today, the technology infrastructure of California state government is made up of overlapping, redundant and outdated systems and support structures that risk security and operational
collapse. It is burdened by complex regulatory controls and archaic funding, approval and oversight processes. These frustrate agency leaders, undermine trust, discourage initiative, diffuse accountability, waste resources, and inhibit enterprise solutions that could empower and energize the workforce to bring about transformational change to government.19

“Departments and agencies . . . reflect traditional business structures, and they continue to struggle to overcome inherent barriers in an effort to drive down costs and deliver services through effective use of information technology . . . Policymakers should heed the “stove pipe” message and begin to build an enterprise business strategy that incorporates the funding streams to create true business/IT transformation.”

—Meta Group20

Agencies and departments lack a state-wide blueprint for the design, implementation and management of technology initiatives. There are little or no useful planning criteria, no specific guidelines for how to appropriately use technology, no library of lessons learned, and no enterprise analysis to assist in the selection of best strategies. There is no strategic focus on technology across the Executive Branch. Although current statutes require each agency to develop strategic plans and submit them each year to the Governor and Joint Legislative Budget Committee, there is no requirement to integrate these plans into a single statewide strategic plan and there is no mechanism for deriving a statewide technology strategic plan.21

The State Administrative Manual requires state agencies to adopt specific technology standards for application within each respective agency.22 Yet the requirements are without provisions for coordinating policy and standards development from a statewide perspective. Little or no work has been completed to establish a statewide set of standards for the development of technology projects, or to determine the appropriate degree of centralization or consolidation of technology services for the overall benefit of the state.23

Assessing the business and technical merit of proposed technology projects is a complex and convoluted process, made worse by DOF’s delegating only limited authority to agencies.24 There is mounting frustration over the time and cost required to complete Feasibility Study Reports (FSR) and obtain funding and approval for projects.25 In their frustration, some agencies now avoid reporting accurate project status, lest they expose themselves to the arduous DOF control process, which has become increasingly mired in mistrust.26 The approval process can take so long that by the time a project gets the go-ahead from DOF, the system requirements and technology have changed. That, in turn, requires a new, lengthy approval process. This also complicates multi-year project funding for long term projects.27 The Statewide Workgroup Computer Policy, which was developed to exercise DOF control over agency computer technology usage, has ceased to provide continuing value, while it burdens departments with yet another arduous reporting requirement.28
Furthermore, the annual state budget cycle, coupled with the phasing of project submittal deadlines, effectively gives departments one chance per year to get projects approved. The primary document agencies must submit to DOF, the FSR must be submitted within a very short window of opportunity in order to have any chance of being approved. However, the FSR must address an exhaustive list of requirements, many of which are simply not known at the time the FSR is developed. To meet these requirements many agencies resort to hiring consultants to write their FSRs, at a cost of $100,000 or more each. This produces FSRs which are laced with extrapolated detail that constitute potential snags and sometimes hold up approval. Any delay imposed while agencies respond to DOF’s requests for clarification or rewrite could cause projects to miss the window of opportunity for approval altogether until the next budget cycle.

Agencies are also frustrated by the effective double jeopardy resulting from DOF’s approval requirement for project expenditures. DOF initially prepares the Governor’s Budget, which includes budgets for programs and their IT initiatives. However, individual projects still must receive expenditure approval from the DOF Technology Investment and Review Unit (TIRU) before they can go forward. In their review, the TIRU exercises what amounts to a line item control to independently make cuts to project funding or staffing. These cuts often cause projects to enter a death spiral due to inadequate funding or staffing.

Efforts to implement technology initiatives across state agencies are complicated by the annual “incremental” state budgeting process which buries IT funding in individual program budgets, making it difficult to aggregate funding and allocate development costs based on how much a system or service will be used by each agency.

“Government executives experience frustration in implementing and institutionalizing new IT strategies because of the traditional institutionalized ‘silo’ government program delivery and categorical funding model. Government staff charged with program delivery and IT infrastructure are not incented to collaborate, because rewards (increases in funding, meeting program targets) occur only within a singular silo program area. The executive, unable to set innovative delivery strategies across program boundaries, faces increased pressure because internet-savvy constituents anticipate doing business with a “virtual government” at their convenience. The successful executive will proactively change the face of government services to present a single, common service and delivery interface while increasing taxpayer value (measured as cost-effective on-demand access to services by constituents). Funding constraints must be overcome as part of the governance process, ensuring a single infrastructure and a common citizen interface.”

—META Group

A Government for the People for a Change
The Department of General Services (DGS), has struggled with procurement reform for years, but frustrations continue regarding the time and cost of major complex procurements, obtaining contracts that meet the state’s needs, and vendor performance management.\textsuperscript{34} While the federal government has reformed its technology acquisition methodology to be more representative of the best practices in the commercial marketplace, the state has not.\textsuperscript{35} DGS was criticized by the California State Auditor in 2003 for not ensuring adequate legal review of large IT system integration projects or IT contracts over a specified dollar amount, exposing the state to increased risk arising from the complexity of these contracting actions.\textsuperscript{36} Efforts are now underway to provide such reviews, but it took a formal audit finding to get them started, reflecting the general lack of integration between various disciplines that have a stake in IT acquisition.

The DGS has suspended the IT project management training program in its Procurement Division as a means of trimming its budget, despite specific recommendations from the state auditor.\textsuperscript{37} This successful program produced more than 100 certified project managers in 29 state agencies and trained more than 1,000 state employees in the principles of project management.\textsuperscript{38} When coupled with the absence of proper training for strategic sourcing in IT, this raises doubts of whether the state is doing anything to ensure that people responsible for managing IT systems acquisition have the appropriate qualifications.

California state government is unable to produce a complete inventory of its technology assets, and so cannot account for the total amount of money being spent on technology. This makes it very difficult to plan for system obsolescence, find redundancies or measure excess capacity.\textsuperscript{39} Little or no work has been completed to establish a set of standards for developing technology projects, and there is no effective mechanism for determining the appropriate degree of centralization or consolidation of IT services for overall state benefit.\textsuperscript{40} There is little evidence of statewide adoption of best practices for portfolio management or enterprise forecasting, and there is no agency designated to do basic research needed to keep the state in the forefront of technology.\textsuperscript{41}

“The institutionalization of portfolio management responsibility can begin to build relationships across the government enterprise that effectively bring budget and finance offices and IT organizations into better understanding and consensus on strategic IT investments during fluctuating budget cycles. Creating portfolio management awareness within government can begin to build the bridge of understanding between IT and budget organizations and program agencies to more effectively and strategically invest in executive branch and legislative public-policy priorities.”

—META Group\textsuperscript{42}

\textbf{The need for modernizing California’s technology governance now}

The state’s interim technology governance structure is a setback even from the relatively ineffective DOIT. It keeps the state from leveraging technology to transform state government.
It results in sub-optimized efforts which dissipate resources and produce inconsistent results. It exposes the state to higher overall operational costs from program overlaps, redundancies, inefficient use of human and physical resources and increased vulnerabilities to security threats and architecture breakdowns.

Implementing modern, strategically focused technology governance will ensure the strategic use of technology. Accountability, affordability and accessibility would be achieved through the clear assignment of responsibility and authority, consolidation of overlapping functions and aggregation of resource potential.

A prerequisite, however, is the institution of statewide business focused strategic planning. Successful technology governance depends on having a statewide strategic plan that has technology strategic planning integrated within it. Strategic planning is a key process of leadership. Without a statewide strategic plan the state cannot provide the necessary statewide focus on achieving overarching goals and objectives. Without those overarching goals and objectives, technology leaders cannot be sure that their initiatives address the most important business issues of the state. Strategic business planning and strategic technology planning must be integrated and focused on the same goals and objectives.

Performance based budgeting is also essential to effective technology governance. It will allow the state to determine exactly how much it spends on new technology initiatives and on the maintenance of existing technology. Without that ability, the state cannot strategically manage its technology.

A unified governance structure that embodies the appropriate integration of leadership, decision making authority, structure and processes statewide will allow the state to address these compelling issues and will drive the modernization of state government.

**Recommendations**

A. The Governor should issue an Executive Order creating a statewide strategic planning office to lead strategic business planning to ensure it is accomplished at the state level and develops the desired business outcomes for the state.

1. This office must ensure the state strategic plan addresses statewide technology goals and objectives within the framework of overall statewide goals and objectives. The plan must define how technology will contribute to the accomplishment of statewide strategic goals and objectives.
2. It must also ensure strategic plans are developed for successively lower levels of the executive branch, written around mission areas, and that these plans link to the statewide plan and reflect the state priorities, goals and objectives. These plans must
define how technology will be used to meet strategic goals and objectives and they must link with the statewide technology strategic plan.

B. The Governor should issue an Executive Order that aligns state technology governance to a new model, with authority and responsibility assigned to concentrate the state’s technology potential while ensuring the maximum collaboration with and input from state agencies. (Exhibit 1)

1. This model establishes a principle “architect” for statewide strategic planning to maintain focus at the strategic level, who has authority and responsibility for leading the state’s efforts for leveraging technology to transform government.
2. The skills and expertise of existing state agencies are the foundation for the governance structure.
3. The responsibility for ensuring compliance with state policy and standards is ensured at each level of governance, with each level accountable for prompt, effective action.

Exhibit 1
Statewide Technology Governance Model
C. The Governor should appoint a State Chief Information Officer who is a senior advisor to the Governor with full responsibility and authority for statewide technology vision, strategic planning and coordination, technology policy and standards, data management policy and standards, information security policy and standards and streamlined technology project review and approval processes.43

The CIO should be provided with a staff comprising the essential functions and capability to administer these responsibilities. The state CIO should advise the Governor and the Legislature on the strategic planning, management and direction of the state’s information technology resources. The CIO responsibilities should include:

(1) Engaging in the formulation and maintenance of statewide technology strategic plans and the planning process for the state’s use of technology.
(2) Ensuring that statewide strategic technology planning is integrated with overall statewide strategic planning and reflects executive branch strategic goals and objectives.
(3) Providing leadership and direction to state departments and agencies for the efficient and effective use of information technology and to minimize the duplication, overlap, redundancy and cost of technology in state operations.
(4) Providing functional direction to and oversight of agency information officers and departmental chief information officers with specific regard to ensuring the integration of statewide technology strategic planning, integration of statewide technology initiatives, compliance with statewide policies and standards, and alignment of technology resources and effective leadership of portfolio management teams.
(5) Establishing technology policies, standards and enterprise architecture which support the business mission of the state, the information necessary to perform the mission, the technologies necessary to perform the mission, and the transitional processes for implementing new technologies in response to the changing mission needs.
(6) Establishing a replacement to the current project review and approval processes. The review and approval processes should be in accordance with current industry best practices and should be established through collaboration led by the Office of the State Chief Information Officer with budgeting and project costing considerations provided by the Department of Finance, technology acquisition considerations provided by the Department of General Services Procurement Division, and project management considerations provided by the Health and Human Services Data Center, Systems Integration Division.
(7) The development of policy for promoting organizational capability maturity in project management, systems acquisition, and workforce development.
(8) The institution of performance monitoring for technology projects and services to measure whether desired outcomes are being achieved, whether they address statewide strategic goals and objectives and whether costs of shared services represent best value.

The authorities and responsibilities invested in the state CIO should extend to all departments and agencies of the executive branch of state government and exclude offices of constitutional officers, the Legislature and the office of the courts. The State Chief Information Officer should be vested with the authority and flexibility to organize these functions and resources to carry out his/her mandate with the greatest efficiency and effectiveness.

D. The Governor should issue an Executive Order that establishes a Technology Commission (TC) consisting of the state CIO (chair), the Director of Finance, the Controller and all Cabinet Secretaries. The vice chair of the TC should be the Secretary of the Office of Management and Budget.

1. The TC should advise the state CIO on the overall state technology program, oversee state technology leadership, approve the statewide strategic technology plan, approve the funding for programs and projects and rates charged by the technology services organization.
2. The TC will provide oversight of the state’s technology investments to ensure alignment with statewide strategic goals, to identify overall risks, and to ensure compliance with statute.44
3. Funding will be approved for programs and projects upon consideration of alignment with statewide and agency strategic goals and objectives, overall statewide priority, funding availability, and project health.
4. The TC will ensure that a management process is established to ensure alignment between funds allocation priorities and statewide strategic priorities, and to ensure that special funds are allocated as to their appropriate programs.
5. Funding will be authorized on a project basis for enterprise and large integration projects and on a program basis to fund the expansion or continuation of services, capitalize project development and initial start up at the state data centers, and subsidize programs as deemed appropriate by the state CIO.
6. The Department of Technology Services may be authorized to implement capacity expansions, technology refresh or new services based on overall business plan/program approval by the TC and will then have direct authority to implement incremental projects in response to support agreements with state agencies.
7. Agency CIO’s may be delegated authority to approve projects within their portfolios and up to a threshold cost set by the TC.
E. The Governor should work with the Legislature to establish a state Technology Investment Fund that is continuously appropriated, available for encumbrance without regard to fiscal years, and restricted from use for any other purpose than funding technology.

1. The Department of Finance or its successor should determine the appropriate prorating of the costs for the implementation or operation of technology programs, projects or services for departments and agencies and ensure the transfer of moneys from the budgets of departments and agencies into the Technology Investment Fund.

2. Moneys should be deposited in this fund from the following sources:
   a. Moneys appropriated and made available by the Legislature for the purpose of implementing or operating statewide information or telecommunications programs, projects or services.
   b. Any other moneys that may be made available to any agency of the Executive Branch for the purpose of funding technology and the return from investments of moneys by the Treasurer.
   c. Moneys reassigned or reallocated from the budgets of departments and agencies, that may originate from appropriations or other sources including the federal government, county or city governments, fees collected or otherwise obtained or appropriations received from any source for carrying out the activities of technology programs, projects or services.

F. The state CIO should by January 1, 2005, implement technology portfolio management teams (ITPT) led by agency CIOs and responsible for overseeing progress on portfolios of projects, providing incremental direction and being accountable to the state CIO and TC for project delivery.

1. Organize teams along the functional business lines of state government (i.e., Infrastructure, Management and Budget, etc.). Teams will include executive membership from business units within the agencies who have a stake in the successful implementation of the technology projects that they will oversee.

2. Portfolios may contain projects with statewide impact but will be led by an ITPT with primary mission responsibility for the project business area.

G. The state CIO should continue the existing CIO council and focus its efforts on policy and standards development, providing enterprise collaboration and coordination of technology initiatives, defining enterprise expectations for service levels and assisting in the establishment of ITPTs.
1. Membership should consist of Agency and departmental CIOs, selected telecommunications managers, and members from the federal, county, local and judicial governments.

2. It will advise the state CIO on matters related to technology in the executive branch.

3. It will provide a venue for statewide collaboration on technology issues such as the development of statewide policies and standards, and coordination of statewide technology strategic planning to ensure alignment across state government as well as vertically with the state strategic plan.

4. The CIO will charter working groups from the CIO council for the development of recommended policies, standards and implementation strategies needed to acquire, operate and maintain technology solutions and infrastructure for the state.

H. The state CIO should by January 1, 2005, establish a program management office (PMO) within DTS to provide primary support for program and project planning, economic analysis, project management and to provide the technical resources (systems engineering) needed to support enterprise projects or to support agency projects when needed or requested.

The PMO is an important instrument of the CIO’s leadership. It is the primary activity that implements the CIO’s policies, standards and procedures for project development and management and provides the statewide orientation and training on these subjects. It will ensure standardization in project management processes and project performance metrics so that effective project management is assured and so that project performance can be uniformly assessed. It will also coordinate and affect the implementation of project remediation actions that may be directed by the CIO or the Technology Commission.

1. The PMO has two tiers of operation:
   a. Program Management develops operational guidelines for all state technology projects and coordinates those activities on an ongoing basis. This is the function of project management standards setting and the integration of projects and project portfolios to make sure they don’t conflict or duplicate.
   b. Project Management provides the execution leadership for specific initiatives, to include the responsibility for the change management components of initiatives, such as communications about objectives, roles and responsibilities, status and direction.46

2. It must become a center of project management practice excellence for the state. It defines the standard, templates and methodologies and leads by example in the implementation.
3. It provides support for developing initiative proposals to include opportunity evaluation, scope definition, schedule and cost analysis, risk analysis, life cycle support analysis, technology selection and overall project planning.

4. It provides the overall tracking of portfolios and integration of portfolios and projects across the state and prepares “dashboard” and “roll up” reports and “stop light” health indicator notices. It “sets a flag” when things look like they are going in the wrong direction, and it facilitates getting decision-makers together to resolve issues. It maintains project status and communications on the web and provides direct support to portfolio managers when they submit initiative proposals or provide update briefings to the TC and CIO on a regular basis.

5. It provides project managers and project technical and support resources from internal resources, coordinates to obtain them from external resources (other agencies) or obtains them from consultant contracts. When human resources are obtained from other state organizations, the PMO will provide a cost accounting charge-back mechanism to pay for the staff hours provided.

6. It provides training, consulting services and advocacy for statewide capability maturity development in project management and related skills.

7. It maintains the library of project documentation and repository for lessons learned, best practices, analysis and research.

8. It provides and manages a project oversight framework, processes and database that include performance metrics such as “earned value” to monitor and assess project performance.

I. The Governor should direct the discontinuation of the Technology Investment Review Unit (TIRU) and Technology Oversight and Security Unit (TOSU) in favor of implementing the new technology governance structure.

J. The state CIO should reengineer the technology project approval process to eliminate the Feasibility Study Report (FSR) in favor of a simplified approval document based on a process standard such as “IEEE Standard 1362-1998, System Definition—Concept of Operations.”

1. The IEEE Guide for Information Technology, System Definition—Concept of Operations (ConOps) Document, IEEE standard 1362-1998, provides a concept proposal outline that addresses the essential information needed to support a decision to approve and fund exploration of a project.

2. It provides a useful format for describing the characteristics for the proposed system from the user’s viewpoint, with focus on describing the existing system, providing justification for a new or modified system and describing the functionality of the
proposed system. Project proposals are to be approved and expenditures authorized by the TC for phased project development.

3. Milestone reviews are used to approve and fund projects to proceed to planning, development or deployment upon meeting cost, schedule and deliverable milestone requirements (see Exhibit 2 below).

4. Milestone reviews provide opportunity to terminate or commit a project to further development based on considerations of strategic alignment, project performance, funding availability and external factors.

5. Large, high risk or high visibility projects are implemented in phases designed to ensure “walk away” value should a project be terminated at a milestone review. Small, low risk projects can be accelerated through the milestone review process.

**Exhibit 2**

**Technology Project Lifecycle**

<table>
<thead>
<tr>
<th>Concept Exploration</th>
<th>Planning</th>
<th>Development and Testing</th>
<th>Rollout</th>
<th>Managed Lifecycle</th>
</tr>
</thead>
</table>

Milestone 0
Project proposal introduced

Milestone 1
Deliverables:
- Scope
- Economic Analysis
- Phasing
- Proposed solution

Milestone 2
Deliverables:
- Project Plan
- Acquisition Plan
- Risk Management Plan

Milestone 3
Operational Readiness Review

Milestone 4
Post Implementation Evaluation/lessons learned

Retirement/disposal

K. The state CIO should by January 1, 2005, rescind the Statewide Workgroup Computer Policy.

The intent of this policy will be satisfied through the implementation of technology policies and standards, master computer commodity contracts, project development support and oversight provided by the PMO and the implementation of Technology Portfolio Management.

L. The Governor should issue an Executive Order that implements benefit sharing as a performance incentive for completing projects under cost, within schedule and with promised benefits.
1. A portion of the cost savings from projects completed below budget should be paid out to the project management team as a superior performance award, a portion should be deposited in an account to fund further technology-related initiatives for the agency and the remainder should return to the technology investment fund.

2. This concept should be extended to include the establishment of a technology innovation suggestion program, with a portion of the benefits from initiatives resulting from suggestions (10 percent) paid to the submitter, as long as the submitter was not primarily responsible for the area implementing the suggestion.

3. Benefit sharing should also be measured and applied across agencies for enterprise-wide initiatives to further encourage enterprise-wide initiatives.

M. The State CIO should implement statewide technology portfolio management to ensure technology is managed from a statewide “portfolio” perspective with emphasis on lifecycle systems management.

1. Portfolio management is another important instrument of technology leadership. It forces decision-makers to develop an overall vision for IT.

2. Project portfolio management should focus on how well the projects within the portfolios deliver on the goals of the organization.

3. It should include four foundational techniques; selecting projects based on alignment with the statewide and agency strategic plans, maintaining a central repository of all project information, tracking performance using earned value, and measuring the technical performance of projects.

4. Accordingly, projects within the state and agency portfolios should be prioritized taking into account the business goals, the return on investment, whether a project satisfies any mandatory legal or legislative requirements, how essential the project is to enabling core services and the degree to which the project mitigates specific business risks.

5. Projects within the state’s and individual agency portfolios should also be balanced in terms of risk, technology, payback periods and capital allocation.

Fiscal Impact
It is impossible to precisely quantify the benefits of a well-governed statewide IT investment process because the current IT investment environment is so poorly governed.

The annual IT spending statewide is estimated by the Legislative Analyst’s to be at least $2 billion.

CIO Magazine estimates that companies with better than average IT governance earn at least a 20 percent higher return on assets than organizations with weaker governance. Using the conservative $2 billion annual IT spending estimate, this governance structure may generate a savings of at least $38 million annually.
Eight of the recommendations are expected to be either cost-neutral or generate some savings and there are minor costs for the remaining four recommendations. The cost to implement statewide technology portfolio management is not known. Total annual personnel costs for the four recommendations is about $500,000.

The following charts show the impact assuming an implementation date of January 2005.

**General Fund**
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>$9,500</td>
<td>$125</td>
<td>$9,375</td>
<td>1.5</td>
</tr>
<tr>
<td>2005–06</td>
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<td>$250</td>
<td>$18,750</td>
<td>3</td>
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<tr>
<td>2006–07</td>
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<td>$250</td>
<td>$18,750</td>
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<tr>
<td>2007–08</td>
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<td>$250</td>
<td>$18,750</td>
<td>3</td>
</tr>
<tr>
<td>2008–09</td>
<td>$19,000</td>
<td>$250</td>
<td>$18,750</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

**Other Funds**
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
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</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.
Endnotes


6 Legislative Analyst’s Office, “Overview of State Information Technology And Procurement, Presented to: Assembly Budget Committee” (Sacramento, California, March 2004), p. 2.


17 Legislative Analyst’s Office, “Overview of State Information Technology And Procurement, Presented to: Assembly Budget Committee” (Sacramento, California, March 2004), p. 2.

18 Legislative Analyst’s Office, “Analysis of the 2004–05 Budget Bill, State Information Technology Projects.”


21 Gov. C. Section 11816.

22 Department of General Services, “State Administrative Manual” (Sacramento, California, March 2003), Section 4819.31.

23 California State Auditor, Bureau of State Audits, “Information Technology: Control Functions are Only Part of Successful Governance,” p. 4.

24 Department of Finance, “IT Budgeting Guidelines Budget Letter, BL04-09” (Sacramento, California, April 23, 2004).

25 Legislative Analyst’s Office, “Overview of State Information Technology And Procurement, Presented to: Assembly Budget Committee,” p. 5.


29 Department of Finance, “Feasibility Study Report Preparation Instructions” (Sacramento, California, June 2003).


32 California Department of Finance, “Governor’s Budget, 2004–05” (Sacramento, California, January 9, 2004).


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38 Interview with John Ashbee, Office of Risk Management, Department of General Services, former manager, Procurement Project Management Academy, Department of General Services, West Sacramento, California (April 1, 2004).


California State Auditor, Bureau of State Audits, “Information Technology: Control Functions are Only Part of Successful Governance,” p. 3.


Legislative Analyst’s Office, “Overview of State Information Technology and Procurements.”

Creating the Organizational Capacity to Support the State’s Information Technology Infrastructure and Emerging Services

Summary
It is far too difficult for state government to recruit, test, select and hire information technology (IT) staff. The current process tends to exclude rather than encourage participation. Classifications are vague, efforts are dispersed among individual departments and statewide exams occur infrequently. As a result, entering state service is confusing and challenging. Yet the state is becoming more dependent than ever on technology in its efforts to provide more services at a lower cost and in a secure environment. A complete overhaul of the current recruitment, selection and hiring system is necessary if California is to find, employ, promote and retain the most qualified IT staff possible.

Background
The need for IT staff
California is relying more and more on technology to make state government programs and services more accessible to Californians while at the same time reducing costs. To do this, the state must not only create new IT infrastructure, but maintain the infrastructure it already has. This infrastructure, as well as new offerings, must be maintained by qualified and appropriately compensated IT staff.

A crisis in human capital
California’s government workforce is aging. As many as one-third of government employees are likely to retire within the next five years, including IT employees, and there are not enough people waiting in the wings to replace them. What’s worse, less than 10 percent of state employees are under 30 years of age. California is facing a dire need to fix its employee infrastructure to preserve corporate knowledge and to train the IT staff which will eventually be supporting California’s ever increasing technology offerings.

Recruitment
As early as 1999, the Little Hoover Commission noted that “the state does virtually no recruiting in good times or in bad to draw young, energetic graduates from its own university system into its workforce.” The absence of an established recruiting program is keenly felt in the IT arena. While some departments have actively recruited at local colleges and universities,
state government as a whole does not promote the public sector as a valuable, challenging employer worthy of consideration. Private sector technology companies, and other companies seeking IT staff, have been actively recruiting on college campuses for years. Graduates will continue to focus on private sector careers until the state establishes a recruitment presence on their campuses. A strategic link with the state’s community colleges, the University of California system and the California State University system would enable students to tailor their educational goals to become state employees and help the state put the brightest people on its payroll.

**Hiring**  
The way state government hires employees is cumbersome. The state first tests potential applicants, then scores those tests and compiles lists of eligible competitors. These tests may occur only once a year, sometimes once every few years and they may be administered statewide or by individual departments. When vacancies occur, that list is the list that must be used for interviewing candidates and hiring employees. An interested candidate may research the job classifications they are eligible to test for, only to find that they have missed the final filing date for a particular exam and have to wait a minimum of one year until the next opportunity to take it. The door to public service is effectively closed to that candidate. The candidate pool has also been hurt in recent years by hiring freezes imposed as a result of California’s budget woes.³

**Retention**  
There are situations where specific job knowledge makes an employee invaluable to the state or to a particular department. In state government, however, unless the responsibility or complexity of the employee’s job increases, there is no way to move up.

This is particularly critical where the state has old, “legacy” IT systems that use dated technologies not known to many other IT professionals. For example, a small number of senior level programmers working for the Franchise Tax Board (FTB) support its Taxpayer Information System. The system was developed more than ten years ago and was written using a computer language that colleges and universities only offer as an elective, one that’s not taken by many students. Retaining this staff would be critical to continue collecting revenue until the system is replaced with a more modern one.

Retention bonuses are often used in the private sector as a way to reward people who are invaluable to an organization or its success. With very few exceptions, the state offers no retention bonuses to its employees.

**Demonstration projects for hiring and compensation**  
In recent years, the Department of Personnel Administration, Health and Human Services Data Center and the Legislative Council Bureau’s Data Center have conducted demonstration projects in an effort to manage today’s antiquated exam, hiring, promotion and compensation
structure. While all three were deemed successful, independent survey results from the two data center projects shows the Legislative Counsel Bureau’s Data Center’s effort to be the more successful of the two.

The project allowed the consolidation of numerous position classifications into a much smaller number with a broader range of salary steps. The use of this “broad-banding” approach, coupled with position-based selection has led to a more qualified candidate pool from which to hire. The current process includes an exam that is general in nature to accommodate every situation where a position classification might be used, then an interview of qualified candidates. In the demonstration project the interview is the exam, making it a one-step process. As a result, there is a ranking specific to that opening.

The Legislative Counsel Bureau’s demonstration project included the following position classifications:

- Computer Operator Information Systems Tech
- Computer Operations Specialist I and II
- Computer Operations Supervisor I and II
- Data Processing Manager I, II and III
- Programmer I and II
- Associate, Staff and Senior Programmer Analyst-Specialist
- Assistant, Associate, Staff and Senior Information Systems Analyst-Specialist
- Associate System Software Specialist-Technical
- System Software Specialist I, II and III-Technical

Baseline of skills and abilities—the state’s intellectual properties

The state must have a baseline of its most important IT resource—staff—to stay ahead of the changing environment and skill set requirements. Very few, if any, departments today have a current inventory of the skills required to maintain their technical infrastructure. Without this baseline, the personnel shifts inherent in bringing in new technologies and retiring older ones are not addressed. As a result, as departments retire legacy systems and technologies, they will find themselves with a large pool of staff with skills no longer needed by that particular department. Those employees may, however, be needed elsewhere. There is currently no way to know.

This also makes it difficult to deploy new technology, since departments have no way of knowing whether their employees have sufficient skills in newer technologies, or if they need to invest in training and hiring new staff to make new technology deployment successful.
Training requirements
For the most part, California has not adequately acknowledged the ongoing training needs of state government IT staff. The complexities of the current IT environment and emerging technologies require an ongoing, aggressive training effort to keep IT staff proficient.

This has serious implications for information security. A March, 2004 roundtable discussion with the state’s Information Security Officer and Information Security Officers from various departments identified five top security issues. Number one on their list was the critical need for training for IT staff and their current inability to address this because of budget constraints and the lack of a centralized focus on maintaining state IT skills.8

Some good training models exist within state government. The Health and Human Services Data Center operates a training center that offers IT training for its data center customers at competitive rates.9

Distance learning would allow all state IT staff to receive the same high quality training regardless of their location or their ability to travel. The use of distance learning capabilities increases training opportunities without the need for expanded facilities.

Educational incentives
Compensation for state employees is currently tied to exam performance and increased responsibility. IT staff requires on-going training but may not take on additional responsibility. Without a compensation mechanism available to compensate those who receive additional certifications or degrees, the state is reducing the incentive of IT staff to keep their skills current.

Other government agencies provide an education salary incentive, such as Sacramento County for peace officers: 5 percent increase in salary for an Associate of Arts Degree, an additional 5 percent for a Bachelors Degree, and 5 percent for job specific training, such as certificates earned through the Peace Officer Standards and Training program.10

Change management will likely be needed
California’s IT staff has been working under less than ideal conditions for the past four years. Considering the significance of the changes that are addressed in this paper alone, the state would be wise to gain the support of its workforce. This might include a formal communication plan to outline the nature of the changes on the horizon to help workers understand the benefits and to address fears about the stability of their jobs. When all is said and done, it will be the workforce that determines the success or failure of these proposed changes, and getting their buy-in will go a long way toward making these changes work.11
Leadership—supervisory and managerial selection and training
The state provides basic skills training to assist supervisors and managers in the performance of their supervisory and managerial tasks. IT management has been geared toward technical competency or subject matter expertise rather than the people skills required for management and team building within an organization. Based on the narrow margin of additional compensation and the lack of a formal structure in which to gain the necessary skills and support, few IT staff today are interested in becoming part of a management team. California needs leaders in IT management. Innovation requires leadership.

Recommendations
A. The Governor should direct the state’s Chief Information Officer to develop a plan to change the way information technology (IT) staff are tested, selected, hired and compensated, using the job analysis and classification plan developed for the Legislative Counsel Bureau Data Center as the model, by October 1, 2005.

This plan should include salary incentives for certifications and degrees completed by IT staff and retention bonuses for IT staff in hard-to-fill positions.

B. The Governor should direct the Department of Personnel Administration or its successor and request the State Personnel Board, or its successor, to provide full cooperation and support to this effort, and to make available whatever resources the state Chief Information Officer may need to develop this plan.
- It will be necessary for the state Chief Information Officer to work closely with the Department of Personnel Administration or its successor to modify the job analysis and classification plan developed for the Legislative Council Bureau Data Center and apply it to IT staff statewide.
- It will be necessary for the state Chief Information Officer to work closely with the State Personnel Board or its successor staff to modify the selection and hiring process developed for the Legislative Council Bureau Data Center and apply it to IT staff statewide.
- It will be necessary for the state Chief Information Officer to work closely with the State Personnel Board or its successor staff and the Department of Personnel Administration or its successor to develop a compensation plan, including pay increases for certifications and degrees completed by IT staff and retention bonuses for hard-to-fill positions.

C. The Governor should direct the state Chief Information Officer to conduct a biannual survey of state IT staff and IT divisions within state departments to:
- Establish a baseline of skills, abilities and intellectual properties. This information must be compiled on a statewide basis and kept current so that it can be compared against the technology infrastructure to determine hiring and training needs.
• Identify mission critical positions where retention is imperative for the effective operations of the state.

D. The Governor should direct the state Chief Information Officer to develop and implement an ongoing statewide IT training plan, leveraging existing training efforts such as the Health and Human Services Data Center training center and the State Personnel Board’s State Training Center. This training plan should include:
• Ongoing training for IT staff to enable them to remain current as new technology is introduced.
• Leadership training for IT supervisors and managers.

E. The Governor should work with the Legislature to establish funding necessary for the ongoing training of IT staff.

F. The Governor should request that the State Personnel Board or its successor staff develop and implement a plan to recruit IT staff to state government.

This plan should include recruitment on the campuses of the state’s community colleges, the California State University and the University of California, as well as private colleges and universities within the state and developing partnerships with those campuses wherever possible.

G. The Governor should direct the state Chief Information Officer and request the State Personnel Board, or its successor, to work together to develop a single Internet portal to advertise all information technology vacancies, accept job applications, provide results and provide updates for similar job postings to subscribers.

H. The Governor should direct the Chief Information Officer and request the State Personnel Board or its successor to develop a change management program for state IT staff to prepare IT workers for the upcoming changes, by October 1, 2004.

Fiscal Impact
The ability to fill IT positions with capable staff will result in benefits, such as reduced service contract costs when existing expertise has not been available within state service, and improved efficiencies in government operations that are supported by a more effective IT operation. These benefits are not quantifiable. Also, there is expected to be efficiencies gained from streamlining the hiring and promotional processes for IT positions.

The cost for modifying the Legislative Counsel Bureau Data Center’s job analysis and classification plan, and the cost for implementing it, cannot be quantified at this time. Also, the costs for performing a baseline inventory of IT staff capabilities and mission-critical positions,
developing statewide IT training and recruiting plans and developing an internet portal for advertising IT positions cannot be quantified at this time.

Endnotes

1 State Personnel Board, “Report for Work force Analysis by Department and Servicewide” (Sacramento, California, February 29, 2004), p. 94.
3 Governor of the State of California, Executive Order D-48-01, Sacramento, California, October 23, 2001; Governor of the State of California, Executive Order D-70-03, Sacramento, California, July 1, 2003; Governor of the State of California, Executive Order D-71-03, Sacramento, California, July 1, 2003; and Governor of the State of California, Executive Order S-3-03, Sacramento, California, November 19, 2003.
4 Interviews with Wayne Kurahara, personnel program manager, Personnel Operations Division, Department of Personnel Administration (March 16, 2004 and May 7, 2004).
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6 Interview with Dennis Dreiling, Office of the Legislative Council, Legislative Data Center, Sacramento, California (March 29, 2004).
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9 Interview with Russ Fong, assistant deputy director of Administration, Health and Human Services Data Center Training Center, Sacramento, California (March 25, 2004).
10 Interview with Michael Siverling, supervising criminal investigator, Sacramento County Public Defender’s Office, Sacramento, California (May 7, 2004).
Creating a Secure Information Technology Infrastructure

**Summary**
California state government must rely on its information technology infrastructure to provide the services demanded of it. This requires providing security for the information the state holds and the transactions it manages. Information security must be a top priority of the state, or the risk of that data will be inappropriately accessed or services disrupted will continue to grow. California must focus its attention on securing its information technology in an organized, standardized manner.

**Background**
California has not had a statewide emphasis on information technology (IT) security since the sunset of the Department of Information Technology (DOIT) on June 30, 2002. While DOIT encountered many problems during its short years as an organization, it did create the first State Information Security Officer (ISO) position and attempted to raise awareness about the critical need for security within the state’s IT infrastructure.

Today the ISO resides within the Department of Finance, Technology Oversight and Security Unit. The ISO identified a number of initiatives the state must undertake, but lacks the staff to do so. They include:

1. **Risk Management**—stronger policy, stressing data classifications and operational recovery.
2. **Adherence to an established, proven set of tools that have a support structure in place.** This includes web hosting being done only by departments with mature IT environments or through an interagency agreement with a state data center, using all state equipment. Establish a statewide enterprise architecture such as what the state of North Carolina has accomplished.
3. **Leverage the opportunity presented in the logon banner to increase accountability and compliance with regulations.**
4. **Explore requiring employees to annually sign a statement regarding acceptable use of state IT equipment, as opposed to the one-time statement signed after hiring.**
5. **Leverage the centers of competence.** Small departments should use interagency agreements with state data centers for web development and hosting, e-mail hosting and vulnerability assessments.
6. **Increase IT security education for all users.** This would include stressing to all users the need for, and methods of, security, as well as providing research, best practices, procedures and training for IT staff.1
The California Performance Review (CPR) facilitated a roundtable forum for California Information Security Officers on March 26, 2004. Attendees included the State ISO, agency level ISOs, data center ISOs, and departmental ISOs. CPR sought input from the departmental and statewide perspective on IT security priorities and problems. Some of the participants focused on the day-to-day problems they face while others mentioned higher-level policy issues, such as the need to be on the review team for every Feasibility Study Report their department creates. Their top five priorities statewide are (not listed in priority order):\(^2\)

- **The IT workforce**
  - Current inability to hire and promote due to the freeze
  - Ongoing inadequate staffing levels in critical support areas
  - Recent lack of training money to keep skills up to date
  - Ongoing lack of trained staff in areas where certification is critical

- **Risk management**
  - A risk assessment must be completed for each department
  - An asset inventory must be completed

- **Statewide security infrastructure**
  - Policy, procedures and standards must be created and disseminated

- **Department and statewide accountability**
  - Responsibility must be coupled with authority to ensure success

- **Leverage shared resources**
  - Trained staff should conduct sessions to share their knowledge
  - Create teams across disciplines and departments to share ideas and lessons learned

It is clear, based on feedback from the ISOs, that there is an immediate, critical need to establish a statewide enterprise architecture with an enterprise security architecture component.

The California Franchise Tax Board (FTB) completed the first step in creating its Enterprise Security Architecture in 2003. The effort began with identifying all applicable governmental policies and industry best practices and detailing at the department level the current environment, then determining gaps. The next step identified the potential impact if the gap was not remedied. The effort then produced tactical and strategic actions for remediation.\(^3\)

FTB used the nine subject areas established by the Computer Security Resource Center, which sets industry standards for IT security:\(^4\)

1. **Cryptography**—Examines methods and techniques for disguising data for protection purposes.
2. **Physical security**—Examines threats, risks and countermeasures to protect facilities, hardware, data, media and personnel.
3. Application and Systems Development—Examines the security components with operating systems and applications and how to best develop and measure their effectiveness.

4. Security Management—Examines the identification of company assets, the proper way to determine the necessary level of protection required and what type of budget to develop for security implementations with the goal of reducing threats and monetary loss.

5. Access Control Systems and Methodology—Examines mechanisms and methods used to enable administrators and managers to control what users can access, the extent of their capabilities after authentication and authorization and the auditing and monitoring.


7. Telecommunications and Network Security—Examines internal, external, public and private communication systems, networking structures, devices, protocols and remote access and administration.

8. Laws, Investigations and Ethics—Examines the preservation of business activities when faced with disruptions or disasters.


As FTB’s experience demonstrates, IT security is complex. It also demonstrates that frameworks exist in government and in the private sector and can be used with great success.

The California Highway Patrol (CHP) is the agency that responds when there are IT security incidents. The chief of CHP’s Information Management Division identified the highest priorities for the state’s IT security, based on CHP surveys conducted in the past two years as well as actual incidents:

Ensure adequate statutes and policies exist within state government. Utilize best practices from other states, such as Virginia.

**Business Analysis and Risk Assessment.** Each agency, through their chief information officer (CIO) and ISO, should develop a business case for existing and proposed technologies. Agencies would then conduct a risk assessment to protect the infrastructure based on the priorities established within the business case; focusing on the protection of mission critical system, confidentiality, availability, and the integrity of data and IT systems.

**Security Awareness.** All state employees should receive cyber-security awareness.
**Technical Training.** IT staff should receive in-depth training on security methodologies and techniques, such as the importance of maintaining and reviewing network and router logs, firewalls, intrusion detection software, timely patch updates, etc.

**Technical Communications.** A defined state communications protocol should exist to report security threats, but is important to disseminate threat information and proposed response protocols throughout the state IT operations.

**Authentication/Authorization/Encryption.** Agencies should assess security measures in regards to verifying users and the information they are allowed to access. Agencies should be utilizing data encryption to protect sensitive information.

**Data Security.** IT staff should protect stored data and remove data from hardware and software before disposal or reuse by other agencies.

**Systems Interoperability Security.** If agencies share data, they should develop formal agreements of safeguarding the information.

**Physical Security.** Agencies should ensure only authorized personnel enter state offices and appropriate security protocols are in place to protect and restrict access to computers, servers, and other network equipment.

**Personnel Security.** CIO and ISOs should review employee job descriptions to ensure only an appropriate level of network and resource access is granted. It is the responsibility of the ISO to ensure no employee is given “too much power” and to evaluate access rights on an ongoing basis. As important, there should be some level of monitoring to ensure employees are not abusing access rights.

**Threat Detection.** There should be some level of best practices that all state agencies must comply with in regards to firewalls, intrusion detection software, and the review of network logs.

**Incident Handling.** There should be a state plan for the prevention of and response to significant computer events.

**Monitoring and Controlling Systems.** There should be a requirement for agencies to monitor systems by investigating log-in attempts that fail repeatedly and investigating anomalies in user behavior. The state should develop guidelines that allow IT staff to install software patches in a controlled and routine manner.
Management Awareness. Agency and department directors should be made aware of the importance of IT security, to include adequate password protections and physical security.

Budget. IT security should be a requirement within the budget of every agency maintaining a computer network.

“State agencies rely upon a vast and diverse information technology (IT) infrastructure to perform the business of the State of California, and provide essential services to Californians. It is the individual responsibility of each respective state agency to ensure their IT infrastructure is secure, and that due diligence is practiced in following established IT security policies and procedures. However, other than ‘self-certification and/or reporting,’ no reliable method exists to validate state agency compliance with minimal IT security policies and practices.”

Security issues vary with each department, based on size, type of service they provide, and how interactive they are through the Internet. A small department with only one IT position does not have the same concerns and complexities as a mid-sized department such as FTB that offers electronic filing of tax returns as well as other web-enabled services. The broad spectrum of needs, infrastructures, and staffing skills and abilities adds to the complexities of establishing the highest priorities for assessment and improvement of the security of the state’s IT assets.

Recommendations

A. The Governor should, not later than January 1, 2005, direct the transfer of the technical component of the Department of Finance state Information Security Officer (ISO) Unit to the state Chief Information Officer.

Under the direction of the state CIO, the state ISO should ensure the information security needs of the state are recognized and properly prioritized for state financial investment, assisting with the strategic planning effort. The state ISO must have the staff and funding necessary to carry out these responsibilities.

This change will allow the focus to be completely on information security, rather than budgetary concerns or project oversight, and will result in a strategic IT plan for the state that includes the necessary security items and appropriate staging and funding.

B. The newly established state Chief Information Officer should direct the state ISO to establish by February 1, 2005, a working group of departmental ISOs and Information Technology professionals to:
1. Develop an enterprise security architecture for California state government.

The State ISO should leverage the efforts of the Franchise Tax Board and industry experts who have developed an enterprise security architecture. This effort will establish the baseline of where the IT environment is today compared to the policies that regulate the state’s IT efforts, as well as industry best practices, by identifying gaps. Prioritizing the repair of these gaps will allow the state’s limited financial resources to be leveraged to shore up the security profile of the state while setting the stage for ongoing improvement.

Early efforts must include:
- Patching and Hardening/Server Configuration/Provisioning
- Workstation Management/Provisioning

2. Develop policies for inclusion in the State Information Management Manual (SIMM) that deal with IT security in addition to the project initiation and reporting requirements contained therein.

This team will create the standards, policy and procedures utilizing established industry best practices published by industry experts to provide solutions for all departments rather than each department expending resources, where the competencies exist, to research and establish these independently.

New policy must include a process change for some departments to ensure that all IT project proposals are approved by the department ISO prior to submission for project approval and funding regardless of whether internally or externally reportable.

3. Develop and execute a department-by-department risk assessment.

The process and procedures will be developed by this team and must have oversight in its implementation. The results must be compiled and statewide priorities established to mitigate security vulnerabilities immediately as well as make strategic decisions for overall improvement in the state’s security posture.

4. Assess the need for a single point of entry for e-government including authentication where applicable.

This effort would rein in the independent application-by-application efforts currently underway and move the state to a seamless, customer-centric presentation on the Internet.
This will improve the ability to stop services when credentials have been compromised, and with the online ability for a user to reset their own password, will significantly reduce help desk calls by an estimated 39 percent.\textsuperscript{7}

C. The Governor should direct the state Chief Information Officer to review the responsibility for departmental Operational Recovery Plans and develop a recommendation identifying the appropriate state entity to be responsible for this workload and coordination, by April 1, 2005.

The Office of Emergency Services is a potential candidate for this workload, which should be staffed and provided resources as necessary to carry out these functions and responsibilities.

This review would assess if the move would align of all disaster recovery and business resumption planning to be fully tested and integrated into an overall statewide approach aligned with the industry experts.

\textit{Fiscal Impact}

Creating a more secure information technology infrastructure provides unquantifiable benefits by preventing inappropriate access to state IT assets. Each incident incurs forensic costs to investigate the cause and breadth of the access breach, as well as remediation costs to resolve the problem. Also, savings should be realized from efficiencies when the standards are utilized and shared procedures are implemented.

Shifting ISO leadership from the Department of Finance to the state CIO, and reassigning responsibility for oversight of departmental Operational Recovery Plans, are expected to be cost-neutral changes. Establishing a working team to develop an enterprise security architecture, develop SIMM policies for IT security and assess security needs for single point of entry e-government would be minimal.

\textit{Endnotes}

1 Interview with Debra Reiger, State Information Security officer, assistant chief, Technology Investment Review Unit/Technology Oversight and Security Unit, Sacramento, California (May 21, 2004).


Memorandum from Kevin Green, chief, Information Management Division, California Highway Patrol, to Denise Blair, California Performance Review (March 26, 2004).

Interview with Victoria O’Kelly, former Agency Chief Information Officer, Youth and Adult Correctional Agency, Sacramento, California (April 5, 2004).

State Enterprise Architecture—A Roadmap for State Information Technology

Summary
State agencies independently purchase computer hardware and software without a government-wide plan. This creates inefficiency and does not allow for the easy sharing of information. The state needs to develop a plan and standards to ensure all agency purchases of computer equipment and accessories take into account all business needs, organizational goals, and compatibility with existing and future computer (IT) systems government-wide.

Background
The Meta Group defines enterprise architecture as “the holistic expression of an organization’s key business, information, application and technology strategies and their impact on business functions and processes. The approach looks at business processes, the structure of the organization, and what type of technology is used to conduct these business processes.”

There is currently no governmental body charged with reviewing proposed IT projects for enterprise architecture. When California departments or agencies develop automation projects, they often attempt to use the project justification as a means to secure newer technology. Deployment of newer technology is then funded via project budgets and is typically limited to the business area that is the subject of a single project scope. As this cycle repeats, departments independently implement new technology or stretch existing technology with little or no attention to the long-term increase in overall enterprise support costs. This point-in-time method of technology deployment creates higher costs in systems integration, deployment, support and training.

A state enterprise architecture will define the roles, policies, standards, technologies and decision-making criteria for the acquisition and deployment of information technology. It will enhance coordination, simplify integration, build a consistent infrastructure, and allow greater efficiencies in the development of technology solutions. The development of a state enterprise architecture will ensure the effective use of state resources, thereby enabling consistent, effective delivery of services to the employees, citizens, and businesses of California.
The federal government recognized the benefit of enterprise architecture and created the Federal Enterprise Architecture—Program Management Office. Their mission is as follows: “The Federal Enterprise Architecture is a business and performance-based framework to support cross-agency collaboration, transformation, and government-wide improvement. It provides OMB [Office of Management and Budget] and the Federal agencies with a new way of describing, analyzing and improving the federal government and its ability to serve the citizen.”

Organizations that develop Enterprise Architectures can expect the following benefits:

- Reduced software and data redundancy;
- Enhanced enterprise information sharing;
- Reduced information systems complexity;
- Better alignment of business strategy and system development;
- Greater reliability at implementations and updates;
- Reduced dependency on key resources;
- Improved accuracy in scheduling software development and implementation;
- More accurate forecasting of development and support costs;
- More efficient deployment of technology solutions;
- Greater ability to set realistic goals;
- Improved alignment of IT solutions with business strategy; and
- Increased traceability.

These benefits were validated when the Franchise Tax Board (FTB) implemented an enterprise architecture process in 2001. Based on a comprehensive business requirements analysis that was tied directly to the organization’s goals and strategic plan, FTB standardized software purchases and licensing, saving approximately $1,000,000 in purchases. They also improved application, data and security standards; established a proactive planning process; and developed an application portfolio that improved overall system integration.

**Recommendation**

Establish the position of Enterprise Architect under the state Chief Information Officer (CIO).

This position will coordinate all enterprise architecture activities as well as develop consistent state-wide standards.

The Enterprise Architect should work with the state CIO and state Information Security Officer to develop the statewide enterprise architecture, creating the standards for hardware and software, data, application development, and security. The enterprise architecture must be a coordinated effort so that all departments follow a similar methodology. A high-level guideline is expected to take a year to complete.
Fiscal Impact
The enterprise architect position can be established under the state CIO using existing resources. The potential savings resulting from development and implementation of a state enterprise architecture cannot be estimated at this time.

Endnotes
4 Stephen Clemons, director, Architecture and Data Management Bureau, Franchise Tax Board, Sacramento, California (May 7, 2004).
Create a Code Library to Leverage State Intellectual Property Rights

Summary
Each state government department writes computer command code for applications. Most departments have not established a resource to reuse the code later in other projects or to share it across California technology resources. The code is an intellectual property of the state and should be protected through copyright and patent applications. California should establish a library of reusable code and store the code in a searchable database for use by all state departments.

Background
Computer application programs over the last few years have evolved into programming languages that are designed to be easily modified to work in various environments. For example, HTML, XML, Java, LINUX and others are written in modular formats that can be connected in different pieces of code to accomplish a variety of functions. In computer terminology, each computer operating system is called a platform and language code that can be used on more than one platform is called “cross platform code.”

Conceptually, the newer codes work like an erector set, building new projects from the same parts in new configurations. If the documentation is adequate, finding the correct piece to build a project saves time and creates uniform, easily maintained code.

The California Performance Review Information Technology Team conducted a survey of 70 state departments on IT asset utilization. The survey results found that the 70 departments employ 824 employees and 124 contractors in application development of computer code.

The federal General Services Administration (GSA) is developing a program that will help federal, state and local government agencies to leverage technology components and has set up a website with this information at www.core.gov.¹

Recommendations
A. The Governor should direct the state Chief Information Officer to establish a library of reusable software code under the direction of a Code Librarian.

The library should provide access to the reusable code to allow all state agency developers and programmers to assemble existing code into project solutions. This will reduce project development time and project cost.
B. The Governor should direct the state Chief Information Officer to create software documentation standards and a database to store the developed code.

The State Chief Information Officer should issue a directive requiring all departments to follow the standards and submit all code developed to the library. The Code Librarian should develop a training course and present it to each department’s application development unit to gain the maximum benefit from the library.

C. The Governor should direct the state Chief Information Officer to obtain copyright and patent protection on the code owned by the state to protect this valuable resource as an intellectual property.

D. The Governor should direct the state Chief Information Officer to leverage the use of the Federal GSA library by becoming a member and offering code for reuse to other government agencies.

E. The Governor should direct the state Chief Information Officer to seek potential license agreements and sales of the state’s intellectual assets in public markets and work closely with the Office of the Attorney General on copyright and patent infringement cases.

**Fiscal Impact**

The fiscal impact of establishing a library of reusable code and storing the code in a searchable database for use by all state departments will result in saving though the specific savings are not quantifiable at this time. The savings will be generated by eliminating the need for the approximately 120 consultants involved in application development throughout the various state departments. The cost of implementing this recommendation is minimal—primarily staff cost to add four librarians to establish the library and provide training to all departments. These costs will be offset by the expected savings.

Additional income may be generated in later years through copyright and patent license agreements and sales. That revenue cannot be estimated until all state-owned code is identified.

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**Endnotes**

California Needs Uniform, Statewide Data Management Standards and Guidelines

Summary
California government lacks coherent standards and guidelines for collecting, processing, storing and sharing data and documents. Having one set of standards for all state agencies and departments would mean better data integrity, easier information sharing, electronic workflow streamlining, efficiency improvements and cost savings.

Background
California government agencies and departments have their own regulations, or no regulations, regarding how to create electronic data or how to handle it once it has been created. As a result, there are a variety of ways the state’s electronic data is created, stored, accessed, shared, maintained, protected, organized and archived. There is also no standard for determining which documents should be converted to electronic form.

Data sharing
As California moves more and more to a digital government, the lack of standards for data sharing becomes a hindrance, making communication across government organizations difficult. Limited data sharing means limited ability to streamline workflow. It also limits data synchronization among users and data integrity checking. Resources are wasted through duplicated data collection, processing, storage and maintenance.

One example of this is within the California Health and Human Services Agency (HHS). A Californian may need several services from different departments within the agency. For example, an elderly person might require services from the Department of Aging. If that person has a mental health issue, he or she might also require services from the Department of Mental Health. If the person has a disability, he or she might further need services from the Department of Rehabilitation. This person must apply separately with each department, even though much of the data about that person has been collected by other departments within HHS.

HHS maintains 544 databases. It costs more than $46 million per year to maintain them. Several different software applications are used for these databases, and it often is difficult, if not impossible, to take data from one application and share it with another. Determining
whether or not someone is qualified to receive services, and the collection of information about that person, can be costly and time consuming.

Sometimes the reasons that data cannot be shared stem from small differences in the way different agencies or departments do things. For example, one department’s protocol may require a data element for a person’s last name to be labeled “Last_Name” while another’s may require that same element to be labeled “LastName.” A minor difference, to be sure, but one that can make transferring data between the two databases immensely complicated. It can also force the state to spend additional resources to develop software tools that enable agencies to share information. The inability to exchange data easily between state entities constitutes a major obstacle to realize the ideal of “one-stop government” which provides a single-entry for services the state offers. Individual state departments and agencies have independently developed or purchased hundreds of databases over the years, often without concern given to the interoperability and exchange of data among applications. A great deal of data is duplicated across many systems, with significant variations in quality, format, and meaning.

California currently has little control over how high-level business data concepts are implemented. As a result, the quality of data produced by individual state departments and agencies varies. Some databases are maintained by careful business processes to comply with locally established standards and guidelines. Some databases in certain state agencies, such as the California Highway Patrol and the California Department of Corrections, are maintained only by occasional batch transfers, or by stressed or broken manual processes. These databases fall far behind in meeting the need of providing accurate information and delivering responsive services internally and externally.

Because there are no statewide database standards and guidelines, there are also inefficiencies in systems development efforts within state agencies and departments. Organizations may be duplicating one another’s efforts. In large departments, one division may not become aware of applications or data sets already being created by another division in the same department. There is no means of readily exchanging that information.

Managing data under a single administrative set of standards and guidelines will make data sharing and application integration easier. More source code for applications can be shared, perhaps in a source code library, making it easier and less costly to develop new applications.

Data consistency and compatibility will create savings by facilitating information exchange and applications sharing among departments and agencies. Efficiency in information exchange helps improve efficiency in the services the state delivers to the public, and applications sharing will help eliminate some duplicate effort in application development and maintenance. Once data conforms to standards, data consolidations can follow, allowing all agencies and departments to eventually share the same set of data and making it easier to
streamline and integrate service delivery. Without data management standards and guidelines, California runs the risk of falling short in providing services with the quality and speed Californians expect.

**Document repository**

California also lacks a central electronic document repository. Individual state departments and agencies use their own means to maintain both “home-grown” documents and those received from the outside. Electronic and hard copies of documents dispersed among departments and agencies may get lost. Often, having a very limited number of hard copies makes simultaneous access of those documents impossible, even by people within the same business entity. Absent a central electronic repository, just locating documents will likely become more costly and time-consuming as the volume of documents increases.

In Fiscal Year 2003–2004, the California Department of Motor Vehicles spent $192,000 to destroy documents, $1.3 million to ship them to and from field offices, $550,000 for microfilming equipment to capture images of the documents, and $2.8 million to research records requests from the microfilm. Much of this cost could have been avoided if those documents had been in a central electronic repository.

**California Records and Information Management**

The California Records and Information Management (CalRIM) unit within the California Department of General Services (DGS) has statutory authority to develop standards, but the law stops short of requiring departments to follow those standards.

**Recommendations**

A. The Governor should work with the Legislature to amend Government Code Section 14740 to require all state departments and agencies to follow data management standards and electronic document management standards set forth by the California Records and Information Management (CalRIM) unit within the California Department of General Services.

B. The Governor should direct the Department of General Services Office of Technology Resources (DGS-OTR) or its successor to establish statewide data management standards and guidelines.

C. The Governor should direct the DGS-OTR or its successor to develop statewide standards and guidelines for creating, managing, storing and archiving electronic documents, and to leverage the state’s existing document management systems to the fullest extent possible.
**Fiscal Impact**

The recommendations can be performed within existing staffing resources. A cooperative effort with the universities should be explored, since this type of joint effort usually yields unbiased products with a more affordable price. Data consistency and compatibility will result in efficiencies from the facilitation of information exchange and application sharing between departments. The related services to the public will also improve.

The cost of implementing an electronic document repository is estimated at $200,000 for hardware, peripheral devices and software. Ongoing maintenance and support is estimated at $100,000 per year. The actual migration of documents to the electronic repository will result in increased costs in staff time; however the staffing costs should be offset as it becomes easier for employees to access documents.

Savings from implementing an electronic repository will be substantial. The biggest savings will come from reduced printing, distribution, and storage costs. Document retrieval time can also be reduced by more than half. In the future, savings will continue to materialize as the requirement for square footage to store actual paper documents begins to shrink. Currently, it costs $19 million to pay for 1,057,000 cubic feet of printed records stored at the State Records Center of DGS and $15 million for document destruction at this center. Document destruction costs would decrease as fewer and fewer documents would exist in paper form. The total savings cannot be estimated at this time.

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**Endnotes**

1. Interview with William Hogan, chief information officer, California Department of Aging, Sacramento, California (April 13, 2004).
2. E-mail from William Hogan, chief information officer, California Department of Aging, to California Performance Review (May 25, 2004).
3. E-mail from William Hogan.
4. Interview with William Hogan, chief information officer, California Department of Aging (May 26, 2004).
6. Interview with Steve Irvine, senior consulting IT architect, IBM, Sacramento, California (May 11, 2004).
7. Interview with Kevin Green, chief information officer, California Highway Patrol, Sacramento, California (April 26, 2004).
8. Interview with Randy Parrett, software account manager, IBM Software Group, Sacramento, California (May 11, 2004).
9. E-mail from Peggy St. George, chief, Information Service Branch, California Department of Motor Vehicles, to California Performance Review (May 13, 2004).

Issues and Recommendations
Redesign of the State Portal (MyCalifornia)

Summary
For California to become the first 21st century government, the state must have a well-designed portal that will function as the technological foundation for statewide (enterprise) information technology deployments. The state can achieve this goal by redesigning the current state portal, resolving the problems that have plagued the portal in the past, and implementing new online services and features to increase its utilization and value. This, in turn, will allow the state to significantly improve the delivery of cross-agency information and services to its key stakeholders, make government more transparent and accountable, increase internal operating efficiencies and reduce costs and risks.

Background
In 2000, California implemented a state portal (MyCalifornia) in an attempt to improve services, increase internal operating efficiencies, and reduce costs. However, this effort fell far short of expectations due to numerous issues. These issues included: lack of funding; inadequate IT governance structure; limited marketing; poor adoption rate by the agencies; problems with the search engine technology; improvements needed to the “look and feel” of the homepage; including the information architecture; lack of state personnel with the appropriate skill sets to operate and maintain the environment; provision of only a few shared services; lack of shareable custom applications based on reusable components; and loss of executive leadership due to the resignation of the eGovernment Director in 2002. The failure of the state portal to achieve the anticipated goals and objectives, however, was not necessarily because of the portal technology environment. The inappropriate funding model, governance structure, human resource constraints, low adoption rate, and lack of leadership were the primary culprits. Hence, this past failure should not be used as a deterrent toward the state’s future utilization of an effective statewide enterprise technology environment.

Value proposition
It is evident that enterprise technologies used in the private sector, including portals, continue to be the most effective way to improve service delivery and reduce internal operating costs. In fact, many companies have successfully used enterprise technologies for years and have since raised the bar on internal efficiencies and customer service excellence. Competition and the bottom line (i.e., earnings) primarily drive private sector’s leadership toward technological innovation. Even though government does not operate in a competitive environment, the state can still realize many of the same benefits by leveraging private sector experiences, employing best practices, reforming funding and IT governance practices and building an enterprise environment using best-of-breed technologies.
The primary goal of a well-designed government portal, in general, is to improve the delivery of cross-agency information and services, increase internal operating efficiencies and reduce costs and risk. For customers, the portal is the gateway through which citizens, businesses, and employees can access online services. It is the “single window” to government; the secured gateway for all to visit. The portal presents information and services in ways that are familiar to citizens and inviting to visitors. It is easy to navigate and allows people to get what they want, when they want it. There is no wrong path to information or service, regardless of the agency source. When no path seems obvious, customer support and robust search engines (using natural language) aid in finding the desired information or service. For government, the portal is the universal technology platform for building shared enterprise solutions, exchanging data across agencies, and making internal operations more efficient. The portal reduces hardware/software, development, maintenance, and operating costs. It also reduces the time to develop and deploy new services while mitigating the associated risks. Most importantly, it allows government to provide seamless cross-agency information and services to its customers.

A government portal comprised of integrated enterprise technologies can provide a substantial value proposition or return-on-investment, both in terms of “hard” and “soft” benefits. Due to the recent shift to customer-centric service delivery, it is important that organizations measure the soft benefits of these technologies along with the quantifiable benefits such as cost savings and reduced cycle times. It is also important to measure these benefits across the multiple stakeholder groups and not just the organization implementing the technologies. The following is a list of the potential benefits that can be realized through a well-designed portal:

Strategic/Political Value—a platform for government transformation; highly visible, constituent-focused improvements near term; and leadership representation of elected officials.

Direct Customer Value—access to accurate, up-to-date information; simple navigation to cross-agency information and services; 24/7 self-service access to government services; and a personalized, more satisfying government experience.

Government Value—reduced total IT costs; drive costs and time out of processes; achieve economies of scale; provide end-to-end architecture; ability to share data and applications across agencies; higher levels of customer service and satisfaction; less redundancy and duplication; and improved trust and reputation among the various customer populations.

Social/Public Value—increased government transparency and accountability; promote constituent participation in government; and improved consistency in security/privacy.

Government Operational/Foundation Value—greater ability to achieve mission; increase employee effectiveness/productivity; better communication across agencies; the right
information in the right hands at the right time; accelerate deployment of new online services; and establish foundational infrastructure.

Risk—reduced deployment risk of new online services; decreased IT risk through common infrastructure; and enhanced security.3

Several states have implemented enterprise portals and are beginning to realize many of the aforementioned benefits. The following are examples of two states that have shown notable success:

• Indiana’s state portal (accessIndiana) improved service delivery and eliminated or integrated redundant systems. The state is saving $3 million per year in development, support, maintenance, and marketing based on a public/private partnership;4 and

• Florida’s state portal (MyFlorida.com) also improved service delivery and eliminated or integrated redundant systems. The state is saving $2.2 million per year through improved access to online services and a 1 percent reduction in call center calls.5

**Portal technology environment**

Portal environments are complex and consist of numerous integrated enterprise technologies including interfaces to various agency back-office systems. The portal technologies include web tools, customized shared applications using re-usable components, shared services using commercial off-the-shelf solutions, security services, a meta-data repository to effectively exchange data with disparate agency back-office systems, an enterprise database, business activity and process monitoring, and enterprise application integration or web services. Figure 1 illustrates the common technologies and functions that are necessary to deliver enterprise-wide government capabilities to the state’s customers.6

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![Figure 1: Portal Technology Environment](image-url)
While most of the elements identified in the preceding exhibit are self evident, some require further explanation to better convey the fundamental concepts of enterprise technologies:

Web tools—content management, customization, personalization, search/taxonomy, subscription, and authentication single sign-on—are used to develop a homepage that will provide customers an easy to access, easy to navigate site where they can obtain government information and services 24 hours a day, 7 days a week. These tools also allow the state to create a unique online experience for its various customer populations (i.e., citizens, businesses, employees and other government bodies) through the Internet.

Shared applications using re-usable components—licensing, permitting, registration, etc.—are customized application systems developed using coded components that can be re-used and shared by multiple applications. Applications are made-up of a number of coded components that are concatenated to form an entire system. Several of these coded components are commonly used across numerous applications. The user’s profile and certification information are good examples of coded components that can be leveraged across many applications. Re-usable components offer a number of distinct advantages including the ability to rapidly develop applications, save development and maintenance costs, and mitigate risk.

Shared services using commercial-off-the-shelf (COTS) applications—customer relationship management, enterprise resource planning, records management, etc.—are proprietary systems that can also be shared by several agencies. These systems are very complex and would be cost prohibitive and extremely risky for the state to develop them on its own. Consequently, COTS applications are the most effective solution for these types of services.

The enterprise database/meta data repository coupled with the enterprise application integration/web services are the technologies required to store and exchange data within and outside of the portal environment (primarily agency back-office systems). The key benefit behind these technologies is that they allow the state to continue leveraging prior investments in agency back-office systems, rather than replacing them.

**Capabilities of a portal technology environment**

The capabilities of a well-designed portal environment are widespread and far-reaching. The portal not only facilitates the day-to-day provision of government information and services to the state’s customers, but it also has the capabilities to optimize revenues, reduce fraud and overpayments, facilitate homeland security, and broadcast public alerts (e.g., electrical brown out alerts and Amber alerts) to name a few. None of these capabilities, however, would be possible without implementing the enterprise technologies, as illustrated and discussed above, that are fundamental to a portal environment. With the appropriate integrated technologies, the state will be able to accomplish the following:
• Enhance the customer’s view of government by branding the state’s Web sites, providing a common look and feel, customizing the customer-centric content for the state’s various audiences and providing customers the capability to create their own personalized sites;
• Provide multi-channel service delivery that provides consistent, up-to-date, and accurate information and services regardless if they are delivered or accessed through the Web, e-mail, wireless devices, telephone, U.S. mail, FAX, or face-to-face;
• Improve internal efficiencies through shared services (e.g., customer relationship management, enterprise resource planning, business analytics, etc.), custom applications built with reusable components (e.g., licensing, reporting, permitting, etc.), a universal platform to support these technologies, and collaboration tools to cut development and day-to-day operational costs while increasing productivity;
• Adapt to change by implementing robust, scaleable, and extensible technologies; thus allowing the state to rapidly scale technology hardware/software to accommodate the increased demand for services as well as add new technologies, communication channels and client applications on an as needed basis;
• Enable seamless integration by relying on open standards. This will allow the state to integrate seamlessly with existing infrastructures and historical content, and it will also allow the flexibility needed to publish and share portlets (individual components of larger enterprise environments);
• Manage across the enterprise by centrally managing multiple integrated sub-portals to meet the unique needs of citizens, businesses, employees, and government organizations such as those that extend across public sites, employee intranets and supplier extranets;
• Access data where it lives by implementing a state-of-the-art virtual repository (a set of metadata that describes data assets) that can easily locate content no matter where it resides across the state and regardless of the storage medium (i.e., legacy database or file server);
• Utilize web services which allow different applications systems to talk to each other automatically; thus providing freestanding functionality such as accounts receivable, credit card transactions and language translations. Web services are also used as a delivery mechanism to incorporate data from back-end systems into applications residing in the enterprise technology environment and also as an interface that can deliver information collected from those applications back to the same system;
• Incorporate content management as a mission-critical asset for web page development. Enterprise environments must be capable of not just accessing and assembling existing information from anywhere, but also creating, managing and publishing content. Content management is, in fact, so inextricable from the function of an enterprise environment that it must be an integral component. Furthermore, a strong content management strategy enables operating agencies to maintain agency-specific content from the enterprise environment without creating a large IT infrastructure for content development and maintenance,
• Utilize advanced taxonomy and search to organize enterprise content, whether in structured or unstructured form. Also, the design of the enterprise categories and classifications must provide content in context so users can quickly and easily locate the right information at the right time on web pages or through a search engine.

In summary, California’s current fiscal crisis coupled with increasing customer demand for improved services has elevated the importance of having an effective statewide portal. The redesign of the current state portal (MyCalifornia) will give the state the capabilities required to capture many of the potential opportunities and benefits associated with enterprise solutions. Moreover, the use of portal technologies is an imperative toward the state’s future transition into a 21st century government. Many of the recommendations provided by the California Performance Review rely on the effective use of technology. It is now incumbent upon the state’s leadership to harness these technologies and significantly improve the delivery of cross-agency information and services, increase internal operating efficiencies, optimize revenues, and reduce costs.

**Recommendations**

The state should use a phased approach to redesign the state portal. This best practice will allow the state to effectively resolve current problems with the portal, establish a robust and reliable universal technology platform and provide the capability to rapidly and efficiently implement future enterprise services while mitigating risk.

**A. Phase 1a: During Fiscal Year (FY) 2004–2005, The State Chief Information Officer (CIO) should take measures to resolve current problems with the state portal.**

Under the direction of the state CIO, the state needs to first correct the current problems with the state portal before any future expansion occurs. The state should improve the current “look and feel” of the portal, re-brand its homepage by developing and marketing an icon that truly reflects California state government, and replace the current search engine with a robust search engine that can index the current volume of documents and identify broken hyperlinks within the state’s domain.

**B. Phase 1b: During FY 2004–2005, the state CIO should direct the preparation of a three-year plan to implement statewide technology solutions and to redesign the state portal to provide a platform for all e-government services.**

Once prepared, the plan will act as a strategic road map to effectively meet the key business priorities identified by the state’s leadership. The plan will also be a living document so that the state CIO can incorporate revisions over time to accommodate the changing needs of government and its various constituent populations as well as innovations in technology.
C. Phase 2: During FY 2005–2006, the state CIO should direct the implementation of new enterprise solutions for various agencies based on the priorities and objectives stipulated in the tactical implementation plan.

Based on the priorities and objectives in the plan, the state can begin implementing new enterprise technology services in an effective and efficient manner. It is very important, however, that the state uses industry best practices when implementing these enterprise solutions.

**Fiscal Impact**

It may be necessary to hire an outside consultant to resolve the current problems with the state portal in FY 2004–2005. Cost estimates may vary depending on the complexity of the changes and the associated requirements. Additional staff may be needed to manage the project and receive the training required to maintain and operate the new technologies, including changes to the homepage’s “look and feel.” At this time, it is not possible to determine the staffing level until a final decision is made regarding the complexity of the changes and whether or not the state will retain consulting services from an outside vendor.

In FY 2005–2006, the state will incur costs to implement new enterprise-wide technology solutions. The estimated cost, however, cannot be estimated due to several unknown factors such as the number of enterprise-wide technology solutions that will be deployed, the complexity of the solutions, and whether consulting services will be needed to design, develop and deploy these solutions. Additional staff will definitely be needed to implement the new enterprise-wide technology solutions and to support the ongoing operations of the state portal. The staffing level will be defined once the specific enterprise-wide projects including the associated requirements are identified.

There are numerous tangible and intangible efficiencies that can be gained through an effective portal environment. With a well-designed portal, the state can realize savings on application development, software/hardware purchases, integrated technologies, shared technology resources, increased internal business operations, and more productive employees. Because the portal environment has not been fully implemented, it is not possible to determine the savings that could be realized once full implementation has occurred.

**Endnotes**

1 Interview with Susan Hogg, chief, Office of Risk and Insurance Management, California Department of General Services, Sacramento, California (May 14, 2004).


Information Technology Contracts Should Be Consolidated Wherever Possible

**Summary**
State agencies commonly work independently of one another to develop, execute and manage their information technology (IT) contracts. As a result, they each have separate contracts with IT vendors who provide similar or even identical services to other departments. Renegotiating those contracts to consolidate them would significantly reduce costs.

**Background**
State agencies often depend on the specialized services of software and hardware manufacturers for the continuing maintenance of key components of the state’s information technology infrastructure and information management systems.

State law allows the California Department of General Services (DGS) to delegate contracting authority for IT services to individual departments and agencies, which it does regularly.\(^1\) DGS and other control agencies are generally involved only to ensure compliance with the law, state policy and the budget. As a result, multiple contracts exist across state government for like services from the same IT vendor.

The law allows the state to renegotiate IT contracts.\(^2\) By leveraging its market power, the state could reduce the cost of many of its contracts by renegotiating and consolidating contracts with select vendors that already have a significant presence in state IT operations. Additional benefits to leveraged buying, also referred to as strategic sourcing, include a reduction in contract management and administrative costs and a reduction in procurement time and efforts.

Exhibit 1 illustrates the opportunity that exists to consolidate contracts. It shows four sample contract services from just three vendors who provide proactive prevention resources, support assistance, problem resolution, information services and/or licenses for their products.
Representatives of these vendors indicate they would benefit from contract consolidation, too, because of reductions in contract administration and management costs and the opportunity to secure multi-year contracts.\(^7\)

**Recommendations**

A. The Governor should direct the Department of General Services Procurement Division (DGS-PD), or its successor, to immediately identify information technology maintenance and support service providers who have multiple contracts with the state.

B. The Governor should direct DGS-PD, or its successor, to negotiate a single master services contract of existing contracts with each of the identified vendors, with commensurate cost re-negotiation, by January 1, 2005.

**Fiscal Impact**

Total cost savings resulting from the strategic sourcing of IT maintenance and support contracts can not be determined at this time, since it depends on specific contract negotiations. Several variables will affect the potential cost reductions, including the actual total value of contracts to be consolidated, and the ability to negotiate multi-year contracts of three to five years in length.

Cisco Systems estimates that a combination of contract consolidation and multi-year contracts of three to five years could result in as much as a 15 percent reduction in contract costs to the state.\(^8\) Microsoft estimates reductions of 5-to-7 percent are possible through Premier Support contract consolidation.\(^9\) The fiscal implications below were derived at using a conservative estimate of 8 percent savings from consolidating the 149 contracts in Exhibit 1 above to four master contracts.
Given that the actual number of contracts and vendors are likely higher than in Exhibit 1 above, the total savings to the state will be even greater. In addition to negotiated savings in the costs of the contracts themselves, other savings such as contract management and administration could be realized. The costs for contract negotiation and administration by the DGS-PD would be absorbed within existing resources. Staffing changes may be required which could have a cost impact but can not be estimated at this time.

### ALL FUNDS
(dollars in thousands)

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Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Endnotes

3. Microsoft Corporation, “Current Microsoft Contracts With the State of California,” Sacramento, California, March 5, 2004. (Computer printout.) The $2.4 million represents the value of current contracts. Three additional contracts are under negotiation with an added value of $1.3 million.
5. Interview with Randy Parrett, software account manager, IBM (March 5, 2004). MLC (Monthly License Charge) covers the leased software for mainframe systems, i.e., Operating system, DB2 database software, etc.
6. Interview with Randy Parrett, software account manager, IBM (March 7, 2004). Support contracts with state agencies for IBM’s distributed software products, i.e., Websphere, etc.
7. Interview with Roger Bruist, lead technical account manager, Microsoft Corporation (March 5, 2004); interview with Mark Noriega, regional manager, Cisco Systems (March 5, 2004); and interview with Randy Parrett, software account manager, IBM (March 7, 2004).
9. Interview with Roger Bruist, lead technical account manager, Microsoft Corporation (March 5, 2004).
10. Interview with Michael Barth, Department of General Services, Office of Legal Services, Sacramento, California (June 2, 2004).
Explore Open Source Alternatives

Summary
Each year the State of California spends millions of dollars on software, software maintenance and renewal. Many private and governmental organizations are turning to open source software as a cost-effective alternative to closed source software. The state should more extensively consider use of open source software, which can in many cases provide the same functionality as closed source software at a much lower total cost of ownership.

Background
The typical model for software acquisition in state government involves the purchase of closed source software solutions from the major vendors. Closed source software is any software whose source code is hidden from the public view. Under most licenses the user cannot modify the program or redistribute it. Closed source products encompass the spectrum from server operating systems, application development platforms, office productivity suites, to small yet often expensive utilities. Each of these software solutions has an initial investment cost, maintenance and/or upgrade costs.

Organizations are now starting to embrace open source solutions as a cost-effective alternative to these closed source products. Open source solutions differ from closed source in many ways, one of which is cost. Open source solutions are typically free of charge, although some companies such as IBM, Oracle and Hewlett Packard (HP) often sell versions of open source software with related maintenance. The following 10 features distinguish open source:

1. Free Redistribution: The software can be given as part of a package with other applications;
2. Source Code: The code must either be distributed with the software or easily accessible;
3. Derived Works: The code can be altered and distributed by the new author under the same license conditions as the product on which it is based;
4. Integrity of the author’s source code: Derived works must not interfere with the original author’s intent or work;
5. No discrimination against persons or groups;
6. No discrimination against fields of endeavor: Distributed software cannot be restricted in who can use it based on their intent;
7. Distribution of license: The rights of the program must apply to all to whom the program is re-distributed without need for an additional license;
8. License must not be specific to a product; Meaning that an operating system product cannot be restricted to be free only if used with another specific product;
9. License must not contaminate other software; and
10. License must be technology-neutral.

Open source software is developed with the source code freely available; anyone can use the software, and make changes to it as necessary. Typically changes are then made available back to the open source community using a common methodology for change control. In contrast to open source, most software development companies sell their products at a specific cost, but do not allow the user to see or modify the source code.

The advent and acceptance of open source software represents a significant shift in the software development and procurement cycle. It is sometimes difficult to think of downloading a free version of software from the Internet and then using it in a mission-critical environment rather than buying software from a major software vendor. There are arguments to be made that open source can be a better choice for some mission-critical implementations than closed source. The following are some potential reasons for choosing open source:

- More secure due to the extreme scrutiny of the source code before being deployed;
- Can be run in multiple environments (i.e. Unix, Linux and Microsoft);
- May be less expensive to manage (no maintenance contracts or upgrade costs); and
- Often less vulnerable to viruses.²

**Open source install base**

Probably the most recognized open source product is the operating system Linux, which is used in thousands of mission critical applications. Amazon.com for example uses a Linux-based infrastructure to process millions of transactions per day.³ Open source software has made the biggest impact on back-end systems such as web and application servers, with many of these products being the dominant software used in the market. According to the Netcraft Web Server Survey, the open source Apache web server software currently hosts 63 percent of all Internet pages. Open source Sendmail (mail server) is used on over 600,000 e-mail servers. Linux is used on over 7 million computers.⁴

Open source software solutions span a broad range of technologies from productivity suites (Open Office, http://openoffice.org) to web browsers, data bases, security tools, and somewhat more specific applications, like time and reporting software. It is possible today to run a fully open source desktop and still be compatible with many closed source applications.

Some state agencies have adopted open source solutions as well. Examples are provided below.

Air Resources Board (ARB) makes use of open source in their web environment. For example, ARB runs the Linux operating system with the Apache web server, MySQL database, Perl and PHP coding and a Swish-E search engine. ARB has used open source from the inception of their web install.⁵
The Franchise Tax Board (FTB) is using select open source products by including them as alternatives to any potential software purchase. The largest installation is a product called Virtual Network Computing (VNC) with a base of 5,000+ clients, which assists helpdesk staff to perform desktop maintenance and remote management. The comparable closed source solution costs approximately $66.00 per client license. For this one installation FTB realized a total savings of $330,000. In addition, FTB is being very proactive in looking at open source alternatives to software products that are due to be renewed and is also looking at larger installations of open source such as using Linux on the mainframe.6

The California Department of Transportation (Caltrans) initiated a project for identity and password management. The rollout required new hardware and software that was quoted at nearly $500,000. Instead Caltrans decided to run the application on an open source operating system, and as a result was able to select hardware and software that cost only $220,000, thus saving nearly $300,000. Caltrans is looking elsewhere within the organization to move to Linux for additional savings.7

**Vendor support of open source software**
Companies such as IBM, Hewlett Packard, and Oracle have been investing millions of dollars into open source software development. Additionally, open source code products are available for many different hardware platforms, including hand-held devices to mid-range servers. Typically the state relies on maintenance contracts for upgrades for closed source software and software problems. Support for open source software is available from many of the major vendors through third-party maintenance contracts; for example, many of these vendors will support any version of Linux, providing upgrades and maintenance.8

In summary, open source is not just about cost savings. Since the code is open, it offers the flexibility for organizations to modify the code as needed for specific uses. Many also feel that open source is more reliable and secure than closed source.9 In closed source software, the code is hidden from the user so it is difficult to identify potential security risks in advance and to work proactively to make the system more secure. Also, bug fixes and patches must be distributed from the originating developer rather than originating from the users who have identified the problem. In this regard, open source can provide superior security than closed source.

**Recommendations**
A. **For potential immediate savings, departments should take an inventory of software purchases and software renewals in the Fiscal Year 2004–2005 and implement open source alternatives where feasible.**

Every state agency has hundreds of different software products in use, from desktop applications and utilities to server and application development tools; all of which have
their own maintenance and upgrade costs. From the tactical perspective agencies should look at all software contracts that are up for renewal, or software that is being purchased in FY 2004–2005. They would then evaluate open source software that could be implemented in place of the closed source solution.

B. **Incorporate open source software as a viable alternative to any software procurement.**

Today, when state agencies purchase software solutions they are required to look at best value, and often go through a formal procurement process wherein vendors submit proposals. Since open source code solutions do not fit the traditional procurement model in that there is not usually a vendor promoting and proposing the product, it is recommended that state departments actively research and evaluate open source code alternatives prior to considering use of the traditional procurement model for software.

**Fiscal Impact**
The recommendation to inventory software purchases and software renewals in FY 2004–2005 and implement open source alternatives where feasible should have no immediate fiscal impact. Agencies participating in this review could fund any minor cost from their existing budgets.

The fiscal implications for the use of open source software can vary widely depending how deep an organization is willing to use these technology solutions and whether they are used at the desktop, server or other installs. Savings could range from several hundred thousand dollars to millions. As listed above, FTB realized savings of more than $300,000 on one software installation. The Department of Transportation realized nearly $300,000 in savings on one application. Also, as software licensing and application development costs continue to increase, organizations are looking at creative ways in which to manage those costs. Looking to the open source community for applications that serve the same function as closed source solutions may cause vendors to be more flexible with pricing and licensing structures. Because these savings will depend on individual agency actions, however, the savings resulting from this recommendation cannot be estimated.

**Endnotes**


4 David A. Wheeler, “Why Open Source Software/Free Software (OSS/FS)? Look at the Numbers!” (June 8, 2004),

5 Bill Welty, chief information officer, California Air Resources Board, “Air Resources Board Open Source Software

6 Interview with Allen Lung, systems architect, California Franchise Tax Board, Sacramento, California (May 3, 2004).

7 Interview with Troy Kallas, account executive, Novell Corporation, Sacramento, California (June 15, 2004).

8 Oracle Corporation, “Oracle on Linux,” http://www.oracle.com/technologies/linux/ (last visited June 2, 2004);

The California state Internet portal is a gateway to state government services and applications available via the Internet. Because of funding cuts and implementation costs, California’s portal has not achieved its full potential to deliver integrated services. To be truly effective the California state portal needs to be substantially self funding. This paper will address several alternative funding strategies to enhance existing portal services and to create new, integrated, portal-based applications.

Background
The California state portal is currently funded through a charge back of services from the Teale Data Center to individual state departments. This includes departments that may not use the state portal infrastructure. Many individual departments have their own web infrastructure where they develop applications and content themselves. There is no accurate accounting of how much money is spent on total web infrastructure and applications, but it is reasonable to assume that millions of dollars have been spent on the current infrastructure and in ongoing maintenance and development. Because of a lack of adequate funding the state portal does not provide the level of services that are expected by the public. There is an opportunity to have the California State Portal pay for itself through innovative funding strategies. Many governmental agencies are getting creative in how they fund their portals and are using strategies that the private sector has been using for years.

There are several ways to make the state portal self funding.

Advertising and sponsorship
The private sector and, to a lesser extent, government have been generating revenue through advertising for many years. Advertising revenue can be generated in a number of ways, with one of the more popular being based on “pay-per-click.” Revenue is generated anytime someone “clicks” on an advertised link. Some estimates of the click-through rate are as high as 5 percent, or more, meaning that for every 100 times an ad link is displayed, it is accessed or clicked five times.¹ Others estimate this average to be as low as 2 percent. The rate paid per click varies as well. Depending on the ad, the placement on the page, etc., a click can produce anywhere from ten cents to several dollars. In addition to generating revenue for the General Fund, a percentage of advertising can be directed back to the portal development to improve services.
**State store: “BuyCalifornia.gov”**

An opportunity exists for California to develop an online store front that allows citizens to buy items directly from the portal, similar to Amazon.com, or e-bay.com. Currently the state sells many items, from surplus property such as cars and trucks, to permits and licenses. Having an integrated online storefront would provide a quick and easy way to generate revenue for the state. A percentage of all sales could go directly back into the portal development and maintenance. This “one-stop-shop” would allow citizens to purchase anything the state has to sell (permits, licenses, surplus property, etc.), pay vehicle license fees, pay taxes, and then total their purchase (or liability) and pay for it in one spot. The United Kingdom is creating a portal to coordinate all government “shopping” with a goal of making it easier for citizens to find what they are looking for and making it easier to purchase these items.\(^2\) One big advantage to this method of “shopping” for state products is that citizens will be more inclined to purchase items or pay for services if they can “check-out” all at once rather than having to search for items all over the portal.

**Public/private partnership**

Many Information Technology projects are developed using a performance based development (or a public/private sector partnership) to share in the cost and benefits of a given system. This takes the burden of total development costs off the state and allows shared benefits or risk with the private sector. In August 1999, Texas ([http://texasonline.com](http://texasonline.com)) launched its official e-government site for state and local government as a public/private partnership with BearingPoint (formerly KPMG).\(^3\) To date BearingPoint has invested $23 million in establishing the portal infrastructure.\(^4\) BearingPoint is recovering its costs through a combination of user, subscription and premium service fees. The state receives 10 percent of the transaction fees generated by TexasOnline applications. BearingPoint projects that it will recover all its investments by the end of Fiscal Year 2005, after which an additional 50 percent of net fee revenues will be added to the state’s share of fees. According to the *Austin Business Journal*, TexasOnline has been so successful that the $1 billion mark in revenue was achieved since its launch in September 2000, and one million transactions are processed per month.\(^5\) TexasOnline provides an example of how California could develop a more robust portal for little or no up-front cost while at the same time generating significant revenue, increasing security and providing increased services to the public.

**Hosting of local government sites (charge-back)**

An integration of government websites should consider the possibility of including governments and governances, such as city and county governments, special districts and the like. Allowing the hosting, or total application integration of local governments and governances would provide a revenue source, since the state could charge for development and hosting of these various governmental agencies. This is different from the current charge-back model employed by California since departments pay whether they use it or not. This model would allow agencies only to pay for what they use.
The following are some governmental agencies that have implemented, or plan to implement, various strategies to fund their portal infrastructures and services:

**State of Virginia**
Governor James Gilmore is planning to issue guidelines for advertising on state websites as part of a major announcement on digital government. Advertising revenue will be used to pay for improvements to state agencies’ information technology infrastructure.6

**State of Iowa**
The Iowa Information Technology Department is preparing to issue a request for proposals (RFP) for web sponsorship. The sponsorships will limit advertisers to displaying their name in exchange for partially subsidizing the site. The Iowa RFP will seek a vendor that will assist the state in identifying sponsors.7

**City of Antlers, Oklahoma**
This city allows advertising on their portal. For reference, their policy and pricing is available on their website (http://www.antlers-ok.com/advertising.shtm).

**Federal government**
The federal government has set up a shopping gateway at http://firstgov.gov. This site allows shoppers to purchase a variety of items and was a partnership with FirstGov.

**Federal General Services Administration (GSA)**
The GSA has developed an auction site for the purchase of government surplus, seized and forfeited property.8 This site is a one stop gateway for purchasing federal government items and is done in an auction format.

**State of Utah**
The Governor has directed state agencies to offer their products and services online, making it easier for citizens to get what they need. “It is our vision to provide a convenient method for citizens to pay for these online services. We envision a single Utah.gov “shopping cart” that can be used to pay for almost any online product or service offered by a state agency.” This shopping cart would provide citizens the ability to purchase multiple products or services from different agencies during a single session, and then pay for them all at once at checkout. This system would become an integral part of the Utah.gov citizen portal, increasing its value and also increasing organizational transparency to the citizen.9

**State of Texas**
TexasOnline.com was developed as a partnership with BearingPoint through a performance based development. BearingPoint is paid through a percentage of fees generated by the website. They also allow hosting of city and county government sites, and even do development for some applications and then charge-back the cost to the entities that use it.10
**Recommendation**
The Governor should work with the Legislature to establish authority to allow advertising on the California state portal as a means of self-funding and to develop a framework for establishing appropriate advertising standards.

**Fiscal Impact**
The potential revenue for advertising revenue may be substantial but there is not sufficient information to estimate the amount of “pay-per-click” that California would generate by advertising. There may be some staffing costs for developing and implementing pay-per-click. At this time it is not possible to estimate the costs.

The potential costs for developing and implementing a central one-stop shopping portal for all state transactions cannot be estimated at this time. Currently, there is no state that has implemented this process.

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**Endnotes**

3. Interview with Kathy Ikard, senior manager, BearingPoint, Sacramento, California (May 25, 2004).
10. Interview with Kathy Ikard.
Consolidate State Data Centers, Servers and Storage

Summary
California should consolidate the resources of its Health and Human Services Data Center, the Stephen P. Teale Data Center and similar information technology functions within other state departments, and manage those resources as a single entity to create the California State Data Center.

Background
A data center is a centralized repository for the storage, management, and dissemination of data and information organized around a particular area or body of knowledge. With the continued advancements in virtualization techniques and technologies, a data center can be one or many physical sites managed as a single entity so that its services are presented seamlessly to its clients.

The state operates six major data centers for its information needs. Two are general purpose data centers and the focus of this consolidation effort, the Health and Human Services Agency Data Center (HHSDC) established to service the human services program area, and the Stephen P. Teale Consolidated Data Center (TDC) established for the business and services area of state government. Other data centers not within the scope of this issue include the Department of Justice Hawkins Data Center, the Franchise Tax Board Data Center, the Legislative Data Center and the Public Employees Retirement System Data Center.

A number of smaller data center operations exist within other departments, including the Departments of Transportation, Motor Vehicles, Employment Development, Health Services and Social Services. The facilities where these are housed are state-of-the-art and, thus, expensive to maintain and operate.

During the past 10 years, advances in information technology (IT) have facilitated many successful consolidation efforts in large public and private organizations. These efforts were aimed at lowering operational costs by leveraging economies of scale and eliminating redundancies. In addition, the total cost of ownership (TCO) of technology was lowered by reducing support costs through standardization. For example, IBM with 350,000 employees at 1,700 sites is an organization similar in size and complexity to California state government. Its consolidation efforts reduced 31 networks to one, 155 data center sites to 10 and 16,000 applications to less than 4,900. Oracle Corporation consolidated 40 data centers into one...
and 97 e-mail systems into two, saving $250 million out of $500 million it was spending on IT support before consolidation.\(^2\)

California has many entities with IT functional organizations of varying size, focus and technical maturation. They maintain their own servers, storage and local area networks (LANs). The California Performance Review survey of 88 departments, boards and offices found there are more than 1,800 state full-time equivalents (FTE) employees and 45 contractor FTEs providing network and web server support at an annual cost to the state of $35,415,000.\(^3\)

One of the biggest benefits of data center consolidation is the opportunity to consolidate servers and storage to achieve economies of scale and lowered TCO. Storage Area Networks (SAN) and Network Attached Storage (NAS) facilitate centrally managed storage for access by multiple servers. This consolidation paves the way to physical consolidation of servers in which client departments locate their servers at a single data center. By doing so, these servers can take advantage of the less expensive storage at the data center, as well as its backup and recovery facilities.

The next phase is “server rationalization,” which involves replacing the many smaller servers with a few larger ones. By employing a server rationalization process, Conseco Finance was able to reduce its physical servers from 135 to 25 and reduce its TCO for a server from $10,400 to $4,500.\(^4\)

**Assumptions—statewide network infrastructure**

This project assumes that a new statewide network infrastructure is in place. This high capacity, high performance network is essential to enabling the existing data centers to achieve telecommunication cost savings and over time, merge their networks. Such a merger will facilitate operational recovery through mutual aid and more effective use of processing and storage capacities.

**Recommendations**

A. The Governor should direct the Health and Human Services Agency and the Business, Transportation and Housing Agency to consolidate the administrative functions of the Stephen P. Teale and Health and Human Services Agency Data Centers under the state Chief Information Officer.

B. The Governor should direct the state Chief Information Officer to establish a high-speed connection between the Stephen P. Teale Data Center and the Health and Human Services Agency Data Center to facilitate resource sharing and operational recovery through mutual aid in the event of catastrophic loss at either data center.

C. The Governor should direct the Teale Data Center and the Health and Human Services Agency Data Center to immediately begin expanding their server hosting
and management services and aggressively market them to state government agencies and departments. The Governor should direct the Department of Finance, or its successor, to support this effort.

**D. The Governor should work with the Legislature to allow the Teale Data Center and the Health and Human Services Agency Data Center to be removed from their respective agencies and their resources combined to establish the California State Data Center under the state’s Chief Information Officer.**

This consolidation need not be a physical consolidation. As noted above, technology exists that allows for virtual consolidation of data centers located at different sites or in different physical plants.

Data center consolidation is an evolution in which each phase becomes the enabler of the next. Consolidation of administrative functions enables planning and implementation of a shared network infrastructure. A shared network enables shared storage which enables central location of servers. Central server location enables physical consolidation which can evolve into data integration, then into application integration. At each step along the evolutionary path, consolidation or virtualization enables the sharing of resources and functions which produces savings and efficiencies.

**E. The state Chief Information Officer should develop customer service standards by January 1, 2005 and measurements for the California State Data Center to ensure customer focused delivery of products and services.**

The new benchmark should be how the California State Data Center compares to other public and private data centers in terms of rates, service level and customer satisfaction. With the concurrence of the customer departments, Service Level Agreements (SLAs) should be re-established to reflect the capacities and capabilities of the new organization.

**Fiscal Impact**

The fiscal impact of consolidating the data centers is difficult to measure. Neither the Stephen P. Teale Data Center (Teale) nor the Health and Human Services Agency Data Center (HHSDC) has an appropriation from a funding source other than their revolving funds. The data centers are granted expenditure authority from those revolving funds and are required to recoup the expenditures through fees charged to their customers for services provided. Any savings achieved results in reduced rates or rebates to their customer departments. Both Teale and HHSDC receive payments from departments with multiple funding sources including federal funding. Only a portion of each data center’s budget comes from the General Fund. Teale receives approximately 30 percent of its reimbursements from the General Fund. HHSDC
receives approximately 40 percent reimbursement from the General Fund. To achieve a $1 in General Fund savings, approximately $3 in total savings must be realized.

Administrative consolidation should result in savings and efficiencies. By eliminating some redundancy in common functions (budgets, personnel, procurement, contracts), savings in dollars and positions will be realized. In particular, eliminating duplicative management positions in administration, operational recovery, customer and security could yield a $1,067,000 annual savings. Potential savings of $1.25 million to $3.75 million could be achieved through consolidation and renegotiation of contracts for software common to both data centers currently valued at $25,000,000 per year. Similarly, savings in common purchases should accrue with increased leverage of purchases.

Using some conservative numbers, if there are a minimum of 3,000 servers scattered throughout state departments and, of those servers, 20 percent are candidates for rationalization and we discount the TCO savings Conseco, as mentioned above, realized by 50 percent, the potential TCO savings would still be $1,770,000 per year.

The installation of a high-speed connection between Teale and HHSDC and modifying the telecommunications distribution and routing to facilitate mutual aid operational recovery could take six months to accomplish. Identifying and renegotiating the common maintenance contracts could take six months as well. Therefore, first year savings associated with eliminating or greatly reducing “hot site” recovery, offsite tape storage and the consolidation of contracts have been reduced by 50 percent in the table below. A high-speed connection, including equipment, would cost $312,000 per year. This connection can support Gigabit Ethernet and FICON file transfers to mirror storage at each site. Mirrored storage is a first step in providing operational recovery support through a mutual aid model. In their draft feasibility study for mutual aid and operational recovery with HHSDC, Teale estimates one time costs of $1.5 million and ongoing costs of $734,000. Once operational recovery through mutual aid is in production, the $620,000 annual “hot site” contract cost could be avoided. Additional savings of $540,000 annually can be achieved by discontinuing the off-site data tape storage as the two sites would be constantly backing each other up.
## All Funds

*(dollars in thousands)*

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Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Endnotes

2. California Department of Finance, “Public Hearing on Data Center Consolidation Summary of Testimony” (Sacramento, California, November 12, 2003).
6. Duplicative positions include director, assistant director for administration and managers for Budgets, Accounting, Human Resources, Business Services, Procurement, Customer Relations, Operational Recovery, Security and Rates/Cost Recovery. 11PYs X $97,000 per PY = $1,067,000.
8. 3,000 servers x 20% = 600 servers x $2950 ($5900/2) = $1,770,000
Create a Statewide Radio Network Infrastructure

Summary
California state government’s radio networks were created by various state agencies, which manage and maintain them separately. The state could achieve significant savings by consolidating the management of existing independent radio communications resources into a single entity offering a centralized and technologically versatile radio network capable of assimilating newer technologies.

Background
Consolidation
The Department of General Services (DGS), Telecommunications Division has been providing public safety radio communication services to many state public safety agencies. However, during the past 50 years, many other public safety agencies have established their own independent telecommunication services to meet their communication needs. They include:

- The California Office of Emergency Services (OES);
- The California Department of Justice (DOJ);
- The California Department of Corrections (CDC);
- The California Department of Transportation (Caltrans); and
- The California Department of Water Resources (DWR).

Some of these agencies manage remote vault (radio tower equipment room) sites that are shared by many public safety agencies. These vault sites are critical to the state’s public safety microwave communications network. The employees who operate and maintain those sites are also critical to the state’s public safety. Since telecommunication service is not a core competency of these departments, their inclination is often to eliminate telecommunication jobs during a period of financial constraints. When that happens, it threatens vital services to public safety agencies.1

The California Performance Review found that the Telecommunications Division of DGS manages radio, telephone and data systems for many state agencies. DGS, Caltrans, OES and DWR are individually and separately responsible for the design, engineering, licensing, installation, operation, maintenance and repair of their independent radio communication equipment and services.2

The state spends approximately $70 million a year on radio operations. As early as ten years ago, the state’s Public Safety Radio Strategic Planning Committee estimated that the cost of maintaining and improving the state’s radio communications infrastructure would be
approximately $3.5 billion between 1994 and 2009, if it were managed on a statewide basis. The committee estimated costs would rise to $4.3 billion over that same time period if individual departments undertook improvements in their existing independent systems, as they ultimately did.³

Existing independent telecommunication service programs and radio network systems are proprietary, inflexible and antiquated. The California Highway Patrol (CHP) and some state agencies have been using analog radios in Very High Frequency (VHF) low band for their telecommunication services. VHF low band equipment is becoming obsolete and its manufacture is progressively declining. Systems using this band may soon become unsustainable. Integration of these disparate systems into a single central telecommunication agency would eliminate unnecessary duplication of telecommunication services, introduce more efficient technologies, and result in economies of scale.⁴

**Need for spectrum**

The central statewide system of radio communications should be able to access adequate radio frequency spectrum to be functionally effective. But the spectrum is a limited resource much coveted by commercial interests. To gain access to the required spectrum, the public safety agencies have to compete with commercial interests who have competitive advantage because of their immense resources. As a result, public safety radio systems face perennial spectrum shortages.⁵ Presently public safety radios operate in five bands of spectrum allocated by Federal Communications Commission (FCC).⁶

The Public Safety Wireless Advisory Committee (PSWAC) in its report of September 11, 1996 to the FCC drew the Commission’s attention to the spectrum shortages for public safety programs and sought allocation of additional 97 megahertz (MHz) of spectrum by 2010. In 1998, the FCC allocated 24 MHz of spectrum to public safety, partially satisfying these recommendations.⁷ Nevertheless, spectrum is still insufficient to meet the public safety community’s general communications needs.

In addition, the general communication needs of government agencies have increased significantly as a result of a quantitative increase in public services and public safety responsibilities. New technologies, such as digital modulation, encryption and trunking have also increased the need for spectrum with increased bandwidth. Meeting the need for additional spectrum with increased bandwidth, especially for public safety, is an urgent necessity.⁹

**Interoperability**

Also of vital concern is the need for public safety radio systems to communicate across agency and jurisdictional boundaries. This need for interoperability among public safety and service
agencies has vastly increased. However, it will not become possible until adequate spectrum is identified and set aside.

The need for interoperability was demonstrated dramatically, and tragically, in New York City on September 11, 2001.

“At 9:00 a.m., the Port Authority Police commanding officer ordered an evacuation of civilians in the World Trade Center complex because of the danger posed by highly flammable jet fuel from Flight 11. The order was issued, however, over a radio channel which could be heard only by officers on the Port Authority WTC command channel. There is no evidence that this order was communicated to officers in other Port Authority Police commands or to members of other responding agencies.

“New York Police Department Aviation radioed in immediately that the South Tower had collapsed. At 10:08 a.m., an aviation helicopter pilot advised that he did not believe the North Tower would last much longer. There was no ready way to relay this information to the fire chiefs in the North Tower.”

The Public Safety Communications Act of 2002 made the Public Safety Radio Strategic Planning Committee responsible for continuing the ad hoc effort that had been underway since 1994 to develop and implement an integrated statewide public safety communications system for state agencies that fosters shared use and interoperability with local and federal public safety agencies. It is required to expand that effort by examining the need for communications among various Public Safety disciplines at all levels of government. The committee, which first met in March 2003, has not yet created standards and policies to direct the state in public safety radio procurement or use.

Interoperability also requires agreement among the parties sharing the spectrum and the services. A study conducted by the National Governors Association emphasized the need for improving statewide and regional public safety communications interoperability. The study pointed out that without a statewide plan that incorporates an intergovernmental approach with specific action and support, new investments in equipment and infrastructure hinders interoperability.

A report issued by the state of Virginia’s Department of Technology Planning for implementing an interoperable radio system pointed out that “Joint-use and shared systems alleviate the spectrum shortages to some extent. But, to facilitate joint-use or shared system of spectrum the concerned parties have to agree to pool their respective spectrum resources and obtain approval of their agreement from the FCC.”

At the national level, a countrywide interoperable system, Project 25 (P25) is being considered. It would take 20 to 25 years to deploy it nationwide. Based on present beta tests of P25
Interoperable solutions

Gateway switches
Gateway switches provide limited and transitory interoperable capabilities. Gateway switches connect together microphone and speaker interfaces from several dissimilar radio systems. When one radio group, for instance police, is having a conversation, one of the police radios can be connected “back to back” with a fire department radio so that the police radio voice traffic gets copied to the fire department’s radios. In real field use, several different radio systems can be joined together using these switches. But the gateway switches offer a rather expensive solution, which is both limited in its capacity and is transitory in its application. General Dynamics offers a gateway solution in the $85,000 price range and JPS offers a product around $23,000 for 11 ports, which requires 11 radios at around $3,000 each for a total of $56,000.16

Software radios
Software radios are now available with various technologies offering an attractive set of interoperability solutions. These radios are software capable of emulating nine radios at the same time, in any frequency from 1 MHz to 1,200 MHz. In practice they offer several bands such as 37–52, 136–174, 380–512 and 700–960 MHz bands.17 The reported selling price for these radios complete with amplifiers is about $45,000. With increase in the use of software radios, this price is likely to fall considerably.18

Software radios offer a much better solution than interoperable gateways for a number of reasons.19

- Cost: The cost of a software radio port is much lower than that of a gateway switch;
- Versatility: Software radio provides better data and mobile computing applications;
- Smooth migration: Migration from present to future networks is slow and without a massive “forklift upgrade” requiring decommissioning of most of the old system and immediate installation of a new system; and
- Flexibility in standards: Software radios are standards independent. They can be programmed to meet any new future standard and will allow full compliance with any future standard.

Executive leadership
The central statewide system of radio communication requires a strong, effective, and visionary leadership with commensurate administrative authority and influence. As Senator Bruce McPherson succinctly put it, “We must not fall prey to bureaucratic foot dragging or interagency turf battles when confronted with the need for new radio systems.”20
This is often easier said than done. Glen Craig, a former Sacramento County Sheriff and currently the Executive Director of the California Alliance for Public Safety Communications, points to the political difficulties, “Sometimes the major obstacles, the political turf, are far greater than the technology to overcome the human and institutional limitations, because there are a lot of people very comfortable with what they have. They don’t want to change. They don’t want to learn a new system. They don’t want to adjust.”21

The result has been administrative inaction, as evidenced in the case of the recommendations of the Governor’s Blue Ribbon Fire Commission following the October 2003 wildfires. The Commission recommended enhanced communication interoperability, something that is essential in the effective command and control of personnel and resources during multi-agency, multi-discipline responses to major incidents. As DGS Telecommunications was not a part of the commission, no action on the recommendation has been taken to date.

A statewide entity headed by a high-level functionary with access to high-level decision makers is essential if there is to be a successful statewide, fully interoperable public safety wireless communications system.22 Political support gives the system credibility, ensures funding for the project’s survival and defends the project in the face of opposition. High-level leadership can also provide needed support during the legislative process when requesting funding for the public safety wireless communications systems. A central statewide entity would provide leadership and resources for building up support at the federal, state, and local levels; and ensure necessary investment and coordination to achieve interoperability for the public safety radio system.23

**Governance**

At present the Public Safety Radio Strategic Planning Committee, chaired by OES Telecommunications Division provides statewide radio infrastructure planning. There is no single advisory board to present information to the Governor on matters concerning a statewide public safety telecommunications system. Such a governance body might well include the standardization committees to support funding for public safety agencies that work to achieve interoperability as well as the authority to reject local agency funding that does not include interoperable solutions. It would also be useful for such a governance body to have responsibility for the development of flexible and open architecture and standards.24

**Statewide vision and coordination**

State agencies rely on a complex assortment of diverse and disparate telecommunications technology infrastructures to support voice, video and data for public safety and state communications. Managing of these infrastructures is largely distributed across all agencies, with few implementation standards and little or no coordination of activities among agencies. This has resulted in multiplication of investments in infrastructures, varying degrees of infrastructure performance, obstacles to the interoperability of the communications systems, and uncertainty as to the security of the state’s critical technology infrastructure.
There is a convergence underway of information and telecommunications technologies and systems. Voice, data and video are likely to get converted into an Internet packet with an IP address capable of traveling through any available route, be it optical fiber, wireless or wired path. As a result of this convergence, many private and public sector organizations have begun centralizing and, in some cases, physically consolidating their core technology infrastructures.25

**Recommendation**

The Governor should work with the Legislature to consolidate and centralize all agencies and departments with public safety radio systems under DGS’s Telecommunications Division (DGS-TD), or its successor, with the existing positions and funding in each department for those services assigned to DGS-TD. DGS-TD should:

- Create the Division of Public Safety radio communications that maintain a core group of staff focused on public safety communications business needs.

Exhibit 1 shows a sample organizational structure that could provide the essential support and guidance to accomplish a statewide, robust, state of the art infrastructure to meet the radio communications needs of the state.
• Pursue acquisition of additional spectrum for shared systems to achieve cost and functional efficiencies.
• Examine all possible public safety radio communications alternatives with a view to reliability, efficiency and cost effectiveness, including proposals of different studies, and to prepare a report for the Governor’s review by January 1, 2005.
• Initiate a software radio pilot project with the California Highway Patrol, Caltrans and OES by July 1, 2005 to develop interoperability solutions for emergency operations and determine what part of the existing infrastructure needs to be upgraded to operate software radio.
• Pursue planning and design coordination to build a single statewide network infrastructure to carry voice, data and video communication via Internet Packet for public safety and state services by July 1, 2005.
• Develop a timeline for initiating planning for implementation of a single statewide radio and data communications network system on a single, statewide backbone.

**Fiscal Impact**

Eliminate or reclassify positions not required after consolidation. Through consolidation it is estimated that there could be a 10 percent reduction (41 positions totaling $3.5 million) in the next five years out of the 410 positions associated with agency telecommunications management without compromising the core business activities of the agency.26

The new system will require significant resources to procure. The federal Department of Homeland Security has made public safety technology improvement and radio interoperability a priority in the wake of September 11, 2001, and had committed resources to this end. The estimated total cost to upgrade the statewide telecommunication infrastructure by consolidation and centralization of resources is $3.5 billion over a period of 15 years. Total cost estimate of upgrading the telecommunication infrastructure over a period of 15 years by each agency independently would be $4.3 billion.27 Total savings that will be generated by consolidation and centralization of resources is $800 million over 15 years.

**Endnotes**

1 Department of General Services, Telecommunications Division, “Public Safety Telecom Consolidation Analysis” by Gary Grootveld (Sacramento, California, March 23, 2004).

2 Interview with Sandra Bierer, chief, Office of Network Services, California Department of General Services (March 19, 2004); interview with Gary R. Grootveld, chief, Office of Public Safety Radio Services, Telecommunications Division, Department of General Services (April 30, 2004); interview with Ferdinand G. Milanos, chief, Office of Radio Communications, and John Smith, senior telecommunications engineer, California Department of Transportation (March 23, 2004); interview with Richard Osborne, assistant chief, Telecommunications, and Ben J. Green, assistant chief, Telecommunications, and George Lowery, assistant chief, Telecommunications, and Jeff Kinder, California Office of Emergency Services (April 5, 2004); and interview with Matt Chinakawoa, senior telecommunications engineer, California Department of Water Resources (March 24, 2004).


6. 30 to 59 MHz, 150 to 174 MHz (VHF Low Band)  
450 to 512 MHz (UHF Band)  
764 to 806 MHz (700 MHz Band)  
806 to 869 MHz (800 MHz Band)  


8. Assistant Secretary of Commerce for Communications and Information, “Final Report of the Public Safety Wireless Advisory Committee to the Federal Communications Commission” and “the National Telecommunications and Information Administration” (Washington, D.C., September 11, 1996).

9. Assistant Secretary of Commerce for Communications and Information, “Final Report of The Public Safety Wireless Advisory Committee to the Federal Communications Commission” and “The National Telecommunications and Information Administration.”


23 Assistant Secretary of Commerce for Communications and Information, “Final Report of the Public Safety Wireless Advisory Committee to the Federal Communications Commission” and “the National Telecommunications and Information Administration.”


26 California State Personnel Board, “Ethnic, Sex & Disability Profile of Employees by Department, Occupation Groups and Classifications” (Sacramento, California, February 29, 2004) (computer printout).

Develop a Statewide Network Infrastructure to Increase Capacity and Reduce Telecommunication Costs

Summary
California should develop and implement a Wide Area Network (WAN) infrastructure based on cost-effective optical technologies to be shared by state agencies for data transport. Such a network is necessary for consolidating information technology resources, meeting increased demand and reducing telecommunication costs to the state.

Background
Currently multiple state-operated WANs traverse California to transport information between state offices. In addition to the major networks of the Stephen P. Teale and Health and Human Services data centers, networks have been implemented and are managed by agencies such as the Departments of Motor Vehicles and Transportation. The result is duplication of cost and effort as well as technical issues that become barriers to the exchange of information. Significant savings can be achieved through a shared infrastructure utilizing optical telecommunication technology, which will enhance network security, scalability and flexibility.1

State data networks currently use services provided by the CALNET Telecommunications contract which is managed by the Department of General Services (DGS) and implemented by SBC Communications and MCI. CALNET provides Frame Relay and Asynchronous Transfer Mode (ATM) services to connect state sites to data centers and each other.2

California, like other states, is divided into Local Access and Transport Areas (LATAs) as a result of the Modified Judgment of 1984 in the resolution of the anti-trust case between the United States and AT&T.3 These LATAs define the boundaries within which a Local Exchange Carrier, such as SBC, Verizon or Surewest can provide telecommunication services. In order for traffic to move from a site in one LATA to a site in another, an InterExchange Carrier, like MCI or AT&T must be involved. There is a monthly charge associated with this inter-LATA transport activity in addition to the local circuit charges. The inter-LATA charge is based on an agreed upon utilization rate known as a Committed Information Rate or CIR. For a typical inter-LATA data communications connection such as a T1, the inter-LATA charge can represent as much as 80 percent of the total monthly cost of the connection.4 For example, in the case of the Health and Human Services Data Center (HHSDC), inter-LATA transport can cost as much as $290,000 per month or $3.5 million per year.5
In addition to the inter-LATA costs, the frame relay and ATM technologies do not scale as well as modern optical technologies such as Dense Wave Division Multiplexing (DWDM) in which multiple light waves can share a single strand of fiber. Frame relay and ATM also offer limited support for techniques such as quality of service which are required to support new services such as video teleconferencing.

A WAN redesign study was conducted by HHSDC which determined that significant cost savings as well as enhanced flexibility, security and scalability could be achieved by implementing an optical-based WAN using DWDM. The study concluded that an optical network with distribution/aggregation sites in each of the ten main LATAs in California could pay for itself within nine to thirteen months and achieve annual savings in excess of $2.5 million thereafter.6

A statewide WAN would consist of Optical Carrier (OC)-48 wavelengths connecting each of the LATAs. These wavelengths have a capacity of 2.5 gigabit per second, and could be leased from and maintained by an optical carrier or could be a service provided through the CALNET contract. Distribution/aggregation points in each LATA would connect to sites within the LATA through the same Frame Relay or ATM circuits from SBC via CALNET that provide connectivity today.

The technologies employed in this design facilitate multiple logical networks sharing a common infrastructure. In addition to the agencies and data centers included in the above estimates, the same infrastructure could be used by networks at other data centers operated by the Franchise Tax Board, the California Public Employees Retirement System, the Legislature and the Department of Justice. Participation by these agencies would not shorten the project payback period significantly, but could substantially increase the ongoing return on investment.7

The design specifies and has included costs for equipment to be housed in “Telco” grade facilities. Such facilities include seismic hardening, HVAC, fire suppression, backup power and security monitored 24 hours a day, seven days a week. The proposed equipment is internally redundant in that all components necessary for supplying power, control, logic and interfaces are duplicated. Each node on the network has a working and protection path to provide the same level of performance should a primary path fail. For high concentration LATAs, such as Sacramento, the San Francisco Bay Area and the Los Angeles/Orange/Riverside/San Bernardino areas, at least two distribution/aggregation points are proposed in separate facilities to which the remote sites can be connected to each in a working/protected manner to survive the loss of an entire distribution/aggregation site.

The project can be phased to minimize risk while demonstrating its functionality and validating its savings. An initial phase could include an OC-48 optical ring connecting
Sacramento, the San Francisco Bay Area and Coast north to the Oregon border and the Stockton/Modesto area. A second phase would connect Phase 1 to the Los Angeles/Orange/Riverside/San Bernardino area and the LATAs in between. A final phase would add the San Diego/Imperial and Chico/Redding areas.

Conversion from the current environment to an optical network of this design involves primarily the relocation of the circuit that currently connects the specific remote office to the frame relay or ATM cloud to now connect to the new LATA distribution/aggregation point. This is a function that has been successfully completed by the data centers and SBC thousands of times over the past years. Staff for all the organizations involved have significant experience in this type of conversion.

**Benefits**

There are many benefits to this conversion. They include:

- **Capacity/Performance**—This network design has the capacity and quality of service capability to facilitate further cost-saving applications such as video teleconferencing, to reduce travel costs and improve productivity. The performance increase enables server consolidation by eliminating many of the “hops” associated with current implementations.

  As demand for bandwidth increases, additional wavelengths could be added without significant increases in costs as they would utilize the original equipment, optical fiber and co-location space.

- **Network and Data Center Consolidation**—While the cost savings generated from this project are significant, other benefits provided by a statewide network are even more significant. The OC-48 wavelengths can be easily divided into distinct channels to transport information for distinct networks such as HHSDC, TDC, DMV and Caltrans in a manner that these entities can share a common infrastructure without significant changes to their individual networks.8

  There are technical barriers to consolidating the traffic from these networks and the environments each currently uses. The capacity of an OC-48 optical network and the proposed equipment enable these networks to share a common transport medium (in this case a light wave) and traverse the network like “ships in the night” unaware of the addressing and routing issues that would normally make them incompatible.9

  Consolidating these networks in the current environment could literally take years to work out the addressing and routing issues. The separation of the networks by channels within the wavelength enables all parties to benefit from the cost savings while the technical addressing and routing issues are resolved.
Additional channels could be allocated for a migration process to a combined addressing and routing scheme once one is developed. The same techniques can be applied to data center consolidation in which the distinction between the current data centers can become more virtual. That is, processing and storage would be performed at separate geographic locations while appearing to be conducted at a single site.

- **Operational Recovery**—Such a network facilitates operational recovery between the current data centers by providing high-speed connectivity to replicate storage in a near real-time mode and enable either center to provide “hot site” back up functionality for the other in the case of a disaster. Given this type of network, a backup site could exist in Richmond, Fresno, Bakersfield, San Luis Obispo, Irvine or any number of locations around the state in which a high-speed connection to the optical network could be established.

- **Data Security**—Security of data transported across an optical network is enhanced by attributes of optical fiber and light. The optical vendor is, in essence, leasing a light frequency band to the state. The conversion of the data to light pulses is accomplished through state-owned and managed equipment kept in a physically secured, limited access environment. In order for a hacker to intercept data on such a network, he/she would have to obtain physical access in order to tap into the fiber, know which frequency of light to monitor and convert the light pulses to recognizable information. Any attempt to tap into or splice a light wave path will cause a degradation of the signal which would immediately trigger an alert on the monitoring consoles at both the vendor’s and the state’s network operations centers.  

Wavelength technology is widely used in the telecommunications industry. Public and private entities have moved to optical infrastructures and DWDM to increase network capabilities and reduce costs. The Los Angeles Unified School District and the Bank of America, both large networks are using DWDM to increase capacity and reduce costs. Craig Hinkley, Senior Vice President for Network Architecture & Strategic Direction at the Bank of America stated in a Cisco Systems publication that “A multi-service optical network simplifies our operational model, simplifies capacity performance-management practices, and gives us one single infrastructure in which people need to train and become skilled in.”

**Recommendation**

The state Chief Information Officer should lead the development of a Statewide Network Infrastructure based on optical fiber and Dense Wave Division Multiplexing (DWDM).

A Request for Proposal (RFP) should be initiated to acquire the specific optical wavelength services and co-location facilities to provide a State Network Access Point (SNAP) in each of the ten major LATAs in California.
The project can be funded and implemented on a phased basis. The first phase would include an optical loop connecting Sacramento, San Francisco/Santa Clara and Modesto LATAs. Phase 2 would add a loop connecting Monterey, San Luis Obispo, Los Angeles/Orange/Riverside/San Bernardino, Bakersfield, and Fresno LATAs. The final phase would connect San Diego and Chico LATAs to the network. Each phase would include extensive testing of the primary and failover paths. Upon successful testing, circuits from remote locations within each LATA would be migrated to the SNAP to traverse the new network.

**Fiscal Impact**

Based on telephone interviews with major optical carriers, one-time costs for a statewide OC-48 optical network are estimated to be $307,000 with ongoing monthly costs of $67,000 for the transport and $46,000 for equipment, co-location and Telco connections in each LATA. A total monthly cost of $113,000 compares favorably to current estimated monthly inter-LATA costs of $450,000 for the Health and Human Services Agency Data Center (HHSDC), Stephen P. Teale Data Center (Teale), Department of Motor Vehicles (DMV) and Department of Transportation (Caltrans) networks. As these were estimates from an informal inquiry, actual costs from a formal competitive bid may differ but should be similar. Assuming a phased implementation period of eleven months, the return on investment calculations project recovering the one-time costs within six to seven months.

Savings are based on circuit information provided by the DMV. Savings of $40,000 per month could be realized by avoiding inter-LATA charges incurred by its current WAN. Participation by Caltrans adds an estimated $180,000 per month from the ATM inter-LATA charges it incurs. Teale’s monthly circuit costs, which could be eliminated by using a common transport, are estimated at $30,000 per month. HHSDC’s monthly inter-LATA cost is estimated at $200,000 per month.

The joint participation by these organizations in a common statewide network could result in savings of $337,000 monthly or $4,044,000 annually based on current utilization rates. Virtually all departments are experiencing continued growth in bandwidth demand. The HHSDC has seen an average increase in bandwidth demand from its customers in excess of 25 percent per year for the past four years. Gartner Group predicts increases in bandwidth demand of 14 to 16 fold between 2002 and 2006. Factoring in a conservative 25 percent annual utilization growth, the total potential savings over the next five years could be as much as $26.3 million.

No increase in staffing is anticipated as the configuration, monitoring and management functions for the WAN transport portion can be accomplished with existing staff. The majority of the network monitoring and management functionality, that is the portion that comprises the day-to-day activities of adding, deleting and relocating circuits, would remain the same as in the current environment. Management of the physical fiber and co-location facilities would be the responsibility of the optical carrier and are reflected in the estimated costs.
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(dollars in thousands)

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Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003-04 expenditures, revenues and PYs.

Other Funds  
(dollars in thousands)

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Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003-04 expenditures, revenues and PYs.

Endnotes

1 Interview with Gilbert Tafoya, deputy chief information officer, Caltrans, Sacramento, California (March 26, 2004); interview with Craig Grivette, director, Stephen P. Teale Data Center, Sacramento, California (May 3, 2004); interview with Bob Austin, interim director, Health and Human Services Agency Data Center, Sacramento, California (April 30, 2004); and interview with Ray Ford, network manager, Department of Motor Vehicles, Sacramento, California (March 24, 2004).


4 Rider B, Products and Descriptions, “CALNET Integrated Services.”

5 Calculation based on application of CALNET inter-LATA charges effective April 1, 2004 to Committed Information Rates recorded in the HWTEL billing system for March 2003 at Health and Human Services Data Center.

6 Health and Human Services Data Center, “HHSDC WAN Redesign Study—Draft,” Sacramento, California, November 20, 2003; and memorandum from John Moise, director, California Health and Human Services Data Center, to William J. Jefferds, Ed.D., director, California Department of General Services (December 30, 2003).
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Cisco, “ONS 15454 Multiservice Transport Platform Data Sheet.”

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Cisco, “Cisco Helps Bank of America Set ‘Higher Standards’ with a Multiservice Optical Network,”

Interview with Ray Ford. Calculated based on CALNET published inter-LATA Frame Relay rates effective April 1, 2004 and circuit information provided by Ray Ford, network manager at the State of California, Department of Motor Vehicles (March 24, 2004).

Interview with Gilbert Tafoya. Calculated based on CALNET published inter-LATA ATM rates effective April 1, 2004 and circuit information provided by Gilbert Tafoya, deputy chief information officer, State of California, Department of Transportation (March 26, 2004).

Costs calculated based on CALNET published inter-LATA ATM rates effective April 1, 2004 and circuit information provided by the Teale Data Center CSGnet map at www.teale.ca.gov.


Calculations based on a 25 percent annual growth in usage and a 5 percent annual increase in operating costs.
Voice Over Internet Protocol
Statewide Network Infrastructure

Summary
California State agencies spend more than $120 million annually conducting business activities via the telephone. Replacing the various systems now used with “voice over internet protocol” (VoIP) technology under a statewide network infrastructure would be cost efficient, simplify use and provide a uniform telecommunication service to transact day-to-day state business.

Issue Background
State departments and agencies now independently determine what telephone and technology services they use. This results in the use of a myriad of networks using a variety of technologies such as digital and analog lines, integrated services digital networks (ISDN), T-1 lines, direct inward dialing lines, business lines and trunk lines from different manufacturers.

State departments pay a wide range of rates for their services and maintenance, many paying for local lines and long distance services with rates payable in measured business flat and long distance rates. Many state departments also incur costs by using a call reception console and some by employing receptionists to answer calls.

State departments now connect from their central office local area network (LAN) to the satellite office LANs through a wide area network (WAN). The LAN and WAN connectivity is provided via network switches that have the ability to carry voice and data, but the state is using the switches to transmit and receive data only. Most of the data network switches currently in use could also be used in a voice over internet protocol framework.

While the Department of General Services Telecommunications Division CALNET contract provides for state telecommunication services, many state departments receive better rates from non-CALNET providers. The CALNET contract also restricts departments from using new and emerging technologies. A limited survey of state departments found that the monthly cost for each telephone line averages about $80.

<table>
<thead>
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<th>Agency Name</th>
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<th>Monthly Cost</th>
<th>Monthly Cost per Line</th>
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<td>339,031.33</td>
<td>79.96</td>
<td>FY 02/03 numbers</td>
</tr>
</tbody>
</table>
The convergence of voice, video and data communications on an IP network lowers the total cost of ownership and operation by enabling cost savings for long distance calls and by integrating the infrastructure and management operations. Replacing many different telephone systems with a single state-of-the-art system will improve efficiency and simplify system management and maintenance.

In addition, significant and more immediate potential savings in telecommunications costs could be realized if an audit of the state’s telecommunications bills is undertaken. The following audit processes and savings are identified:

- One-time audit savings—15 to 20 percent is recovered from billing errors; and
- Optimization savings—15 to 20 percent of additional savings generated by maximizing the use of discount rate plans, network optimization and more efficient use of technologies

**Recommendations**

A. **The Governor should direct the California Inspector General to conduct an independent audit of all telecommunication services and respective billings received by the state.**

An appropriate measure of savings resulting from this one-time audit should be redirected to acquire and implement a Telecommunications Management System to control telecommunications costs and optimize the state’s network.

B. **The Department of General Services or its successor should initiate a pilot project to further test and confirm the advantages of VoIP within a statewide network infrastructure by January 1, 2005.** It is anticipated that this project would take 90–180 days.

Based on results of the pilot, the Department of General Services or its successor should coordinate the replacement of all appropriate departmental telephone systems with VoIP, using existing infrastructure components to the maximum extent possible beginning July 1, 2005.

**Fiscal Impact**

A California Environmental Protection Agency pilot project realized a savings of 45 percent by using voice over internet protocol rather than traditional telephones. Their cost was $41 per line; but with a larger statewide contract, this cost can be expected to be reduced to about $20 per line. The monthly saving for 45 user units was $1,754. These savings came with many benefits including:

- Integrated audio conferencing;
- Built-in caller ID;
- Flexibility and scalability;
Better utilization of network infrastructure to leverage cost effectiveness;
Savings in phone cost and increase in bandwidth;
Equal or better sound quality than on traditional phone networks; and
Network management tools that provide real-time monitoring of networks and troubleshoot problems with voice quality.

The cost of performing a pilot project is projected to be about $2,050 per pilot project location. Existing staff can be used to perform the pilot project workload.

Future regulation by the Federal Communications Commission and the state may add costs for a voice over internet protocol system. This cost cannot be estimated at this time. State telephone numbers may need to be changed depending upon the current Public Utilities Commission guidelines. These costs would be minimal.

Cost savings per user is projected between $10 dollars to $40 dollars per month per line converted. The state has about 315,000 state employees, if one-half of the phone lines are converted to voice over protocol system, a potential savings between $1.6 million and $6.3 million may be realized per month. The one time cost to install the voice over internet protocol is projected to be $6.5 million in the year of conversion. Existing staff resources can be used for the conversion to VoIP.

**Endnotes**

1. Interview with Sandra Bierer, chief, Network Services, Telecommunications Division, Department of General Services, West Sacramento, California (March 19, 2004).

2. Integrated Services Digital Network is an international communications standard for sending voice, video, and data over digital telephone lines or normal telephone wires. ISDN supports data transfer rates of 64 Kbps (Kilo bits per second). Two types of ISDN: Basic Rate Interface consisting of two 64-Kbps B-channel and one D-channel for transmitting control information and Primary Rate Interface consisting of 23 B-channels and one D-channel. T-1 lines sometimes referred to as DS1 lines are a popular leased line option for businesses to connect to the Internet and for Internet Service Providers (ISPs) connecting to the Internet backbone which consists of faster T-3 connections. T-1 dedicated telephone connection supports data rates of 1.544 Mbits per second and consists of 24 individual channels, each of which supports 64 Kbits per second. Each 64 Kbit/second channel can be configured to carry voice or data traffic. Direct Inward Dialing (DID) trunk lines are incoming only and are powered by the customer which is the reverse of normal telephone lines where the telephone company supplies the power. A DID customer must supply -48 volts to provide “talk battery” and requires polarity a certain way with respect to Tip and Ring wires. Trunk lines are a communication channel between two points. It usually refers to large-bandwidth telephone channels between switching centers that handle many simultaneous voice and data signals. A circuit from a user’s terminal or PC to a network is more accurately called a line, that is, T-1 line or ISDN line, rather than a trunk, although the terms line, trunk and circuit are often used interchangeably.
IntraLATA is a connection between two telephone companies within the same region. InterLATA, which is the same as long-distance service, is a connection between two local exchange carriers in different regions.

E-mail from Marsha Fulton, Employment Development Department to Hway Sheen Sheu, California Performance Review (April 5, 2004).

E-mail from Joan Keegan, Franchise Tax Board to Denise Blair, California Performance Review (April 5, 2004).

E-mail from Joyce Griffin, California Highway Patrol to Hway Sheen Sheu (April 15, 2004).


Interview with Thomas Kins, Daniel Ianni and John Devolites, TEOCO, Sacramento, California (June 10, 2004); and e-mail from Thomas Kins, vice president and general manager, Telecom Solutions, TEOCO, to Joe Sogge, California Performance Review (June 11, 2004).

Interview with Theresa Parsley, California Environmental Protection Agency, Sacramento, California (March 26, 2004).

Implement Internet Protocol Video Technology for Video Conferencing and Training

Summary
Internet protocol video technology can be used for providing standardized video conferencing, distance learning and employee training capabilities in a more accessible and affordable manner.

Background
The convergence of conferencing, distance learning and employee training activities into a consolidated statewide infrastructure makes the Internet Protocol (IP) services of the local area network, wide area network and statewide infrastructure a powerful cost effective tool for state government.

The state now uses a combination of “Internet protocol (IP) video,” integrated services digital network, (ISDN) and point-to-point systems for video conference services statewide. Point-to-point systems are limited in that the equipment is not compatible with other systems. Its operation is effective but costly. ISDN systems are more flexible but remain costly to operate because of line costs and the number of lines required for operating at an acceptable speed. IP video is a more open system that increases flexibility. It has low hardware costs and seamless connectivity with other IP video and ISDN sites. The lowest cost solution will not be effective if carried out as an isolated solution rather than a statewide interoperable solution.

IP video services
IP video services can be provided statewide from a centralized management IP video services location, such as a statewide data center. By centralizing IP video service, the state will develop a flexible videoconferencing infrastructure of services that allows for participation in a suite of videoconferencing activities. The cost of statewide implementation of IP technology is made more affordable by capitalizing on the statewide network infrastructure offered through a centralized management IP video services location and by leveraging the buying power of the state as a whole rather than by agency or department.

Video Conferencing
A statewide IP video network provides an array of options for videoconferencing to off-site meetings and for other services. Video conferencing is real-time and can include interactive features. The Department of Corrections Health Care Services Division has been using video conferencing since 1998 to save on travel costs. On the 413 conference calls made to date, they
have realized $704,000 in cost avoidance.\textsuperscript{1} The current cost for a standard medical visit for an inmate is $850, with the majority of the cost in security and transportation. Figures received from the Department of Corrections show a cost avoidance of $4.5 million for Fiscal Year 2002–2003.\textsuperscript{2} A study done in 1999 by the federal government prison system determined that savings are realized by implementing video conference technology for medical uses. Savings are actual, not a shift from one part of the government to another.\textsuperscript{3}

**Distance Learning**

Distance learning is more user-friendly and provides the ability to schedule events in advance, track activity and generate reports of activities. In addition, each initiating location has the ability to seamlessly interconnect to several locations simultaneously and easily connect to resources that exist outside the group of participating institutions. Distance learning is successfully being done at colleges around the country including 108 in the California Community College system.\textsuperscript{4} This technology is applicable to state training facilities and correctional institutions as well. By providing classroom instruction over the Internet, the state can reduce its cost for instructors.

Applying video over IP for employee training provides a financial benefit to the state by reducing the number of instructors necessary for conducting training. A secondary service benefit results from providing training on a statewide basis, having the same instructor teach a particular course, thus ensuring the same quality and content of instruction to all employees regardless of their work location.

**Recommendations**

A. *The Department of General Services Telecommunications Division, or its successor, should implement Internet Protocol video conference capability.*

IP video session management should be administered from a centralized location, such as a state data center. A survey of all state government occupied facilities needs to be done to determine current video conferencing capabilities. The state should replace all point-to-point systems and systems using ISDN lines with IP video technology.

B. *The Department of General Services Telecommunications Division, or its successor, should provide statewide employee training using centralized interactive IP video technologies. The state should broadcast instructor-guided courses from a centralized location to provide interactive classroom instruction to its employees statewide.*
IP video capabilities can provide consistent (one instructor) instruction for training of employees at locations across the state simultaneously, thus reducing conflicting interpretations of materials.

C. The Department of Corrections, or its successor, should make telemedicine available at correctional facilities, to provide timely care, less disruption and minimize the cost incurred from security and transportation of inmates to and from medical facilities.

**Fiscal Impacts**

The use of IP video will reduce costs in travel by providing a viable alternative to staff travel to attend training. IP video allows for more staff to participate in meetings, something that is often necessary but not possible due to travel restrictions. With a statewide data network infrastructure and consolidated information technology functions, data traffic related to IP video can be managed from a central site.

Staff will be needed to coordinate video activity functions at a centralized location. One additional staff person should be redirected from existing resources to operate the increase in video activity. This would result in no additional costs. IP video technology is in place at 26 of the 32 correctional facilities. Costs to purchase six additional video projections systems is estimated at $447,870.5 The total costs should include training costs to Department of Corrections training coordinators to implement the new protocol. These costs cannot be estimated at this time. Therefore, the total costs and savings for implementing the Internet protocol video technology for video conferencing, distance learning and employee training capabilities cannot be estimated.

Telemedicine, a program in place at 26 of the 32 correctional facilities, can be effective at all state facilities with a capable network infrastructure. In FY 2002–2003 the Department of Corrections realized $4.5 million in cost avoidance over the traditional method of transporting inmates to medical facilities for services.6 Additional equipment may have to be purchased at a cost of $447,870.7 The savings cannot be estimated at this time because it is dependant on the medical services that may be required sometime in the future. However, based on the average savings in FY 2002–2003 in the 26 facilities ($4.5 million), it may be possible to save over $1 million.8

**Endnotes**

1 Interview with Christine Martin, chief, Office of Telemedicine, Department of Corrections, Sacramento, California (April 27, 2004).

2 Interview with Christine Martin.


WireOne has a Tanberg system available for purchase at a cost of $74,645 each. Estimated costs is $74,645 x 6 = $447,870.

Interview with Christine Martin.

WireOne has a Tanberg system available for purchase at a cost of $74,645 each. Estimated costs is $74,645 x 6 = $447,870.

Assumed savings per facilities is $173,077 ($4.5 million divided by 26 facilities = $173,077 average savings per facility). This $173,077 x 6 facilities to be added = $1 million (rounded) potential additional savings.
Wireless Metropolitan Area Networks Provide Improved Broadband Access

**Summary**
The state should implement “wireless metropolitan area network” technology, also known as 802.16a or WiMAX, to provide wireless broadband speed communications to stationary and mobile computer users, improve the quality of communication services and reduce telecommunication costs.

**Background**
T-1 lines are a popular leased-line option for businesses connecting to the Internet and for Internet service providers (ISPs) connecting to the Internet backbone. The state leases T-1 lines, typically at the rate of $400 per month per line, for the local loop or the “last mile” into most state department buildings. The last mile typically is a data line from a local telephone service Central Office (CO), a state datacenter facility, a state operated hub and/or another state office building. Most state departments use one or more T-1 lines to connect to a state-operated datacenter.

New developments in wireless technologies create an opportunity to implement Metropolitan Area Network (MAN) technology as a cheaper last mile solution. The implementation of Institute of Electrical and Electronics Engineers (IEEE) Standard 802.16a wireless MAN technology embedded chipsets in hardware products (laptops, desktops, PDA, cell phones) and the commoditization of wireless networking gear are making this technology less expensive and easier to deploy than wired networks.

The 802.16a wireless MAN technology provides an alternative to cable, DSL and T-1/E1 circuits and can be used as complimentary technology to connect 802.11’Wi-Fi’ hot spots to the Internet. WiMAX is an industry trade organization formed by leading communications component and equipment companies to promote and certify compatibility and interoperability of broadband wireless access equipment that conforms to the IEEE 802.16 and ETSI HIPERMAN standards.

The 802.16a MAN technology provides up to 50 kilometers of service area range, allows users to get broadband connectivity without needing direct line of sight with the base station, and provides total data rates of up to 280 Mbps per base station. This is enough bandwidth to simultaneously support hundreds of businesses with T-1/E1-type connectivity and thousands of homes with DSL-type connectivity with a single base station.
The existence of unlicensed spectrum gives innovative companies the space to show off new services, many of which will be cheaper and better than the services that operators allow on their licensed frequencies. The IEEE 802.16 Air Interface Standard is a state-of-the-art specification for fixed broadband wireless access systems employing a point-to-multipoint (PMP) architecture. Task Group 1 of IEEE 802.16 developed a point-to-multipoint broadband wireless access standard for systems in the frequency range 10–66 GHz. IEEE standard 802.16 will lead to standards-based wireless MANs that will reduce telecommunications costs and create a super-fast broadband infrastructure that is not hostage to a single commercial party, but is open to a variety of providers.

WiMAX technology provides secure point-to-multipoint broadband connectivity that eliminates hard-wired network connections and operates on the unlicensed radio spectrum. This will make the deployment of wireless MANs an attractive last mile alternative for metropolitan areas. WiMAX will deliver savings, improvements, and new abilities on multiple technology fronts, including lowered costs in building wiring plant, increases in available bandwidth to the stationary device and provision of broadband-level telecommunication services to mobile devices including public safety vehicles and ancillary incident responders.

The State of Pennsylvania estimates that it will save between $100 and $145 million over the first five years of their wireless MAN technology project by switching over 65,000 state telephone lines and thousands of T-1 and other high capacity telecom lines.

Michael Best of Massachusetts Institute of Technology, speaking on the topic of providing broadband telecommunication to developing nations utilizing 802.16 technology says “Here is the punch line: Initial trials have demonstrated that networks for voice and high-bandwidth data can be deployed over hundreds of kilometers, at costs currently under United States Dollars (USD) 50,000. Put another way, at per-subscriber costs approaching USD 300 (and continuing to drop), communities in relatively rural and dispersed areas can receive voice and data connectivity.”

Another specific example of the potential cost savings from this approach is included in a Select Committee on Technology in Government report entitled, “Network NYC—Building the Broadband City.” The report states that in New York City many neighborhoods have several municipal buildings clustered within a ten to twenty block radius (importantly, the municipal buildings often are also the tallest buildings in a given area). Typically, these firehouses, police precincts, high schools, elementary schools, parks department facilities, library branches, and job centers are all connected separately via the telephone companies network, each having multiple T-1 lines for example, that incur monthly charges of anywhere between $400 and $1,200 each. With secure, point-to-multipoint wireless last mile or last hundred feet links, the tallest municipal building in a given area can distribute bandwidth wirelessly to all the various municipal sites from the one building’s fiber backbone. This building then becomes a Point of Presence (POP) located on a fiber MAN. Significantly, with such an arrangement, data...
connectivity is secured without recurring monthly costs. Indeed, according to one industry estimate, a nine building wireless POP arrangement would only cost approximately $45,000 in one-time capital expenditures and could be installed in a matter of days or even hours instead of the months that a fiber pull or a telephone company installation could take. The costs of such a build-out would be fully recouped within the first few months of operation. With such a network, even greater cost savings would be possible if the city delivered telephony and data over the wireless links, since typically underutilized voice T-1 lines could also be eliminated.8

The advantages of using wireless MAN technology in the workplace include improved mobility, flexibility, productivity and reduced cost. Some examples of government arenas where wireless applications can be used include: homeland security, public safety and criminal justice, education, health care and transportation.9

**Recommendation**

The Department of General Services Telecommunications Division, or its successor, should plan for and deploy a pilot project to demonstrate a Wireless Metropolitan Area Network built upon 802.16 technology (WiMAX technology) and investigate the feasibility of deploying WiMAX technology as a replacement for state leased T-1 lines and as expansion to mobile computing, to improve and/or provide telecommunications capacity in remote locations.

**Fiscal Impact**

Case studies with historical information are not readily available upon which to base implementation cost estimates. The following estimates of potential savings are based on the statements of industry experts cited above. As this newly emerged technology is deployed, case studies will reveal typical implementation costs and will more accurately represent expected savings potential.

Replacement of T-1 lines (CalNet contract rate of $400/month, not including datacenter add-on costs for premise equipment and support) clustered within a 30-mile range of a single 802.16 base-station would be a potential source of savings. Per a short survey of data received from the Health and Human Services Agency Data Center (HHSDC) regarding T-1 lines that are administered for HHSDC customers, three representative sites were selected as potential locations for a single 802.16 WiMAN base-station. These three sites include the following numbers of T-1 lines supported and T-1 line costs (excluding HHSDC charges):10

- L.A. area (30 miles from downtown) 92 T-1 lines, costing $36,800 per month;
- Riverside area (30 miles from Corona) 45 T-1 lines, costing $18,000 per month; and
- Orange area (30 miles from Disneyland) 29 T-1 lines, costing $11,600 per month.
The total projected annual savings that may be created by the elimination of these three clusters of HHSDC-supported T-1 lines is $796,800 per year. This is based on an effective implementation date of July 1, 2005.

Estimated one-time implementation costs are $135,000. Estimated monthly support costs are $136,800 per year. This is based on an effective implementation date of July 1, 2005.

If this were implemented as a pilot project, no additional staff will be required. Current staff will no longer perform the wired telecommunication lines, and would be redirected to support the WiMAN infrastructure.

Gross savings of $796,800 will be generated each year beginning July 1, 2005. One-time costs of $135,000 will be saved in FY 2005–2006 and annual on-going costs of $136,800 will be saved beginning in FY 2005–2006 and beyond.

**General Fund**  
(dollars in thousands)

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<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
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Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

**Other Funds**  
(dollars in thousands)

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<th>Net Savings (Costs)</th>
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Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.
Endnotes


4 The WiMAX Forum, “What is WiMAX?”


8 The Council of the City of New York, “Network NYC—Building the Broadband City, Staff Report to the Select Committee on Technology in Government.”


10 Interview with Robert C. Voelkert, Health and Human Services Agency Data Center (HHSDC), Sacramento, California (May 21, 2004).
Wireless Fidelity Networks

Summary
Wireless connection is not available to most state workers. Providing a Wireless Fidelity (Wi-Fi) Network will increase productivity and efficiency of the state’s diverse workforce.

Background
State workers connect their personal computers (PC) or laptops to the Internet by a wired network. When an additional PC needs to be connected, there is a need to install or move Category (Cat) 6 or 5e cabling to create access points. With a traditional wired infrastructure, a new connection would need, at the very least, cabling through walls and ceilings between the user and server or hub/switch every time a new user is added. With wireless local area networks (WLANS), all that needs to be done to add a new computer to the network is to place a wireless card into the PC and configure access to the wireless access point.

Wi-Fi is a wireless technology like a cell phone and provides fast and easy connection from anywhere within the range of a base station. With Wi-Fi, an entire office can be moved, or new staff can be added without losing investment in networking installs or moving cables or installing complicated hubs and switches.¹

Wi-Fi technology is powerful and the networks use radio technologies called Institute of Electrical and Electronics Engineers (IEEE) 802.11b or 802.11a to provide secure, reliable, fast wireless connectivity. Wi-Fi networks operate in the unlicensed 2.4 and 5 GHz radio bands, with an 11 Mbps (802.11b) or 54 Mbps (802.11a) data rate or with products that contain both bands. A Wi-Fi network can be used to connect computers to each other, to the Internet and to wired networks which use the Ethernet (IEEE 802.3).

Wi-Fi technology also enables “voice over Internet protocol” phones to be used in offices without the need of phone cabling. This would be particularly cost effective in new locations where phone cabling is not installed.

Wi-Fi technology use in the public sector
Many corporations provide wireless networks to their offsite and telecommuting workers to use at home or in remote offices and large companies often use Wi-Fi to connect buildings. The public sector is beginning to incorporate Wi-Fi technology also.²

- New York Police Department uses wireless technology for its next generation agency-wide crime analysis system, allowing all city agencies to connect and analyze, in real-time, crime patterns by location and frequency for better crime prevention.³
• Federal Emergency Management Agency (FEMA) relies on wireless technology for disaster recovery efforts and to determine where to place emergency personnel.4
• The City Council of Jacksonville, Florida, has developed a joint venture with several service providers to set up a wireless, 802.11b Internet connection for residents and visitors at the city’s riverfront area, at no cost to the city.5
• Oregon has plans for using Wi-Fi technology to install full motion video cameras along the highway corridor.6
• The new wireless network in Texas allows multiple users to enter a virtual office via one entry point, and increases computing flexibility and information sharing by teams.7

According to the META Research Group, enterprises will accelerate wireless spending during the next two to three years. Fifty percent of enterprises will have wireless e-mail in place which will spark a run on wireless application projects. Jack Gold, wireless industry analyst at the META Group, advises enterprises to implement these projects to maximize return on investment.

Wireless technology eliminates the patch panel and switch, and instead uses an access point to go straight to the router. Wireless architecture has evolved to fit better with enterprise network management. The WLAN switch takes the burden of security off small, over-utilized CPUs in access points and places it squarely on larger, dedicated CPUs within centralized, rack-based devices. Using technologies such as IEEE 802.1x, WPA (Wi-Fi Protected Access), RADIUS servers, and Kerberos,9 WLAN switches keep hackers off of networks, segment wireless users effectively within the network, while increasing reliability and mobility.10

According to a study conducted in the United Kingdom by NOP World—Technology, wireless networking has a measurable impact on return on investment (ROI). Organizations save an average of $164,000 annually on cabling costs and labor; more than 3.5 times the amount IT staff had anticipated. These savings did not include the financial benefits of increased productivity, which can increase an organization’s return on their wireless LAN investment by thousands or millions of dollars more. Per employee, the annual estimated ROI was $7,550 through a combination of cost savings and productivity gains. Considered on an overall organization level, the productivity improvements were worth as much as $6.3 million annually to the average large organizations participating in this study.11

In summary, the advantages of using wireless in the workplace include mobility, flexibility, reduced costs, and increased productivity.12

**Recommendation**

The Department of General Services, or its successor, should develop a plan for the deployment of Wi-Fi Networks built upon IEEE 802.11 technology for new state offices and facilities.
Fiscal Impact
The cost for wireless would include a peripheral component interconnect (PCI) adaptor and access point of about $150 per user. The cost to continue to use the current cabling process will cost about $450. Because the savings and costs are directly related to the number of workstations moved, it is not possible to determine the future savings from implementing the wireless process. However, for every workstation moved to a wireless connection, a net savings of $300 should be achieved.

Endnotes
4 IACA Conference, “Bridging the Gap to Technology, Government White Paper.”
5 IACA Conference, “Bridging the Gap to Technology, Government White Paper.”
6 IACA Conference, “Bridging the Gap to Technology, Government White Paper.”
7 IACA Conference, “Bridging the Gap to Technology, Government White Paper.”
8 RADIUS—short for Remote Authentication Dial-In User Service, an authentication and accounting system by many Internet Service Providers (ISPs). When you dial in to the ISP you must enter your username and password. This information is passed to a RADIUS server, which checks that the information is correct, and then authorizes access to the ISP system.
9 Kerberos—is an authentication system developed at the Massachusetts Institute of Technology. Kerberos is designed to enable two parties to exchange private information across an open network. It works by assigning a unique key, called a ticket, to each user that logs on to the network. The ticket is then embedded in messages to identify the sender of the message.
911 Emergency Call Center System Improvements

Summary
The United States 911 system handles 500,000 calls daily or about 183 million annually. Emergency 911 answering centers, called Public Service Access Points (PSAP), are not able to transfer data between different PSAP due to inadequate hardware and a lack of standard information format. The State of California should improve the technology used in the state network of 911 PSAP to increase its efficiency and effectiveness in normal situations and to ensure capacity in the event of a major disaster.

Background
California Highway Patrol (CHP) call centers answered over 8 million wireless 911 calls in 2002. CHP 911 operators are regularly overloaded during peak commute hours and callers often get a busy signal or are put on hold for up to ten minutes. Current technology used by CHP still cannot transfer calls from a PSAP that is over its volume capacity to another that has operators available. Of the millions of California wireless 911 calls received, it is estimated that between 1.8 million and 3.6 million of these are “phantom calls.” (Phantom means non-emergency, accidental redials, speed dials, etc.) While state law provides for fines for individuals misusing 911 for non-emergency calls, it has never been implemented.

In a vehicle pursuit, when a car moves between dispatch locations, the call data is transmitted by voice and the data file remains at the originating PSAP. The CHP is working on a new system that will resolve some compatibility issues within their own PSAP system, but it still will not be integrated with other federal, state or local emergency responders.

With the current CHP system, a single event can immediately overload the system and tie it up for long periods of time. A recent tanker truck fire on a Sacramento freeway resulted in over 1,000 cell phone calls to the Sacramento 911 call center and tied-up all five operators for over an hour. When three cities tried to assume responsibility for answering wireless 911 calls in their areas, all three returned the responsibility to CHP because they were unable to handle the volume of calls. As cell phone and Voice over Internet Protocol (VoIP) use increases, the number of calls to CHP dispatch centers can also be expected to increase.

In the current system, the transfer of information between PSAP, a mobile command post, officers on the street, and emergency headquarters requires a telephone call and a conversation, a process which is error prone. The 911 phase II system is now being implemented as required by the Federal Communications Commission under which the wireless phone providers are required to provide the location of the wireless call, but only a
few PSAP in the state have this technology now and it still will not create an effective communication system between various PSAP, commanders in the field and officers at the scene of an incident.¹⁰

The Department of General Services’ California 911 Emergency Communications Office is the central point of purchase and policy for all 911 communications systems in the state. However, this centralized purchasing of the systems has not resulted in the desired effect of creating an interconnected network of 911 emergency answering systems and Public Service Access Points.

**Examples of system failures**

During the emergency response to the September 11, 2001 attack on the World Trade Center, emergency response commanders on the scene were unable to communicate to PSAP that people should evacuate the building. As a result, PSAP operators followed New York City’s standard operating procedure for hi-rise fires and advised callers to stay in impacted buildings.¹¹ In several ways, the 911 system was inadequate for handling a major disaster. In large part, PSAP operators and dispatchers were the only official source of communication for individuals on the damaged floors. Once evacuation decisions had been made, accurate guidance should have been made available to these operators and dispatchers.¹² This situation exposed many of the serious deficiencies in current PSAP systems.

The 2003 fires in Southern California engaged the State Office of Emergency Services, federal responders, responders from 18 cities and numerous firefighting PSAP. Because there had never been an agreement on the use of compatible systems, none were able to transfer data on fire zone situations to all the others to ensure coordination of efforts. Centers were overloaded with calls quickly and stayed that way for five days. The inability of the systems to manage the call traffic and transfer calls and logs to other call centers out of the area and other government agencies resulted in long delays in response time and residents unable to get information or medical attention.

**Emergency deployment of personnel and equipment**

The majority of emergency response vehicles in the state are not equipped with the GPS systems that are needed to ensure that emergency command centers are aware of the location of vehicles and officers that may be needed for effective deployment during a disaster. New GPS systems are low cost, effective and easy to install in existing systems and would make the PSAP and command centers more capable of effectively managing resources.

**Recommendations**

A. The Governor should work with the Legislature to require payment of a fine or fee charged to individuals who place non-emergency 911 calls. Call centers should create a transfer capacity that automatically connects the caller to a recorded message that advises that the call was determined to be a non-emergency call and that a fine/fee

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will be charged to their telephone bill. The call center will maintain a call log for use if the customer wishes to appeal the charge.

B. The Governor should work with the Legislature to establish two California 311 wireless non-emergency call centers.

C. The Department of General Services’ California 911 Emergency Communications Office, or its successor agency, should link all state Public Service Access Points (PSAP) as soon as practicable to a statewide network. This will permit data to be transferred between various PSAP and federal, state and local responders, as needed.

D. The Department of General Services’ California 911 Emergency Communications Office, or its successor, should work with the Office of Emergency Services, or its successor, to standardized databases so all California call centers can share data and information with one another.

E. The Department of General Services’ California 911 Emergency Communications Office, or its successor, should develop an emergency call roll-over system that will permit an overloaded center to transfer excess calls to other centers.

F. The Department of General Services’ California 911 Emergency Communications Office, or its successor agency, should explore the use of new technologies, under development by California Highway Patrol, that screen incoming 911 calls to determine if they are valid emergencies or not.

G. The Department of General Services’ California 911 Emergency Communications Office, or its successor agency, should explore statewide implementation of the Phase II Wireless Cell Phone Improvement that requires cell phone providers to transfer the location of the cell phone along with each call. The Department of General Services’ California 911 Emergency Communications Office should explore expanding this reporting mechanism to require the service provider to also provide the subscriber’s name, address and cell phone number at the time of each emergency call.

H. The Department of General Services’ California 911 Emergency Communications Office, or its successor agency, should develop data logging standards for 911 calls so all emergency response units can use and share this data and information.
**Fiscal Impacts**

The costs to improve the current 911 process cannot be estimated at this time because the equipment needs have not been identified. Over the past five years, the General Fund borrowed about $100 million from the 911 Special Fund. These loans have not been repaid.¹³ These funds along with other funding may need to be used to fund the improved 911 equipment.

Federal Homeland Security Grants and National Emergency Number Association grants may provide some additional funding. These additional funds cannot be projected at this time.

CHP answers over 8 million wireless 911 calls annually. Based on information provided by CHP, between 1.8 million 3.6 million are non-emergency 911 calls. Fees or fines that may be imposed on non-emergency calls will result in additional revenues. These revenues cannot be estimated until the fee and fine dollar amount are established by the Legislature.

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**Endnotes**


³ U.S. Department of Justice, Office of Community Oriented Policing Services, “Misuse and Abuse of 911.”


⁵ Interview with Kevin Green, Chief Information officer, California Highway Patrol, Sacramento (April 26, 2004).

⁶ Interview with Roy Young, Telecommunications officer, California Highway Patrol, West Sacramento, California (April 1, 2004).

⁷ Interview with Kevin Green.

⁸ U.S. Department of Justice, Office of Community Oriented Policing Services, “Misuse and Abuse of 911.”

⁹ Interview with Kevin Green.


¹³ Interview with Daphnie Rowe, Department of General Services Telecommunications, Emergency Communications Centers, Sacramento, California (May 25, 2004).
Wireless 311 Non-Emergency Call Centers

Summary
The California Highway Patrol answers most of the eight million calls to 911 made by wireless phones every year. During emergencies, it is unable to answer all the calls it receives. To take the burden off the wireless 911 system, and to improve service to both residents and tourists, California should establish two call centers so that wireless callers can dial “311” for their non-emergency calls.

Background
There are about half a million calls to 911 in the United States every day, or about 183 million every year. In California, the 911 calls that are made from cellular phones are answered by the California Highway Patrol (CHP). When call volume becomes heavy, up to 37 percent of the cellular phone calls made to the CHP go unanswered.

It is critical to answer all phone calls that come to the CHP’s 911 call center, even if the emergency is over, because some callers may be witnesses who should be contacted when investigations are conducted later. If a caller hangs up before contacting an operator, a potential witness may be lost.

Not all calls made to 911 by cellular phone users are emergencies. Of the 911 calls CHP answers, between 1.8 million and 3.6 million are “phantom” calls—non-emergency calls, accidental re-dials, accidental speed dials, etc.

There is a non-emergency line cellular callers can use. According to the director of the CHP Northern California call center, the 1-800-TELL-CHP line is often utilized by citizens with emergencies when they are not able to get through on the 911 call system. CHP has experimented with a *CHP call number as a non-emergency number and found that it was not effective. The reason for this failure was the lack of public awareness of the phone number.

The cities of New York, Austin, Houston, Chicago, San Diego, and San Jose have successfully implemented 311 call centers that handle non-emergency police information and information on most city services. In essence these systems are used as “Call City Hall” conduits to services.

A study conducted for the New York Police Department (NYPD) found that the first year 311 was operating, NYPD received approximately 255,000 fewer 911 calls than the year before.
Based on customer surveys of their 311 system they were able to report that there was an overall improvement of service.\(^6\)

In the case of a disaster like the September 11 attack on the World Trade Center, the 911 call systems in New York were overwhelmed in a few seconds with calls from the burning towers. In order to handle the excess call load during these emergencies, the City of New York has now established the 311 call centers to help serve the customers and gather critical information.

The cellular 911 system in California is currently a dedicated set of circuits and databases just for the operation of 911, for which the state pays more than $100 million per year to Southwestern Bell Communications.\(^7\) The 311 system could be established on the regular communications backbone because it is a non-emergency call center. Under the new Phase 2 wireless requirements from the Federal Communications Commission that are now being implemented, the cellular telephone company would transmit the caller’s location coordinates to the 911 call center. The 311 system could use the older 911 systems that are not capable of meeting Phase 2 requirements any longer.\(^8\) This would help reduce the cost of setting up the 311 call centers.

**Recommendation**

The California Highway Patrol (CHP) should establish two 311, non-emergency, wireless call centers to handle the calls that now clog the 911 emergency wireless call centers. One 311 center should be located in Northern and one in Southern California. The call centers should provide assistance to wireless callers who need to contact the CHP, but whose calls are not emergencies, and for callers who need to interact with all levels of government.

Operators would answer all wireless 311 calls in California and provide assistance and information to the customer in their interactions with city, county, state and federal government. The system should be capable of transferring the customer to the correct telephone line or providing answers to basic, frequently asked questions.

Because the calls would all originate from cell phones, the majority of calls would be from people who are traveling and who need information about location and directions, whose vehicles have broken down, who are reporting road hazards and so on. Operators should be able to answer those questions or transfer the call to the appropriate agency. The call center should be equipped with monitors to watch the traffic patterns in each geographic location.

The 311 call centers should have advanced computer systems, capable of taking reports, transferring calls to other government agencies or answering basic customer questions about interactions with the government.
The call centers could also help train operators to work as CHP 911 dispatch operators after the training is complete. Currently CHP has trouble training and retaining the emergency operators.\(^9\)

**Fiscal Impact**

The leasing costs associated with establishing two 311 call centers cannot be estimated at this time. The call centers could be located in less populated areas where they can help the economy through additional employment; with the new technology there is no reason to place them in high-cost areas like San Francisco or Los Angeles.

Each call center would provide 24 hour service. A total of 10 operators and two administrators would perform this function at each facility. This is projected to cost approximately $2.34 million per year.

In January 2005 computer systems will need to be installed and customized software developed that is capable of being used to transfer calls and track processes. It is not possible to project the costs of the computer systems at this time.

The CHP is upgrading its 911 call centers with new equipment to meet Phase 2 wireless standards and the old equipment would work well for the 311 system. Plans should be made to use the old 911 call center equipment for the 311 system. If the old CHP systems cannot be used, equipment will need to be purchased for both 311 call centers. It is not possible to estimate the cost of the call center equipment without first identifying specific locations and equipment surplus.

The 311 number for California will need advertising and public awareness of when to use 311 versus 911. Staff should be redirected to perform this function. This would not have any costs if existing staff are used.

The costs for the amount of air time that will need to be purchased cannot be estimated at this time. In addition, the cost of training and developing the staff hired cannot be estimated.

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**Endnotes**

2. Interview with Kevin Green, chief information officer, California Highway Patrol, Sacramento, California (April 26, 2004).
Interview with Mike DePola, lieutenant, Sacramento Call Center, California Highway Patrol, Sacramento, California (April 1, 2004); and letter from Jan Carr, Public Safety Dispatch supervisor II, California Highway Patrol to the Sacramento Communications Dispatch Center (March 26, 2004).

Interview with Kevin Green.

Letter from Dean Schloyer, executive director, DoITT 3-1-1 Citizen Service Center, Department of Information Technology and Telecommunications, City of New York to Steve Schenck, California Performance Review (April 16, 2004).

Interview with Barry R. Hemphill, deputy director, Department of General Services, West Sacramento, California (May 19, 2004).

Interview with Andy Nielsen and Ed Mosbaugh, SBC Public Safety, GEM, Sacramento, California (June 3, 2004).

Interview with Mike DePola.
California Should Develop a Statewide Integrated e-Payment Portal

Summary
Californians and countless businesses are forced to transact payments for state products and services in a manual form, such as currency, check, money order, or traveler’s check, because most state entities are not set up to accept electronic payments. California should provide a single point of electronic payment, such as electronic fund transfer or credit card, for all payment transactions with state government to improve accessibility, enhance revenues and reduce costs.

Background
As of 2001, 52 percent of California’s population had internet access. As the state’s Internet-enabled population continues to grow and demand faster government service, there will likely be a corresponding demand to enable electronic payment capabilities across all state entities. Internet users are increasingly purchasing products and services online from companies such as eBay, Amazon.com, and so on. There are very few brick and mortar companies which have not established a web presence for the general public’s access, most of them offering an online means of paying for goods and services. California state government has, by contrast, a primitive online presence, which provides very limited online payment capability.

There are three types of electronic payments:

1. Electronic Funds Transfer (EFT), which transfers money directly from one account into another with virtually no time lapse;

2. Payment cards, including standard credit cards, debit cards, store value cards, and virtual payment systems such as digital cash and electronic wallets. Credit card payments may take two to three days to process, four to five days if the credit card is used over a weekend.

3. Automated Clearing House (ACH), including direct deposit of payroll, social security, tax refunds and other government benefits; direct payment of consumer bills such as mortgages, utility bills and the like; business to business payments; federal, state and local tax payments, business-to-business payments and e-commerce payments.

For credit card payments, state agencies have contracted with various third party vendors resulting in disparate processing methods on a department by department basis. Consumers all pay a transaction fee for this service. Costs for processing credit card payments vary...
among the state entities as either a percentage of the transaction cost or as a flat fee. For example, the State of Texas charges flat fees to citizens who purchase licenses, whether with cash, credit cards or debit cards. Texas charges a percentage for variable purchases, such as tax payments, that are made with credit cards or debit cards.4

There are many benefits to electronic payments, for both the state and its residents.

Electronic payments increase economies of scale. A large entity like the State of California can negotiate a lower provider rate for all agencies than those agencies can negotiate on their own. They also maximize state revenue through increased interest earnings because funds are posted more quickly and interest accrual begins as soon as funds are posted. Paperwork is also reduced as employees spend less time processing checks and more time on automated transactions. It also means less paperwork for the Californians and businesses making the payments. In addition, electronic payments can reduce the number of dishonored checks.

California Performance Review contacted several state government departments to examine various payment methodologies. Department websites were searched first and, if the data were not available online, telephone interviews were conducted with appropriate staff.5 The following exhibits summarize CPR findings.
### Exhibit 1 - State Entities with Credit Card Capabilities

<table>
<thead>
<tr>
<th>State Entity</th>
<th>Flat Fee</th>
<th>Percentage Fee</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Department of Real Estate</td>
<td>No convenience fee for eLicensing transactions. The Department does not accept ATM cards or electronic checks.</td>
<td>N/A</td>
<td>VISA, MasterCard, or American Express credit cards, as well as debit cards bearing a VISA or MasterCard logo, to pay for online transactions made via the eLicensing System.</td>
</tr>
<tr>
<td>2. Employment Development Department</td>
<td>Pays for benefit overpayment bills. Transactions under $40 are subject to a $1.00 minimum.</td>
<td>2.5%</td>
<td>Discover/Novus, MasterCard, or American Express</td>
</tr>
<tr>
<td>3. Medical Board of California</td>
<td>$10 processing fee for each transaction —Pay for initial application for license or renewal of the license of physicians and surgeons</td>
<td>N/A</td>
<td>Visa, Mastercard, or Discover/Novus</td>
</tr>
<tr>
<td>4. Motor Vehicles</td>
<td>$4.00</td>
<td>1.5%</td>
<td>Discover</td>
</tr>
<tr>
<td>5. Motor Vehicles</td>
<td>$4.00</td>
<td>1.61%</td>
<td>Visa, Mastercard</td>
</tr>
<tr>
<td>6. Motor Vehicles</td>
<td>$4.00</td>
<td>2.2%</td>
<td>American Express</td>
</tr>
<tr>
<td>7. State Bar of California</td>
<td>$9.50</td>
<td>N/A</td>
<td>Visa, Mastercard, EFT</td>
</tr>
<tr>
<td>8. Franchise Tax Board</td>
<td>N/A</td>
<td>2.5%</td>
<td>Visa, Mastercard</td>
</tr>
<tr>
<td>9. Franchise Tax Board</td>
<td>N/A</td>
<td>2.5%</td>
<td>Discover, American Express</td>
</tr>
<tr>
<td>10. Franchise Tax Board</td>
<td>N/A</td>
<td>2.5%</td>
<td>N/A</td>
</tr>
<tr>
<td>11. Board of Equalization</td>
<td>Transactions under $40 are subject to a $1.00 minimum.</td>
<td>2.5%</td>
<td>Discover/Novus, MasterCard, or American Express</td>
</tr>
</tbody>
</table>
California constituents are required to purchase many government products to conduct their business, and they want fast, accurate transactions with the state. The state, in turn, needs to collect honored revenue, increase revenue streams, and reduce the costs of manual transactions.

**Recommendations**

A. The state Chief Information Officer should establish a statewide strategic policy on electronic fee collection by January 1, 2005.

That strategic policy should establish electronic payment as the method of choice, but retain manual payments for Californians who wish to use them.

B. The state Chief Information Officer should develop a statewide methodology to enable electronic payments for state provided goods and services through a web-based portal by June 30, 2005.

Key features include:
- Authentication for security and privacy protection;
- Reconciliation with existing banking institutions;
- Amending Government Code to require credit card or EFT use, in lieu of the department director’s discretion;
- Enabling the use of electronic signatures, where feasible;
- Easy integration with existing accounting systems.

C. The Department of General Services, or its successor, should consolidate all contracts for electronic payments.

**Fiscal Impact**

Increasing the amount of electronic payments will move funds more quickly into the state treasury. This brings one-time direct benefits from adding funds to the treasury. There would
be indirect benefits that occur from reducing the effort for state departments receiving electronic payments compared to manual processing costs and from standardizing to a single third-party payment processor contract.

The cost to establish a statewide strategic electronic fee collection policy would be negligible. Development of the e-payment system is estimated to have a one-time cost of about $3.5 million, including ten PYs. An annual cost of $750,000 including eight PYs is estimated for ongoing operating costs. Consolidation of existing third party payment processor contracts would require a one-time effort of about one-half PY.

Endnotes

2 Interview with Thomas Smelker, manager, Texas Department of Cash and Securities Management (May 25, 2004).
4 Interview with Thomas Smelker.
DMV Drivers Teaching and Testing Improvement

Summary
More than half of the people who first take the written driving test administered by the California Department of Motor Vehicles fail. Nearly a third of drivers renewing their licenses fail the written test, too. Retesting these people costs the state more than $4 million a year and increases the number of people in lines at DMV’s 168 field offices. A computer based testing and training system would reduce the costs, shorten the lines and help people improve their driving skills.

Background
The California Department of Motor Vehicles (DMV) currently administers more than four million written driving tests every year. It costs $9.5 million to administer the test, $61,854 to print the test and $25,873 to translate the test into 33 languages.

The current test is printed on paper then administered and graded by a DMV field office technician. A customer must answer a portion of the total number of questions correctly in order to pass. This means, for example, that if a customer failed all questions related to railroad crossings but answered the minimum number of total questions correctly, they could still pass. Because the test is not interactive, they might never know that they failed the portion of the test related to railroad crossings or what the correct answers are.

More than half of the first-time test takers fail, and about a third of drivers renewing their licenses fail. A person who fails must then make another appointment or stand in line and take up a field office technician’s time taking the test again. Yet the people who fail the test often do not learn the correct answers to the questions they got wrong and thus do not improve their knowledge of the driving rules.

There are no studies correlating the passage or failure on the written test and the customers’ driving ability or accident rates. The DMV has determined that 31.1 percent of the customers renewing their driver’s licenses fail the test. A driver with a good record is given two five-year extensions beyond the original five years, so these drivers have been driving for fifteen years and still almost a third of them fail the written test. These test results would seem to indicate other issues such as language and study skills rather than driving skills.
**Touch screen testing**
DMV has experimented with touch-screen testing, and an example is on the DMV website.\(^5\)

In addition to testing the applicant, the terminals become training tools. When an applicant fails a question in a given category, the computer asks another question from the same category and continues doing so until the applicant has successfully completed the required number of questions from each category. The terminals also feature moving graphics that help applicants visualize the written questions. This helps applicants who have reading comprehension or language issues. At the end of the test, the kiosk prints out the results for the test taker (pass/fail). This would reduce the time the technician now spends grading the written test.

The touch screen testing concept was tested at the California State Fair in 2000 and 2001 and at the Government Technology Conference in 2000. It received positive customer comments from both venues. However, funding restrictions prevented DMV from implementing touch screen testing.

In addition, DMV is already moving toward kiosk-based services. It is currently testing kiosks for vehicle registration which are similar to the machines that could be used for administering the written tests.\(^6\)

**Recommendation**
The California Department of Motor Vehicles (DMV) should begin putting touch screen terminals in its field offices to administer the written driving test.

**Fiscal Impact**
Implementation of this computer based testing and training system will reduce costs, shorten lines and help people improve their driving skills when they take their driver’s license exam. This should be phased in over a three year period. DMV has 168 field offices; therefore, 56 field offices should be phased in per year.

On July 1, 2005, 56 DMV field offices should be identified for implementation of the computer based testing and training system. The development of testing software will require one graphic artist with 3D modeling experience and one HTML programmer.\(^7\) Total annual cost for two staff to be hired is estimated at $195,000. DMV will have to purchase 168 kiosks at $2,000\(^8\) for a total of $336,000 over three years. The total costs for this computer process is $921,000 for three years. Costs will be reduced to $195,000 after the three-year phase-in of the kiosks.

Retesting costs the State more than $4 million dollars a year.\(^9\) If the computer based testing is implemented this will save the state potentially $4 million dollars of retesting costs. This
process should be phased in over a three year period to ensure a seamless transition. This may result in savings of $1.3 million per year the first year, $2.6 million the second year, $4 million the third year and $4 million after the full implementation of the 168 field offices is complete.

### Special Fund
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings (in thousands)</th>
<th>Costs (in thousands)</th>
<th>Net Savings (Costs) (in thousands)</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>0</td>
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<tr>
<td>2005–06</td>
<td>$1,300</td>
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<td>$993</td>
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<td>$2,600</td>
<td>$307</td>
<td>$2,932</td>
<td>2</td>
</tr>
<tr>
<td>2007–08</td>
<td>$4,000</td>
<td>$307</td>
<td>$3,693</td>
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<td>2008–09</td>
<td>$4,000</td>
<td>$195</td>
<td>$3,805</td>
<td>2</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Endnotes

1. E-mail from Eric Chapman, research analyst, California Department of Motor Vehicles, to California Performance Review (April 1, 2004).
2. E-mail from Eric Chapman, research analyst, California Department of Motor Vehicles, to California Performance Review (April 5, 2004).
3. E-mail from Eric Chapman (April 5, 2004).
4. E-mail from Eric Chapman (April 5, 2004).
6. E-mail from Barbie Robards, manager, California Department of Motor Vehicles, to California Performance Review (March 30, 2004).
7. Assumption is that the position has a cost of $97,500 (salary is $75,000 and operating expense and equipment is $22,500).
8. http://www.carolnet.com/kiosk.htm offers a Kiosk for $1,099 with similar functions required to accomplish this task. It would take shipping and modifications of some functions to have it perform this function. So the estimated delivered working cost is $2,000 per unit. http://envisionkiosks.com/ offers a Kiosk for $1,915 starting price that would perform all the duties required for this program at this price. With shipping and larger quantity purchase these units would be around $2,000 each.
9. E-mail from Eric Chapman (April 1, 2004).
Provide Electronic Law Libraries for Prisons to Save Money

Summary
The California Department of Corrections spends more than $4 million every year to buy current law publications in order to provide court-mandated legal information services to inmates. An electronic law library system with touch screen kiosk could provide similar services to inmates at substantially lower costs.

Background
Prison inmates in both state and federal prisons are guaranteed certain constitutional and civil rights. Among these rights is the right of access to the courts. Existing federal constitutional case law also guarantees prison inmates the right of meaningful access to the courts.¹

To comply with this mandate, the California Department of Corrections (CDC) purchases and makes available current editions of about 110 titles of legal serial publications in printed form to each prison, at an approximate cost of $4 million each year. There are additional expenses for processing, maintaining, preserving and storing the printed materials.²

Installing touch screen legal information resource kiosks at each of CDC’s 32 prisons could all but eliminate these expenses.

The kiosk unit using touch screen technology is a rugged, tamper-proof small box, connected to a server loaded with a Lexis-Nexis legal database. The Lexis-Nexis law library databases contain about 25 gigabytes of legal information. The information can be tailored to meet the individual needs of customers and is updated quarterly. Inmates can access the database by entering keywords, statute or case by touching the screen without having to acquire computer skills.³

The kiosks retrieve information from a comprehensive central legal information database stored on a server housed in the existing personal business switch room of each institution. The information will be transmitted to each kiosk station via wireless link, provided by the contractor, at no additional cost to the state. The contractor will pay the cost of design, equipment, installation and maintenance.⁴

CDC currently allows inmates to copy required materials from the legal publications.⁵ Inmates will be able to get printed copies of the required information upon request. Printers will be provided and installed in the institution by the contractor at no cost to the state.
Touch screen kiosks electronic legal resource kiosks have been installed at four state correctional centers in Hawaii; and five correctional centers in Riverside County, California. Riverside County pays Touch Sonic and Lexis-Nexis an annual fee of $94,400 for seven kiosks with five servers in five county jails. The cost of each kiosk at Riverside County jails is approximately $13,400.6

**Recommendation**
The Youth and Adult Correctional Agency, or its successor, should implement touch screen legal information resource kiosks at each state prison by July 1, 2005.

**Fiscal Impact**

**Costs**
Approximately 300 kiosks will be required in order to provide the same level of service to the inmates as is currently being provided by the printed publications. The state will need one server and about ten kiosks at each of its 32 prisons. At such prison sites, one server will be able to serve all the terminals at the prison.

**Savings**
Since kiosk electronic database information will be available at 49 percent of the cost of the printed materials, annual savings of approximately $1.9 million could be realized after the anticipated installation costs.

### GENERAL FUND  
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
</tr>
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<tr>
<td>2004–05</td>
<td>$0</td>
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<td>0</td>
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<tr>
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</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.
Endnotes

2 Interview with Phil DeGrood, assistant superintendent, Education and Inmate Program Unit, California Department of Corrections (June 9, 2004).
4 Information provided by Touch Screen Technologies and Lexis-Nexis to the California Department of Corrections Technology Transfer Committee, Sacramento, California, October 23, 2002.
5 California Code of Regulations, Title 15, Section 3162.
6 Information provided by Touch Screen Technologies and Lexis-Nexis to the California Department of Corrections Technology Transfer Committee, Sacramento, California, October 23, 2002.
Creating a California Enterprise Human Resources Solution

Summary
California state government lacks a statewide enterprise solution for managing its human resource assets effectively and tracking program assignments. State departments and agencies should freeze development, enhancements, or modifications of existing human resource software applications pending the implementation of the State Controller Office’s 21st Century Project. The state Chief Information Officer and all state agencies should give priority to the implementation of this project.

Background
The processes involved in the hiring, benefits management, promotions and eventual retirement or employee transfers between departments of about 315,926 employees are labor-intensive in that no single application exists to keep track of all the data and changes. Separate applications and databases are utilized to track positions, employees and programs assigned. In many departments, there are manual processes—and their respective 71 California standard personnel forms—still in place since the cost of developing a departmental human resources application figures in the millions of dollars, especially given California’s fiscal situation. Support costs continue with application modifications required for every bargaining unit contract signed, and the ever increasing age of these applications. Faced with the rapidly retiring workforce in state service, the ability to keep programs and applications functioning is at risk.

One of the state’s most valuable resources is its workforce and an effective human resources application is a required tool to manage this resource. A reduction in processing time and expense would be realized through the use of a statewide employee database. When an employee transfers from one department to another, the first department must remove the employee’s human resource information from its human resource applications, as well as notify the State Controller’s Office. The receiving department must then enter the new employee into its system and notify the State Controller’s Office. The current process, in addition to being somewhat manual and redundant in nature, also includes the manual (for most departments) routing of personnel forms for multiple signatures prior to being completed.

Human resource systems also include information on hourly wage employees that must be provided to the State Controller’s Office in order for that employee to receive compensation for the hours worked. These applications, where they exist, are often legacy systems completely inadequate for the daily demands placed on the systems. Consider the impact of a
department such as Franchise Tax Board not being able to pay their temporary workforce on any given week during the tax filing season due to a system failure, and it becomes apparent how critical the need is for a statewide upgrade. Staff without pay will not work. If the Franchise Tax Board is unable to deposit the tax payments on the date they are received, interest income is lost. When tax refunds are not processed as required by regulations, interest payments become payable as a penalty to the state.

Lacking a statewide application, each entity is faced with the challenge of continuing their manual processes, completing redundant personnel forms and patching their legacy systems until they can no longer do so.

An enterprise human resources system should have expanded functionality to seamlessly perform the following minimal functions in the most paperless method possible:

- Payroll reporting;
- Personnel data base;
- Position tracking;
- HR requirements of all permanent, temporary and hourly employees;
- Attendance reporting;
- Production reporting; and
- Program reporting.

State employee human resource records tend to be in limbo as the documents move between departments, being deleted from one and pending processing until created in the next department. In comparison, Verizon Wireless used an enterprise human resources system to get rid of its legacy operation and is now using out-of-the-box self-service functionality to immediately reflect employment changes.

The State Controller’s Office is working to implement its 21st Century Project, which will provide much of the functionality described above. A request for proposals was issued in May, 2004, for the necessary software and required modifications to the software. Installation of the software for the 21st Century Project in state government agencies and departments will begin in December 2006. State departments and agencies should freeze development, enhancements, or modifications of existing human resource software applications pending the implementation of the 21st Century Project.

**Recommendations**

A. The state Chief Information Officer (CIO) should direct all state departments and agencies to identify existing human resource software applications and development projects. The state CIO should work with all agencies and departments to determine any critical fixes and continue those, while halting all other human resource development efforts, in order to implement the State Controller Office’s 21st Century Project.
B. The Governor should direct the state Chief Information Officer to render the fullest possible support and cooperation to the State Controller’s Office in the development and implementation of its 21st Century Project.

**Fiscal Impact**

Halting development of new human resource software systems pending the release of the 21st Century Project will save the state money. A project-by-project analysis must be conducted to devise an appropriate stopping point. Cost savings for stopping each project can then be identified.

A statewide enterprise Human Resource system should lead to substantial savings and improved services. Because these actions will depend on individual agency actions, the savings resulting from this recommendation cannot be estimated.

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**Endnotes**


3 Interview with Denise Blair, former business applications manager, California Franchise Tax Board, Sacramento, California (June 16, 2004).


Develop a Statewide Centralized Financial System

Summary
California state government should replace its duplicative and numerous financial software applications with one global statewide centralized enterprise application which interfaces with California’s enterprise asset management and enterprise procurement tools.

Background
*If you can’t measure it, you can’t manage it.—Old management philosophy.*

There are many budget planning and tracking software applications within state government. Some have been purchased, others developed specifically for individual entities to document budget plans, encumbrances and expenditures. These “applications” include Excel spreadsheets, Word tables, commercial off-the-shelf (COTS) software, and a few formal budget software tools. To compound the problem, each entity budgets at different levels. Some do their budget planning and management from a departmental perspective while others distribute their budgets to program areas, some even down to the payroll unit level.

California does not have a standard business process method of departmental budgeting or accounting. This has many unfortunate implications. For example, there are many programs or projects within each department that cross business and information technology (IT) support areas. Employees who work on multiple projects or programs must record the time spent on each when filling out their time sheets. There is no means, with the current budgeting applications, for many departments to consolidate total expenses or know how budget dollars are being spent on a day-to-day basis. As a result, many departments go on buying frenzies at the end of the fiscal year based on their best guesses of available resources.

Consistent and current data reviewed on a daily basis allows for better planning and forecasting—and would be enabled through centralization of one system.

The number of people who work in departmental budget and accounting sections is growing, as is the volume of financial data from state agencies. End users are demanding more and more information, which is becoming more and more difficult for outdated “legacy” accounting systems to quickly provide. Requests for information from the California Department of Finance and the State Controller’s Office are difficult to respond to quickly, since data must be collected from numerous sources and compiled, often manually. Without an automated way of capturing and reporting this data, reports provided to control agencies are often late, incomplete, or inaccurate.¹
The development of an enterprise financial system should include the following design requirements specified in Governor Schwarzenegger’s budget plan:\(^2\):

- Incorporate Performance Based Budgeting principles into the state budget planning process;
- Implement a process to generate savings by providing incentives for state agencies and departments to reengineer business processes and increase operating efficiencies;
- Develop a web-based Governor’s Budget to ensure greater citizen access. This is the first step towards developing a transparent budget;
- Consolidate related statutes for greater accessibility;
- Implement a process to control the release of appropriations to avoid overspending in cases where revenues do not materialize as originally projected, and to improve savings opportunities, thus ensuring prudent fiscal management; and
- Ensure that the Department of Finance’s orders to implement budget adjustments are processed in a timely manner to order to carry out programs in accordance with law.

**Conditions of systems in other government organizations**

Less than 10 percent of the federal IT budget is spent on financial systems. The total federal IT budget is $38 billion, while the federal financial systems budget is $2.4 billion.\(^3\)

In federal Fiscal Year 1999–2000, the federal financial systems included:

- 24 CFO agencies (agencies that have Chief Financial Officers, or CFOs)—includes entities such as Department of Treasury, Federal Emergency Management Agency, NASA, Social Security Administration, Office of Personnel Management, etc.;\(^4\)
- 640 Financial systems—includes core financial management system software and feeder system software;
- 971 software applications, 13 percent of which are COTS software applications; and
- 640 operating systems, 62 percent of which reach the end of their lives within the next five years, and many are out of compliance with laws, policies or requirements.\(^5\)

**How California compares**

There is no location to find definitive totals for this list, however the California Performance Review found:\(^6\)

- More than 200 CFO agencies;\(^7\)
- An unknown total of financial systems—the only formally defined financial system is CALSTARs;
- An unknown number of software applications, whether proprietary or COTS (such as PeopleSoft, SAP, Oracle, Excel, Access, etc.);
- Approximately $2 billion annual expenditures, total is unknown; and
- An unknown number of operating systems, including Microsoft Windows XP, Microsoft Windows 2000, virtual operating systems, and so on.\(^8\)
Research from implementation of enterprise financial applications identifies the following benefits range in both private and public sector—California should achieve benefits in the same ranges:\(^9\)

1. Reduce days to close books = 25%–50%
2. Improve reporting time = 25%–50%
3. Reduce transaction costs = 40%–60%
4. Reduce level of reconciliations = 35%–70%

In summary, California employees are required to purchase tools to complete government deliverables and management is required to report expenditures and balances fast and efficiently. The state needs to identify revenues fast and accurately, reduce transaction cost in order to realize economies of scale, and to significantly reduce the financial burden manual processes require with each transaction.

**Recommendations**

A. The state Chief Information Officer (CIO) should assemble a Financial Task Force (FTF) of key representatives from various departments and develop a statewide vision and plan for a California enterprise financial system which supports the statewide business strategic plan, conforms with General Accepted Accounting Principles (GAAP), and enables integration with enterprise Procurement and Asset Management systems.

The goals of the Financial Task Force are to facilitate more accurate accounting and accountability to produce an accurate and up-to-date financial picture, and to ensure basic standardized business process methodologies from accounts payable and receivables are included.

B. The state Chief Information Officer should identify all development projects enhancing or expanding existing financial applications before October 31, 2004. The Governor should direct state departments to freeze those applications that do not conform to the new FTF plan or are duplicating efforts. Fixes to keep business applications running should be exempt.

There are many applications with a small or large financial module(s) embedded in them approved by the Department of Finance for implementation. These applications’ development span to implement range anywhere from one year to thirteen years and costs from $278,000 up to $1,146,170,000.\(^{10}\)

C. The Governor should direct the FTF to develop statewide basic financial system requirements and standards for the collection of all cost center data, including both personnel services and operating expenses and equipment.
Include timesheet and production data to be able to capture personnel services at the lowest level. Explore the option of utilizing the program side of the California State Accounting and Reporting System (CALSTARS) application as a basis. The selected alternative must include an electronic interface to CALSTARS and provide all reporting requirements to both DOF and SCO.

**D. The Governor should direct the state Chief Information Officer to begin implementing the statewide basic financial system by December 31, 2005 with implementation in all state agencies and departments completed by July 1, 2007.**

**Fiscal Impact**
The recommendation to assemble a Financial Task Force to develop a statewide vision, plan the direction, develop standards and basic financial system requirements for a statewide centralized financial system should have no immediate fiscal impact. Agencies participating in the task force could fund any minor costs from their existing budgets.

Halting all development of new financial systems pending the completion of a statewide strategic plan will save the state money. A project by project analysis must be conducted to identify duplicating efforts and devise an appropriate stopping point. Cost savings for stopping projects can then be identified.

The leading enterprise commercial off-the-shelf software vendors have estimated planning, development and implementation will cost many millions of dollars, with a multi-year phased approach.\(^1\) These costs will be dependent on negotiations, contract language, and shared costs should California partner with a vendor to share development costs, and share savings. The selected software cost will depend on the development of the infrastructure, expected longevity, and other considerations—such as standardization of coding and shared costs per participant department.

The savings resulting from this recommendation cannot be estimated at this time.

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**Endnotes**

1. Interview with Mark Shijo budget office manager, California Franchise Tax Board, Sacramento, California (March 19, 2004).
2. Governor’s 2004-2005 Budget.

6 Interview with Valerie Varzos, California Performance Review Audit Team, Sacramento, California (June 3, 2004).

7 Interview with Ann Evans, Rita Escobar and Nicolas Schweizer, California Performance Review, Budget Team, Sacramento, California (June 3, 2004).


10 E-mail from Terry Bridges, technology manager, California State Controller’s Office, 21st Century Project, to Karan Yowell, California Performance Review, Sacramento, California (April, 2004).

Implement a Statewide, Automated Asset Management Tool

Summary
California’s management of its assets—including office buildings, real property, and computers—suffers from the lack of a unified system to track and manage these assets on a statewide basis. Duplicative asset management computer software applications should be replaced by a single, enterprise application that interfaces with the state’s procurement and financial systems.

Background
The California Department of General Services defines assets as “. . . things of value to the state that need to be managed effectively.” Assets include fixed assets such as buildings and real estate that have an operating life of 30+ years, and personal property assets such as personal computers and printers that have an operating life of 1.5 to 5 years.¹

The state has no single, statewide, accurate accounting of its assets. Each department currently tracks its own assets, and each uses a different system, sometimes automated, sometimes manual. Managers cannot make accurate assessments of what they have or accurate forecasts of what they need. Sometimes departments have an excessive amount of some assets, which could possibly be sold or salvaged, and sometimes they run out sooner than they anticipated. Some departments rely on vendors to tell them the number of a specific asset they have, often resulting in overestimates for things like software purchases, or other items that may go unused.

The problem is not limited to the assets the state owns. When equipment is leased and needs to be returned to a vendor, departments often cannot find the asset. This can lead to significant costs if the state must pay for assets that have been “lost.”

According to the Gartner Group:
“Enterprises often lack the process or tools to track leased assets, which means they have trouble locating assets scheduled for return at the end of the lease. For example, most enterprises whose PC asset base is at least one-third portable (e.g., laptops) lose from 4 percent to 6 percent of their PCs through theft or poor tracking.”²

Inadequate asset management also poses a risk should a tracking system fail, or in the event of a disaster.
To be most effective, an asset management system must be integrated with procurement, and financial processes. This allows for “life cycle” management to accurately track and manage assets from procurement through salvage. Information technology can facilitate the integration of this life cycle.

Accurate electronic-based asset management is important for many reasons including:

- **Inventory control**
  One of the chief benefits of asset management is inventory control. Necessary for asset redeployment, to help prevent theft of assets and to prevent duplicative purchases.

- **Total cost of ownership**
  A measure of all aspects of owning and operating an asset. A properly functioning asset management system can reduce total cost of ownership by eliminating costs from duplication of assets or from wasting assets by not using them after purchase.

- **Operational recovery**
  If there is a disaster that requires systems to be brought back online, it is difficult to know what to replace without an accurate inventory.

- **Budgeting purposes**
  As items reach their end of life, it is necessary to budget for replacement. Without knowing what to replace, it is impossible to accurately forecast purchases.

- **Tracking**
  Knowing where assets are and the ability to find them when necessary.

- **More informed purchasing**
  The asset management system can help an agency evaluate past purchasing decisions and make better decisions in the future.

- **Business resumption support**
  Whether assets are lost through disaster or something less severe (such as theft or damage) a properly functioning asset management system helps the business resume its operations more quickly. From knowing what assets are being used to how they are configured, an asset management system contains data that is vital to a recovery from disaster.

Without an effective asset management system, departments waste time and resources managing inventory, buying unnecessary equipment, maintaining license compliance for software, and lack the necessary tools to salvage or sell outdated items. With a functioning asset management system the agency can expect to reduce total cost of ownership and provide a solid foundation for the operational system necessary to keep the infrastructure operating efficiently.

**Recommendations**

A. The Governor should direct the Department of General Services (DGS), or its successor, to acquire an information technology-based asset management system that can be leveraged statewide.
There are many “off the shelf” asset management applications that the state could purchase and implement quickly. This tool should allow asset management to be integrated with procurement and financial systems.

B. The Governor should direct all state departments to conduct detailed inventories of their assets and maintain accurate asset information using the new asset management system.

**Fiscal Implications**

The greatest expense for asset management will be the purchase of an information technology application and subsequent maintenance. The savings of an asset management solution needs to be driven out of the business need for the system. For example, in the area of IT assets, there could be a potential savings of more than $10 million per year through the elimination of unused assets, software licensing for assets that are not used or are no longer available, and avoidance of redundant maintenance contracts, to name just a few.

### General Fund

(dollars in thousands)

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<th>Net Savings (Costs)</th>
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### Other Funds

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Endnotes

1 California Department of General Services, “What are Assets”, http://www.pd.dgs.ca.gov/sarealign/assets.htm (last visited June 1, 2004).

2 The Gartner Group, “IT Asset Management: Reduce Costs and Minimize Risks” (Stamford, Connecticut, October 17, 2001), p. 3.
California Should Create a Statewide Solution to Manage State Employees’ Workers Compensation Claims

Summary
Workers’ compensation expenses for state government totaled nearly $502 million in Fiscal Year 2002–2003. Standardized case management tools and processes could save the state a minimum of $5 million per year. California state agencies must create their own case management process and tools to manage employee workers’ compensation cases. Some entities have purchased add-ons to their recently procured human resource software to manage these cases. Most, however, continue to use spreadsheets, “home-built” databases, or manual processes.

Background
The workers’ compensation program provides for medical benefits and compensation to employees who are injured on the job. While the Department of Personnel Administration contracts with the State Compensation Insurance Fund (SCIF) for workers’ compensation benefits, technology solutions are not part of what SCIF offers. SCIF is planning to release a case management interface to its online claims submission in early July 2004 to enable departments to extract case information. While this is a step in the right direction, it is not a case management tool.

A coordinated effort—between the employer, employee, treating physician and claims professional—results in quicker recovery times for employees and lower cost to the state.

In order to properly manage each case, departments need current, accurate data from SCIF and from medical providers in order to confirm an employee’s health status and any possible work restrictions. Departments can save money and increase productivity when they are able to find limited duty positions for recovering employees elsewhere within the department. It usually costs less for a department to purchase adaptive equipment for an employee, if necessary, than it does to pay a month’s compensation for an injured employee. Departments can also save money by avoiding delays in returning employees to work.

There are specific, event-driven steps to case management. For example, an injured employee is first assessed by a physician, who submits the report to the employee’s department. The employee and his/her manager discuss recommended time off. There will be follow-up examinations, physical therapy, etc. Without a comprehensive automated case management tool which uses a calendaring feature, many departments must rely on partially automated or
heavily manual processes with cumbersome methods. This means excessive processing time and missed opportunities to speedily return employees to work in limited capacities.

Some departments have moved toward automation. The California Department of Transportation is piloting an integrated case management module from PeopleSoft. The California Department of Forestry and Fire Protection uses a Microsoft Access case management database created in 1998 to track its open caseload. The California Highway Patrol uses a custom solution by Oracle developed in 1995–1996.

The Franchise Tax Board (FTB) is implementing CompWatch, a commercial off-the-shelf software solution. FTB has an estimated 6,000 permanent full-time employees and an additional workforce of 1,000 seasonal staff. It generates approximately 15 to 20 new workers’ compensation claims per month, with an average annual caseload of 290 active cases, which is small in comparison to that of larger departments. Five full-time staff manage these cases and process paperwork in an effort to meet its compliance regulations and to return the employees to work as soon as possible.

Even before implementing its automated case management tool, FTB’s workers’ compensation program was considered well managed. However, FTB wanted a more frequent review of each case in order to follow up on details from medical providers and determine actual working condition limitations so that staff could return to work more quickly.

Another benefit from a standard tool is that it allows caseworkers who move from department to department to do so without having to be retrained, making them effective from their first day on the job. Sufficiently trained and motivated caseworkers are a component that cannot be leveraged without adequate standards and tools.

State law requires employers to report workers’ compensation claims within five to 14 days, depending on the form used. However, it takes an average of 12 working days for most claims to be submitted to SCIF. There are numerous reasons for delays. For example, an employee and his/her supervisor may be offsite and unable to complete claims immediately, such as when a state firefighter is injured fighting a forest fire which lasts ten days. The employee may leave but his/her supervisor may have to remain on the fire lines for some days after the injury occurs.

It is important for claims to get to SCIF as quickly as possible. It keeps costs down and increases the likelihood of returning employees to work as soon as possible. While penalties for late filing are rare, there is a significant cost associated with late filing. A claims adjuster has 90 days from the date of injury to accept or deny a workers’ compensation claim. Considering the lead time necessary to get the employee to a medical provider for an assessment is generally 60 days, losing time in those first few weeks can result in acceptance of
claims by default that should have been denied. That, in turn, increases the overall cost to the state.

**Recommendation**

The Governor should direct the Department of Personnel Administration or its successor to immediately begin developing the requirements for a statewide workers’ compensation case management tool. These requirements should be completed by July 1, 2005.

This system must include electronic interfaces with medical providers where available and with the State Compensation Insurance Fund. It must also interface with the State Controller’s Office 21st Century Project, which will be a payroll database, since payroll information is essential to proper case management and claims reporting. The portion of the 21st Century Project necessary for implementing an automated workers’ compensation solution is scheduled for implementation in FY 2007–2008. The workers’ compensation case management solution should be implemented in FY 2008–2009.11

**Fiscal Impact**

The one-time cost to acquire a standard Workers’ Compensation case management system that integrates with the State Controller’s new payroll system is estimated to be less than $5 million, with $25,000 annual operating costs. Department of Personnel Administration has estimated that the cycle time for processing all claims, except permanent disability and vocational rehabilitation, could be reduced by 1 percent to 9 percent with a standard case management system. Assuming a dollar savings proportionate to the cycle time improvement, these claim types, which currently cost about $380 million annually, could have an annual cost reduction of $4 million to $34 million with this tool.

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Endnotes
1 Interview with Colette R. Barritt, state contract services consultant, State Compensation Insurance Fund, Sacramento, California (May 6, 2004).
3 Interview with Dave Schaefer, return to work coordinator, California Department of Transportation, Sacramento, California (May 21, 2004).
4 Interview with Susan Magnuson, California Department of Forestry, Sacramento, California (June 2, 2004).
5 Interview with Jovita Vierria, California Highway Patrol, Sacramento, California (June 2, 2004).
6 Interview with Ronda Ellingsworth, workers’ compensation manager, California Franchise Tax Board, Sacramento, California (March 19, 2004 and May 17, 2004).
7 Interview with Sue Kane, workers’ compensation program manager, Department of Personnel Administration, Benefits Division (May 6, 2004 and May 17, 2004).
8 Interview with Ronda Ellingsworth, workers’ compensation manager, California Franchise Tax Board, Sacramento, California (March 19, 2004 and May 17, 2004).
9 Labor C. section 6409.1.
10 Interview with Sue Kane.
Develop a California Enterprise Application to Manage its Statewide Training and Examination Requirements

Summary
The State of California lacks a statewide vision and clear priorities for the staff development, training and training-related examination of its employees. The lack of clear staff development priorities causes the state to miss opportunities to obtain federal grants available to fund staff development, training, exam tools and initiatives. The State needs a centralized interactive training system that schedules, registers, and tracks employee’s online and offline training and exam results. By developing and implementing a training management application, the state can establish a baseline of statewide intellectual properties and better manage its employee resources.

Background
Employees manually schedule, track and manage the historical progress of about 315,000 state employees’ training and testing. State agencies cannot efficiently manage employee training histories or determine future staff development and training needs. Individual state employees are also not provided a consistent means to manage their own training records.

The State Training Center (STC) is the primary training source for many state agencies. It is primarily focused on soft skills (e.g., administrative, analytical, communication, management and supervision). Instructor-led STC courses range from $80 to $365 per employee. Of the 97 courses offered, only 11 are web-based. Costs have not increased over the past seven years.

The Franchise Tax Board’s (FTB) Enterprise Learning Management Center provides technical training for their technology staff as well as auditing for their auditor staff. FTB paid $50,000 for the initial purchase of Learning Management Systems, and $115,000 annually for software leases, maintenance, and upgrades.

The Health and Human Services Data Center (HHSDC) provides certificate training for technical and management courses similar to FTB’s.

Many of these same types of training are provided through a wide range of private and public entities that provide their employees with a central location to log on, perform skills assessment, find either zero cost online training, cost required online training, or on/off site vendor provided training. One difference between the state’s training model and these entities
is that their employees can self-register and track their own progress. If a fee is required, the employee’s supervisor is notified electronically when a training request is submitted and can deny or approve the request within minutes. If approved, the electronic approval is submitted to the vendor and the employee is enrolled. If denied, the supervisor and employee can initiate a discussion.

Once the employee completes training and examination, the system is updated to reflect that change and the supervisor notified. This provides the supervisor metrics to forecast projected employee training and associated costs. There are many commercial off-the-shelf packages that can be used to demonstrate costs to develop such an interactive enterprise solution. Cost could include content development, server web-based development, training administration, and software. Costs could range from $2,000 to $8,000 per course, depending on its content, competitive bids and vendor absorbed costs.6

**An industry model**

Intel Corporation is considered an industry model and serves a population comparable to the training needs of California’s 315,000 employees. Intel trains about 300,000 users in 120 countries using multiple languages. Their interactive training system allows the employee to perform skills assessment, register, obtain management approval, administer and complete courses on-line, download courses onto their computer, or attend instructor-led courses. All employees can access their training history reports.

The components of Intel’s Interactive Training Model include:

- **Learning Management Systems** provide the ability for a database-driven publication, management and delivery system. This module costs between $2 million and $3 million for the initial license for unlimited users. Annual maintenance costs equal about 10–15 percent of the license cost;
- **Learning Content Management Systems** provide for web-based delivery. This could cost $500,000 to implement and allows integration with other systems such as human resource databases. It also provides user authentication security;
- **Purchase of content software costs** are based on the degree of state purchase approvals and depend on the specific types of training being developed. Software may include training for any desired skill set. Many state entities with specialized training needs already develop this training;
- **Rental of content software from private sources** costs are based on the degree of state purchase approvals and depend on the specific types of training being developed. Software may include training for any desired skill set. Many state entities with specialized training needs already develop this training;
- **Four PYs to provide administration and support** two to manage the training software, ensure it runs correctly and two to help customers with administration of software; and
• Four PYs to administer the management reports such as: who is taking training, how often and their results. These positions also are involved in customizing reports as needed for the enterprise.7

Federal sources of funding
The Telecommunications and Information Infrastructure Assistance Program (TIIAP) of the U.S. Department of Commerce’s National Telecommunications and Information Administration has available grants.8 The Department of Commerce’s Technology Opportunities Program (TOP) promotes the widespread availability and use of digital network technologies in the public and nonprofit sectors. As part of the Department’s National Telecommunications and Information Administration (NTIA), TOP gives grants for model projects demonstrating innovative uses of network technologies. TOP evaluates and actively shares the lessons learned from these projects to ensure the benefits are broadly distributed across the country. TOP makes matching grants to state, local and tribal governments, health care providers, schools, libraries, police departments and community-based nonprofit organizations.

This year, approximately $12.9 million is available for grants through the Commerce Department’s Technology Opportunities Program (TOP) for Fiscal Year 2004. While several state universities sent employees to attend the March 26, 2004 TOP workshop, no state departments were represented.9 The maximum grants are $700,000.

Summary
To retain competitiveness, California needs an automated tool that allows past and scheduled employee training and examinations to be viewed and reviewed to ensure skill sets and intellectual properties are up-to-date and maintained. Of the “Emerging Issues for State Policymakers,” one of the top three questions asked by the Joint Committee on Preparing California for the 21st Century was, “Are we sufficiently training our state workforce?”10 With the implementation of an enterprise training system, California will have metrics and facts to support a positive answer.

Recommendations
A. The Department of Personnel Administration (DPA), or its successor, should develop a plan for an enterprise training and examination system.

B. DPA, or its successor, should develop or purchase an enterprise training and examination system that schedules, registers and tracks employee’s online and offline training and examinations.
C. The Department of Finance, or its successor, should direct state agencies and institutions of higher education to aggressively compete for federal grants to help fund evaluation and training initiatives.

The return on investment of this initiative can be considerable in both costs savings and PYs. It is in the state’s interest to secure up-front funds to enable early completion of this initiative.

Fiscal Impact
A statewide enterprise training management application should lead to opportunities for improved efficiencies and potential cost reductions in managing employee training. These recommendations will require some implementation costs for the system, maintenance, training, and staffing; however, the savings resulting from this recommendation cannot be estimated. The implementation costs may be reduced if the state is successful in competing for a federal grant such as those awarded by the Telecommunications and Infrastructure Assistance Program.

Endnotes
1. California Performance Review, Governor’s Cabinet Briefing (Sacramento, California), February 4, 2004 (Presentation).
2. Interview with Evelyn Hemenover, manager, Brian Koapp, manager, Program Development; George Steinert, manager, Training Services, Jim Meleski, manager, Learning Management, California State Training Center (March 24, 2004).
3. Interview with Sharon Elledge, supervisor, Franchise Tax Board (March 26, 2004).
5. Interview with Ana Ramirez-Palmer, regional administrator, Department of Corrections (April 15, 2004).
Consolidation of E-Mail Will Improve Services and Save the State Millions

Summary
E-mail systems for California’s state government are fragmented and costly. Many large public and private sector organizations have consolidated their e-mail systems, making them more robust and less costly. The state should consolidate its e-mail services to provide a more secure, robust environment at a lower cost to the state.

Background
E-mail is an essential tool for communication in government as in the private sector. The current e-mail system used by California government was purchased, installed, and maintained on a department-by-department basis. Like so many other state applications, what started as a good idea for a small implementation grew to proportions that are costly to maintain and at risk for failure and downtime.

In the 1980s, e-mail was just beginning to gain acceptance. The advent of wide area networks and, more importantly, the Internet, brought the ability to communicate and share files instantaneously to anyone in the world. Each agency began to develop their own e-mail infrastructure in a relatively limited manner adding users incrementally. Now it has become the preferred method of communication. This has led to an ever-growing number of servers, server space, and personnel needed to maintain each system. E-mail has also become the method of choice for citizens to communicate with government, further increasing demands on the existing e-mail infrastructure and security.

In October 2003, the California Department of Finance conducted a survey of state e-mail systems on a departmental basis. The survey included information about the number of servers, mailbox size, number of users supported, virus detection software and various other factors. Results from the survey showed the wide variety of e-mail systems that support the state, the cost of running those services and the complexity.1 Approximately 100 surveys were returned to the DOF. An analysis by the California Performance Review shows that costs vary widely among agencies, with on-going costs ranging from approximately $144 per year, per employee to a high of $216. With an estimated 145,000 client mail boxes across state service, the total cost is estimated to be at least $21.6 million per year. This figure is consistent with analysis of other states’ e-mail infrastructure costs.
As a result of the uncoordinated growth of e-mail in state government, these systems are increasingly at risk for failure, virus attack, lost e-mail and extended interruptions. As an example, the Love Bug Virus of 2000 affected thousands of computers, causing several departments to be without e-mail for days as staff tried to eradicate it from their e-mail systems. The California Franchise Tax Board was without e-mail for four days as a result. The loss in productivity and the need for staff at each department to eradicate this virus cost thousands of dollars in lost staff time and productivity. As departments have developed their own e-mail systems, they often did not have the funds to create redundant systems or adequate virus protection.

There are also no standards across departments, and there are often missed steps in adding security patches. This can lead to system problems and lost e-mail. Retention of e-mail is essential as it is considered a record of state activities and subject to public records act requests. Failure to produce e-mails when requested will cause distrust by the public. This makes redundancy, standards and security a necessity.

E-mail systems in individual departments also require a local management structure including information technology (IT) staff. Anytime there are new software patches or upgrades in software, operating systems, e-mail server, or other infrastructure, staff at each department need to do the upgrade. Thus, they are done redundantly across agencies, and changes may not occur simultaneously. In contrast, consolidated e-mail systems are developed with a standard infrastructure, upgrades occur in one place, software patches for security are implemented across the board in a timely manner and require less staff time to manage.

Studies in large organizations and other states support messaging consolidation as an appropriate strategy for improving security, management and reducing total costs of operations. The following are some examples:

- **State of Utah**—A centrally administered e-mail service administered by the state’s Information Technology Services by an IT process group sponsored by the Governor of Utah and the State Chief Information Officer (CIO). The group proposed an immediate implementation. The principal deliverable will be a consolidated e-mail service that will reduce overall e-mail administrative and infrastructure costs to the State of Utah.²
- **State of Indiana**—In October 2003, Indiana established in policy a proposed single e-mail system for all agencies. The policy states, “Migrate all state agencies under a single e-mail system.” The primary benefits of a consolidated statewide e-mail system are lower costs, improved service and tighter security. Additional benefits expected from the e-mail consolidation include common calendars and scheduling, increased productivity, remote access to e-mail via the Internet, and more robust virus protection.³
- **State of Ohio**—The Information Technology Services Delivery of Ohio offers Microsoft Exchange services for integrated e-mail and information management. The service allows agencies to take advantage of the organization and management of all
e-mail, calendar, contact and task information using a single integrated application in a safe, secure and reliable infrastructure. Currently Ohio has approximately 9,000 users implemented on the consolidated e-mail infrastructure. Once fully implemented, the state of Ohio (59,000 e-mail clients) has estimated their consolidation savings as follows:

1. Reduce servers from 460 to 20;
2. Reduce e-mail administrators from 44 to 20; and
3. Reduce annual cost from $11 million to $2.1 million.⁴

- State of Louisiana—The state will provide consolidated e-mail services for agencies under the authority of Louisiana’s Act 772 at one or more of its consolidated data centers. This service will include the support of standard e-mail services including basic messaging, address book, scheduling of personnel and resources within and among departments and optional integration with the standard wireless service offered through the Office of Telecommunications Management. Thus far, 14 departments are using the consolidated e-mail service.⁵

- Oracle Corporation reported that consolidating its 97 e-mail systems world wide into a single, unified e-mail system, saved the company $13 million in its first year and $11 million in subsequent years.⁶

**California’s evolution toward consolidation**

In 1999, the Employment Development Department (EDD) began migrating and consolidating its Microsoft Exchange environment to the Health and Human Services Data Center (HHSDC).⁷ The goals of the project were to eliminate redundant and incompatible e-mail systems, provide support at an enterprise level, increase system availability, security and recoverability, and eliminate duplicative support work. In response to the goals of EDD’s consolidation, the HHSDC did a study to analyze the merits of providing an e-mail service offering to HHSDC customers. The study found HHSDC could offer full featured Microsoft Exchange services to all departments regardless of size, at a competitive price. The study also found that, “HWDC’s [HHSDC] messaging pricing is competitive when compared to other industry service providers and should be the primary choice for internal government customers considering the move to managed based e-mail solutions.”⁸

Since the initial deployment by EDD in 1999, HHSDC has developed its messaging infrastructure to handle up to 32,000 mailboxes and is doing a migration to Microsoft Exchange 2003, which will be completed by July 2004. This infrastructure is robust enough to handle the needs of several departments in its current iteration, and, with the appropriate hardware and software purchase, can be scaled to handle statewide consolidation. Although this infrastructure has redundancy, additional consideration must be given to disaster recovery.

The consolidation of e-mail services in California state departments is in alignment with the direction of the state chief information officer. On April 30, 2004 the state CIO presented the
Responsibility for Messaging Systems policy to agency secretaries and department chief information officers, who unanimously accepted it. The messaging policy provides that:

“Messaging systems are common technologies within the Executive Branch, for which the acquisition, technical and security management, and ongoing licensing will be consolidated for reasons of cost-effectiveness, improved manageability and security . . . The State CIO shall designate one or more agencies to assume responsibility for consolidated acquisition, technical and security management, and ongoing licensing of messaging systems for the Executive Branch subject to such conditions and oversight as the State CIO may require.”

Possible implementation risks
Though consolidation is an obvious path most large organizations pursue, it is not entirely without risk. These risks may include:

- Different retention policies across agencies;
- Different remote access methods and policy;
- Different mailbox sizes;
- Application integration with e-mail preventing a seamless migration; e.g., the Pass-Through Entity tax application at Franchise Tax Board which requires Microsoft Exchange;
- Necessity of upgrades to related technologies (e.g., Active Directory, Windows 95/98 upgrade of desktops); and
- Potential of temporary interruption of existing e-mail function due to migration.

Recommendations
A. The Governor should direct all state departments and agencies to immediately begin migrating their e-mail services into the existing Department of Health and Human Services Data Center (HHSDC), or its successor.

B. The Governor should direct HHSDC to work with departments to develop the migration plan to include at least 20,000 additional mailboxes in Fiscal Year 2004–2005.

A detailed work-plan should be developed identifying the departments to be migrated, the time-frame for migration, and all associated costs and savings identified, including existing server and staff redirection as needed.

C. The Governor should direct HHSDC, or its successor, to consolidate excess hardware infrastructure, where possible, to support all state e-mail accounts.

As departments migrate from their existing, distributed e-mail systems, excess hardware should be redirected to HHSDC to scale the infrastructure for a larger number
of mailboxes. A certain amount of hardware should be purchased for technology refresh and standards adherence. These costs are a part of the ongoing maintenance of e-mail and are significantly less than what each department would pay individually for hardware upgrades.

**Fiscal Impact**

Consolidation of California state government e-mail services could save the state millions of dollars. The specific savings resulting from these recommendations cannot be fully estimated since the savings depend on the specific implementation plan developed and the detailed analysis of the equipment, software, and staffing currently providing these services.

Departments pay a significant amount of money to implement system security for e-mail. Consolidation will allow e-mail systems to be more secure, and will consolidate the security infrastructure, allowing economies of scale in the purchase of security infrastructure tools.

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**Endnotes**

8. California Health and Welfare Data Center [has now become the Health and Human Services Data Center], “Messaging Service Analysis” (Sacramento, California, July 26, 1991).
9. California Information Technology Council, Enterprise Applications Committee, “California E-mail Solutions” (Sacramento, California, April 30, 2004).
Create a Statewide Information Technology Help Desk

Summary
California should create a statewide information technology help desk to better serve state employees and achieve economies of scale.

Background
California state government departments and agencies have multiple information technology help desks, doing similar functions and each using different tools to capture information from client calls. This approach limits the ability of the help desks to share information; users often don’t know who they need to call when they have a problem; and calls are not consistently tracked. Duplicating these activities results in multiple license costs, requires additional personnel to staff these help desks, increased training costs and additional office space to physically locate the many help desks.

Up to 35 percent of help desk activity is password resets, followed by support for network outages or software functionality questions. These calls are supported by what industry considers a “Tier-1” help desk. Tier 1 resolves the most basic problems or previously identified problems. Tier 2 and 3 help desk functions are used for more advanced problems that cannot be resolved by Tier 1. The scope of this issue paper addresses only Tier 1 activities since these are easily consolidated, and Tier 2 and 3 level problems are more efficiently solved by having staff available to do hands-on support closer to the client.

CIO Magazine reports that help desks are no longer about just fixing problems, but are a place to keep problems from happening in the first place. The help desk can collect data on frequently occurring problems and assist in mitigating problems before they happen. The most prevalent help desk trend is consolidation, bringing dispersed support groups together to present a single and thus more efficient point of contact to users. An example cited is Dow Corporation, which has consolidated global help desk functions into one central point of contact. Dow states that the single point of contact makes life easier for global users, but it also affords the desk an enterprise view of the systems, users and their problems that is essential to effective preventive care.

Other state examples
Florida has set up a Tier 1, Enterprise Technology Service Desk which provides a single point of contact for determining and resolving hardware, software and connectivity problems. Its centralized tracking system allows problem resolution by prioritizing the incident and assigning resources, identifies training and education opportunities relating to recurring
problems, analyzes and identifies unexpected call volume patterns, and provides a process for escalating, tracking, communicating call status and closing of logged cases.³

The New York State Office of Technology implemented an integrated help desk in June 2001. It provides support for single and multi-agency applications and serves as the entry point for problems that state agencies may have with their own internal operations and applications, New York’s telecommunications network or with running their applications at the Consolidated Data Center.⁴

In 2003, the California Franchise Tax Board consolidated four help desks with duplicative assignments into one. The consolidated Help Desk Contact Center provides Tier 1 support for 6,000 employees in California and to the four out of state branch offices (Chicago, Houston, Long Island, and Manhattan). This consolidation was necessitated by staff reductions and budget cuts in Fiscal Year 2003–04.⁵

As organizations face budget cuts and staff reductions, they look for ways to provide consistent service levels to customers. Consolidating Tier 1 help desk functions is one way of reducing redundant tasks and allowing for proactive problem resolution with less staff and cost.

**Recommendation**

Stephen P. Teale Data Center, or its successor, should develop by July 1, 2005 an information technology “help desk” service to be offered to all state agencies. The help desk service would include telecommunications, networking, mainframe, servers and storage devices, personal computers, desktop applications and enterprise applications.

**Fiscal Impact**

The implementation of a statewide information technology help desk for Tier 1 functions can produce significant savings; however, these savings will be offset by the initial investment in setting up the call center infrastructure and for related software and hardware purchases and will occur as the implementation is phased in over three years.

A conservative estimate, based on a state CIO survey conducted by the California Performance Review, indicates there are more than 400 staff performing this function. A 10 percent staff savings could be achieved through consolidation. This would produce a savings of approximately $3.8 million per year in personnel costs, a 40-PY reduction. Indirect benefits will occur over time as efficiencies associated with a consolidated solution are realized.⁶
Endnotes


5 Interview with Kelli Haggerty, manager, IT Help Desk, California Franchise Tax Board (March 25, 2004).

The Virtual Desktop—A Computer Support Model that Saves Money

Summary
Most state agencies and departments have adopted their own “standard” suite of software for their employees who use computers. Software for e-mail, word processing, spreadsheets and the like are installed on each employee’s computer. This practice is becoming increasingly expensive. “Virtual desktops,” which provide Internet browser-based access to software applications that reside on a central server, could substantially lower the cost to the state, while increasing productivity and lowering state government’s total cost of ownership of personal computers.

Background
When state agencies and departments supply their employees with computers, the computers are generally delivered to the employees with software already installed on them. Applications for e-mail, word processing, spreadsheets, presentations, databases and the like are installed on each and every computer as part of a “standard” package. But these standards vary widely by agency and department, resulting in higher operational costs across agencies for technology support. Agencies and departments configure, maintain and support this software on individual personal computers (PCs), creating an ever-expanding requirement for individual licensing on a per-user basis, rather than a pool of licenses that are managed for reassignment as needed.

While agencies and departments attempt to maintain standard PC configurations, the PC world is constantly changing. Computer manufacturers are constantly improving technology with faster chips, graphics displays and communication interfaces. Software designers, in turn, take advantage of this improved technology and create more powerful and useful programs and operating systems. Users likewise need hardware and software upgrades periodically to maintain levels of service and to facilitate electronic document sharing in the new environments created by these new technologies. As a result, the “standards” are constantly changing. Unfortunately, budgets do not allow for throwing out old systems and replacing them with brand new systems every time the standards are changed. Also, many departments and agencies make big purchases of computer equipment and software at the end of each fiscal year in order to fully use their budgeted dollars, often with little thought given to planned computer upgrades.

These factors combine to yield a very diverse PC hardware landscape in state government, with a wide variety of PCs, operating systems, software and software versions. This environment creates tremendous challenges in providing employees with the tools they need
to effectively and efficiently accomplish their jobs. It also makes for large operational challenges in training, task coordination and information sharing, to name but a few.

**A la carte cannot satisfy the IT appetite**
The “a la carte” method of satisfying state business desktop computing needs has several undesirable consequences:

Higher Total Cost of Ownership
- Software updates are needed before planned and at a higher price;
- Excessive expenditures for applications and hardware beyond what is needed—buying more powerful computers and applications than is needed to perform desktop functions;
- Cannot fully leverage software and hardware purchases to achieve better pricing; and
- Each PC must be individually “touched” by support staff to maintain and upgrade applications.

Loss of productivity, lower customer service levels and lack of desktop tool portability means that employees:
- Must learn new tools when transferring agencies or even from unit to unit within an agency;
- Cannot easily access tools or information from varying locations; from building to building, city to city or from room to room;
- Face severely limited telecommuting opportunities;
- Face downtime associated with software upgrades and support delay; and
- Face complications in sharing of data files caused by software version differences requiring manual manipulation of data or results of analysis.

**Is total cost of ownership the rogue elephant in the IT budget room?**
At a September 1999 Technology Excellence in Government seminar, Charles Self, assistant commissioner for the federal General Services Administration’s (GSA’s) Federal Technology Service, told attendees that the biggest impact of “seat management”—the management of the hardware, software and services for each employee—might be its influence on the initial purchase of PCs. Self said too many agencies “just buy PCs at the end of the fiscal year with no real plan for how they will be deployed or whether they are even necessary.” Howard Stoodley, an expert in total cost of ownership benchmarking for Harris Corporation, echoed Self’s remarks and told attendees that this kind of buying contributes to per-seat TCOs that can spiral to $15,000 per year and beyond.¹ These costs are significantly higher than those of Gartner Group, a worldwide consulting firm, whose estimates range no higher than $11,000 per year for a Windows-based desktop system in a distributed network.²
Furthermore, TCO analyses often uncover what Stoodley calls “soft costs.” Soft costs are those incurred as a result of poor training, inadequate help desks, uncoordinated equipment replacement, a lack of standardization, and unconsolidated servers. Experts agree that better IT management, not more IT itself, is the only way to solve these kinds of problems. At a March 2000 TEG seminar, Lt. Colonel Alvin Lee, a technology branch chief and program manager at the Air Force Air Education and Training Command (AETC), told attendees that Randolph Air Force Base officials found that their “soft costs” per client ran as high as $12,000 per year. These soft costs usually show up as operational and efficiency losses and are not reflected in IT budgets. The Air Force uncovered staggering productivity losses in its current environment, finding that the average desktop user at AETC spends 9.3 hours per month fixing his or her own IT problems and another 9.2 hours per month helping coworkers with their IT problems. At just one Air Force Base, that is the equivalent of 480 people not at work.

While there is evident disparity in TCO from one organization to the next, the costs for computer support range from high to exceedingly high. Certainly California state government is not operating with any tighter rein on computer support costs than other organizations.

**Virtual desktop can tame the TCO elephant**

Virtual desktop solutions provide access via Internet browser to standard desktop tools such as Microsoft Office (Outlook, Word, Excel, PowerPoint, Access) and other office automation suites such as Star Office, from standard software installed, maintained, and deployed from a central server facility. Individual desktop PCs or laptops allow local or remote access for individual use, rather than having the software installed on each computer. This method of software provisioning dramatically improves access to a standard set of office automation tools, provides simplified support processes, and improves hardware and software management.

Other benefits include remote access, portability of work functions and the capability to extend desktop services to work partners who would otherwise not be able to collaborate electronically. Implementing a virtual desktop based on commercially available solutions will enable state agencies to deliver standardized PC desktop tools, reduce TCO and increase productivity and customer service levels.

Today, state agencies continue to configure individual desktop or laptop PCs with applications needed by employees, creating a requirement for individual licensing on a per user basis. Migration of state desktop computing to terminal server-based systems architecture will generate substantial savings, increase security, improve organizational effectiveness, and improve government agency coordination and interoperations. It would also allow employees to access their desktop tools from virtually any machine with a web connection, thus increasing productivity. The ability to tap into a “virtual office” can promote a higher use of telecommuting and the creation of “working out” offices in locations that are closer to employee homes.
Virtual desktop solutions provide a solution that scales to fit the needs of large organizations. The New York State Department of Civil Service uses a Citrix solution to provide virtual desktop access to its 173,000 employees and to 394,000 local government workers within 104 separate governmental agencies.\(^5\)

Some state government entities are moving in this direction. The California Department of General Services (DGS), California Department of Rehabilitation (DOR), and California Franchise Tax Board (FTB) have all successfully deployed virtual desktop solutions.\(^6\)

**Recommendation**
The Stephen P. Teale Data Center, or its successor, should develop and implement a new offering for virtual desktop technology to deploy to all state agencies and departments as a managed service offering, with participation managed on a subscription basis. The Stephen P. Teale Data Center, or its successor, would provide the virtual desktop server infrastructure and software license pool to support client agencies, expanding their current operations to provide support to all subscribing agencies.

**Fiscal Impact**
Virtual Desktop management is a service offering that allows departments the choice of continuing their current management of office automation responsibilities or contracting for this service at less cost from the Stephen P. Teale Data Center, or its successor. Data have not been captured to identify the statewide TCO average, but it is estimated to be less than the $11,000–15,000 per workstation that the Gartner Group and the federal government estimated. A conservative estimate for the state would be about $5,000 per workstation. With virtual desktop management, the costs at FTB, DOR, and DGS have been approximately $1,000 per workstation.

Department subscriptions representing 25,000 desktop workstations could potentially generate savings of $100 million annually. Nearly all of these savings results from the reduction of current effort of either staff dedicated to desktop support or staff diverted from unrelated work assignments to assist in desktop support. A significant indirect benefit would be the increased productivity of employees who are diverted from other work assignments when assisting in desktop computer support. This is not quantifiable.

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**Endnotes**

6 California Department of General Services, “Cost Estimate of a Citrix Meta Frame Solution” (Sacramento, California, March 9, 2004); California Department of Rehabilitation, “Post-Implementation Evaluation Report: Field LAN/WAN Project (5160-43)” (Sacramento, California, September 30, 2001); and California Franchise Tax Board, “Thin Client Technology Deployment Feasibility Study Report FTB FSR 00-07” (Sacramento, California, November 2000).
Use Digital Photo Technology to Reduce Costs

Summary
California agencies and departments often use film photography instead of digital photography. Digital photography is less expensive and offers more versatility of images captured for reference or evidence purposes.

Background
Many state agencies use photography in various areas of their daily business. For example, investigators with the California Department of Motor Vehicles (DMV) take photographs as part of their investigations. Field offices use either Polaroid™ or 35mm film for their needs. Only DMV headquarters has digital cameras at this time.¹

California Highway Patrol (CHP) officers take photographs for their crime scene documentation and evidence collection. The use of digital cameras is very limited, since the standard for crime scene photos is black and white film. Digital cameras are sometimes used for crime scene re-creations and CHP officers often use their own digital cameras for suspect and witness identification, and other purposes.

California Department of Corrections
One department that would benefit from implementing digital photo technology is the California Department of Corrections (CDC).

CDC houses about 160,000 inmates in its 32 facilities throughout the state.² CDC estimates that about 10 percent of the inmate population transfers from one facility to another throughout the state each month. Each movement of an inmate constitutes a substantial amount of documentation, including new photographs taken upon being processed into a new facility.³

The number of pictures taken for processing an inmate varies from 15 to 18 pictures each time an inmate is reassigned to a new facility. These pictures are used for administrative documents and distributed to different law enforcement agencies such as the California Department of Justice, the U.S. Department of Justice and the U.S. Bureau of Immigration and Citizenship Services for tracking these individuals.⁴

Digital images can be incorporated into the California Department of Justice Live Scan system for a more complete record of persons entered into that system as is done by the Los Angeles County Sheriff.⁵
Digital photo technology is currently used by CDC’s Parole and Community Services Division. Additional knowledge can be gained from its experience.6

Twenty-two of CDC’s 32 prisons use Polaroid™ film as the primary media for their photographic needs and each spends between $100,000 and $150,000 on Polaroid™ film each year. The ten institutions using digital technology have photographic supply costs ranging from $25,000 to $30,000 annually, though the digital systems are not standardized within CDC.7

By standardizing to digital photo equipment statewide, using the National Institute of Standards and Technology (NIST) standards for digital photo technology, the Department of Corrections could enhance the Live Scan fingerprint database by incorporating digital photographs into that system. Among other things, CDC would also be better able to immediately transmit images electronically from one institution to another as inmates are transferred, to law enforcement agencies worldwide to aid them in identification, to local law enforcement in the event of escapes and to provide photographs of inmates and parolees to the news media.

**Recommendations**

A. The Governor should direct all agencies and departments to immediately begin using digital photo technology whenever possible.

B. The Governor should direct the California Department of Corrections (CDC), or its successor, to install digital photo technology that meets the standards of the National Institute of Standards and Technology for compatibility with the Live Scan system at all 32 of its prisons by July 1, 2005. The Director of CDC should ensure that the department’s digital photo technology is standardized department-wide, and that holographic capabilities are incorporated in the digital photo systems for enhanced security and identification.

**Fiscal Impact**

The implementation of digital photo technology will begin producing savings in the first year; however these savings are lower because of the initial investment in equipment and supplies. The first year includes one time costs of $10,000 per institution for new cameras and all required peripheral equipment. This will standardize the systems and allow the transmission of images and information electronically between all 32 institutions. Savings increase in the following years because the costs for digital supplies and maintenance are much lower than the costs for photographic supplies.
## General Fund
(dollars in thousands)

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Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

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### Endnotes

1. Interview with Audry M. Lee, technology liaison, California Department of Motor Vehicles (June 9, 2004).
4. Interview with Ron Cappel, administrative assistant, Institutions Division, California Department of Corrections, Sacramento, California (May 12, 2004).
5. California Department of Transportation, Transportation Division, Institutions Division, “Transport by Trip Type,” Sacramento, California May 12, 2004 (computer printout).
6. Interview with Ron Cappel.
7. Los Angeles Sheriff’s Department, Technical Services Division, Record and Identification Bureau Overview, [http://www.lasd.org/divisions/tsdiv/record_id/ri_overview.html#lacril](http://www.lasd.org/divisions/tsdiv/record_id/ri_overview.html#lacril) (last visited June 2, 2004).
8. Interview with Ron Cappel.
9. California Department of Corrections, “Technology Unit–Costs Associated with Inmate Photographs” (Sacramento, California, July 2002).
Chapter 7
B. Performance-Based Management and Budgeting

California’s current incremental budgeting process is widely acknowledged as “broken.” The current budget process forces the Governor and the Legislature to focus on individual department requests for increased expenditures rather than on broad policy issues that impact the people of California the most.

California’s traditional line-item system of budgeting outlines how much money has been spent on specific operating costs (training, travel, overtime, etc.) but does not provide information on performance or productivity. A department is measured not by the effectiveness of its programs but by bottom line expenditures. This does not allow for efficient management of programs.

Ineffective programs are allowed to continue without review and programs which have outlived their purpose cannot be identified easily. The long-term effectiveness of a program is seldom revisited once it is in a department’s baseline budget. Limited attention is given to evaluating performance because there is no standard measurement system in place. Accountability for services the public expects and to which they are entitled is virtually impossible. In 1999, the Senate Advisory Commission on Cost Control in State Government noted that an estimated 60 to 70 percent of the annual budget is approved without significant scrutiny.

Planning and performance assessments play an insignificant role in the state’s budgeting and management process. Decision-makers continually must make budget decisions with limited information. The system must change to enable decision-makers to set priorities proactively, determine strategies, assess performance and revise funding levels accordingly. Under the current system goals are not reprioritized when revenues fall short and management is not held accountable for program performance. Instead, cuts are made equally across all government as a quick way of reducing budgets and expenditures with little thought toward the outcomes.

To make state government more accountable and responsive to the needs and interests of the public, a performance management system is needed that will promote rational decision-making by state officials and program managers. By developing a comprehensive performance-based management system California will be able to focus on and respond to customer needs, measure and evaluate service delivery and base program and funding
decisions on valid performance data. The data should focus on priorities, strategies to meet those priorities, current performance assessments emphasizing accountability and the development of new or revised strategies.

The core recommendation of our proposals is the introduction of Performance-Based Management to California’s budget, financial and management processes. Each proposal outlines specific recommendations believed necessary to accomplish performance-based management. With its reliance on strategic planning and performance measurement systems, performance-based management links resources to the ultimate program outcomes. This focus on measurable results allows policy makers to gain clear information on the impact of expenditures and provides the necessary information to make sound fiscal decisions; allows the public to see the impact of the dollars expended; provides actual accountability to the state’s civil service management structure; and can provide for improved delivery of services to the people of California by focusing on management efficiencies and elimination of under-performing, ineffective programs.

A key recommendation involves modernizing statewide financial information systems. Some investment is needed to support performance-based management. Timely and meaningful information is essential to measure and manage government performance. Investment in a modern, statewide financial information system that is capable of integrating with existing departmental systems is needed for measuring performance, formulating budgets, and evaluating programs. This will allow the state to quantify the full cost of government programs.

Ongoing improvement in the efficiency of state government requires a focus on business process reforms. These can range from automating manual processes to improving employee training. The state should provide resources to provide an incentive to encourage and fund these reforms. An innovative recommendation included in this chapter proposes the creation of a 21st Century Innovation Fund to provide that type of incentive in the form of a competitive revolving loan fund.
Transform the State’s Strategic Planning Process and Implement a Performance-Based Management System

Summary
California state government’s current strategic planning process does not rely on accurate performance measures to provide the state’s decision-makers the information necessary to evaluate individual programs and ensure that taxpayer dollars are not wasted. To ensure state government becomes fiscally responsible while achieving its goals and objectives, California should implement a performance-based management system.

Background
Performance-based management is the latest in a long line of efforts to reform public-sector management by measuring government program results. As used in this document and in our recommendations, performance-based management includes strategic planning, annual program level action plans, performance-based budgeting and regular internal and external performance reviews. One critical component of performance-based management is strategic planning, which provides a systematic road map for achieving long-range goals. There are many ways to engage in strategic planning, but all strategic planning processes contain five main elements: reviewing where you are; identifying where you want to go; implementing the plan to get you there; reviewing progress toward goals; and adjusting the plan when necessary. Strategic planning as a component of performance-based management creates useful performance measures and then uses them to determine if state government programs are achieving their goals.

Strategic planning cannot be successful if it does not obtain accurate information on the results of government programs. An effective performance-based measurement system can provide that information. Linking strategic planning to performance measures has several benefits. First, when planning focuses on results, departments must consider the impact of their activities on stakeholders and customers. Second, successful strategic planning requires regular reviews and updates, which forces agency managers to ensure their plans remain relevant to their customers. Third, requiring planners to consider the resources they need to accomplish their goals and objectives forces those in charge of planning and those in charge of the budget process to work together. Finally, requiring goals and measures of performance means managers must measure the effect of their program strategies to determine if they are achieving their state goals and objectives.
In private business, the basic measure of success or failure is the existence or absence of profits. Establishing a similar “bottom line” measure of results for government services is a necessary step to ensure accountability.

Oregon, Virginia, Florida and Texas implemented performance-based management with varying degrees of success. In addition, the federal Government Performance and Results Act became law in 1993. This act requires all federal agencies to develop agency level strategic and program level annual planning processes, performance measures, annual performance reports and use those processes to develop program and agency budgets. At about the same time, Vice President Al Gore brought together a large team of high-level federal employees and consultants to undertake a review of federal programs in a manner that paralleled the approach taken in the Texas Performance Review.

During this period, other states began to transform their governments into more customer driven, results-based organizations. The history of these efforts is not complete, but observation and existing assessments suggest some of these efforts show promise.¹

**California’s reform efforts**

California has a number of entities in the executive and legislative branches responsible for preparing, overseeing or reviewing the state’s budget process and assessing performance. These entities have little explicit coordination or common focus.²

At least since the 1940s, the Governor’s budget has included program-specific descriptive and performance information on major programs. In 1962, the Legislature created the Milton Marks Commission on California State Government Organization and Economy (also known as the Little Hoover Commission) “to promote efficiency, effectiveness, and economy in state programs.”

An extensive effort to improve government program performance occurred in the 1960s when Governor Pat Brown and Governor Ronald Reagan developed the current agency/department organizational structure. Under this arrangement, agency secretaries, acting as agents of the Governor, have responsibility for policy coordination across the departments and boards under them. The secretaries also review budget and legislative proposals.

In response to the severe economic shock and budget problems of the 1990–91 recession, Governor Pete Wilson initiated a series of reforms including performance-based budgeting pilots and department strategic planning. Ultimately, the performance-based budgeting pilots failed.³ Further, the Governor required departments to link their budget requests to these plans, and the legislation expressed a legislative intent that strategic plans form the basis for conducting performance reviews.⁴ While the state required each department, board and agency to have strategic plans, use of these plans to guide budget allocations and to improve operations was limited.⁵
California's system of performance management

While California already has a strategic planning mandate and budget procedure in place, no system of accountability exists if planning goals are not met. Departments and agencies create plans but fail to update them regularly or to attach relevant performance information. Further, departments typically do not link strategic plans and performance measures to the budget process. While the Department of Finance (DOF) directives require departments to link their budget requests to strategic plans, departments often do not include such information or include it in a way that is not useful.

In addition, the responsibility for oversight is spread across numerous entities, which use multiple and uncoordinated methods for exercising that oversight. California has at least five distinct entities with responsibility for evaluating program, department, and agency performance statewide: the State Controller, the Little Hoover Commission, the Bureau of State Audits, the Office of the Legislative Analyst and the Department of Finance.

The state’s current management and program structure results in agencies, departments and programs with overlapping responsibilities. Other programs are fragmented, which prevents their customers from obtaining the services they need. Existing information systems also do not provide the necessary support to tie planning and management systems to budget systems. Current budget systems do not link budget requests either to annual action plans, to strategic plans or to program performance.

These problems must be solved if the state’s programs are to become cost-effective over time. To ensure the state begins to reduce overlapping services and prevent program fragmentation requires planning mechanisms that identify them.

Recommendations

A. The Governor should issue an Executive Order directing all state agencies to implement uniform performance-based management systems, which include linked strategic planning, annual action planning, performance measurement, performance-based budgeting and performance reporting for all programs within their purview.

The order should delineate the state’s vision and related goals. The order also should direct agency secretaries to establish agency-level goals that conform to both the state vision and goals and to each agency’s scope and responsibilities. Moreover, this order should direct department directors to use their strategic plans to identify ways to achieve the goals enumerated in the agency plans.

B. The Governor should direct the Department of Finance (DOF), or its successor, to ensure that its budgeting units use strategic plans, annual program action plans, related performance measures and performance reports in its review of department and agency budget proposals.
The Governor should direct the DOF or its successor to revise its current strategic planning guidelines to ensure they are focused on results. The Governor should issue a directive to DOF or its successor and all departments and agencies that the budget system will begin to use performance-based management principles to ensure that resource plans are consistent with anticipated revenue and provide realistic assurance that programs will meet their objectives, agency goals and the Governor’s priorities over time.

C. The Governor should direct the DOF, or its successor, to implement performance-based management to ensure the development and use of appropriate guidelines, processes, training and information systems.

The record in other states suggests that successful implementation requires developing appropriate reporting and support systems. This includes developing compatible information and budgeting systems, training managers and employees, and moving accountability to the appropriate individuals and entities. To accomplish these tasks, the Governor should create workgroups to implement the new system, which should include a Web-based reporting system and modern financial management systems.

D. The DOF, or its successor, should work with the Office of the Legislative Analyst, the Bureau of State Audits and the State Controller to develop processes to ensure that the mechanisms created to oversee the new system continue to evolve and improve to meet the changing needs of the state over time.

The Governor should consult legislative leadership to form a partnership with the Joint Legislative Budget and Audit Committees to ensure they help develop adequate performance review and audit processes.

E. The Governor should direct the DOF, or its successor, to develop and implement routine program-level performance reviews. The Governor should also instruct the Director of Finance, or his or her successor to consult with the Office of the Legislative Analyst, Bureau of State Audits and the State Controller when developing the review process.

Under the recommended performance-based management system, program managers will need to undertake regular performance reviews as part of their planning process. Such processes allow managers, workers and other stakeholders to learn which programs experienced success and which ones failed and to make any necessary adjustments. These reviews provide useful information about the adequacy of budget allocations provided to program managers to carry out their planned short-term targets and achieve their long-term goals. Some agencies conduct performance reviews and evaluations, so it is important to ensure these agencies agree to the procedures...
developed for reporting performance measures and information that contribute to the effectiveness of performance reviews.

**Fiscal Impact**

Implementation of the performance measure reporting system will require one-time costs to create a Web-based performance measure reporting system. In addition, departments must develop accounting and financial reporting systems that are consistent across departments.

It is not possible to estimate the ultimate fiscal impact of these recommendations. Over time, improved program information and coordination and more informed budget decisions will result in more efficient and effective programs, likely resulting in cost savings. Implementation and ongoing performance-based management planning and budget development should be absorbed in department and agency budgets, because these entities currently are assigned these functions.

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**Endnotes**


Create a Function in the Governor’s Office Charged with Implementing a Performance Management System

Summary
To develop, implement and effectively operate a performance-based management system in California, it should be a function of the Governor’s office to designate who is responsible for managing, directing and influencing the implementation process, and to resolve any obstacles to monitoring the state’s transition to a performance-based budgeting and management system.

Background
Implementing a major change, such as a performance-based management system, requires establishing strong and consistent oversight to focus long-term attention on solving the problems that naturally arise when an institution is undergoing transformational change.1

In 1994, the federal government launched the largest government effort to achieve results-oriented performance planning, measurement and reporting. The responsibility for managing the implementation of the Government Performance and Results Act of 1993 (GPRA) was assigned to the Office of Management and Budget.

Although GPRA has established the foundation needed for achieving results in the federal government, the U.S. Government Accounting Office (GAO) reported in 2004 that numerous significant challenges to implementation of GPRA remain. The report found evidence of: inconsistent leadership, difficulty in setting outcome-oriented goals, difficulty in collecting useful data on results, obstacles to establishing linkages between programs and performance and reward systems, as well as an inadequate focus on addressing issues that cut across federal agencies.2

The 1997 National Performance Review report, Serving the American Public: Best Practices in Performance Measurement, discussed how some of the best organizations, both public and private, implemented results-oriented performance management systems.3 It stated that:

1. Leadership is critical in designing and deploying effective performance measurement and management systems;
2. A conceptual framework is needed for the performance measurement and management system;
3. Accountability for results must be clearly assigned and well understood; and
4. Performance measurement systems must provide intelligence for decision-makers, not just compile data.

California’s effort to implement performance-based budgeting statewide in the mid 1990s received little support for the Administration and the Legislature according to the Little Hoover Commission. The State of California embarked on a pilot program to implement performance-based budgeting in four departments. Those involved with the project and its assessment, quoted in the 1995 Little Hoover Commission Report, *Budget Reform: Putting Performance First*, said no single point person among policy makers championed the continuation of reform.4 The report noted the experience of other governmental jurisdictions using performance-based budgeting points to the need for patience and long-term commitment to reform.

During California’s earlier effort, the California Department of Finance (DOF) was charged with developing the guidelines and managing the process. The pilot agencies and the Legislative Analyst Office noted a lack of guidance by DOF, the department’s very tentative support, and a lack of common reporting formats or computer application standards hampered the pilot project’s ability to implement performance-based management. Comments from the Department of Finance’s staff that performance-based management had only limited applicability to state government indicated their lack of understanding and lack of support.5

The Little Hoover Commission’s report also noted that few are comfortable with the wholesale changes needed in reform. Most experts recognize that strong, effective, visible and committed leadership from the top is critical whenever an organization attempts to change the way it does business. This is no less true in government than in the private sector. Moreover, it may become more important, because no profit motive exists to help drive change. For performance-based management to succeed, the executive branch should provide the logistical support necessary to make the system work; it must also create a plan that assigns clear responsibility for directing and monitoring the implementation of a performance-based management system.

**Recommendations**

A. The Governor should establish a Performance-Based Management function in the Governor’s office to develop a plan to implement performance-based management in California state government.

The plan should include:
- A clear, consistent and visible involvement by the Governor and his cabinet in creating and implementing the performance-based system. This involvement
should include the development of a statewide vision and goals to guide the development of agency-level goals;

- A conceptual framework for the performance-based management system that includes major milestones, activities, timelines and the delineation of responsible parties. The framework should include a uniform and well-understood structure, explaining how the process works, identifying who is ultimately responsible for process outcomes and establishing a clear calendar of events that lists what is expected from each organizational level, and when;

- A training component that outlines the training needed for state employees to implement the new system. The initial training plan should begin immediately and culminate with an implementation plan for Performance-Based Budget training to be scheduled in the Fall of 2004 to be considered in the development of the 2005–2006 budget;

- An effective internal and external communication program that includes employees, customers and stakeholders; and

- A report format and schedule designed to share results and track progress.

B. The Governor shall appoint an executive director who shall develop a resource and staffing plan by August 30, 2004 that supports a Performance-Based Management Section as a permanent operation in state government designed to provide the long-term guidance necessary to implement performance-based management.

C. The Performance-Based Management Section shall develop a monitoring and evaluation plan for implementing performance-based budgeting and make recommendations for corrections as needed to ensure success.

Fiscal Impact

The recommendations would result in minor additional costs for the Performance-Based Management Section. The ultimate fiscal impact cannot be estimated. Over time, however, improved program information and coordination and more informed budget decisions are likely to produce more efficient and effective programs, which in turn should produce substantial cost savings.

Endnotes


Devise Useful Performance Measures to Improve State Government

Summary
Performance measures used in the public sector are statistical indicators that gauge performance and monitor the results and progress of public programs. California should develop and implement useful performance measures to assess accurately the quality of service provided by state programs.

Background
A number of key elements must be in place for a system of performance-based management to work successfully within an organization. One of these elements is the development and implementation of performance measures, which are practical, realistic and meaningful to management, employees and the public.

How an organization targets desired results, measures what it does and assesses its own performance is critical to the successful implementation of a strategic planning process and performance-based management. Merely because an organization is involved in a number of activities, however, does not mean the results of those activities are effective or move the organization closer to achieving its goals.

The consensus is that the development of meaningful and useful performance measures is not easy; it takes time and effort. It is an evolving process that can take a number of years to refine. It is also difficult to gauge government activities and to demonstrate a clear cause and effect between a government program and existing conditions.¹

What are performance measures?
Performance measures are tools used to assess an organization’s success in fulfilling its mission and meeting its goals. Included within these measurements are various indicators, all of which are essential to measure performance accurately.² These include:

- Input Indicators—the amount of resources used to provide a specific program or service;
- Output Indicators—the number of units produced, such as the number of citizens served;
- Outcome Indicators—the reports of the results;
- Efficiency Indicators (or Process Indicators)—the cost effectiveness or cost per unit; and
- Explanatory Information—the information that helps the user understand what influenced the results positively and negatively.
Why develop performance measures?
Performance measures are necessary to improve an organization’s performance. They can help managers stay focused on results. By objectively assessing past and current performance, administrators are better equipped to plan for the future. Programs are implemented and services are provided, but the money used to support these programs belongs to the taxpayers. Moreover, in some cases, the recipients of some services have no other source of assistance. Responsible administrators develop performance measures to ensure state government is using tax dollars wisely and that state employees are held accountable for their decisions.

The development and implementation of a performance measurement system provides management with an internal mechanism to track productivity, assess performance, gauge its progress towards fulfilling its mission and goals, improve performance and motivate employees. Performance measures also are an effective way to inform elected officials, oversight agencies, and the public and other stakeholders of the results of government programs.

Primary obstacles
Valid performance measures can be difficult to develop depending on the nature of the work performed by the organization. Discrete units of service or output indicators may be discernable, but identifying objective outcome indicators (including the quality of services) may not be as obvious. This difficulty can be attributed to one or more of the following:
- Lack of training in performance measures, what they are and how to develop them.
- Lack of verifiable data about results and efficiency. Systems may not be in place to collect and analyze the necessary information.
- Resistance to reporting potentially unfavorable results.
- Lack of agreement about what should be measured and how accurate and valid the collected information is.

Identifying valid measures
Performance measures can be items of information, such as numbers or percentages, which by themselves do not give a complete picture of how well an organization is functioning. To be of use, a performance measure must be practical and realistic. It has to be meaningful to the user, and it should be information that can be compared to an identified benchmark. The following steps identify valid performance measures:
- Defining success for the organization. What does it look like to management? What does it look like to stakeholders and to employees?
- Identifying the indicators that either highlight progress or point out areas needing improvement. In what way or why do they indicate progress or point out problem areas?
- Identifying indicators that can be measured in both quantitative and qualitative terms.
- Ensuring comparisons—from year to year, against an organization’s goals, or in relation to their jurisdictions—can be made using the data tied to the individual indicators.
What to avoid
A manager should understand the organization’s mission and goals. Performance measures, however, should be balanced and take into consideration the perspectives of the organization’s customers, stakeholders and employees. The results of the organization’s performance will be important to each of these groups, so the measurements used to gauge this performance need to address their concerns. Success or outstanding performance to one interest group may look different from another group’s viewpoint.

One of the key areas in the implementation of a strategic planning process is the development of the performance measures. Unfortunately, far too often this component of the process does not receive the attention it deserves. Organizations will identify input and output indicators, because they may be easy to count, but fall short when developing outcome indicators, because they are more difficult to quantify.

Charles Handy, author of *The Age of Paradox*, discusses this ill-fated approach and refers to it as:

“McNamara’s Fallacy”
What does not get counted does not count.

The first step is to measure what can be easily measured. This is OK as far as it goes.
The second step is to disregard that which can’t be easily measured or to give it an arbitrary quantitative value. This is artificial and misleading.
The third step is to presume that what can’t be measured easily isn’t important. This is blindness.
The fourth step is to say that what can’t be easily measured doesn’t exist. This is suicide.

The selection of specific performance measurements is essential, because it sends a message. It communicates what is deemed to be important. To employees, it communicates what to pay attention to and what they will be held accountable for. This in turn will influence employee behavior. If the organization’s focus is limited to output indicators, or the number of units to be produced, effort will be spent to increase productivity (quantity) at the expense of improving outcome indicators or quality results.

Ideally, performance should be measured using a number of indicators. However, if the system of measures is complex, difficult to understand and costly to implement, it will not be adequately implemented and used, which defeats its purpose. Performance measures should:

- Be easily understood with a clear explanation about why it is important;
- Describe the information collected or calculated with the source of the data provided;
- Demonstrate how it relates to other measures, if applicable;
- Identify the limitations of the measurement so it is not misinterpreted; and
• Explain how the data can be used to judge performance; for example, is the data cumulative or non-cumulative for the reporting period.9

**Best practices**
The National Partnership for Reinventing Government reviewed a number of public agencies (at the federal, state and local levels) analyzing the processes and approaches they used to implement performance-based management. The final report, *Balancing Measures: Best Practices in Performance Management*, was completed in 1999 and included the highlights listed below.

1. **Establish a results-oriented set of measures that balances business, customer and employee concerns.** The focus is on the development of a family of measures that addresses what the customers want, the stakeholders expect, and the employees need to achieve success. A commitment to change (possibly an organizational cultural change) is essential if the effort is to be sustained over time. Maintaining flexibility is also critical because performance measures must be reviewed and revised. A common area for improvement has been in the number of performance measures identified by agencies. With a reduction in the number of measures, the quality and timeliness of the reported data has improved.10

2. **Accountability must be established throughout the organization.** Administrators, managers and employees are responsible for not just activities and programs, but for results. The Federal Social Security Administration has implemented a system of executive sponsors who are responsible for each of the agency’s strategic objectives. Ongoing participation and involvement by the sponsors in the implementation of the work strategies is required.11 Employees are kept informed about milestones, and employee evaluations are tied to program results. In addition, customers and stakeholders are kept informed about agency activities and progress, which encourages communication and invites feedback from individuals outside of the organization, such as the legislature.

3. **Collect, analyze and use data.** All of the agencies reviewed use electronic systems to collect, house and disseminate data. Real-time data are essential to make real-time decisions. The information collection process should include not only performance data but also feedback information from outside stakeholders, which tells the organization it is collecting the right data. Collecting and analyzing data is only valuable if it is ultimately used to make decisions. Data collection and analysis is important, but the goal is to use it to gauge progress, change the course of action when appropriate and improve program results.12

Performance measures are a tool to measure performance against intended results. Identifying, developing and using performance measures are integral parts of a strategic planning process. If sufficient time and effort are not allotted for this part of the process, it will have a
detrimental impact on the viability of the strategic plan and on the sustainability of the organization’s planning process.

**Recommendation**
The Department of Finance, or its successor, should devise and distribute guidelines and recommended procedures to state agencies and departments on how to develop and use viable performance measures.

Performance measures should be:
- Balanced and recognize the perspectives of the organization’s customers, stakeholders and employees;
- Practical, realistic and meaningful to management, customers, stakeholders and employees of the organization;
- Based on legitimate indicators of productivity and results oriented (development of output indicators, such as the number of units produced, is insufficient);
- Meaningful because they enable the organization to establish responsibility and accountability for results; and
- Valid so that an organization can measure its productivity, gauge its progress and make management decisions based on reliable information.

**Fiscal Impact**
These recommendations may result in start-up costs associated with consultant and technical assistance support needed by some departments and agencies to assist them in developing performance measures from existing or modified strategic plans. There should also be initial costs associated with the development of a performance measure reporting system.

To the extent that departments and agencies are able to realize program efficiencies through the development and use of performance measures, initial costs should be offset by savings to the General Fund.

The continuation of this process should be accomplished within existing resources.

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**Endnotes**


Implement a Budget Development Process That Links Statewide Goals, Program Performance and Funding Decisions

Summary
California is paying for state programs that have outlived their purpose and ineffective departments that continue to operate without review or evaluation. When resources are limited, decision-makers do not have the information necessary to establish funding priorities. The California Performance Review recommends reforming the budget process to identify statewide goals and develop spending plans to achieve these goals.

Background
California’s budget process traditionally has examined an individual program’s prior-year level of funding as a base amount without considering if that amount was more than necessary. The result is that some California program budgets may be inflated unnecessarily. The process begins with departments preparing baseline budgets to maintain existing services. Departments also may prepare budget change proposals to increase or decrease funding.

The Department of Finance (DOF) analyzes the budget change proposals, focusing on the fiscal impact of the proposals and their consistency with the policy priorities of the Governor. For some caseload-driven programs, such as financial assistance to the poor and elderly, the process may differ slightly although the approach is the same. Instead of submitting budget change proposals, these departments submit a letter outlining proposed changes to their caseload assumptions. These letters typically include program and fiscal changes to the baseline budget.

Instead of appropriating funding for individual items such as personnel costs and equipment, the Legislature in many cases authorizes a lump sum appropriation for a program, which does not limit spending to specific items, but instead permits program managers some decision-making flexibility. These lump-sum appropriations, however, do not identify goals and objectives, or tie the appropriations to performance measures that would demonstrate whether the goals and objectives are met.
**Ineffective programs**
While the current process has worked during periods of revenue growth and budget surpluses, it does not identify programs that have outlived their purpose. Even when revenues are increasing, it is difficult to address emerging critical needs or new priorities. The California Constitution Revision Commission noted in 1996 that “for members of legislative budget committees or citizens frustrated with the operation of state government, making changes to the status quo is extremely difficult.” Since 1996, that situation has not changed.

**Making the problem worse**
When revenues decline and deficits appear, however, the existing process collapses. When budget shortfalls were first projected in May 2001, the DOF abandoned the traditional budget process to balance the budget. The DOF conducted internal reviews to identify ways to reduce programs and then asked departments to submit plans to achieve targeted budget reductions. These reviews and plans, however, also worked off the baseline budget.

The state has been unable to reduce expenditures sufficiently over the long haul, and the 2003–04 Budget Act relied on about $20 billion in borrowing to bridge the shortfall. Because this budget relies heavily on borrowing and one-time solutions, the state faces operating deficits estimated at more than $14 billion annually over the next five years. The Legislative Analyst’s Office says “the persistent nature of the out-year operating shortfalls—even in the face of an improving economy—indicates that the state will not be able to ‘grow its way out’ of its budget problems.” The current deficits are the result of three years of major imbalances between revenues and expenditures.

**Proposition 58**
The California Balanced Budget Act, Proposition 58 passed by voters in March 2004, enacted significant changes to protect the state from carrying large deficits in the future. It requires the state to enact a balanced budget. It establishes a Budget Stabilization Account of up to $8 billion or 5 percent of General Fund revenues, whichever is greater, to cover budget shortfalls. It provides for a process to make mid-year budget adjustments. It also prohibits future borrowing to cover budget deficits.

These provisions will help California avoid future fiscal crisis, but the state cannot rely on these measures to bridge revenue declines. For example, even the new $8 billion Budget Stabilization Account is insufficient to cover the current deficit. In addition, the restriction on the use of debt to cover budget deficits will require the Governor and Legislature to restructure state expenditures if undesirable program reductions and tax increases are to be avoided.

**How the private sector does it**
In some areas of private industry, the budget process starts with establishing a firm’s mission statement and strategic plan. Then front-line units develop action plans to achieve the goals included in the strategic plan, and negotiate budget allocations and performance targets with
senior executives. Private-sector firms use performance targets as the mechanism to monitor front-line unit operations. Periodic reports are submitted to senior executives so they can assess performance. Some firms have even replaced their fixed budgets and performance targets with comparative performance targets indexed to their competitors’ performance.³

**Performance-based budgeting**

Performance-based budgeting represents an adaptation of private-sector budget processes to the public sector. A performance-based budget process identifies what each department is trying to accomplish, how much it is planning to do with its resources, and how well it did with the resources it had last year. Resources are allocated based on political decisions about the service level desired from each program, and program managers are held accountable for carrying out those decisions.

The advantage of performance-based budgeting is that funding is allocated based on what a program can accomplish. It also allows decision-makers to identify programs that have outlived their purpose. In addition, when budget shortfalls occur, it provides decision-makers the information they need to review the performance of all state programs and identify which reductions will have the smallest negative impact.

The Little Hoover Commission and numerous other organizations have recommended implementing a performance-based budgeting system in California. Specifically, the commission found that “the current process for allocating funds and setting program priorities is not a framework that encourages the best policy decisions, especially in times of economic contraction.”⁴ As a result, the May Revision to the Governor’s Budget included proposed legislation to require state agencies and departments to:

- Develop strategic plans;
- Prepare annual action plans which identify objectives, performance targets and the budget resources required for each of their programs; and
- Report program performance at the end of each fiscal year.

**All across the nation**

In the State of Florida, departments develop long-range program plans. The program plans are goal based and provide a justification for each department’s budget request. Each request is based on an estimated level of service. In addition, each request identifies performance targets to estimate what can be expected in return for state funds. This budget and performance information is provided to the public via an interactive Internet website.

The budget development process in the State of Texas begins with the Texas Office of the Governor preparing a vision statement for the state. This statement guides departments in the development of their own long-range strategic plans and budget requests. The goals included in the strategic plans and the performance targets included in the budget requests are reviewed simultaneously by administration and legislative staff.
The result of Texas’ budget process is a General Appropriations Act that identifies goals and performance targets for each department. Each department’s budget is organized with goals and strategies. For each goal, targets are identified and included in the budget. Under each goal is a set of strategies for achieving the goal along with targets.

All departments must submit quarterly or semiannual reports to the Texas Legislature, and the Governor’s office on their progress in meeting performance targets. Data submitted through these reports are verified by the State Auditor’s Office and serve as the primary tool for monitoring each department’s progress toward reaching its strategic goals and objectives.

The State of Washington adopted a budget process for its 2003–2005 biennial budget known as the “Priorities of Government.” First, agencies developed a list of about 1,300 activities performed by the state government. Workgroups of administration officials then identified ten core “results” they believed government should achieve and formulated performance indicators that would help them judge how they were doing. The workgroups then dedicated lump-sum amounts to reach specific results. Subsequently, they devised a prioritized spending plan that specified how the lump sum would be spent to achieve each result.

Washington officials believe the process was successful because it allowed the Legislature to reprioritize these activities as it wished. Ultimately, the Legislature made few modifications to the budget as proposed. As a result, agencies have been instructed to update and refine their activity lists, and the workgroups have again been formed to repeat the process for the 2005–2007 biennial budget.

**Recommendations**

A. The Governor should issue an Executive Order that instructs state agencies and departments to ensure all of their funding requests will conform to and support the statewide vision and goals prepared by the Governor’s office.

B. The Executive Order shall also require state departments to identify their core programs and develop an action plan for each.

As proposed in the May Revision to the Governor’s Budget, each action plan should identify objectives, performance targets, and the budget resources required. The plans also should identify the service level to be provided along with historical baseline performance data.

Essentially, departments should submit “bids” to fund each of their core programs at a specific level of service. Departments should no longer be required to report incremental changes, nor employee position details such as job classifications.
The program action plans will allow department management and other decision-makers to identify programs that have outlived their purpose or are ineffective. In addition, when resources are limited, it provides decision-makers the information they need to prioritize funding.

C. The Governor should assign each agency secretary a statewide goal(s) with instructions to devise strategies and spending plans to achieve that goal(s).

Each agency secretary would be assigned one or more goals and provided an allocation for each goal. Each secretary would then develop a statewide strategy and spending plan to achieve that goal by evaluating departmental bids based on their comparative cost, proposed performance targets and ability to achieve results. The secretaries would submit their prioritized spending plans to the Governor’s office.

They also would detail the strategy behind each spending plan and other background information to support the spending plan. Using this information, the Governor would devise a budget that distributes the available revenues among the various goals.

D. The Department of Finance, or its successor, should post the Governor’s Budget including its statewide goals on an Internet website.

Implementing this recommendation will provide the public access to information on the Governor’s goals and how the Governor proposes to spend their tax dollars to achieve those goals. It will also provide the Legislature the information it needs to evaluate the Governor’s goals, strategic plans and spending proposals. The Governor’s Budget should include the following:

- The statewide goals;
- A description of the strategy to achieve each goal;
- The prioritized spending plan for each goal;
- A description of how each program supports one or more of the statewide goals; and
- Information on costs and performance from the proposed action plans.

E. The Governor should direct the Department of Finance, or its successor, to identify, at a minimum, core programs and performance targets and work with the legislation to establish the performance targets in statute.

Implementing this recommendation allows the Legislature to hold each department or agency accountable for achieving the targets it approves.
Fiscal Impact
Implementing these recommendations could produce significant ongoing General Fund savings. For example, Washington’s revised budget process enabled the state to close a $2.4 billion budget. These savings represented a 9 percent reduction in expenditures. Potential savings cannot be determined at this time because they depend on the degree to which funding currently misallocated to ineffective programs will be discontinued.

Minor General Fund savings may be achieved because the Department of Finance, or its successor, would no longer be required to track each incremental change proposed to the baseline budget. These savings, however, would be offset by additional workload related to evaluating the spending plans. There also would be minor additional costs for departments to develop action plans and agency secretaries to develop spending plans.

Endnotes
Implement a Long-Range Financial Planning Process

Summary
The Governor and the Legislature have no way to determine the long-term fiscal impact of their decisions. Without an ability to assess the effect of their decisions, California’s elected officials cannot safeguard the future fiscal health of the state. The California Performance Review recommends the state adopt a long-term financial planning process to ensure the state’s leadership has the information necessary to determine the long-term impact of their decisions on the people who elected them.

Background
The Department of Finance (DOF) and other state departments estimate the long-term fiscal impact of legislation when they analyze individual proposed bills. DOF also prepares a five-year capital outlay plan each year for the Legislature in which DOF estimates the state’s infrastructure needs and the cost of meeting those needs. Little attention, however, is paid to the long-term impact of budget decisions or the long-term financial condition of the state during the budget development process. DOF develops comprehensive, long-range projections for credit-rating agencies after the budget is in final form, but these projections often only cover the coming budget year and the year after. In addition, the Legislative Analyst’s Office (LAO) publishes a comprehensive five-year projection of revenues and expenditures after the Legislature adopts the final budget.

Fiscal crisis
In its 1995 review of the state’s fiscal condition, the Little Hoover Commission warned “while California’s budgets appear to be in balance each year when they are adopted, the state has incurred a large structural deficit.”1 In short, expenditures have exceeded revenues on an ongoing basis. At the time of the commission’s review, the state had accumulated a General Fund deficit of $1.2 billion in four years. The state’s 1994–95 budget contained temporary, short-term measures that masked the true size of the deficit.

Only after three years of moderate economic expansion and revenue growth, did the state erase the deficit. The California Constitution Revision Commission concluded in its 1996 final report that “annual solutions to the State’s fiscal imperatives have resulted in long-term budget-balancing problems” and that “the long-term has simply become a series of short-term decisions laid end to end.”2

California’s recent fiscal history has been similar if not worse. The 2003–04 Budget Act included about $20 billion in borrowing to bridge the shortfall. Because this budget relies
heavily on borrowing and one-time solutions, the state faces annual operating deficits of more than $14 billion over the next five years. LAO reports “the persistent nature of the out-year operating shortfalls, even in the face of an improving economy, indicates that the State will not be able to ‘grow its way out’ of its budget problems on the natural.” The current deficits were the result of three years of major imbalances between revenues and expenditures.

Since 2001, the Governor has proposed, and the Legislature has adopted budgets that were balanced in the year they were adopted, but created growing operational deficits in future years. As early as May 2001, LAO predicted an ongoing structural deficit of $4 billion beginning in 2002–03. Although the 2001–02 Budget Act proposed a $2.6 billion reserve, it did not significantly restrain the growth in state spending. By November 2001, the projected structural deficit had skyrocketed to more than $12 billion.

The fiscal crisis grew worse. To alleviate the situation, the 2002–03 Budget Act included a year-end reserve but still did not address the underlying structural deficit, because it relied again on expenditure reductions that were short-term in nature. By 2004, the budget shortfall more than doubled.

The California Balanced Budget Act, Proposition 58, passed by voters in March 2004, enacted significant changes to protect the state from carrying large deficits in the future. It requires the state to enact a balanced budget. It establishes a Budget Stabilization Account of up to $8 billion, or 5 percent of General Fund revenues, whichever is greater, to cover budget shortfalls. It also provides a process to make mid-year budget adjustments and prohibits future borrowing to cover budget deficits.

These provisions should help California avoid fiscal crises in the future, but they alone cannot bridge revenue declines. For example, even the new Budget Stabilization Account would not be sufficient to cover the current deficit. In addition, the restriction on the use of debt to cover budget deficits will require better financial planning on the part of the Governor and Legislature, if undesirable program reductions and tax increases are to be avoided.

**Everyone agrees**
The Government Performance Project, an effort conducted by the Maxwell School of Citizenship and Public Affairs of Syracuse University in partnership with *Governing Magazine*, in its review of state and local fiscal practices found that “successes in financial management are achieved by moving towards longer-term planning.”

The National Advisory Council on State and Local Budgeting also recommends governments develop long-term financial planning processes. The council said a “financial planning process helps shape decisions and permits necessary and corrective action to be taken before problems become more severe.” In addition, the Government Finance Officers Association recommends...
forecasting both revenues and expenditures at least three to five years beyond the budget period.\textsuperscript{8} Finally, the National Association of State Budget Officers said “a multi-year budget projection may help to fend off short-term expenditure increases or revenue reductions that are not sustainable in the long-term.”\textsuperscript{9}

**Bad credit rating**
Credit rating agencies regard long-range financial planning as evidence of strong fiscal management. Standard & Poor’s credit ratings criteria for state and local public finance demonstrate that “adherence to long-range financial plans is considered a reflection of good forecasting and planning.”\textsuperscript{10} Standard & Poor’s also suggests documenting long-term financial planning goals and objectives while aligning those objectives with projections included in the operating budget.

Standard & Poor’s February 2004 rating analysis of California said the state historically has had difficulty in achieving a balanced budget without significant one-time measures and that “the lack of significant movement toward long-term structural balance may have negative credit implications.”\textsuperscript{11}

The state’s fiscal crises and lack of long-term planning has damaged the financial community’s confidence in the state’s financial condition and in its ability to resolve it. The situation has deteriorated to the point that California’s state bond issues receive a Standard & Poor’s credit rating of BBB, which is one of the lowest ratings awarded.

**Other states**
A number of states produce long-range financial plans and incorporate these plans in the Governor’s proposed budget. New York has one of the most comprehensive long-range financial plans. The state’s financial plan includes economic data, historical data, cash flow projections, a discussion of underlying assumptions and an assessment of risks. It covers the current year, the upcoming budget year and the next two years. The financial plan is initially submitted with the Governor’s proposed budget and reflects the impact of the Governor’s proposals. It is then updated to reflect the final budget as soon as it is enacted, and it is updated quarterly thereafter.

New York’s Division of Budget staff report the administration uses the plan to track and resolve future budget gaps when making budget decisions. The long-term impact of every spending and revenue issue is calculated and considered before a decision is made. The New York Legislature also has adopted budgets that take into account future problems identified in the long-range plan by either setting aside funding for future years or by approving spending increases on a one-time basis only.\textsuperscript{12}
**Recommendation**
The Governor should issue an Executive Order instructing the Department of Finance, or its successor, to prepare a long-range financial plan for the State of California.

The plan should project revenues and expenditures for five years. It should also reflect the statewide strategic vision and goals.

The creation of a long-range plan would provide the Governor and the Legislature the information necessary to assess and adjust when necessary the long-term fiscal impact of their decisions. At a minimum, this plan should be updated when the Governor’s Budget is published and each time the budget is significantly revised, including when the May revision to the Governor’s Budget is released and when the final Budget Act is adopted. This schedule would require calculating and tracking the five-year fiscal impact of all budget decisions throughout the budget development process.

**Fiscal Impact**
These recommendations should result in significant, but as yet to be determined, General Fund savings from improved state credit ratings beginning in Fiscal Year 2005–2006. To the extent the Governor and Legislature use long-range financial planning to improve the fiscal condition of the state, the state’s credit rating should improve. This change, in turn, would lead to lower borrowing costs and future savings.

These recommendations also would result in minor workload increases and General Fund costs for DOF or its successor, which must produce, track and update the plan. Moreover, the current automated budget systems are unable to track budget decisions and could not even begin to support the development of a long-range financial plan or track the long-term fiscal impact of budget proposals. In light of the inadequacy of the current automated system, DOF is currently tracking most budget decisions in a database, that could be modified to accommodate long-range financial planning at a minor, one-time cost.

**Endnotes**


12 Interview with Dominic Colafati, New York Division of Budget (March 29, 2004).
Improve Financial Management Systems

Summary
California does not have adequate financial management systems in place to provide the state’s decision-makers the information necessary for an efficient and cost-effective state government. The state should develop the capacity to obtain cost information, which can help state officials assess program results on a timely and regular basis. California also should invest in a central automated financial management system to support the publication of state-of-the-art financial reports essential to maintaining accountability and credibility.

Background
In 2002, Syracuse University’s six-year Government Performance Project study of state and local government performance reported that financial management is a primary indicator of overall government performance. In addition to exercising basic fiscal responsibilities, sound financial management improves accountability over government operations and designs results-oriented reports that help officials to assess a government’s condition.

California state government is not a recognized leader in state financial management. In 2001, Governing Magazine conducted a nationwide survey, comparing financial management practices among the 50 states. The magazine awarded California a B- in financial management. California fails to provide timely, accurate and useful financial reports to state officials, the business community and the taxpayers.

California’s past accounting practices have violated the basic rules that govern the objective financial reports necessary to support accountability and sound management decision-making. A recent example is the Department of Finance’s (DOF) Fall 2003 effort to bridge the deficit by retroactively increasing the California Department of Transportation’s fund balances reported for Fiscal Year 2003–2004 by more than $2.5 billion, causing a 25 percent shift of its expenditures to the following year.

In addition, the Fiscal Year 2004–2005 state budget will benefit by nearly $1 billion because DOF instructed the Department of Health Services to use a different accounting method, which recognizes only liabilities paid instead of including liabilities incurred but not paid. State law allows DOF to make these accounting system changes. These maneuvers, however, cripple the state’s executive and legislative branches’ ability to measure the true structural imbalance of the budget.

Financial management leadership in California is vested within DOF. California Government Code assigns financial policy responsibilities to DOF, while the constitutional office of State
Controller has responsibility for fiscal operations.\(^7\) This separation between policy and operations reduces accountability and diminishes the state’s ability to respond to fiscal crises promptly.

The State Controller issues a year-end financial report that conforms to “generally accepted accounting principles” (GAAP).\(^8\) Unfortunately, this report, known as the Comprehensive Annual Financial Report, is prepared using an accounting method dissimilar to the one state agencies use. As a result, this information is relatively meaningless for making budgetary decisions, managing operations and accounting for results.

California has not undergone any significant government wide financial management reforms in the past ten years. Any attempts at modernizing the state’s financial management system have occurred only at the individual department level.

**California information systems**

DOF is still requiring state agencies to use a 23-year-old fiscal accounting system, known as the California State Accounting and Reporting System (CALSTARS).\(^9\) A stated goal of CALSTARS is to achieve uniformity between the state’s budgeting and accounting processes.\(^10\) Departmental budget management systems, however, are typically stand-alone and not tied to the CALSTARS accounting system. In addition, departments often modify CALSTARS to fit their own needs or ignore it and devise their own financial information system.

The Senate Advisory Commission on Cost Control in State Government observed that departments’ decision to not use CALSTARS, or to augment it with additional systems, was due to the fact that CALSTARS cannot provide information on costs as well as other data necessary to evaluate departments’ performance. In other words, CALSTARS is incapable of providing essential information.

CALSTARS compiles information that funnels into the program structure in the Governor’s budget proposal, but it is not integrated with other program systems to provide decision-makers cost information. Additional inconsistencies occur due to the relative independence of some departments from the DOF oversight. For example, the Department of Justice operates independently using its own accounting methods, systems and reports.\(^11\)

California produces annual reports six months after the end of the fiscal year. As a result, the financial information available to California government managers and stakeholders is frequently not useful.

If decision-makers are to safeguard taxpayers’ dollars and spend them wisely, they must have accurate, consistent and reliable financial information on program cost and performance. They must be able to obtain analysis and insight about the financial implications of program decisions and the impact of those decisions on department performance goals and objectives.\(^12\)
California lacks integrated automated information systems capable of providing the type of information necessary to operate a sophisticated, state-of-the-art financial management system. Department financial systems focus narrowly on processing financial transactions, without pulling the information together in a coordinated report for decision-makers.

In 2001, the Senate Advisory Commission on Cost Control in State Government reviewed performance measurement attempts by the state, and observed that California lacks a statewide, integrated management information system.

Their report stated; “There is no uniform management information system available to help the State develop, publish, or obtain data required to manage and monitor the various operations for service, cost effectiveness, or outcomes. Lacking central leadership, agencies are proceeding independently. There are organizations that currently have, or are developing, management information systems using outside vendors. This requires investment of huge amounts of money with no data outputs on a statewide basis.”

**Federal solutions**

The federal government in the 1990s initiated major financial management reforms. The U.S. Congress passed the Chief Financial Officers’ Act, which modernized the federal government’s financial management practices, with an eye to ensuring integrity of financial information needed for decision-making and measuring program and financial performance to achieve desirable results.

The act required appointment of a Chief Financial Officer (CFO) for each of the larger federal agencies. These CFOs are members of the CFO Council, which is the vehicle for active cooperation among agencies dealing with common problems. Office of Management and Budget (OMB) employees are the council’s staff, which forges a vital link between budgetary and accounting operations.

A major achievement of the CFO Council was the creation of a long-term financial management strategic plan and an annual progress report that examined all of the federal government, not just individual pieces of the federal pie. Strategic goals articulated in the plan included greater accountability to the public, creation of reliable financial systems and better financial management.

The federal government also has actively looked at addressing information system needs. As part of the President’s Management Agenda issued in August 2001, OMB said integrating financial and performance management systems to support day-to-day agency operations and producing timely and accurate financial information is essential in today’s modern financial environment.
To support results-oriented budget practices, the U.S. General Accounting Office determined that information systems must provide performance information that will support budget formulation and implementation, by providing reliable estimates of costs and resources, and relating performance, budget, spending and workforce information. Credible information is essential to drawing conclusions about program effectiveness. Data quality involves data reliability and consistency across jurisdictions.

**Recommendations**

A. The Governor should instruct the Department of Finance, or its successor, to develop a financial management system capable of supporting a performance-based management system.

B. The Governor should establish a financial advisory committee that includes the Department of Finance, the State Controller and State Auditor.

The committee should create financial management standards for state government. The committee also should develop recommendations to update the existing Government Code to provide for modern financial management responsibilities, authority and expectations.

C. The Governor should direct the financial advisory committee to develop a long-term financial management strategic plan with targeted goals and strategies for accomplishing those goals. The committee should annually report to the Governor on its progress.

D. The Governor should create an organization composed of agency and department chief financial officers to shift state government’s focus from transaction processing to decision and program support.

E. The Governor should work with the Legislature, Department of Finance, and the State Controller’s Office to develop a modern financial information system and implement that system statewide, requiring state agencies and departments to use it as their financial operations system and their financial reporting system.

**Fiscal Impact**

Improved performance information should result in indirect long-term benefits and savings stemming from more efficiently distributed resources and more clearly identified public needs. These benefits are not quantifiable.

The direct costs of implementing Recommendations A, B, C and D are estimated to be $200,000 for two positions in Fiscal Year 2004–2005 and $900,000 for seven positions and consultant services in Fiscal Year 2006–2007, and ongoing.
The costs of implementing Recommendation E cannot be determined at this time. However, based on estimates that were prepared for the federal government, development of the financial information system is estimated to take three to four years, costing $15–$20 million for each year. After implementation is completed, ongoing operating and maintenance costs are estimated at $5–$10 million dollars annually. Once this system is implemented, these costs will be offset by savings resulting from elimination of the current financial systems.

Endnotes

4 Letter from Robert L. Garcia, chief financial advisor, California Department of Transportation, to Donna Arduin, director, California Department of Finance (December 19, 2003).
5 Interview with Maura Donavan, financial forecasting, California Department of Health Services, Sacramento California (April 30, 2004); and Welf. & Inst. C. Section 14159.
6 State of California, Str. & H.C. Section 183(c), 188.1(d), Gov. C. Section 14556.5(b).
7 State of California, Gov. C. Section 12460.
9 State of California, Gov. C. Section 13300.
11 Interview with Priscilla Moss-Middleton, Accounting Division. Department of Justice (May 12, 2004).
Improve State Business Processes Through Incentives

Summary
To provide a responsive and cost-effective government, state agencies should conduct periodic business process reviews and develop strategies to reward employee performance gains. In addition, California should create a 21st Century Innovation Fund to support investments needed to carry out business process review findings.

Background
California currently suffers from a severe budget imbalance. Such fiscal pressure requires all state agencies to look for ways to reduce costs while improving services. Even without the budget deficit, public perceptions about the cost-effectiveness of government warrants developing a focus on customer service and program efficiency.

A variety of state agencies perform ad hoc performance reviews of government programs. While these reviews often are useful, frequently they are one-time events and review one problem at a time. Recommendations also may not produce sustainable improvements.

To improve efficiency, government agencies should institutionalize business process reviews. The business process review—sometimes called process reengineering and sometimes lumped together with total quality management or continuous quality improvement processes—examines key business processes with an eye to simplifying or modernizing the process, thereby saving money and increasing efficiency.

During the mid-1990s, the California State Parks’ Administrative Services Division engaged in business process reviews of its major business operations including accounting, budgets, personnel, training, business services and labor relations. The effort resulted in the elimination of redundant process steps, reduced error rates, shortened process cycle times and increased customer satisfaction levels.

Factors affecting success
While not delineated explicitly, many authors suggest an effective business process review program that is most likely to generate ongoing performance improvements should be an integral part of each program’s or department’s business model. A survey of the literature suggests several organizational characteristics are necessary for successful process reviews:

- Front-line workers who are encouraged to identify areas for improvement because they best know the strengths and weaknesses of existing systems;
• An understanding by workers and management that participation in process reviews is a normal part of their work;
• Incentives and support for employees and teams implementing cost-saving or service-improving changes;
• Sufficient administrative flexibility to allow implementation of proposed improvements; and
• Clear objectives and timelines for process review teams.³

Generating buy-in from state departments and agencies will require clear direction from the highest levels of state government. Incentives for workers and line managers to recommend budget-reducing innovations also are helpful to ensuring a successful review. In addition, department officials will find that a supportive, consistent and ongoing leadership is essential if business process reviews are to produce positive results.⁴

Capturing savings
One challenge of process reviews is to capture cost savings. The California Department of Parks and Recreation identified savings and informally redirected those savings to other important operations within the organization. The Texas Department of Comptroller of Public Accounts uses pay-for-performance and other incentives to encourage employees to identify ways to save money.⁵

Other states or private companies have used “gainsharing,” which refers to methods by which individual employees or employee teams can share a part of any financial savings realized from innovations or process reviews that result in reduced costs or improved productivity, to create incentives for productivity improvement. For example, Florida’s performance-based budgeting program authorizes the Governor to recommend to the legislature department-initiated proposals to keep a share of performance gains (50 percent of amount saved), however, the Legislature does not always approve the Governor’s requests.⁶

When implementing business process reviews, the city of Indianapolis used bonus pools, made them available to teams realizing savings, and used competitive contracting to find ways to reduce costs.⁷

California should also adapt a strategy to encourage innovation and redirect savings due to productivity-improving innovation to a fund that agencies could tap to pay for additional process reviews or to implement process review recommendations. Such a fund also could help agencies purchase training, information technology or other goods and services necessary to complete process-improvement projects.
Recommendations

A. The Governor should direct state agencies to implement internal business process reviews to ensure agency processes and customer service are under ongoing scrutiny.

Developing a supportive environment for process reviews and their results requires agencies to incorporate process reviews in strategic planning, providing incentives to reward the efforts and changing the culture of management. There are many approaches to accomplish such process reviews, and agencies should test alternative approaches to determine which ones work best in their organizations.

B. The Governor should work with the Legislature to create a 21st Century Innovation Fund to capture savings obtained from business process reviews and other identified cost savings.

The fund can be used to help agencies initiate business process reviews and implement the review findings. Such a fund also could provide a streamlined application process agencies could use to request funds for specific purposes. The application and approval process could resemble the kind of process banks and other financial institutions use when making business loans. Agencies would be required to pay back funds used for training, information technology or other investments necessary to support process review projects.

C. The Governor should work with the Legislature to develop and implement “gainsharing” methods to create incentives for employee teams to identify cost-saving or productivity improvements using business process reviews.

The Department of Finance would have to develop techniques for measuring the magnitude of the savings and for capturing such savings. These funds could be dedicated to a separate account for agencies applying for funds to buy information technology improvements. A portion of the savings, up to 25 percent, could form a bonus pool for employee teams or for other one-time investments within an agency.

Fiscal Impact

It is not possible to estimate the fiscal impact of implementing this recommendation, because it is not possible to determine how many reviews will result in savings or improve efficiency. Nevertheless, it appears the potential for significant net benefits exists.
Endnotes
1 Among these agencies are the Office of the Legislative Analyst, the Bureau of State Audits, the State Controller, and the Department of Finance.
2 Conversation with Dr. Denzil Verardo, former Chief Deputy Director for Administration, Parks Department (May 5, 2004).
5 Conversation with Billy Hamilton, Deputy State Comptroller, Texas Department of Comptroller of Public Accounts, April 2004.
7 Presentation and discussion by Skip Stitt, former Senior Deputy Mayor and COO for the City of Indianapolis at the California Performance Review (April 19, 2004).
Biennial Budgeting Should Be Adopted

Summary
California currently prepares an annual budget, which allows state officials insufficient time to review the performance of individual programs and make appropriate adjustments to agency and department budgets. California should amend the state constitution to change the annual budget cycle to a biennial cycle. A biennial budget cycle will provide state officials the essential time to review and evaluate state program performance.

Background
California’s Legislature, along with 29 other states, meets in annual legislative sessions and operates and prepares an annual budget. Historically, the Legislature spends the first six months of each year debating the Governor’s annual budget. For the past 18 years, the Legislature has missed the statutory requirement to approve a budget bill by June 15th.

The budget bill authorizes annual funding for most government programs, and the delay has sometimes resulted in state government coming to a halt. Important state programs are interrupted and services postponed. In addition, small and large businesses alike suffer because the state does not pay its bills on time. The state’s credit rating is also negatively affected.

Annual budgets create great pressures on all budget staff and policy-makers. The current process means that government employees are always working on three budgets at one time. They are preparing the next fiscal year’s budget at the same time that they are beginning to implement the current-year budget and wrapping up the previous year’s budget.

The Reason Foundation and the Performance Institute, which are both headquartered in California, published a report entitled, The Citizens’ Budget 2003-05, which proposes a 10-point “Plan to Balance the California Budget and Protect Quality of Life Priorities.” The report recommends California adopt a biennial budget. The recommendation envisions a two-year budget cycle that allows agencies more time for program planning and review and more time for the Legislature to determine if its spending decisions are carried out and its expectations are met.

Over the last ten years, states have begun to consider the benefits of biennial budgeting. Proposals for biennial budgeting generally call for policymakers to enact budget legislation one year and to oversee and evaluate program results in the next. Biennial budgeting advocates believe the requirements of the annual budget process overwhelm policy-makers.
and public officials. They argue that the seemingly incessant demands of that process detract from other government responsibilities—such as long-range planning and oversight—duties that are equally, if not more, important.  

**Biennial budgeting advantages**

Three major advantages of biennial budgeting are most frequently cited by its proponents. First, it improves long-term planning. Efficient budgeting yields data about long-range trends and performance. To take advantage of this information, however, policy-makers need to look beyond the near term and assess the impact of their decisions over the long haul. Building multi-year projections into the budget process or adopting a budget that spans more than one year can improve long-term planning.

Second, it allows more time for program review and evaluation. Proponents claim that a biennial cycle encourages decision-makers to focus on performance-based budgeting. Connecticut, Ohio, and Oregon officials contend that a biennial cycle allows for an in-depth review of expenditures.

Third, the process is less expensive and time-consuming than annual budgeting. Annual budgets cost more because of the year-round effort spent on the budgeting process.

**Other states**

Currently 21 states operate under a biennial budget cycle. Of these 21 states, 14 combine annual legislative sessions with biennial budgets. These legislatures enact separate budgets for two fiscal years at one time. Seven states have a biennial legislative session that enacts a biennial budget, and three of these enact a consolidated two-year budget.

*Arizona*—Beginning in 1993, the Arizona State Legislature initiated a series of budget reform measures, enacting legislation to convert small- and medium-sized agencies to a biennial budget cycle and establishing the program authorization review process to evaluate the effectiveness and efficacy of state programs. In 1997, the 11 largest departments were placed on a biennial cycle, beginning with Fiscal Year 1999–2000 and FY 2000–2001. The first year focused on budgetary review and approval, while program evaluations were conducted during the second year.

*Texas*—The State of Texas operates under a biennial budget. In the early 1990s, the state developed a form of performance budgeting based on strategic planning. The governor initiates this process by outlining government’s mission, goals, and priorities. Each agency then prepares a five-year strategic plan for accomplishing its goals and submits a budget request to implement its strategic plan. The Legislature determines the agency’s biennial funding after considering various performance measures to gauge the agency’s success in meeting its goals. During each regular legislative session, lawmakers produce a state budget for the following two-year period.
During the 1999–2000 California Legislative Session, several constitutional amendments and bills were introduced (ACA 6, ACA 15, AB 590) to change the state budget to a biennial cycle. No bill, however, ever made it out of committee.

While there are opponents to biennial budgets, a study conducted by the National Council of State Governments concluded that a state can develop a good system of executive and legislative fiscal and program planning and controls under either an annual or biennial budget. A 1984 study by Texas A&M University entitled, Annual Versus Biennial Budgeting? Public Policy Paper No. 7, came to the same conclusion.

**Recommendation**
The Governor should propose an amendment to Article 4, Section 12 of the California Constitution to change the annual budget requirement to a biennial budget.

**Fiscal Impact**
The fiscal impact of implementing this recommendation cannot be estimated at this time, but it should be minimal. Such costs, however, should be offset by the savings accrued from improved planning and budgeting. Over time, improved program information and coordination can be expected. In addition, more informed budget decisions may produce more efficient and effective programs, likely resulting in major cost savings.

**Endnotes**

5. Commission to Study the Management of State Government, Final Implementation Report (Hartford, Conn.).
Chapter 7
C. Personnel Management

Personnel Management for the Twenty-First Century
California’s state government is no longer able to attract, hire, manage, and retain “the best and the brightest” to efficiently serve the taxpaying public. California, the sixth largest economy in the world, is a trendsetter and innovator; it is the home of a major tax revolt, and the creator of the computer microchip and movie industry. Despite its status as a world leader, California is not using the best available tools, strategies, and technology for hiring a skilled, talented workforce.

The state’s ineffective personnel management system is mired in laws and rules. This ineffective and unwieldy system is the result of piecemeal legislation and bargained labor agreements that meet the needs of special interest groups instead of the public good. California must bring its personnel management system forward to meet the demands of the 21st Century.

Research scope and methodology
CPR contacted, interviewed, and received information from more than 200 stakeholders and leaders in personnel management—managers, personnel officers, line employees, union leaders, personnel executives in other states, and current and former executives from California’s two personnel control agencies, the Department of Personnel Administration (DPA) and the State Personnel Board (SPB). The team researched best personnel practices and personnel reforms in other states and countries, as well as those of the federal government. In addition, reports on California’s personnel management practices and system from organizations such as the Little Hoover Commission (LHC) and the Legislative Analyst’s Office were reviewed.

One of the most surprising discoveries made during this research process was the number of reports that have been produced over the years that have made recommendations to improve the state’s personnel system. Many of these reports are thoroughly researched and make sensible recommendations, but have been largely ignored.

For instance, the LHC wrote Too Many Agencies, Too Many Rules: Reforming California’s Civil Service in 1995, which identified many problems with California’s personnel management, including its organization, labor management, and examination and classification procedures, and Of the People, By the People: Principles for Cooperative Civil Service Reform in 1999, which provided recommendations for reforming management, compensation, training, recruiting, and discipline. The expected wave of retirements is not new either. In 2002, SPB wrote Workforce Planning, Maximizing the State of California’s Workforce, warning of the impending
retirements and providing a variety of resources to mitigate the problems that the aging workforce would cause. Many other reports were invaluable for their historical perspectives and insight. A mechanism should exist for the implementation of such recommendations.

**Issue identification**
CPR identified 15 areas needing significant improvement and updating. They are as follows:

- California’s dual personnel management system, consisting of SPB and DPA;
- Workforce and succession planning;
- California’s human capital crisis;
- The classification system;
- Recruitment processes;
- Examination and hiring processes;
- Employee compensation;
- Performance management and training;
- Employee discipline;
- The discrimination complaint review process;
- Retirement benefits;
- Layoffs;
- Meeting minimum qualifications;
- The Employee Suggestion Program; and
- The Career Executive Assignment Program.

**Intersection of issues/functions**
When considering personnel management issues, it is important to recognize that many functions intersect and significantly affect each other. For example, the number, type, and frequency of examinations given by a state department will often play a major role in how, when, and where the department performs its recruitment activities. The classifications and skills needed by a state department will also drive the types of examinations given and the audiences to whom recruitment activities are directed. Compensation packages are a large and obvious factor in the success of recruitment and hiring efforts.

Changes to the state’s personnel management system cascade into several other areas. Therefore, the system should not be adjusted on a piecemeal basis. Its current dysfunction is due in large part to the piecemeal nature of its evolution. The individual functions of California’s personnel management system, and the issues and recommendations associated with those functions, should be considered together in order to make significant improvements. Any attempts at reform must be comprehensive.
Consolidate California’s Dual Personnel Management System

Summary
California’s personnel management system is split primarily between two control entities, the State Personnel Board and the Department of Personnel Administration. The dual management system has caused confusion about the two entities’ roles and delays in services to client state departments. The two departments should be consolidated into one entity that is responsible for the state’s personnel management system.

Background
In 1934, a newly-formed labor union called the California State Employees Association (CSEA) sponsored a ballot initiative creating the State Personnel Board (SPB). SPB was charged with overseeing the state’s employment system and ensuring that it is free from political influence. Over the next three decades, CSEA and other unions began to seek a formal and exclusive process for negotiating the terms and conditions of employment for state employees.

The 1961 George Brown Act required the state to meet and confer with state union representatives over salaries. CSEA later lobbied for collective bargaining with the Governor’s office. Administratively, the duties of setting salaries and benefits began to shift from SPB to the Governor’s office. By executive order, the Governor’s Office of Employee Relations was established in 1975, to represent the Governor on salary and benefit issues and to meet and confer with union representatives.

In 1977, the Dills Act (also known as the State Employer-Employee Relations Act, or SEERA), gave the Governor and the unions authority to negotiate wages, hours, and working conditions for state employees. In 1979, the Department of Personnel Administration, or DPA, was created by executive order to oversee collective bargaining, hear union contract grievances, and replace the Office of Employer-Employee Relations. Thus, California arrived at its present dual personnel management system.

SPB continues to enforce the state’s merit system—a fair system of hiring, retaining, promoting, disciplining, demoting and terminating employees based on job-related criteria that are specified in law and are contestable. SPB’s five-member board hears merit-related appeals (e.g., examination and disciplinary appeals). DPA oversees collective bargaining with state employee labor unions and hears non-merit statutory appeals and contract grievances (e.g., employee requests for reinstatement after automatic resignation and appeals from layoff).
This split has caused confusion and conflict between the two entities. They often have different responsibilities for the same personnel processes, and their roles are unclear to client state departments. The two entities do not agree on which areas of personnel are defined by merit law and which can be negotiated at the bargaining table. For example, SPB is responsible for creating classifications, but DPA sometimes revises classifications during collective bargaining, without SPB’s input. The two departments disagree on the rules for transferring employees from one position to another.5

SPB and DPA legal staff has spent several hours each month working on lawsuits between themselves. SPB estimated that from about June 1998 until March 2004, it spent approximately 50 hours each month on this litigation; and DPA estimated that between December 1998 and March 2004, it spent nearly 1100 hours on litigation against SPB.6

**Personnel management structures in other states**

The consolidation of state labor relations and personnel management functions is common in other state governments. Based on a review of their websites, several states appear to have consolidated labor relations and personnel management entities or functions.7 In Wisconsin, for example, the Division of Labor Relations is located within the Office of State Employment Relations, Wisconsin’s central personnel office. The Office’s assistant director, Susan Crawford, states that the labor relations function has been a part of the office since at least 1977. Her view is that this centralization of labor relations is critical, since the division represents management and the administration in the collective bargaining process.8

**Stakeholder perceptions**

Nearly every stakeholder interviewed by the California Performance Review’s Personnel Management Team, including department personnel officers, program managers, unions, and legislative members indicated that the current dual personnel management system is confusing and cumbersome. The interim director of the Department of Personnel Administration, in a memo to the California Performance Review, specifically recommends consolidating the two agencies, noting that it is “...essential to provide clear and consistent personnel management policy needed for effective State government operation.”9 In addition, in 1979, 1995, and 1999, the Little Hoover Commission noted the need for the coordination of the state’s personnel functions.10

**Benefits/challenges**

A major benefit to consolidating the personnel management and labor relations functions would be the resulting operations and policy coordination between SPB and DPA, and an end to the confusion for state department clients about which entity is responsible for what function. In fact, the two entities’ areas of authority are so unclear that DPA’s website asks readers: “Confused about whether DPA or SPB is responsible for a particular function?” It then
directs readers to a chart of 124 personnel functions on its website, to show which department does what.11

A potential challenge to combining DPA and SPB into a single entity may be labor representatives’ perceptions that their current relationship with the Governor’s office through DPA and, subsequently, the ability of employees to air their opinions and needs through collective bargaining, will be diminished. Combining SPB and DPA into one entity will eliminate the existence of the agency created solely to oversee employee relations.

A second challenge, which may be voiced by the Legislature as well as employees, is the perception that meshing the state’s merit system (currently overseen by SPB) with the same organization that oversees collective bargaining may erode the integrity of the merit system. In its 1995 discussion of consolidating the entire personnel management system into DPA, the Little Hoover Commission noted that, “A lingering concern is how the principle of fairness, open competition for public jobs, and equitable treatment of civil servants would fare in an environment defined by a political administration sitting across the table from labor unions . . . It is in the best interest of the state that professionals are free from political abuse, and that all citizens have a fair opportunity to secure public jobs.”12 The Commission further notes that “Collective bargaining also required splitting personnel management duties between the Personnel Board and the Department of Personnel Administration, and framers of the new strategy believed they did so in a way to minimize conflict.”13

A way to alleviate this concern would be to leave the five-member State Personnel Board intact within the consolidated structure. The five-member Board could continue to serve as a separate and independent hearing and appellate body. The members are appointed by the Governor for ten-year terms, thus providing employees and the public with balanced viewpoints and judgments.

**Recommendations**

A. The Governor should seek legislation consolidating the Department of Personnel Administration and the non-constitutionally mandated functions, and staff of the State Personnel Board into a single entity.

The five-member State Personnel Board (SPB), whose members are appointed by the Governor for ten-year terms, was created by Article VII, Section 2 of the Constitution. It is currently part of the State and Consumer Services Agency. Under the proposed consolidation, the five-member SPB would remain intact and would continue to serve as a hearing and appellate body.
The work performed by DPA’s Statutory Appeals Unit and Hearing Office would be transferred to the consolidated entity, but kept separate from the State Personnel Board’s appellate function. DPA has statutory authority to hold hearings and/or conduct investigations of non-merit, statutory appeals, such as requests for reinstatement, appeals from layoff and demotions in lieu of layoff, and appeals from denial of merit salary adjustments.

In addition to the non-constitutional functions currently performed by SPB and the functions performed by DPA, the consolidated entity should perform the following activities to improve and enhance the state’s human resources system (with the approval of the constitutional five-member board when legally required):

• Workforce planning;
• Performance management-related activities, including developing compensation systems for rewarding supervisors/managers, seeking legislation that will require state departments to integrate employee performance expectations with department missions and develop evaluation processes that hold supervisors and managers accountable for results and developing performance standards for rank and file employees;
• Activities to improve the state’s job classification and examination system, including restructuring and updating the state’s current civil service classification system, upgrading SPB’s current mainframe online certification and examination system, establishing a regular review and audit process for state departments, developing Internet and/or other computerized exams that can be administered continuously and developing training on examination forecasting and conducting competency-based examinations; and
• Activities to improve state recruitment of employees, including establishing a centralized state recruitment program for state departments, developing and implementing a marketing plan for state employment that involves branding and outreach strategies, re-establishing a centralized, sufficiently staffed Employment Service Center, upgrading and maintaining SPB’s existing website to serve as a single Internet portal for all human resources information, re-establishing a state college recruitment program, and developing and administering a formal paid college intern program; and
• Activities to improve state training of employees, such as developing a statewide training policy, establishing an Internet portal or website listing all training offered by the state and other institutions, creating a statewide training registration system and providing training to human resources staff on the fundamentals of performance-based management.

B. The Governor should work with the Legislature to amend applicable statutes to specify that the duties of the State Personnel Board (SPB) will be limited to their
functions prescribed in the Constitution. The legislation should specify that the consolidated entity would dedicate staff to support the constitutional functions of SPB.

C. The Governor should work with the Legislature to ensure the consolidated entity is funded through the same process currently used for state agencies providing central administrative services for the state. That is, the costs for the consolidated agency should be distributed among all other state agencies on a pro rata basis.

**Fiscal Impact**
The estimated savings of combining SPB and DPA is $1.3 million annually in total funds (13 PYs). This includes $737,500 in General Fund (7.5 PYs), $425,900 in other funds, and $143,000 in federal funds. Reductions were not applied to SPB because the five-member board and some of its functions are constitutionally mandated.

It is anticipated that costs associated with combining SPB and DPA will be absorbed. Only partial year savings are estimated for FY 2004–2005 to provide sufficient time for implementation of the recommendation. It is assumed that central service costs will be allocated to all state departments and supported by the General Fund, other funds, and federal funds.

### General Fund
(dollars in thousands)

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<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
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<td>(7.5)</td>
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</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003-04 expenditures, revenues and PYs.
Other Funds  
(dollars in thousands)

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<th>Costs</th>
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<td>(5.5)</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003-04 expenditures, revenues and PYs.

Endnotes

1 The initiative placed the 1913 Civil Service Act within the State Constitution.
6 E-mail from Dorothy Egel, staff counsel, Legal Division, State Personnel Board, to Karen Coffee, California Performance Review (March 2, 2004); and e-mail from Dave Rechs, associate governmental program analyst, Legal Division, Department of Personnel Administration to Karen Coffee, California Performance Review, (March 29, 2004).
7 Survey of the websites of 50 state personnel/administrative departments, conducted by California Performance Review staff, April 5 through May 30, 2004.
8 Interview with Susan Crawford, executive assistant to the Director, Wisconsin Office of State Employment Relations, Madison, Wisconsin (May 8, 2004).
9 Memorandum from Michael Navarro, interim director, Department of Personnel Administration, to Chon Gutierrez, California Performance Review (April 15, 2004).
The Leadership Challenge

Summary
In the next three to five years, California will be forced to withstand the largest wave of retirements in the history of its public service. To address this unprecedented human capital drain, state agencies should immediately begin workforce and succession planning to analyze current and future workforce needs. In addition, the state should begin to establish formal management development programs that are based on sound leadership principles, integrated with strategic public policy goals, and supported with a stable financial commitment by the highest levels of government.

Background
Demographers are predicting a “perfect storm” of an aging workforce that cannot be replenished by the less populous generations behind them, especially without a formal human resources development program.1 The current lack of workforce and succession planning will reduce the state’s ability to replace experienced managers with quality leaders. It also will increase the state’s vulnerability to worker shortages and competition for employees from the private sector and local governments. The following statistics are sobering:

- Employees who are at least 40 years of age comprise 68 percent of the state’s current civil service workforce.2
- The number of employees at least 50 years of age will increase by 37,000 within the next five years, and by another 34,000 in ten years.3
- More than 60 percent of Career Executive Assignment (CEA) employees are at least 50 years old; within five years they will comprise more than 80 percent of current Career Executive incumbents.4

California’s disappearing leadership
Supervisory and managerial classifications will be hardest hit with retirements, as shown in Chart 1.5 In fact, almost 60 percent (2,368) of the managerial employees, including CEAs, are at least 50 years old and eligible to retire.

While it is difficult to predict exactly when these employees will retire, the ongoing retirement of the largest segment of the employee population will have significant impact on state operations, particularly when considering the recent enactment of more lucrative retirement formulas. Unlike the federal government and most other states, though, California does not have a succession plan or a formal leadership development program to address this imminent loss of critical human capital, especially in the management ranks.6
Succession planning

Succession planning is the development of the future leaders and managers of the state workforce. The state is ill-prepared for the impending mass retirement of highly skilled technical staff, experienced managers, CEAs and politically appointed executives (a.k.a., those exempt from Dills Act collective bargaining rules). Moreover, preserving and transferring the knowledge of seasoned employees to those who remain is not a formal process. On the other hand, according to a recent cover article in Chief Executive Magazine, the chief executive officers of many Fortune 500 companies are convinced that grooming top leaders is absolutely key to their companies' ability to compete. These same executives believe in developing their management talent from within their own organizations. “In this era of nervous boards, directors are interested in homegrown talent versus outside messiahs,” says Jeffrey Sonnenfeld, associate dean of the Yale School of Management.

In a sense, the same could be said for California’s CEAs, as these positions must be filled by state civil servants, or in rare instances, by current or former Legislative or non-elected exempt Executive Branch employees with two or more consecutive years of service. As such, the initial recruitment of entry-level technical and professional staff provides the primary source of
California’s future management talent. Incumbents in CEA and exempt executive jobs must possess the technical and leadership competencies to formulate and implement public policy at the highest levels of state government. More importantly, they must possess the fundamental leadership and management skills necessary to direct complex organizations. Given this vast responsibility, therefore, the stakes are simply too high to ignore the development of potential executives, managers and the most skilled technical staff.

**Leadership development models**

The federal government has established five fundamental personal and professional attributes known as Executive Core Qualifications for Senior Executive Service (SES) employees. The SES is equivalent to California’s CEA positions. Successful performance in the SES requires competence in each of the five following qualifications:

- Leading Change;
- Leading People;
- Results Driven;
- Business Acumen; and
- Building Coalitions/Communication.

One particular course for high-level federal managers is the Executive Development Seminar which is geared to SES Candidate Development Program enrollees and seasoned managers who can commit to an online learning experience. This is a “blended” two-week course where half of the content is delivered through an online, distance-learning format and a one-week intensive in-residence experience at various locations in the United States. The course develops such leadership competencies as accountability, decisiveness, partnering, strategic thinking and vision. Federal agencies pay $3,200 per participant, which includes tuition, materials, meals and lodging for the one week in residence.

The United States Army has similar management and executive development programs for its civilian employees. In fact, there are mandated classes for first-level, middle managers and SES appointees. These classes are delivered in a variety of ways including online, on-site (at the participant’s worksite) or through residential programs. The Army even has a mandatory, five-day Intern Leadership Development Course for entry-level civilian workers who have an interest in supervisory advancement.

In addition to formal leadership programs, various state and federal agencies have developed mentoring programs to nurture potential supervisors and managers. In New York State, mentoring is viewed as a relatively low-cost method that serves the needs of the protégé, the mentor, and the organization in numerous ways including recruitment, retention, knowledge transfer, promoting diversity, and succession planning. Also, the U.S. Department of Transportation established the “Leaders for Tomorrow” mentoring program for technical employees in federal Government Service levels 13 and 14. The focus of this program is to
address workforce gaps by developing new leaders and dedicated staff with minimum cost and time investment.\textsuperscript{13}

The U.S. Air Force has a mentoring program to facilitate achievement of civilian employee career goals and the Air Force’s need to develop quality leaders. Its objective is to establish a formal mentor mechanism that will ensure the development of future leaders.\textsuperscript{14} The mentor program is used in conjunction with a formal career program that trains and develops Air Force employees in a number of technical fields and management areas. The career program’s training goals are to provide the right training to the right people at the right time in their careers.\textsuperscript{15}

In the private sector, the General Electric Company (GE) has established the “John F. Welch Leadership Center” at Crotonville in New York—the world’s first major corporate business school. GE operates in more than 100 countries, employs more than 315,000 people worldwide, and invests about $1 billion annually on training and education programs—from assembly lines to corporate classrooms to boardrooms.\textsuperscript{16} Through Crotonville programs, GE employees are tackling new business problems from around the world and sharing knowledge with customers, suppliers and business colleagues. Crotonville also plays a crucial role as an agent of cultural change at GE. Courses are designed to reinforce values, sharpen skills and develop leadership talent while preparing GE leaders for the new challenges and responsibilities they will face. Emphasis is placed on action learning and team activities.

Only employees who receive stock options, about 27,000, can attend the senior courses; and some 5,000 to 6,000 GE managers attend Crotonville classes each year. As such, only the best performers, who are nominated by their supervisors, are even eligible for the training. While attendance is not required for promotion, administrators want to know why a good employee has not attended classes at Crotonville because they believe the courses will help GE employees be successful. GE businesses are responsible for Crotonville tuition.\textsuperscript{17}

\textbf{California’s leadership training efforts}

There have been a few leadership and management training courses organized by the California state government. The State Training Center (STC) created the California Leadership Institute in 1998 for Staff Services Manager IIIs and higher-level employees. The Department of Finance approved funding for a vendor to provide the training, but STC had to develop course concepts and the request for proposal (RFP) to select a vendor with the Center’s existing resources. The University of Southern California (USC) was selected to provide residential and classroom-based training twice each year. Each session had about 35 to 40 participants, whose departments were charged $4,000 tuition. The Institute graduated 202 participants between 1998 and 2003.\textsuperscript{18} But the contract with USC lapsed in 2003 and it has yet to be re-approved.

A good example of a best practice within state government that could be deployed statewide is the process the Department of Social Services (DSS) used to develop their Professional
Management Development Program (PMD). In 2001, DSS produced a preliminary workforce planning data report that recommended, among other things, that DSS conduct a department-wide workforce analysis develop a Management Academy, enhance recruitment efforts, and continue with their strategic planning efforts. DSS developed a management training curriculum and a set of comprehensive training manuals and management development resources. Unfortunately, the two-person unit that performed the workforce analysis and developed the PMD program was eliminated in 2003 budget reductions, staff was redirected and the PMD program was never implemented.

**Funding options**
An alternative to the traditional reimbursable method of payment for classes is the establishment of a not-for-profit educational institute. There are legal ramifications to this method, though, and some of the considerations include the relationship the state would have with the non-profit board of directors, the manner in which the state would pay for the training services, handling the receipt of grants and donations from private or public entities, and the determination of overhead costs that may be passed on to the state.

Another payment consideration is the formation of a management training pool or the establishment of a pro rata contribution formula shared by departments benefiting from the training.

**Conclusion—California is not prepared for the future**
The Brookings Institution’s Center for Public Service describes five tests of healthy public service. Healthy public service is:

- Motivated by the public good, not security or a stable paycheck;
- Recruited from the top of the labor market, not the bottom;
- Given the tools to do its job well;
- Rewarded for a job well done, not just showing up day after day;
- Trusted by the people and leaders it serves.

Some may argue that California’s current fiscal difficulties preclude expending resources on workforce planning, training and development; and that layoffs will solve those financial difficulties. Yet layoffs are often focused on the least senior and experienced staff and can result in even worse future labor and skill shortages.

The state’s inconsistent methods of limiting hiring over the last ten years has had an unintended effect of increasing the average age of state workers and reducing the numbers of incoming young workers. Meanwhile, imminent retirements drain California of its most experienced technical and management resources.

California must act now to avoid the human capital crisis that is being created by the most significant and continuous exodus of retiring personnel in the state’s history.
Recommendations

A. The Governor should establish a taskforce to develop a strategic plan to implement a permanent, ongoing education system for all state workers.

California once had a leadership institute, but there is no provider currently under contract. Other public and private organizations understand the need for a consistent, quality leadership development effort to ensure future management capability. The federal public service, U.S. Army, U.S. Air Force, and General Electric, among others, provide extensive management and leadership training to their employees—much of it mandated and all of it aligned with strategic goals. An option to reduce training costs would be to establish a non-profit leadership institute that could accept grants and donations. More extensive legal analysis is required, however, before this can be considered a viable alternative.

The U.S. military’s education system for military and civilian personnel is an excellent model and could be effectively duplicated at the state level, providing that the Governor plays a key role in defending the curriculum from rigid program-focused goals and that funding is allocated for the long term. The military’s ongoing education system is meant to train its personnel in leadership and management skills, not just service and occupational specialties. The military’s effort to educate its personnel is a top priority and is recognized as receiving a substantial return on investment.

The development of all managers is critical to establishing a leadership culture in state government. Employees should have high expectations of their managers in order to live up to high expectations managers should have of their employees. Since first-line supervisor and higher-level manager training should provide the foundation upon which more strategic executive-level training is based, there must be Executive and Legislative Branch commitment for leadership and management training for all state employees.

B. State agencies should establish a mentoring program to groom potential managers and executives within their organizations.

Among others, the Army and Air Force have established cost-effective mentor programs for civilian employees who have an interest in management. The state must augment leadership training and education with mentor programs that provide role models to reinforce organizational values, enhance performance and facilitate career development.

C. The state should fully support recruiting operations to bring top-quality college graduates into the state’s public service.
Today’s entry and journey-level employees will be tomorrow’s leaders. The lack of a recruiting effort and no concentrated workforce succession planning has impeded the growth of a talent pool from which future leaders could emerge. As the state government begins to conduct workforce planning, focused recruitment on college campuses will be needed to replenish the ranks of top management positions.

**Fiscal Impact**

Fiscal impacts of improving leadership and management training for state employees are unable to be determined at this time.

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**Endnotes**

5. Collective Bargaining Identifiers (CBID) define classifications as managerial, supervisory, rank and file, confidential, and excluded. CEAs are included in the managerial category.
18 Interview with Evelyn Hemenover, training division chief, Department of Personnel Administration, Sacramento, California (May 27, 2004).
19 Interview with Michelle Schmitt, co-manager of the Professional Management Development Program, Department of Social Services, Sacramento, California (April 28, 2004).
Creating a Workforce Plan for California State Employees

Summary
California state government is about to experience its largest wave of retiring state employees in history. The state should use this as a catalyst for workforce planning, and for developing a more efficient workforce through improved technology, budgeting, and management.

Background
Demographers are predicting a “perfect storm” of an aging workforce that cannot be replenished by the relatively smaller generation that follows. According to the State Personnel Board, 70,000 or 34 percent of state employees will be eligible to retire in the next 5 years.¹ Some independent studies have estimated that this number could actually be as high as 49 percent, or as many as 100,000 state employees.²

Exhibit 1, below, shows the age of the state’s workforce:

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</tr>
</tbody>
</table>

Source: State Personnel Board, as of 02/29/2004.

An aging workforce is not the only factor contributing to the increasing number of state employees retiring. State policies have changed in recent years, allowing employees to retire at an earlier age. For example, new union contracts will allow correctional peace officers to retire at age 50 instead of age 55 and most other state employees can now retire at 55 years of age instead of 60.⁴

Excluding state employees in public safety and higher education sectors, about 26,000 state employees retired in the last five years, or a little over 5,000 per year. The average age of a state employee retiring was 60 years of age for that same period.⁵ If the average age at retirement were to drop to 57 from 60 years of age during the next five years, the number of state employees retiring annually could increase to 7,000 based on the increasing age of the workforce.
The projected number of retirees increases when public safety and higher education sector employees are added. Public safety and higher education sector employees are not addressed in this analysis, however, due to the nature of services provided by public safety employees and the employment structure for higher education employees. It is assumed employment levels for these two sectors will remain relatively unchanged, despite increasing retirement rates.

The “bubble” of California’s aging workforce is traveling quickly through the state’s workforce. In 2002, 31 percent of the state’s workforce was over 50. Just two years later, 34 percent was over 50 (see Exhibit 2). California needs a plan to address this impending problem.

![Exhibit 2: Employees by Age Group](image)

**Employees by Age Group**

Source: State Personnel Board

Not all occupational groups see the same rate of turnover. This means that with the increased retirements there will be certain occupational categories that will need special recruitment efforts. There should be an effort made to collect, aggregate and reconcile state employee data for the state so that it can be used for targeted recruitment of new employees.
Exhibit 3, below, shows the total percentage of employees leaving state service during the last six years and the average percentage for each major occupational group within state civil service.

<table>
<thead>
<tr>
<th>Exhibit 3</th>
<th>Total Separations by Occupational Category (percents)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1999</td>
</tr>
<tr>
<td>Agriculture and Conservation</td>
<td>54</td>
</tr>
<tr>
<td>CEA</td>
<td>12</td>
</tr>
<tr>
<td>Custodian and Domestic</td>
<td>14</td>
</tr>
<tr>
<td>Education and Library</td>
<td>12</td>
</tr>
<tr>
<td>Emergency</td>
<td>6</td>
</tr>
<tr>
<td>Engineering</td>
<td>7</td>
</tr>
<tr>
<td>Fiscal, Management, Staff Services</td>
<td>12</td>
</tr>
<tr>
<td>Legal</td>
<td>11</td>
</tr>
<tr>
<td>Mechanical &amp; Construction</td>
<td>19</td>
</tr>
<tr>
<td>Medicine</td>
<td>15</td>
</tr>
<tr>
<td>Office &amp; Allied</td>
<td>18</td>
</tr>
<tr>
<td>Public Safety</td>
<td>30</td>
</tr>
<tr>
<td>Social Services &amp; Rehab</td>
<td>4</td>
</tr>
</tbody>
</table>

Above data is based on all separations: voluntary, involuntary, retirement, and unknown separations. Data provided by the State Personnel Board as of 3/31/2004.

The increase in employees retiring is not unique to California government. There have been numerous reports written detailing the impending “human capital crisis” that will affect the nation’s workforce in the next several years. The crisis is fueled by the wave of retirements expected as the “baby boomer” generation is entering retirement age. By one estimate, there are more than 70 million baby boomers in the workforce versus about 40 million of the generation following them. Both public and private entities face the problem of losing a large percentage of their most experienced workforce.

Unlike the federal government, other states and some private sector employers, California does not have a centralized workforce plan to address this imminent loss of critical human capital. In California, the total number of state employees is based on a disjointed system where individual agencies either fill or do not fill vacancies, based on available funds. There is no statewide analysis of workforce needs and no correlation between the state’s management of its workforce with trends in the state’s overall labor market. As such, the state is particularly vulnerable to labor shortages and will not be able to effectively compete with the private sector for skilled employees as the labor pool shrinks.
Creating a workforce plan

According to the U.S. Department of Health and Human Services, workforce planning means having “the right number of people with the right skills, experiences, and competencies in the right jobs at the right time.” A workforce plan estimates the number of people and types of skills an employer will need to meet future business goals. Workforce planning is, therefore, inextricably connected to an employer’s strategic business plan. The state’s current workforce management process, in contrast, is geared only to re-filling vacant positions and is rarely connected to a strategic business plan. As such, state agencies simply react to vacancies instead of proactively determining future hiring needs.

According to a 2001 report of the Government Performance Project, 46 percent of states had developed and used formal workforce plans, and 24 percent used informal workforce plans. The report found that high-performing states typically prepare formal, centralized workforce plans that are aligned with strategic business plans and lower performing states do not.


The first step in developing a workforce plan is to define the scope of the plan, based on the employer’s strategic goals, resources and customer expectations. Next, the employer must identify its current work functions and processes, and then determine its future work and process requirements. It is at this step the employer must decide what services should be discontinued or outsourced, what functions should be consolidated, what process reengineering or staff retraining will be required, and what technological improvements will be implemented.

The next step is to identify the skills employees will need to perform the new work, and then determine the number of employees that will be required. The employer then must assess the skill levels of the current workforce while taking into account staff turnover, including retirement rates. The future staffing needs are then compared with the existing workforce to identify gaps and establish priorities.

The final step in developing a workforce plan is to identify how the organization will address the gap between its existing workforce and future workforce needs. For example, if the state determines it will need additional engineers in five years, it could take steps to address the problem, such as creating incentives for students entering college to pursue degrees in engineering so that in five years, the number of engineers entering the workforce would increase.
Once implemented, a workforce plan must be monitored and its progress evaluated routinely. Necessary adjustments and improvements should be incorporated as needed.

Developing a workforce plan for California would enable the state to use its impending wave of retirements as an opportunity for streamlining its business processes and reducing its workforce to accommodate the state’s shrinking labor pool. A reduced state employee workforce also could help to address the state’s current budget crises though reduced payroll expenditures.

**Consolidating workforce data in California**

Critical to an effective statewide workforce plan is reliable employment data. Four state agencies separately collect state government workforce information in California: The State Controller’s Office; the Department of Finance; the State Personnel Board; and the Department of Personnel Administration. In addition, the U.S. Census Bureau also aggregates workforce data on each state.

Each entity uses its own methodology to determine how many people the state employs. As a result, asking each of the four state agencies for the total number of state employees produces four different numbers. It is not that any of the numbers are incorrect, they just count different things. For instance, the Department of Finance tracks how many positions state agencies are collectively authorized to fill. It does not track how many positions are actually filled.\(^{16}\)

**Relationship between workforce planning and performance-based management**

Workforce planning fits well into a performance-based management system. A performance-based management system requires agencies to develop strategic plans, performance measures and action plans linked to their budget. One outcome of this process is that agency employees are trained to work more efficiently and effectively using modern business techniques and tools. These efficiencies can then be used in a workforce plan to estimate future workforce needs. The end result is better government services accomplished with fewer employees; something California will need if it is to successfully address its impending and unprecedented depletion of state employees.

Implementing performance-based management also provides an employer with better information about its workforce needs. With the implementation of effective performance management, the actual number of workers required to run successful programs will become apparent. Gaps between skills employees possess and those the organization needs to effectively perform will be narrowed.
Potential savings through workforce planning
An effective workforce plan could result in savings of $240 million in Fiscal Year 2004–2005, increasing annually thereafter through at least FY 2009–2010, at which time the cumulative savings could total $4.3 billion. These estimates are based on assumptions that the state will increase its efficiency by improving its use of technology and reengineering business processes. The end result will be an overall decrease in the rate in which the state replaces retiring employees.

Demographic forecasts published by the Department of Finance project about a 1.5 percent annual growth rate in the state’s population over the next several years. Using this projection, it is possible to estimate how many employees the state would have assuming it replaces each retiree. This number can then be compared to estimates of a reduced overall workforce that may be achieved through effective workforce planning.

Exhibit 4, below, shows the current number of state employees in California (not including higher education) and the overall population of California. The current ratio of state employees to population is 5.57 employees for every 1,000 people in California. Assuming the same ratio and an annual increase in population of 1.5 percent, the state will have about 203,070 employees in FY 2004–2005 and 218,772 in FY 2009–2010. This is the baseline used to calculate potential savings through workforce planning.

### Exhibit 4 California Workforce Estimates

<table>
<thead>
<tr>
<th>FY</th>
<th>State Population (thousands)</th>
<th>Percent Change</th>
<th>State Employees</th>
<th>Employee Reduction</th>
<th>Savings (thousands of dollars)</th>
<th>Cumulative Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/04</td>
<td>35,934</td>
<td></td>
<td>200,298</td>
<td>0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>04/05</td>
<td>36,474</td>
<td>1.50%</td>
<td>203,070</td>
<td>2,872</td>
<td>$239,841</td>
<td>$239,841</td>
</tr>
<tr>
<td>05/06</td>
<td>37,028</td>
<td>1.52%</td>
<td>206,155</td>
<td>6,157</td>
<td>$514,106</td>
<td>$753,947</td>
</tr>
<tr>
<td>06/07</td>
<td>37,582</td>
<td>1.50%</td>
<td>209,239</td>
<td>9,115</td>
<td>$761,092</td>
<td>$1,515,040</td>
</tr>
<tr>
<td>07/08</td>
<td>38,144</td>
<td>1.50%</td>
<td>212,370</td>
<td>10,205</td>
<td>$852,106</td>
<td>$2,367,145</td>
</tr>
<tr>
<td>08/09</td>
<td>38,715</td>
<td>1.50%</td>
<td>215,547</td>
<td>11,132</td>
<td>$929,509</td>
<td>$3,296,654</td>
</tr>
<tr>
<td>09/10</td>
<td>39,294</td>
<td>1.50%</td>
<td>218,772</td>
<td>12,084</td>
<td>$1,009,037</td>
<td>$4,305,691</td>
</tr>
</tbody>
</table>

Components of Change

<table>
<thead>
<tr>
<th></th>
<th>Alternative Employees</th>
<th>Gross Annual Change</th>
<th>Retirements</th>
<th>Net Hires</th>
</tr>
</thead>
<tbody>
<tr>
<td>03/04</td>
<td>200,298</td>
<td>-100</td>
<td>-7,000</td>
<td>6,900</td>
</tr>
<tr>
<td>04/05</td>
<td>200,198</td>
<td>-200</td>
<td>-7,000</td>
<td>6,800</td>
</tr>
<tr>
<td>05/06</td>
<td>199,998</td>
<td>126</td>
<td>-7,000</td>
<td>7,126</td>
</tr>
<tr>
<td>06/07</td>
<td>200,124</td>
<td>2,041</td>
<td>-7,000</td>
<td>9,041</td>
</tr>
<tr>
<td>07/08</td>
<td>202,165</td>
<td>2,250</td>
<td>-7,000</td>
<td>9,250</td>
</tr>
<tr>
<td>08/09</td>
<td>204,415</td>
<td>2,273</td>
<td>-7,000</td>
<td>9,273</td>
</tr>
<tr>
<td>09/10</td>
<td>206,688</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
Like the baseline projections, projected savings through workforce planning (i.e. “alternative projections”) assume an overall increase in the total number of state employees between FY 2004–2005 and FY 2009–2010. The alternative projections, however, assume that fewer employees retiring will be replaced. The alternative projections, therefore, take into account the exiting of the baby boomers from the workforce. The result is a net decrease in the growth rate of the workforce for that period.

If the state increases its workforce by 6,490 between FY 2004–2005 and FY 2009–2010 as projected in the “alternative projections” instead of increasing the workforce by 15,702 during that time period (as shown in the baseline projections), the state could save about $1.5 billion by the third year, and up to $4.3 billion by the end of FY 2009–2010.

**Recommendations**

A. **The Governor should direct each state agency to develop a strategic plan and performance measures that ensure business operations meet customer needs as recommended in the performance-based budget section of the CPR report.**

In order to successfully plan for future workforce needs state agencies must understand their customers and mission, and have developed a strategic direction. Establishing performance-based budgets will require state agencies to develop the strategic plans and performance measures necessary to implement this recommendation.

B. **The Governor should direct each state agency to develop comprehensive workforce plans that align their workforce with their strategic business plans by identifying the work functions and skills required to meet internal and external customer needs, identifying and prioritizing gaps between present and future skill levels, and by developing and implementing human resources solutions that meet short and long-term business goals.**

State agencies must understand the work that needs to be performed and the individual and organizational core skills required in order to successfully accomplish their missions and provide the services their customers expect. Armed with this information, agencies can develop competency models against which current employee skill levels can be compared and any differences identified. Once any gaps are determined an array of human resource solutions can be prioritized and implemented. These include staff training, targeted recruiting and strategies for retaining employees.

C. **The Governor should request the State Personnel Board, or its successor, and direct the Department of Personnel Administration, or its successor, to work together to establish a centralized unit to collect employment data, assist departments in developing individual workforce plans and develop a workforce plan for California.**
**Fiscal Impact**

The fiscal impact of recommendation A cannot be estimated because it is contingent upon how each department develops and implements performance-based management.

Recommendation B will result in savings through increased retirements and improved management of the workforce. Workforce planning will be implemented statewide. Therefore, savings will be realized by the General Fund and other funds.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>$119,921</td>
<td>$209</td>
<td>$119,712</td>
<td>0</td>
</tr>
<tr>
<td>2005–06</td>
<td>$257,053</td>
<td>$417</td>
<td>$256,636</td>
<td>0</td>
</tr>
<tr>
<td>2006–07</td>
<td>$380,546</td>
<td>$417</td>
<td>$380,129</td>
<td>0</td>
</tr>
<tr>
<td>2007–08</td>
<td>$426,053</td>
<td>$417</td>
<td>$425,636</td>
<td>0</td>
</tr>
<tr>
<td>2008–09</td>
<td>$464,755</td>
<td>$417</td>
<td>$464,338</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>$119,920</td>
<td>$209</td>
<td>$119,711</td>
<td>0</td>
</tr>
<tr>
<td>2005–06</td>
<td>$257,053</td>
<td>$418</td>
<td>$256,635</td>
<td>0</td>
</tr>
<tr>
<td>2006–07</td>
<td>$380,546</td>
<td>$418</td>
<td>$380,128</td>
<td>0</td>
</tr>
<tr>
<td>2007–08</td>
<td>$426,053</td>
<td>$418</td>
<td>$425,635</td>
<td>0</td>
</tr>
<tr>
<td>2008–09</td>
<td>$464,755</td>
<td>$418</td>
<td>$464,336</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

Recommendation C will result in annual total costs of $835,000 (10 PYs) for a centralized unit that collects employment data, assists departments in developing individual workforce plans and develops a workforce plan for California. This unit will be organized in conjunction with the proposed reorganization in April 2005.
Endnotes


2 Council of State Governments, “State Employee Worker Shortage, the Impending Crisis” (October 2002), p. 16.


16 Department of Finance, “Governor’s Budget 2004–05” (Sacramento, California, January 2004). Changes in authorized positions are listed following each department’s budget presentation in the Governor’s Budget; Department of Finance, “2004–05 Governor’s Budget Summary” (Sacramento, California, January 2004). Glossary of Budget Terms,
Appendix pp. 2 and 5; and Department of Finance, “2004–05 Salary and Wages Supplement” (Sacramento, California, January 2004). The detail of authorized positions by classification is published in the “Salaries and Wages Supplement” for State organizations.
Improve the Quality and Productivity of the State Workforce by Establishing a Statewide Recruitment Program

Summary
Recruitment is a core human resources function that has been badly neglected by the state. In California state government, no process exists to forecast the need for employees with specific skills in current or emerging occupations. Strategic initiatives have not been formulated to systematically identify and attract good workers to fill the myriad of state jobs. Employment information and assistance is fragmented and inadequate. Most notably, the state does nothing to recruit the “best and brightest” college students who become tomorrow’s leaders.

Background
“The most important thing we do is hire great people,” according to Steve Ballmer, the Chief Executive Officer of Microsoft. Successful businesses and governments recognize and support the continual need for organizationally supported strategic recruitment efforts, based on sound forecasting and workforce planning information. Cisco Systems, Inc., a highly successful company that receives thousands of unsolicited resumes each year, employs 800 recruiters to staff its workforce of 34,000 employees. Companies and governments that are strategic in their orientation know that the quality of tomorrow’s workforce depends upon whom they recruit today.

“Successful recruitment in government boils down to a complex formula: get the right people . . . in the right position . . . at the right time . . . with the right skills . . . to perform the right role . . . to achieve the agency’s mission.” Recruitment is the foundation of any personnel selection program. Agencies cannot hire the best employees if they do not attract the best applicants. Despite recent fiscal restrictions, most states support a vigorous recruitment program and acknowledge that these efforts must be on-going to have value.

As early as 1988, the United States Department of Labor forecast major changes in our workforce after the year 2000. Among their findings: the number of workers will decrease; most new jobs will be in services and information; and new jobs will require higher skills. Most notably, workers will need to be technology enabled and adaptable to changing work methods. Not surprisingly, their forecast is proving to be accurate.

Data from the 2000 census confirmed these earlier predictions and provided some new insights. The western region of the United States has the smallest percentage of college graduates in its working-age residents aged 25–34 (29.8 percent). Other sources indicate that
of every 100 ninth graders in California, only 70 will graduate from high school four years later, and only 19 will graduate with an associate’s degree or a bachelor’s degree within three or six years respectively of starting college. Of every 100 undergraduate enrollees in California, only 6.2 will achieve a bachelor’s degree.

A survey released in March 2004 by the Council for Excellence in Government found that only three in ten young people say that they would prefer to work in the public sector as opposed to the private sector. Government employers will have to work hard to build a more positive image of government employment.

The State of California now finds itself facing a significant human capital crisis in which 34 percent of the workforce will likely retire in the next five years and very few replacement employees in the pipeline. As of January 2004, only 9 percent of the state government workforce was less than 30 years old and no comprehensive, statewide plan for recruiting replacement employees is in place.

In 1999, the Little Hoover Commission noted that, “the state does virtually no recruiting in good times or in bad to draw young, energetic graduates from its own university system into its workforce.” The state has failed to make even a small investment in recruiting new workers. As a result of recent years’ fiscal problems, most state departments have either abandoned or seriously curtailed their recruitment efforts. Those efforts that do exist are sporadic and uncoordinated. Today, the state only considers those applicants who come to the state to seek employment. At a time when the labor force is dwindling and fewer young people are willing to consider government employment, this poses a serious problem.

**The state lacks central leadership and coordinated recruitment efforts**

Historically, the State Personnel Board (SPB) has viewed recruitment, at least for large classes used throughout state government, and coordination of resources and information across departments, as a core human resource activity. SPB has served as a central source of information about state government employment, guidance for departmental recruitment efforts, and the direct provider of recruitment activities for service wide classifications when resources have been available to support these activities.

Today, recruitment for the State of California jobs is a combination of a centralized and decentralized human resource function. A few large departments recruit independently for classifications that are unique to them. Recruiters in various state departments meet every other month in an effort to coordinate resources and information but these efforts fall far short of the need.

Senate Bill 1045, passed by the Legislature in 2003 and codified as Government Code 11139.6, requires all state departments to engage in broad and inclusive recruitment for entry classifications. Departments are in need of guidance to carry out this mandate. In lieu of new
rules, the State Personnel Board approved a new section of the Merit Selection Manual entitled, “Recruitment for Civil Service Examinations” in September 2003. Release of this new section has been significantly delayed due to the need for approval from the Office of Administrative Law.

“While the needs of individual departments change from year to year, the state’s overall recruitment effort should be consistent and consolidated.” A model of centralized coordination of techniques and resources and a combination of centralized and decentralized efforts would seem to be the most cost-effective strategy.

**Forecasting future skills and worker needs is essential**

“Strategic recruitment initiatives that are based on workforce analyses and human capital plans, targeted to contribute to workforce diversity, and aligned with agency strategic plans, are integral components of the strategic management of human capital.” State law requires the State Personnel Board to maintain workforce data and each state agency to complete an annual workforce analysis for the purpose of identifying and remedying significant underutilization of any identifiable group of individuals. Written plans are prepared to address the identified problems and submitted to the State Personnel Board for approval.

This process is not used to its fullest advantage as a tool for identifying or tracking workforce trends or for forecasting future recruitment needs. This process is neither tied to nor aligned with a strategic planning process. Departments have not embraced the need for future workforce planning. Further, they indicate that changes from one year to the next are generally not significant, resulting in nearly redundant data analysis.

**Successful recruitment initiatives include marketing and branding**

According to Dr. John Sullivan, Professor of Human Resources Management at San Francisco State University, “all recruiting is marketing, and a marketing-based strategy is the foundation of everything we do” in recruiting. The private sector has long recognized this maxim and typically fuses recruiting efforts with advertising and public relations efforts. The State of California faces stiff recruiting competition from the private sector, federal, and local governments. In times of limited budget and staff resources, it is imperative that recruitment programs are data driven in order to produce the right people with today’s work skills.

Effective recruitment includes aggressive marketing of the employer. Successful employers develop effective branding, outreach efforts, and marketing strategies. A brand is an image that will make an employer easily recognizable to job candidates and will differentiate it from other employers. Examples of successful branding abound. American Express has developed a “Working Mother” recruitment campaign that uses a photo of a toddler with the statement, “We understand that there may be another boss in your life.” The federal General Services Administration (GSA) adopted the slogan, “You can do that here” to emphasize the various educational and professional experiences that qualify individuals for employment with GSA.
Many states also have developed brands, or slogans to suggest positive attributes to their customers. “Ohio.gov So much to discover” and “Kentucky’s JobBANK Serious NetWORKING” (part of “Kentucky.gov My New Kentucky Home”) are some of the many state brands and slogans.  

As part of its limited marketing efforts, the State Personnel Board has developed general pamphlets and publications such as the State Personnel Board’s “The Road to Employment with the State of California, State Civil Service Employment Information.” A “Recruitment Sources Directory” provides resource information to all state departments, but it should be expanded and updated on a regular basis. Clearly, this is not sufficient to meet current or future needs. Occupation-and geographic-specific recruitment materials should be developed to use in conjunction with other recruitment strategies such as advertisements in professional journals, attendance at career fairs and community events, and the development of partnerships with organizations whose members have mission critical skills. Increased reliance on and use of Internet technology could enable the state to reach more potential applicants and provide comprehensive information faster and for less cost.

**There is no single comprehensive resource for obtaining employment information**

The State Personnel Board hosts a website that is intended to serve as a single source of state and departmental employment, examination, and job information. This site receives more than 3 million unique visitors per year. Because there is no requirement to do so, not all departments post their information on this site. State departments currently maintain duplicative websites listing department-specific examination and job information. Customer service and efficiency could be greatly improved by establishing a single portal of comprehensive information about state careers, available jobs, examinations, information about state employment, applications, and electronic scheduling of tests, and requiring departments to post information on that site. To fulfill this need, the SPB site will require redesign to bring it up to the envisioned standard.

A related area where there is a need to consolidate individual departmental efforts is to establish a centralized walk-in employment service center where all information about state government employment, examinations, job vacancies, etc. is available. Traditionally SPB has fulfilled this need through its Employment Service Center. In Fiscal Year 2001–2002, service center staff responded to 2,494 e-mails and 3,135 pieces of correspondence requesting information or responses to questions (including many forwarded from the Governor’s Office). In addition, 5,380 visitors came into the center for in-person assistance using the center’s thirteen free Internet computers to locate job information. Many visitors also attended one or more free seminars on topics such as how to get a state job, complete an application form, develop a resume, and/or prepare for an interview. The Employment Service Center also includes a call management system that handled 35,572 calls in 2001–2002. Almost 12,000 calls involving candidate-specific information or questions about departmental hiring.
processes were referred to staff to answer. As a result of personnel reductions, the Employment Service Center has now become self-service for all but two hours each day. The e-mail inquiry service has been shut down. Correspondence and telephone calls not handled by the call management system have been redirected to other higher paid staff for response or were unanswered, and only 824 visitors received in-person help during the limited hours the center is staffed.

Despite the rapid increase in computer ownership and use, many individuals still do not own or have access to a computer or the information that is available on the Internet. This is particularly true for the unemployed, members of disadvantaged groups, recent immigrants, older workers, and many blue-collar applicants. State law requires that departments give priority consideration to persons receiving public assistance for seasonal (non-testing) jobs under the Aid to Families with Dependent Children program. Many such individuals seek out the personal assistance obtainable through the Employment Service Center. Failure to adequately staff this center severely impacts those individuals who most need assistance to become employed.

Job seekers and applicants increasingly complain about the lack of in-person and telephone assistance, and the inconvenience of trying to locate individual departmental testing offices where they may or may not find information and/or personnel to answer questions. Failure to adequately staff the employment service center does not deter individuals from directing their telephone or written inquiries to the central human resources agency. Rather, it significantly diminishes the public’s perception of the state’s customer service and adds to the growing frustration over the inability to access state services and information.

**Remove barriers to the recruitment of college graduates**

Over time, the state slowly deemphasized its outside recruitment program, and in particular, its college campus recruitment efforts. Positions in most classifications are now filled either through “promotional only” examinations or the transfer of individuals who are at comparable salary levels. As an example, the Staff Services Analyst (SSA) classification was established in 1977 to provide an avenue for recent college graduates to become entry level professionals in state government. Typically, over 1,800 annual appointments are made to this class. In 2003, only 1 percent (eight of 783) of the SSA appointments were non-state employees. This practice obviously limits public access to government jobs, discourages good applicants, and fails to infuse state government with bright, new talent.

One of the most effective ways to bring college talent into state government is through a student intern program, usually a paid, structured work experience of three to six months designed primarily for student employment during the summer. Many progressive state and local government employers recognize the value of student intern programs. The State of New York viewed the reestablishment of a student intern program as an important initiative to improve its civil service system. Even in lean times, numerous programs continue in the
The effectiveness of recruitment tools and strategies must be determined

Most departments are not using any tools to measure the effectiveness of their recruitment efforts.44 “The success of recruitment and retention efforts are only gauged informally by the number of positions a department would like to fill, but cannot—rather than by assessing the caliber of employees the state is hiring.”45 Metrics should be developed for both high volume (efficiency) and low volume (effectiveness) jobs.46 Only through the use of evaluative tools will state departments realize a good return on investment for its recruitment dollars.

The economic value of superior employees

According to Dr. Frank L. Schmidt and Dr. John E. Hunter, a superior employee (at the 84th percentile (one standard deviation away from the norm) is considerably more productive than an average employee. This difference can be quantified in dollars. On average, superior employees are 40 percent of salary more productive.47

The State of California hired about 10,000 new employees annually in 2002 and 2003.48 If the state’s recruitment efforts resulted in hiring 1,000 (10 percent) additional superior new employees, who are each $20,000 more productive, this represents a $20,000,000 productivity...
gain for each of ten years (the average tenure of a state employee). In ten years, the dollar value of the increased productivity from a single year of improved recruitment is $200,000,000.

**The economic value of a below average employee**

Conversely, an employee whose productivity is below average (16th percentile) costs at minimum 40 percent of their salary (on top of their salary). There are on average 3,000 adverse actions each year. This is about 1.4 percent of the 215,000 civil service employee state workforce. If an effective and comprehensive recruitment program decreased the number of adverse actions by an estimate of 70 (.7 percent of 10,000 new hires), this would represent an additional $1,400,000 annual gain in productivity.

**Less workers are required to do the same amount of work**

Alternatively, productivity levels could remain constant, and the state could employ less people to do the same amount of work. In the above example, this equates to 250 less employees in the second fiscal year and a cumulative total of 500 less employees in the third fiscal year to produce the same amount of work as in the first fiscal year.

**Recommendations**

A. The Governor should request the State Personnel Board, or its successor, to establish and staff a centralized state recruitment program that provides leadership and coordination for departmental recruitment efforts, develops recruitment initiatives, markets state government as a desirable employer and directly recruits for service-wide occupations such as information technology, engineering, health care, and staff services.

The new central unit will develop a comprehensive marketing plan for State of California employment, including branding and outreach strategies that capitalize on the many positive aspects of state employment. As an employer, the state must aggressively identify and publicize unique “selling points” such as workplace qualities, values, attractive geographic/community attributes, and employee programs. Demographic research and existing data should then be used to successfully target outreach to likely sources of well qualified candidates.

B. The Governor should work with the Legislature to amend existing statutes to require the state’s workforce analysis process be conducted by departments and the results reported to the Legislature every odd numbered year. The process should be aligned with the strategic goals of each department and should be expanded to include identification and consideration of employment trends and to forecast future workforce needs.
C. The Governor should request the State Personnel Board, or its successor, to develop a single statewide Internet portal for all human resources information.

Departments must be required to advertise every examination and job vacancy and to post them on this site. This portal can easily be linked to a larger statewide customer service portal.

D. The Governor should request the State Personnel Board, or its successor, to establish an Employment Service Center. The call management system should be upgraded and eventually integrated into a comprehensive statewide call center network.

Adequate staff and fiscal resources must be provided to enable the service center to serve as a single source of information and provide computerized, Internet, in-person, telephone, and written assistance to employees and public job seekers. This center will also serve as the primary respondent for inquiries sent to the governor’s office regarding employment and related matters.

E. The Governor should request the State Personnel Board, or its successor, to issue a policy memorandum directing departments to utilize the Staff Services Analyst (and related) classifications as originally intended to introduce a wide spectrum of college graduates into the state workforce.

All current state employees must pass the SSA examination before transferring into this class. In addition, it should work with departments to better balance the need to infuse the system with new talent with the goal of providing upward mobility to existing employees.

F. The Governor should request the State Personnel Board, or its successor, to develop a centrally advertised and coordinated statewide college recruitment program and adequate staff and fiscal resources should be provided to ensure its effectiveness.

G. The Governor should request the State Personnel Board, or its successor, to establish a formal paid college intern program and departments should utilize this tool as a source for hiring talented, well-educated employees.

H. The Governor should request the State Personnel Board, or its successor, to work with departments to expand the use of the Student Assistant and Graduate Student Assistant classifications and to develop mechanisms to facilitate their easy transition into permanent state service employment upon completion of their degree programs.

I. Staff of the central recruitment unit will develop metrics to evaluate the effectiveness of various recruitment strategies against pre-determined program objectives. These
metrics will be used by the central human resources agency and by state departments as well.

**Fiscal Impact**
Recommendation A would require five staff costing $329,000 per year, $350,000 in Temporary Help, $600,000 for materials, publications, advertisements, events and miscellaneous operating expenses. Recommendation B requires an additional position with supporting operating expense dollars totaling $91,000. Recommendation C requires a contract estimated at $100,000. Recommendation D requires five staff and operating expenses totaling $350,000. Recommendation E can be accomplished within existing resources. Recommendations F, G, H, and I can be assumed under Recommendation A and accomplished within those resources.

### General Fund
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>CBE</td>
<td>$910</td>
<td>($910)</td>
<td>5.5</td>
</tr>
<tr>
<td>2005–06</td>
<td>CBE</td>
<td>$1,820</td>
<td>($1,820)</td>
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<tr>
<td>2006–07</td>
<td>CBE</td>
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<td>($1,820)</td>
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<td>2007–08</td>
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<td>CBE</td>
<td>$1,820</td>
<td>($1,820)</td>
<td>11.0</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Endnotes


Interview with Gene Castillo, chair of the State Recruiters’ Roundtable, Sacramento, California (June 10, 2004).


California Gov. C. Section 19792.

California Gov. C. Section 19797.

Interview with Karen Coffee.

Interview with Kay Priest, personnel officer, Department of Real Estate, Sacramento, California (April 28, 2004).


State Personnel Board, “The Road to Employment with the State of California, State Civil Service Employment Information: Volume II” (Sacramento, California, May 2002).
State Personnel Board, “Recruitment Sources Directory” (Sacramento, California, 2001).


33 State Personnel Board, Recruitment and Employment Services Unit, “Quarterly Reports.”

34 State Personnel Board, Recruitment and Employment Services Unit, “Quarterly Reports.”

35 California Gov. C. Section 19063.


36 State Personnel Board, information and data provided by the State Controller’s Office to the State Personnel Board, April 2004.

37 State Personnel Board, information and data provided by the State Controller’s Office to the State Personnel Board, April 2004.


40 Interview with Craig Haines, employment services officer, City of Long Beach, California (March 9, 2004).


42 State Personnel Board, “Student Assistant Positions by Department” Sacramento, California, June 14, 2004 (computer printout).

43 State Personnel Board meeting notes provided by Elizabeth Montoya, former manager, Demonstration Projects, Sacramento, California (May 3, 2004).

44 Interview with Gene Castillo, chair, Recruiters’ Roundtable (June 10, 2004).

45 Little Hoover Commission, “Of the People, By the People: Principles for Cooperative Civil Service Reform,” p. 70.


48 State Controller’s Office, Personnel and Payroll Services Division, “Report PDC9735, Counts of New Hires, Reinstatements, and Retired Annuities by Effective Year and Month and Time Base from July 1, 2001 to Current Month,” Sacramento, California (computer printout).

49 California Public Employees’ Retirement System, Actuarial and Employer Services Division, “State and School Actuarial Valuation as of June 30, 2002” (Sacramento, California, 2002), pp. 55–57. Average tenure was computed based on the data in this report.
52 State Personnel Board, Examination Services Unit, “Number of Civil Service Employees by Date,” Sacramento, California, February 20, 2004 (computer printout).
Summary
California’s government will only be as strong as the personnel it hires. The state’s human resources system is severely hampered by arcane regulations, poor departmental selection techniques, and a creaking, mainframe-based test management system. The state’s hiring system often discourages new talent and the most qualified candidates do not always fill available positions.

Background
Clear and just principle
Article VII of the state constitution defines the merit principle: “... appointment and promotion shall be made under a general system based on merit ascertained by competitive examination.” This overarching principle encompasses the ideas of recruiting, selecting, and promoting public employees under conditions of political neutrality, equal opportunity, and competition based on merit.¹

Arcane regulations
There are some 350 state civil service laws and 390 accompanying rules that define and interpret the merit principle.² These codes and accompanying regulations constitute the state’s civil service system.

Certain laws and rules are obsolete and refer to selection procedures no longer in use. Many of the rules are redundant and provide multiple methods for accomplishing the same action. For example, there are at least three methods of certification, two definitions of “entry level,” two methods of computing veterans’ credit points, and approximately 20 different ways to appoint an individual to a position.³

Particularly problematic are the strict legal requirements for hiring law enforcement personnel. There are about ten legally required selection procedures.⁴ These procedures are either described in Government Code or Penal Code. This maze of legally required procedures has resulted in selection procedures that are expensive, inflexible, and lengthy.

When faced with a similar situation, the State of Washington passed civil service reform legislation in 2002.⁵ Staff engaged in a systematic effort to review best practices in all states and to completely overhaul their system. The merit principle was retained; however, the rules were significantly reduced and simplified. In preparing their new rules, staff worked with usability and plain language experts to improve the language of the new civil services rules. Their draft rules are presented in a question and answer format for ease of use.⁶
Antiquated exam system threatens failure; web-based technology needed

An automated test management system is in place to assist both the State Personnel Board and departments to accept applications and to process and score candidates through the many phases of examinations. This mainframe-based system is old and antiquated, and it becomes increasingly difficult to find programmers to work with this obsolete technology. The system no longer responds adequately to the demands placed upon it, and failure is a distinct possibility. Such a failure would result in examinations being processed manually, with monumental cost implications.

A brief review of states’ selection activities conducted in 2002 revealed that virtually all states have or were in the process of developing an online application system, and many were experimenting with new and exciting Internet tools to assist with candidate processing and assessment.°

Automated examination procedures clearly are faster and more responsible to candidates’ and hiring managers’ needs. Online examinations often include automated review of minimum qualifications with instantaneous feedback to candidates. With traditional procedures, this process typically takes three to four weeks. Scoring of examinations and candidate notification can also be instantaneous for online examinations whereas the turnaround time from exam to results notification in six to eight weeks for non-automated examinations. The biggest advantages, however, are that after startup costs, online examinations are available continuously and are considerably less expensive than traditional testing formats.

Users express dissatisfaction with the current system

Virtually every stakeholder interviewed by the California Performance Review expressed some level of frustration with the current system of testing and hiring employees. Program managers continually provide feedback that candidates available for hire often do not possess the skills needed to accomplish program goals. Individuals working within human resources as well as program managers and job applicants have almost universally indicated that the system functions slowly and is rendered complex by an overabundance of rules.

Despite advances in recent years, system users note that the examination management system does not meet their present day needs. A recent survey conducted by the Examination Supervisors’ Forum concluded that the examination and certification system is written in antiquated language and is “nearing the end of its useful life.” In addition, they note that there is an ongoing need for improved direction and standardization in delegated testing. The lack of formal written procedures that describe and require sound selection result in inconsistent and non-job related testing procedures.°

The concerns vary among stakeholders. Job seekers, whether members of the public or current state employees, universally indicate a need for more and better information about state vacancies and procedures for getting hired, and simplified testing procedures. Managers
typically want more flexibility and less regulation of hiring procedures. Unions, on the other hand, perceive a lack of transparency and suspect that bias, favoritism, and discrimination permeate the system.

**Outside candidates excluded**

California’s civil service system places strong emphasis on promotion from within the civil service. With the exception of the lowest entry levels, virtually all examinations are given on a “promotional only” basis that restricts competition to those individuals who are currently working for the state, and most often, in the department sponsoring the examination. This results in limited access for the public to coveted state jobs and high levels of frustration, particularly among highly qualified candidates who would probably score well, if they were allowed to compete in examinations.

Even the state’s traditional entry professional classification, the Staff Services Analyst, is almost exclusively populated with individuals who transferred or promoted into the class. In the last five years, the number of hires from outside the system into this class has dropped from 8.3 percent (119 of 1,432) to 1 percent (8 of 783).

Virtually all class specifications include an “open pattern” that permits individuals outside state government to qualify for examinations. Like the choice of examination components, the decision to give a test open or promotional is delegated to each department for most classifications. California law specifically facilitates administration of managerial examinations on an open basis by providing for merger of open and promotional candidates onto a single list, thus eliminating any preference for promotional candidates.

In deference to the wishes of unions and employees and in consideration of the increased costs, most departments elect to give promotional examinations above the entry levels. In part because of cost considerations, managers are discouraged from looking outside civil service to find qualified candidates and prefer to look internally for the most qualified promotional candidate within state service.

A review of data from the State Personnel Board’s examination and certification system shows that 15,153 examinations have been administered during the last five calendar years (1999–2003). Of these, 8,960 (59 percent) were open or open non-promotional and 6,082 (40 percent) were promotional only. An additional 111 (1 percent) were open and promotional. Although not including most entry law enforcement classifications (some of the largest examinations in state government), these examinations represent a staggering 884,000 applicants and 443,000 list eligibles.
Non-merit points skew examination results
Many types of non-merit points are added to the final score of individuals in select examinations. Primary among these are two different types of veterans’ points, seniority points, and points simply for being a current state employee. The prevalence of these non-merit points often skews examination score distributions and can result in lists where individuals with near perfect test scores but no additional “points” cannot be immediately considered for job vacancies. With the inclusion of non-merit points, it is possible to achieve higher than a “perfect” score.

In 1995, the Legislative Analyst’s Office noted one examination that resulted in a list of individuals available for immediate hire consisting exclusively of veterans and incumbent state employees. More than a hundred outside candidates who attained the highest score in the exam (before the awarding of extra points) could not even be considered for hire. The report went on to note that, “The rules undermined the purpose of holding open examinations, which is to maximize the pool of highly qualified candidates for potential hire. The award of extra points to an individual because he or she happens to be a veteran or a state employee has no direct connection with the individual’s ability to fulfill job requirements.”

The problem with veterans’ points is further complicated by a law that allows individuals to apply for and receive points as much as six months after the completion of an examination. Adding veterans’ points changes the candidates’ ranking after the list has been released and causes frustration for departments and for individuals who believe that they can be hired, but find that new ranks have appeared on the list. In many other states and the federal government, candidates must submit all relevant paperwork, including information required to receive veterans’ points by the final filing date.

Office of Administrative Law review hinders creation of manual
The California Administrative Procedures Act (APA) requires the Office of Administrative Law (OAL) to review rules created by state departments to ensure that state agencies do not create rules that the public does not know about or understand. In 1978, the California State Supreme Court ruled in the case of Armistead vs. State Personnel Board that the State Personnel Board’s rule manual was not exempt from the APA.

The State Personnel Board holds public hearings on any proposed or revised rules. This process ensures opportunity for public and other stakeholder comments. To require a second review is both unnecessary and time consuming. This process impedes the revision or release of updated rules including those that departments find helpful such as new sections of the Merit Selection Manual: Policy and Practices.
Federal law and statutes in other states either require less review or exempt internal management rules from independent review. The State of Washington’s administrative procedure law expressly exempts internal management rules from review.21

**A decentralized examination process**

Many individuals who e-mailed the California Performance Review believe that the state’s testing and examination system could be significantly improved by recentralizing this function. The California State Employees Association also favors centralized testing.22 The State of New York features a highly centralized system and believes that centralization is the most efficient strategy for delivery of cost effective and high quality selection services.23 A few public agencies, including the County of Los Angeles and the State of Ohio, are currently recentralizing their selection function following a period of decentralization.24

Many states believe that decentralizing most selection and hiring procedures to departments and line managers improves the responsiveness and timeliness of the hiring process. Texas, Florida, and Georgia have decentralized all hiring to operational departments, although Georgia’s central agency retains responsibility for developing and administering tests for multi-department and statewide classifications.25

The federal government operates under a decentralized selection and hiring system with central oversight and guidance provided by the United States Office of Personnel Management.26 At least half of the states operate with a combination of centralized and decentralized functions.27

California decentralized selection and hiring for most classifications in the mid 1980s and was a leader in the trend toward a combination of a small centralized function (including guidance and an audit/review function), and a largely decentralized system of selection and hiring. Presently, only 106 or 2 percent of the state’s examinations are centrally administered, largely because these classifications are used by numerous departments, are open to the public, and are prohibitively large and costly for any individual department to manage. Sixty other service-wide classes have been delegated to departments for promotional only testing.28

Most states that have some measure of decentralization within their system rely upon the central agency for up-front guidance. California does not have sufficient central staff who can provide case specific guidance or who can develop written guidance to assist departments. To overhaul Human Resources and create an effective system, guidance and information must be readily available to departments. In 2002, the State Personnel Board began a systematic review and overhaul of the state’s Merit Selection Manual: Policy and Practices. Three sections have been released to date. Another ten sections have not been released due to the need to clear the Office of Administrative Law requirements.29
Virtually all stakeholders support the continued development and release of additional sections of the selection manual. The Examination Supervisors’ Forum (an informal association of the Examination Managers from most large state departments) is particularly interested in the continued development of this manual.30

For a decentralized system to succeed, knowledgeable central agency staff must be available to conduct periodic audits of departmental examinations to ensure adherence to the broad principle of merit, and the use of professionally sound and legally defensible practices. Some of the larger state departments that particularly value decentralization would welcome freedom and flexibility coupled with a periodic post audit.31 Many stakeholders endorse decentralized examining with a centralized audit function. The California State Employees Association has also endorsed the need to staff a monitoring and audit function for decentralized examinations.32

**Poor quality examinations administered by individual departments**

By failing to adhere to recognized professional testing standards and principles, departments have diminished the state’s ability to effectively assess the qualifications, fitness, and ability of job candidates. A 2003 study by the State Personnel Board found that most departments’ examinations are not based on a thorough understanding of what is required for successful job performance (job analysis), are not job-related, use ineffective selection devices and/or scoring criteria, and are not valid (predictive of future job success). There is an over reliance on poorly constructed and inadequate interviews. There is no defensible basis for determining who passes and fails examinations. It was further noted that there was a high level of inconsistency among departmental examinations for a single class, resulting in inconsistent standards for promotion, and an inability to transfer from one examination list to another.33

Departmental managers have lost faith in the examination program, fail to see value, and have come to regard examinations as obstacles to overcome. Departmental managers and even examination staff have focused too heavily on the dual goals of faster and cheaper examinations. Often, however, this can result in examinations of lesser quality. These can fail to identify the better qualified candidates, result in hires that are poor performers, and further erode managers’ faith in the system.

A commonly heard expression is, “Hire easy, manage hard.”34 Inattention to the manner in which employees are selected results in many more “mistakes” (individuals who should not have been hired) that subsequently require time and attention to remove and find replacement employees.

Current thinking is that success on the job can be attributed 20 percent to the possession of technical skills and 80 percent to the possession of personal/interpersonal skills.35 Yet the
state’s examination programs focus on and do a better job of identifying individuals who possess technical skills, no doubt because better tools are available for assessing these skills. Those traits that contribute to job success, personal/interpersonal skills are not as thoroughly measured.

Alarmingly, many state departments have gone to single instrument selection procedures such as 15 minute interviews as the sole basis for assessing candidates’ qualifications. Even Microsoft, a highly successful company that prides itself on hiring flexibility, spends approximately four to five hours interviewing each candidate before making a job offer.36

**The effects of poor selection**

State departments rely too heavily on poorly constructed interviews that are not based on a thorough understanding of what constitutes job success, do not include behavioral anchors for evaluating the response to each question, and are scored only on a global basis based on summary impressions. Such interviews typically have low validity, do not lead to sound decisions, and have caused managers to lose faith in the value of the selection process and unions to believe that bias and favoritism permeate the system. Table 1 indicates state departments’ use of various selection components for a three-year period.

The loss of productivity as a result of using poor interviews is significant. Using the estimate of a 40 percent of salary productivity increase of a superior employee versus an average employee, and applying it to the 2,500 examinations annually conducted by the state, a 10 percent increase in the number of “superior” employees among the 36,000 annual new hires and promotions could represent a $72 million productivity gain.37 This discussion demonstrates in general terms the possible gains from improved selection procedures.

**Table 1: California State Departments Selection Instrument Usage by Year**

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<thead>
<tr>
<th></th>
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<th></th>
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<tbody>
<tr>
<td>Examination Interviews</td>
<td>59%</td>
<td>60%</td>
<td>52%</td>
</tr>
<tr>
<td>Ratings of Education, Training and Experience (E&amp;E’s)</td>
<td>18%</td>
<td>17%</td>
<td>20%</td>
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<tr>
<td>Written Examinations</td>
<td>10%</td>
<td>10%</td>
<td>11%</td>
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<tr>
<td>Supplemental Examinations</td>
<td>7%</td>
<td>9%</td>
<td>10%</td>
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<td>Performance Tests</td>
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<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Promotional Readiness Examinations (PRE’s)</td>
<td>2%</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Statements of Qualifications</td>
<td>1%</td>
<td>0.30%</td>
<td>0.20%</td>
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</tbody>
</table>

Information compiled from Table 6, page 42; Table 9, page 45; and Table 12, page 48

The best metric available to assess the quality of the hiring decisions made as a result of the use of selection instruments is validation. From a practical perspective, the most important value of a personnel assessment method is predictive validity, the ability to predict future job performance and job-related learning. Predictive validity is proportional to the practical economic value (utility) of the assessment method. Utility is the degree to which the use of a selection instrument increases the quality of the individuals selected beyond what would have occurred had that device not been used. High selection validation translates into considerable financial savings for most organizations. In economic terms, the gains from increasing the validity of hiring methods can amount to literally millions of dollars; viewed from the opposite point of view, by using selection methods with low validity, an organization can lose millions of dollars in reduced productivity over time.

The workforce selected by a valid procedure will be more productive than a workforce selected by a less valid procedure. The extent of the improvement in productivity depends on the extent of the accuracy in prediction. If two predictors differ in validity, the most valid predictor will generate better selection and hence produce a workforce with higher production. It should be remembered that the gain or losses from a selection decision are realized not just in the year that the decision is made, but over the tenure of each person hired. In California state service, the average tenure of an employee is 10.4 years. Thus selection decisions have far reaching consequences.

There are two primary ways to estimate the value of an improved selection process. First, the average dollar value of a superior employee (one whose performance is at the 84th percentile) as compared to an average employee (one whose performance is at the 50th percentile) produces, on average 40 percent more output. Second, the typical gain from an improved (more valid) selection procedure is 9 percent; meaning that workers hired with the improved selection method will have on average 9 percent higher output.

Schmidt et al (1979) estimated the impact of a valid test (the Programmer Aptitude Test) on productivity if it were used to select new computer programs for one year in the federal government. There was a difference in validity of .46 between the old and new selection procedures. Over one year, 618 hires would be made, a per-person cost of testing is $10, and the average tenure is 9.69 years for computer programmers. Schmidt et al showed that the average gain in productivity per selectee is $64,725, spread out over the 9.69 years.

Cascio and Ramos (1986) demonstrated the payoff associated with the use of improved selection devices for first-level managers where 1,116 managers were selected and their average tenure at that level was 4.4 years. The payoff was over $13 million. This represents about $12,000 in improved performance per manager over 4.4 years, or about $2,700 per year in improved job performance.
Recent years’ research has resulted in the aggregation of validation evidence across many studies. This meta-analysis allows practitioners to evaluate the likely gains from the use of different types of selection instruments. The following table presents the commonly recognized validities for most types of selection instruments. The column labeled “gain in validity from adding supplement” and “% increase in validity” shows the probable gain from using the most valid selection procedure, a measure of general mental ability along with some other instrument and the percent of improvement resulting from this combination.

Table 2: Predictive Validity for Overall Job Performance of General Mental Ability Scores Combined with a Second Predictor

<table>
<thead>
<tr>
<th>Personnel Measure</th>
<th>Validity</th>
<th>Gain in Validity from Adding Supplement</th>
<th>% Increase in Validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Mental Ability Test</td>
<td>0.51</td>
<td>0.12</td>
<td>24%</td>
</tr>
<tr>
<td>Work Sample Tests</td>
<td>0.54</td>
<td>0.12</td>
<td>24%</td>
</tr>
<tr>
<td>Integrity Tests</td>
<td>0.41</td>
<td>0.14</td>
<td>27%</td>
</tr>
<tr>
<td>Conscientiousness Tests</td>
<td>0.31</td>
<td>0.09</td>
<td>18%</td>
</tr>
<tr>
<td>Structured Employment Interview</td>
<td>0.51</td>
<td>0.12</td>
<td>24%</td>
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<tr>
<td>Unstructured Employment Interview</td>
<td>0.38</td>
<td>0.04</td>
<td>8%</td>
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<tr>
<td>Job Knowledge Tests</td>
<td>0.48</td>
<td>0.07</td>
<td>14%</td>
</tr>
<tr>
<td>Job Tryout Procedure</td>
<td>0.44</td>
<td>0.07</td>
<td>14%</td>
</tr>
<tr>
<td>Peer Ratings</td>
<td>0.49</td>
<td>0.07</td>
<td>14%</td>
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<tr>
<td>T&amp;E Behavioral Consistency Method</td>
<td>0.45</td>
<td>0.07</td>
<td>14%</td>
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<tr>
<td>Reference Checks</td>
<td>0.26</td>
<td>0.06</td>
<td>12%</td>
</tr>
<tr>
<td>Job Experience (years)</td>
<td>0.18</td>
<td>0.03</td>
<td>6%</td>
</tr>
<tr>
<td>Biographical Data Measures</td>
<td>0.35</td>
<td>0.01</td>
<td>2%</td>
</tr>
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<td>Assessment Centers</td>
<td>0.37</td>
<td>0.02</td>
<td>4%</td>
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<tr>
<td>T&amp;E Point Method</td>
<td>0.11</td>
<td>0.01</td>
<td>2%</td>
</tr>
<tr>
<td>Years of Education</td>
<td>0.1</td>
<td>0.01</td>
<td>2%</td>
</tr>
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<td>Interests</td>
<td>0.1</td>
<td>0.01</td>
<td>2%</td>
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<td>Graphology</td>
<td>0.02</td>
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<tr>
<td>Age</td>
<td>-0.01</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Table 3: Utility of Alternative Predictors That can be Used for Selection in Entry-Level Jobs Compared with Utility of Ability as a Predictor

<table>
<thead>
<tr>
<th>Predictor/Strategy</th>
<th>Utility</th>
<th>Opportunity Costs*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability Composite</td>
<td>15.61</td>
<td>-3.12</td>
</tr>
<tr>
<td>Job Tryout</td>
<td>12.49</td>
<td>-5.11</td>
</tr>
<tr>
<td>Biographical Inventory</td>
<td>10.5</td>
<td>-8.23</td>
</tr>
<tr>
<td>Reference Check</td>
<td>7.38</td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td>5.11</td>
<td>-10.5</td>
</tr>
<tr>
<td>Interview</td>
<td>3.97</td>
<td>-11.64</td>
</tr>
<tr>
<td>Training and Experience Rating</td>
<td>3.69</td>
<td>-11.92</td>
</tr>
<tr>
<td>Academic Achievement (College)</td>
<td>3.12</td>
<td>-12.49</td>
</tr>
<tr>
<td>Education</td>
<td>2.84</td>
<td>-12.77</td>
</tr>
<tr>
<td>Interest</td>
<td>2.84</td>
<td>-12.77</td>
</tr>
<tr>
<td>Age</td>
<td>-0.28</td>
<td>-15.89</td>
</tr>
</tbody>
</table>

*Opportunity costs indicate the amount lost is a selection device other than ability is used.


These tables indicate that the single best available tool to predict future job success is a cognitive ability test, also known as a measure of general intelligence (ability). Therefore, any departure from the optimal selection strategy of hiring from the top down based on a test of ability will necessarily lead to loss of productivity.45 The most valid (highly predictive) selection process that could be used to select highly productive entry level employees is a cognitive ability test (general intelligence) coupled with a measure of integrity. Integrity tests are used in industry to hire employees with reduced probability of counterproductive job behaviors, such as drinking or drugs on the job, fighting on the job, stealing from the employer, sabotaging equipment, and other undesirable behaviors. In addition to predicting these behaviors, they also predict evaluations of overall job performance.46

**Benefits of valid selection outweigh costs**

What can be concluded from this discussion? Utility figures associated with valid selection programs are far higher than most people would suspect, yet the inability to demonstrate such gains in the past is the major reason why decision makers mistakenly have emphasized the cost of these procedures. In most instances, such costs are trivial, relative to the gains to be realized from the use of sound selection instruments.47
**Selection expertise is needed**

A primary problem in state government human resources is the lack of fundamental selection/assessment knowledge on the part of departmental individuals who develop and administer examinations. In all of state government, only 29 employees were hired into classifications that specifically require education and/or experience in the technical aspects of test development and administration. The International Public Management Association-Human Resources, the largest association of public sector personnel managers, certifies individuals who meet specified criteria of competence and experience in personnel management. Only four individuals employed by the state hold this certification. Unlike many departments in the federal government, the state employs virtually no industrial/organizational psychologists to help develop effective assessment tools.

In the absence of hiring knowledgeable individuals, training is available for examination staff from both internal and external sources; however, few individuals take advantage of what is available. Of the estimated 560 staff in state departments working on examinations and employee selection, only 192 have completed the State Personnel Board’s Selection Analyst Certification Program. This program consists of 12 training classes covering core aspects of sound selection and is designed to equip staff with the tools they need to make effective choices of selection instruments and design selection systems that will facilitate the accomplishment of managers’ program objectives.

**Examination training is available**

This lack of knowledge cannot be attributed solely to the lack of fiscal resources. Much training is available for free or at very low cost. Professional associations offering a variety of educational opportunities and resources abound, but only 4 percent of the state’s examination staff is members of professional organizations such as the Personnel Testing Council, International Public Management Association, or the International Public Management Association Assessment Council. Information is readily available in professional journals and on the Internet, and free from the State Personnel Board via its website, in monographs, and in Test Talk sessions. Examination staff does not take advantage of these many opportunities to master their profession and rely instead on adherence to rules.

Examination managers in departments that wish to retain their delegated testing authority can be required to complete the Selection Analyst Certification Program or an equivalent. The federal government only grants delegation for a three year period.

**Managers fail to reject non-performing employees during probation period**

California’s constitution gives the Personnel Board authority to prescribe probationary periods. All classifications have probationary periods of sufficient length (usually six or 12 months) to enable departments to evaluate effectively the performance of employees prior to granting them permanent status. If a probationer’s performance is unsatisfactory, the
appointing power may remove the probationer from the appointment through a “rejection during probation.”

The burden of proof in appealing a probationary rejection is on the employee; however, substantial evidence is required to document a rejection. Despite this burden, it is far easier to reject an employee during probation than it is to do so after probation when the burden of proof shifts to the employer and the legal standard is increased to a preponderance of the evidence.

The Government Performance Project 2001 reported that in California, only 0.35 percent of employees are terminated during probation, compared with 2.5 percent in New York, another heavily unionized state. In FY 2001–2002, there were over 36,000 new hires, rehires, and promotions, and only 269 individuals (0.75 percent) were rejected on probation. Failure to act at the beginning of an individual’s employment when it is relatively easy to let him/her go, forces subsequent supervisors to face the more daunting prospect of terminating a permanent status employee, or more often than not, simply tolerating an unsatisfactory employee.

The probationary period is the final step in the selection process and provides a mechanism for effectively assessing critically important competencies that are difficult to assess during the other phases of the selection process. It is clear that supervisors and managers are not effectively using this tool, most probably because the process is time consuming and laborious, there are no performance standards against which to evaluate employees, they do not have the necessary knowledge and skills, and there is no immediate consequence for failure to do so.

As noted by Frank L. Schmidt and John E. Hunter, two well-respected personnel psychology researchers, “It has been our experience that supervisors are reluctant to terminate marginal performers. Doing so is an unpleasant experience for them, and to avoid this experience many supervisors gradually reduce the standards of minimally acceptable performance, thus destroying the effectiveness of the procedure.”

Different probationary periods (six or twelve months) for employees in different classifications unnecessarily complicates the hiring process and is yet another example of multiple requirements for a single function. Keeping track of the differing schedules for review is cumbersome.

Probation periods of six months appear to be too short for a thorough evaluation of the long-term capability of employees to succeed in their job assignment. Depending upon departmental procedures for generating probation rejection documents, a supervisor may have to complete three written evaluations, make a decision regarding the need to reject an individual on probation and notify the designated individuals within the department to
prepare the paperwork only four and a half months after hiring an employee. Anecdotal reports indicate that a standard 12-month probationary period would be appropriate.

**Conclusion**
A complicated, restrictive, and exclusionary examination and selection process, served by outmoded technology, prevents California from filling open positions with the best candidates. Achieving human resources’ worthy goal of “all exams open all the time,” is nearly impossible in the current regulatory environment and with the tools presently employed.

**Recommendations**
A. The Governor should request the State Personnel Board, or its successor, to develop a short list of guiding principles to be followed by departments as they administer examinations. Simplify the “rules” that define these principles and provide for increased flexibility such as using position-by-position testing, and selective certification by skills.

B. The Governor should request the State Personnel Board, or its successor, to work in conjunction with information technology resources as well as departments to pursue the advantages of technology and focus on the development of considerably more Internet and/or other computerized examinations that can be administered continuously, thus reducing the cost of examinations and the length of time hiring managers must wait for hirable eligibles. All service wide examinations should be administered continuously as Internet or computer adapted examinations.

C. The Governor should request the State Personnel Board, or its successor staff, to work in conjunction with information technology resources to formulate a plan to replace the current examination and certification system that manages virtually all examinations for state departments.

Funds must be committed to replace this system. This process should begin immediately as failure to act will prove to be very costly if the system fails and there is no replacement.

D. The Governor should request the State Personnel Board, or its successor staff, to offer training on how to construct and conduct competency-based examinations and on exam forecasting to enable departments to conduct job analysis and administer tests before hiring needs actually occur and to better serve the needs of hiring managers.

E. The Governor should work with the Legislature to repeal all Government and Penal Code requirements for the selection of law enforcement personnel, thus enabling each department to establish job-related minimum requirements, utilize testing
instruments that best meet its needs, and take advantage of advances in the science of human assessment.

F. The Governor should work with the Legislature to amend the Administrative Procedures Act to eliminate the Office of Administrative Law’s review of rules and regulations relating to the internal personnel administration of the state.

G. As cost effective Internet and computerized examinations become available, the Governor should direct departments to carefully consider the benefit to the state of administering non-entry level examinations on an open basis in order to gain access to outside talent.

H. The Governor should request the State Personnel Board, or its successor, to develop and release Internet or computerized examinations for the 60 service-wide classes that have traditionally been given on a promotional only basis. These examinations should be offered on an open continuous basis.

I. The Governor should direct departments to carefully monitor the success of internal candidates in open examinations and provide increased developmental opportunities when warranted.

J. The Governor should work with the Legislature to amend existing statutes to eliminate all types of non-merit points from state examinations. In a true merit system, scores should be based solely on test performance and not on other non-job related factors. These points should be eliminated and/or revised to mitigate the negative impact on other candidates.

K. The Governor should work with the Legislature to repeal existing statutes to eliminate the application of career credits and seniority points to examination scores. The Department of Personnel Administration, or its successor, should not agree to any contract provisions that permit seniority as a consideration for hiring decisions.

L. The Governor should request the State Personnel Board, or its successor, to reinforce policy and provide guidance to departments for distribution to hiring managers directing them to effectively use the probationary period.

M. The Governor should direct departments to train hiring managers and then hold them accountable for the completion of all probationary reports and for the effective use of this process.

N. The Governor should encourage departments to modify the mandatory 80 hours of supervisory training to include more in-depth information regarding the need for
effective use of probationary periods and more information regarding the details of conducting an effective performance related discussion.

O. The Governor should request the State Personnel Board, or its successor, to establish a single probationary period of one year for all non-managerial civil service classes.

P. California should retain its current system of centralized service wide examinations and decentralized department-specific examinations.

The State Personnel Board, or its successor staff, should retain responsibility for and administer examinations for all service-wide classifications, including the sixty service wide classes that have been delegated to departments for promotional only testing. Staff resources must be redirected to accommodate this increased workload.

Q. The Governor should request the State Personnel Board, or its successor, to require that the examination manager in each department complete the Selection Analyst Certification Program, or an equivalent program recognized by the State Personnel Board as a condition of continued delegation of examinations.

R. Departments should focus as much on the quality of their selection instrument decisions as they do on the goals of faster and cheaper examinations. The Governor should request the State Personnel Board, or its successor staff, to direct departments to use the metrics of job analysis and validation to assess the quality of their examinations as tools to meet managers’ needs and to develop examinations of acceptable quality.

S. The Governor should request the State Personnel Board, or its successor, to ensure departmental accountability and examination quality by establishing a regular review and audit process.

Adequate staff resources must be directed to this activity in order to ensure evaluation of each department’s programs every three years. Delegation should also be reconsidered at that time. A scoring or grading system should be developed, utilized, and published annually.

T. Management of the human resources function and utilization of selection metrics should be included as measures in performance-based management.

**Fiscal Impact**
Recommendations A, B, E, F, G, J, K, N, P, Q and S can be absorbed within existing resources. The primary benefits are improved efficiency and simplification of the civil service system.
which should result in departments making fewer procedural errors and providing better customer service.

Recommendation C and D require information technology solutions. Replacement of the online examination and certification system will be costly and will require a carefully thought out, multi-year plan and partnership with the information technology resources. Failure to act will eventually require countless additional staff to manually process the nearly 200,000 annual applications for more than 2,500 examinations. It is estimated that the automation solution would cost between $8 and $9 million spread over three years. The state will begin to recognize savings when the new system is in production and the old systems are decommissioned.

Recommendations H and I suggest administering more open state examinations, allowing individuals outside state government to qualify to compete in the exams. This could increase the cost of each department’s and the central agency’s examination programs. A small promotional examination that now costs $30,000 per administration could cost $50,000 with addition of outside candidates. However, when coupled with an increased use of automation, these costs can be contained. For example, a traditional interview only examination for the service wide classes of Staff Services Manager I, II, and III, would cost approximately $201,000 for about 3,000 candidates while the same examination would cost $108,000 if given on the Internet. If these two strategies are carefully managed together, these recommendations could be cost neutral. Adequate resources will need to be directed to this activity to facilitate central agency development and administration of all service-wide examinations.

The benefits of recommendations L and M are to improved efficiency, clarity for candidates, and a fairer, merit based system. Veterans will not be placed in a lower rank as a result of this proposal. Rather, the proposed changes will eliminate the lowering of the ranks of non-veterans. Candidates will better understand the proposed system as rankings will not change after the promulgation of a list. The State Personnel Board processes about 10,000 requests for veterans’ points per year. This will not change as a result of these recommendations.

Recommendation O will result in savings, but those savings can not be estimated at this time. Failure to reject non-performing employees while on probation costs the state millions of dollars annually in lost productivity, extra work for supervisors and managers who must cope with poor performers or initiate more time-consuming and costly adverse actions. If California’s probation rejection rate were the same as the State of New York’s (2.5 percent), the state would reject 900 individuals from probation annually which is 631 more rejections than the current 269 annual rejections.

Recommendation R could be accomplished through the redirection of departmental staff that would no longer be required to conduct service-wide examinations. Centralization of the
development and administration of all service-wide examinations is cost effective and assures the quality of the examinations.

The value of recommendation T can not be estimated. The use of hiring methods with increased predictive validity leads to substantial increases in employee performance that can be measured in percentage increases to output, increased monetary value of output, and increased learning of job-related skills.63

Recommendation U requires an audit unit be established. This unit would require a minimum of seven staff. Total costs including salaries, benefits and operating expenses are estimated at $661,000. This unit is essential if departments are to retain decentralized responsibility for department-specific examinations. This unit could be funded from existing resources available for redirection from the consolidation of the State Personnel Board staff and the Department of Personnel Administration.

### General Fund
(dollars in thousands)

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<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings(Costs)</th>
<th>Change in PYs</th>
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<td>2008–09</td>
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<td>7.0</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003-04 expenditures, revenues and PYs.

### Endnotes
1. Brown, supra, 29 Cal.3d at p. 184, fn. 7, 172 Cal. Rptr. 487, 624 P.2d 1215.
2. California Code of Regulations, Title 2, Division 1, Chapter 1.
3. E-mail from Sherry Magee, State Personnel Board to Laura Aguilera, Sacramento, California (November 26, 1990).

10 Data provided by State Personnel Board from State Controller’s Office information to Karen Coffee, the State Personnel Board, Sacramento, California.

11 California Gov. C. Section 19054.1.

12 Little Hoover Commission, “Of the People, By the People: Principles for Cooperative Civil Service Reform” (Sacramento, California, January 1999), p. 78.

13 The count is actually a little higher as this total does not include those examinations that are administered without the use of the State Personnel Board’s online examination and certification system.

14 Data from the State Personnel Board’s online examination and certification system, Sacramento, California, April 21, 2004.

15 Data from the State Personnel Board’s online examination and certification system.

16 California Gov. C. Sections 18951, 18951.5, 18954, 18973, and 18978. In addition to the points that can be added to individuals’ scores, two bargaining unit contracts (Units 1 and 4) include non-merit based provisions to require that individuals be selected to fill vacant positions in specified classifications based solely on seniority. These contract provisions limit the ability of hiring managers to make the best job-person match, and thus effectively accomplish their program goals. Master Table Contract, 2003–2005 Units 1, 3, 4, 11, 14, 15, and 20, California State Employee Association, Section 15.3.1 Pilot Post and Bid (Unit 1) and Section 15.3.4 Pilot Post and Bid (Unit 4).


18 California Gov. C. 18974.5.

19 Interview with Jill Hansen, senior staffing specialist, United States Office of Personnel Management, Sacramento, California (May 10, 2004).


21 Little Hoover Commission, “Too Many Agencies, Too Many Rules: Reforming California’s Civil Service,” p. 44.

22 Interview with J. J. Jelincic, president, California State Employees Association, Sacramento, California (March 9, 2004).

23 Interview with Paul Kaiser, assistant director, Testing Services Division, New York State Department of Civil Service, Sacramento, California (May 17, 2004).

24 Interview with Susan Toy Stern, chief deputy director, Department of Human Resources, County of Los Angeles, Los Angeles, California (March 31, 2004); and State Personnel Board, Policy Division, “The Status of the State’s Decentralized Testing Program, Final Report of Findings and Recommendations” (Sacramento, California, January 2003), p. 28.


26 Interview with Jill Hansen.

27 National Association of State Personnel Executives, “HR Management: State to State” (Lexington, Kentucky, 2002).


29 E-mail from Shelley Langan, supervising personnel consultant, State Personnel Board, to Karen Coffee, Sacramento, California (May 11, 2004).

30 Meeting with Examination Supervisors’ Forum Steering Committee, Sacramento, California (March 17, 2004).
Interview with Judy O’Day, division chief, Human Resources, Department of Transportation, Sacramento, California (March 15, 2004).

Joint Labor Management Committee on Discrimination, “Report to the California State Personnel Board, Civil Service Division, CSEA/SEIU, Local 1000, and Department of Personnel Administration” (Sacramento, California, November 7, 2003), pp. 46 and 51.


Alan Davidson, Ph.D., president, Alan Davidson Associates, San Diego, California.

Alan Davidson, Ph.D., president, Alan Davidson Associates, San Diego, California.


E-mail from Shelley Langan, manager, Test Validation and Construction Program, State Personnel Board, Estimate based on questionnaire results, “The Status of the State’s Decentralized Testing Program, Final Report of Findings and
Recommendations,” April 27, 2004; and e-mail from Bill Groome, manager, Technical Training Program, State Personnel Board (May 7, 2004).


Interview with Jill Hansen.

Constitution of the State of California, Article VII, Section 3 (a).


State Personnel Board, “Report 5112, Intake and Promotions of All Employees by Department, Occupation Groups and Classification for the Period 07/01/01 Thru 06/30/02 (Excludes Reinstatements),” special report, p. 757; and State Controller’s Office, “List of Adverse Actions by Name, Class, Date, and Department.”


Department of Alcoholic Beverage Control, presentation by Ginny Chang, associate personnel analyst, Sacramento, California, April 27, 2004.


Creating an Effective Management Structure

Summary
The state does not have a process that ensures that the most qualified individuals are appointed to career-level management and leadership positions. State law and regulations provide rigid criteria for creating career executive positions and restrict the recruitment and appointment process for individuals outside the civil service system to these positions. A more responsive and open executive hiring culture should be established so that the state can develop a workforce of high-performing managers.

Background
In 1963, the Legislature created the “Career Executive Assignment” (CEA) class in an effort to blend civil service protections with managerial flexibility. The requirement of civil service status prior to appointment to a CEA class was viewed as a protection from patronage. The discretionary nature of these appointments was thought to encourage accountability.

There are currently over 1,200 positions allocated to the CEA class. Agencies that need to establish or modify CEA positions must receive approvals from the Department of Personnel Administration to determine appropriate CEA level, and the State Personnel Board for allocation to the CEA class. This process can be time-consuming and frustrating to state agencies. Personnel Officers have argued that, given the detailed guidelines available on allocating CEA positions, no central review, “let alone two reviews” is necessary.

Expectations of the policy role
State law defines a Career Executive Assignment as:

“...an appointment to a high administrative and policy influencing position within the state civil service in which the incumbent’s primary responsibility is the managing of a major function or the rendering of management advice to top-level administrative authority. Such a position can be established only in the top managerial levels of state service and is typified by broad responsibility for policy implementation and extensive participation in policy evolution. Assignment by appointment to such a position does not confer any rights or status in the position other than provided in Article 9 ...”

When establishing new CEA positions, the State Personnel Board advises state agencies that “... Significant policy formulation and program management responsibility are mandatory aspects of CEA positions ...” While the State Personnel Board expects positions to have a
strong policy role, the Little Hoover Commission has found “the success of a policy or program can be determined as much by how it is implemented as how it is designed. Implementation almost always requires judgments that on a micro-level are defining policy.”

In a 1995 report, the Little Hoover Commission stated, “In 1988, DPA proposed to the Personnel Board that the management classes and the CEA positions be ‘harmonized’ by consolidating the classification, selection, pay and tenure provisions of the entire managerial rank. DPA argued that the Personnel Board had too narrowly interpreted the CEA definition. And in an era of collective bargaining, a broader interpretation was needed to give management more flexibility.” Following a Senate Committee Hearing on the proposed expansion of CEAs, the Legislature concluded that any proposal to significantly expand the CEA category should be a part of a legislative bill, not an administrative decision . . . and the issue was not resolved.

Qualified candidates from outside the civil service
“Exempt” employees are hired without examination from within or outside the civil service at the discretion of the administration. Managers, supervisors, and rank and file employees can be hired through either open examinations, in which anyone meeting the qualifications can be considered, or promotional examinations limited to individuals within the civil service. CEA assignments, however, are primarily limited to employees with permanent civil service status. In limited circumstances, specialized CEA classes are established that allow for outside recruitment and flexibility in salaries. There are approximately 53 specialized CEA classes.

Expanding the candidate pool to attract well-qualified executives from outside the civil service will contribute toward a better qualified workforce and could result in productivity savings. According to researchers Dr. Frank L. Schmidt and Dr. John E. Hunter, a superior employee can be up to 40 percent of salary more productive.

These changes are also necessary given the impending human capital crisis. Currently more than 67 percent of CEAs are age 50 or older, compared to just 34 percent of the state workforce as a whole. If the state is to meet future workforce need, expanding the CEA classification is necessary.

Termination of executive appointments
Exempt employees serve at the discretion of the appointing power and can be terminated without notice at any time, for any reason. If these individuals had civil service status prior to their exempt appointment, they are entitled to return to their former position. Individuals appointed to CEA positions do not gain status and can be terminated without cause after receiving 20 days notice. Employees terminated from their CEA appointments have mandatory right of return to their former position; some may have return rights to a higher position if certain conditions are met. In contrast, employees new to state service who are appointed to a
specialized CEA class serve a one-year probationary period and if successful, acquire permanent civil service status. Employees serving in these and other high level managerial positions cannot be removed from their civil service positions without cause and after appropriate disciplinary measures.

**Promoting a leadership culture among managers and supervisors**
There are over 3,900 filled managerial positions. Expanding the CEA classification to include other managerial classes will enhance management accountability, improve state services, and contribute toward a system based on performance rather than longevity.

As part of a 1995 review of the state’s personnel management system, the Little Hoover Commission recommended that the CEA program be extended to all managerial positions. In response to this recommendation, the Department of Personnel Administration stated, “The flexibility of the CEA selection procedures that provide for examining on a position-by-position basis, as well as the limited tenure of CEA appointments should contribute to the development of responsive management teams.”

**Staff Services Manager series**
The Staff Services Manager (SSM) I, II, and III classification series provides an example of managerial classifications. The SSM series was established in 1973, and individuals in these classes acquire permanent civil service status upon the successful completion of a probationary period. The SSM series encompasses four separate classes responsible for “...the effective resolution of a broad range of governmental, supervisory and/or managerial problems. They...formulate procedures, policies, and program alternatives; make recommendations on a broad spectrum of administrative and program-related problems...” The entire SSM series is excluded from collective bargaining.

The SSM I and SSM II (Supervisory) classes are both considered “supervisory.” State law defines a supervisory employee as “...any individual, regardless of the job description or title, having authority, in the interest of the employer, to hire ... reward, or discipline other employees, or responsibility to direct them...” The SSM II (Managerial) and SSM III classes are considered “managerial.” State law defines managerial employees as those “... having significant responsibilities for formulating or administering agency or departmental policies and programs or administering an agency or department.”

**Best practices**
States with less restrictive policies and procedures have experienced a positive effect on reducing the recruitment and hiring process. It is common for states to utilize open continuous recruitment, particularly for difficult-to-fill positions. In 1996, the Georgia Legislature decided to declassify all unfilled positions; any state employee hired after July 1, 1996 does not have civil service protections and is an “at-will” employee. The federal government hires
executives from either outside the federal civil service or within. There also are performance-based incentives for supervisors and managers in the federal government that are based on accomplishing organizational goals.20

Within California, the Department of General Services (DGS) explored a demonstration recruitment project for selection of managers and supervisors. This demonstration project consolidated 79 classifications into two broad classes. DGS developed a process to examine and screen applicants for each position, from within and outside the civil service, and found that it was more efficient than conducting exams for each classification and is more effective at finding the right person for the job.21

A common concern identified by stakeholders was management accountability. The Little Hoover Commission has also recognized that high-quality managers are essential to improving outcomes for taxpayers and clients of government services.22

**Conclusion**

High-performance organizations foster a work environment in which people are empowered and motivated to contribute to continuous learning, performance improvement and mission accomplishment while ensuring accountability and fairness for all employees.21 “An agency cannot hire the best employees if it does not attract the best candidates.”24 Allowing open recruitment for CEA positions and placing more management employees in the performance-based CEA class will enhance California’s chances for creating a leadership culture.

**Recommendations**

A. The Governor should work with the Legislature to amend existing statutes to allow individuals outside state civil service to compete in examinations for career executive assignments.

B. The Governor should work with the Legislature to amend existing legislation to expand the definition of the Career Executive Assignment classification to encompass the policy role of lower level managerial positions. This classification should be referred to as the Senior Executive Service class (SES). The Governor should request the State Personnel Board, or its successor staff, and direct the Department of Personnel Administration, or its successor, to work with agencies to determine which managerial positions are appropriate for conversion to the SES class.

C. The Governor should request the State Personnel Board, or its successor, and direct the Department of Personnel Administration, or its successor, to delegate to state agencies the authority to allocate a specific percentage of their positions to the Senior Executive Service class without additional approval.
D. The Governor should request the State Personnel Board, or its successor, to incorporate specialized Career Executive Assignment classes into the Senior Executive Service category as these positions become vacant.

Fiscal Impact

The fiscal impact of this recommendation cannot be estimated. Costs likely would be minor and absorbable; however, the state could realize productivity improvements that would result in significant savings.

Endnotes

1 Little Hoover Commission, “Of the People, By the People: Principles of Cooperative Civil Service Reform” (Sacramento, California, 1999), p. 46.
2 Department of Personnel Administration, “Position Count Report” (Sacramento, California, June 17, 2004).
4 Gov. C. Section 18547.
5 Memorandum from the State Personnel Board to All State Agencies (September 3, 2002).
8 Memorandum (PML 95-053) from Department of Personnel Administration to State Agencies (December 15, 1995).
9 Department of Personnel Administration, “Report on CEA Classifications” (Sacramento, California, June 17, 2004).
11 State Personnel Board, Sacramento, California.
12 Gov. C. Sections 19889.3–19889.4.
14 Little Hoover Commission, “Too Many Agencies, Too Many Rules: Reforming California’s Civil Service System.”
15 Memorandum from the Department of Personnel Administration to Agency Secretaries (September 18, 1995).
17 Gov. C. Section 3513 (g).
18 Gov. C. Section 3513 (e).

Consolidate and Update State Civil Service Classifications

Summary
The state’s classification plan contains too many classifications, is inflexible, and is too cumbersome for today’s human resources needs. As a consequence, classification specifications are out of date, titles are not descriptive or understandable to applicants, and there is virtually no distinction among many similar classifications which results in redundant testing.

Background
Civil service reform is overdue
Position classification has been called the “backbone” of the Civil Service System. The Little Hoover Commission noted in January 1999; “Classifications are used in structuring organizational work flows and in establishing budgets. They shape examination, selection, compensation and promotional decisions. As a result, many of the maladies plaguing state human resources are either caused by—or can be detected in—the classification system.”

Every major civil service reform effort studied as part of this analysis, with the exception of Georgia, resulted in the jurisdiction’s reduction of the number of classifications in the classification plan. (Georgia eliminated civil service in 1996 and has experienced a proliferation of classifications.) Most of the stakeholders interviewed remarked that the classification system had grown too large and too complex.

Civil service reform has been the topic of hearings and studies by the Legislative Analyst’s Office and the Little Hoover Commission. Since 1979, the Little Hoover Commission has recommended streamlining California’s personnel management system to “untie the hands of managers and delegate to departments the authority to hire, promote, reward employees for excellence in performance based on principles of merit and a representative workforce.”

There are 4,462 classifications in the state’s civil service. Of this number:
- Thirty-seven percent of these classifications have five or fewer incumbents;
- Nearly one-fifth are one- or two-person classifications; and
- As of April 23, 2004, there are 1,062 classifications with no incumbents.

Each classification has its own classification specification, minimum qualifications, pay range and exam plan. The classifications are further organized into 13 major occupational groups. Many of the minimum qualifications for classifications within the same occupational group are so similar that departments are recruiting from the same pool of candidates. The salaries are
exactly the same for numerous classifications within the same major occupational group, as are the exam plans. For example, there are 161 classifications in the clerical occupational group, many of which have the same minimum qualifications, similar typical tasks and the same candidate pool.

**Broadbanding classifications and salaries is the national trend**

In 2002, the State of Washington passed the Personnel Reform Act with the goal of streamlining the State’s classification structure. They conducted a thorough literature search as part of their civil service reform effort. They noted a nationwide trend that states and other public jurisdictions were using various methods to streamline their classification systems. They concluded, “Many are using a broadband approach in which large numbers of jobs or functions are grouped into broad categories based on various factors, such as type of work, level of responsibility, compensation level, occupational group, competencies, and so on.”

Ten years ago, the Department of Personnel Administration (DPA), in partnership with numerous departments, began developing proposals to consolidate similar classifications and merge them into a few “deep classes” which would eliminate the need to maintain separate lists, conduct separate exams and certify candidates for those classifications. A “deep class” is the product of the consolidation of several classifications into one classification with multiple levels and a single examination. For example, the classification of Staff Services Analyst is a “deep class.” The DPA had planned to consolidate the research, administrative, and the managerial classifications.

The Managerial Consolidation project proposed consolidating 326 managerial classifications (excluding Career Executive Assignment and exempt) into 13 broadband classifications. In addition to consolidating managerial classifications, the proposal was intended to expedite the selection process for appointments to the new managerial classifications; to provide greater executive flexibility in making job/person matches; and to set salaries based upon managerial performance. Twenty-two departments elected to participate in the Managerial Consolidation Project.

The consolidation proposals were developed with the support and encouragement of the Wilson Administration. Opposition from the California State Employee’s Association (CSEA) was a concern to the new Davis Administration and the proposals were abandoned. One year ago, the DPA attempted to abolish about 100 classifications that had no incumbents and that had not been used in several years. The DPA abandoned this effort when CSEA voiced opposition to abolishing each individual classification. CSEA was concerned that their members might miss out on an opportunity to be appointed to one of these classifications. Unused, obsolete and underused classifications should be abolished.

In interviews with department personnel officers, nearly all persons interviewed urged simplification and updating of the classification plan. Some personnel supervisors remarked
that many class specifications have not been updated for more than twenty years. One reason cited is the process for revising a classification specification is cumbersome and time-consuming. The process requires that the proposed revision be approved by the Department of Personnel Administration, bargained with the relevant union, and then submitted for approval to the State Personnel Board. This is one area where both agencies currently have jurisdiction. The DPA reported that in the last five years, much needed classification studies, assessments of salary relationships, and other regular maintenance activities have been put on hold. According to DPA staff, virtually the only classification proposals that were pursued were those agreed to during contract negotiations.

**Consolidating classifications into “deep classes” simplifies the personnel management process**

There is also another issue raised by stakeholders related to the State’s classification plan. Personnel executives, labor unions and employees all complain that there are too many layers of management, not enough pay differentials between classifications and a need to address the issue of “span of control.” The consolidation of 326 managerial classifications into 13 broadbanded classifications, as previously proposed by the DPA, would address this concern.

The federal civil service has reorganized their classification plan into major “families” of classifications, with major occupational groups as a subset. They also grouped similar classifications into “salary bands” within the family of occupational groups. This has resulted in a simplification of the classification of positions and eliminated the need for numerous selection efforts for similar classifications. In California’s classification plan, transfer requests must take into consideration the pay differential between the incumbent’s current classification and the proposed classification into which the incumbent would like to transfer. There can be no more than two salary steps between the “to” and “from” classifications. A system of “salary bands” would simplify these decisions.

When Florida was pursuing their broadbanding efforts seven years ago, they consulted with California’s DPA because they had developed the blueprint for such efforts. Florida successfully implemented their project; however, California has failed to address this problem.

**Recommendations**

A. The Governor should direct the Department of Personnel Administration (DPA), or its successor, to immediately begin updating the consolidation proposals previously developed in partnership with participating departments and implement the new consolidated classifications.

B. The Governor should direct DPA, or its successor, to study other major occupational groups of classifications, such as legal, business services, clerical and investigators,
for consolidation. These groups were previously identified for future consolidation projects.

C. The Governor should direct DPA, or its successor, to explore the federal model of grouping similar classifications into “salary bands” to further streamline the classification and pay process and create additional efficiencies.

D. The Governor should direct DPA, or its successor, to propose the State Personnel Board, or its successor, to abolish those classifications with no incumbents and which have not been used in the previous two years.

**Fiscal Impact**

**Recommendations A and B**

It is not possible to determine the fiscal impact at this time. Although much of the costs for updating the previous proposals can be absorbed by those departments that participated in the original studies, the additional costs associated with the new studies and preparation of consolidation proposals for adoption by SPB and DPA cannot be absorbed. Funding for this new workload has not been included in the current budgets for SPB and DPA.

**Recommendation C**

It is not possible to determine the fiscal impact at this time. To maximize efficiency, the classification and pay structures for the new consolidated class series must be compatible. Broadbanding classification and pay, delegating classification and pay decisions to departments, and providing criteria for such decisions would greatly streamline the personnel process. Developing these proposals and conducting the studies to accomplish broadbanding will require the expenditure of resources not currently budgeted for these activities. Although broadbanding will achieve efficiencies and speed up service delivery in department personnel offices by reducing the amount of classification actions, it would be difficult to estimate any savings because these staff are engaged in a variety of personnel activities in addition to classification and pay issues.

**Recommendation D**

Implementation of the consolidation proposals and abolishing all unused classifications will reduce the number of classifications by almost 1,400. This will greatly reduce the number of examinations, position classification actions, State Personnel Board items needed for routine maintenance of the classification plan, and the number of out-of-class claims filed. Since we have abandoned routine classification maintenance for at least the last five years, however, any efficiency achieved cannot be claimed as a “savings.” This recommendation should still proceed in order to streamline the classification plan.
Endnotes

1 Little Hoover Commission, “Of the People, By the People: Principles for Cooperative Civil Service Reform” (Sacramento, California, January 1999), p. 65.
5 California State Personnel Board, “Report of Active Classes Not on Roster File” (Sacramento, California, April 23, 2004).
7 California Department of Personnel Administration, Managerial Consolidation Project, “State Personnel Board Item” (Sacramento, California), p. 11.
8 Interview with Sharon Planchon, personnel officer of the California Department of Corrections, Sacramento, California (March 2004).
9 Interview with Wayne Kurahara, California Department of Personnel Administration, Sacramento, California (April 2004).
11 Interview with Josie Fernandez and Wayne Kurahara, California Department of Personnel Administration, Sacramento, California (April 2004).
Develop an Official Policy for Setting Employee Compensation

Summary
California’s civil service has 21 collective bargaining units, each of which has a separate, negotiated contract stipulating various and inconsistent compensation packages for employees represented by those bargaining units. The compensation packages for managers, supervisors and exempt employees are informally tied to the compensation negotiated for represented employees. This system is inconsistent, discourages high performance and is not responsive to the labor market. Several actions should be taken to resolve this issue, including conducting a statewide salary survey and changing state law.

Background
Represented employee compensation
The majority of California’s civil service is organized by occupation into 21 bargaining units, each of which is represented in contract negotiations by an employee organization—a labor union. The Department of Personnel Administration (DPA) represents the state’s management interests in accordance with the Ralph C. Dills Act. The DPA is responsible for negotiating the 21 separate, legally-binding contracts with the labor unions. The contracts are usually referred to as memoranda of understanding or MOUs. The MOUs establish salary ranges for each classification with minimum and maximum pay rates that generally have three steps in between. In addition, the MOUs specify various benefits, premium pay differentials, merit salary adjustments and other terms and conditions of employment.

In 1999, the Little Hoover Commission wrote that “the State’s compensation policies have devolved into a large source of controversy.” At the heart of that controversy, wrote the Commission, is a lack of “... common principles for what the State wants to accomplish with the compensation system.” According to the director of the DPA, the state does not have a clearly stated policy regarding salary. This has caused an inconsistent application among the different MOUs. The result is a complicated pay scale document over 2,000 pages long that contains the salaries for each of the 4,200 classifications; alternate range criteria for about 400 classifications; 284 salary differentials; and other rules, regulations and information. Despite previous reform efforts, this compensation system lacks uniformity among bargaining units, has no relationship to California’s labor market and discourages a performance culture in the state’s workforce.
Interest-based labor negotiations
According to the Little Hoover Commission, “Through collective bargaining, there can either be confrontation between unions and management, or the two can become partners and collaborate to make changes.” It is essential that state management form partnerships with organizations that represent employees and jointly present potential compensation reforms in a manner that emphasizes employees’ interests. A number of other states, local governments and private sector employers have used a more collaborative and interest-based approach to labor relations. These partnerships not only achieved more productive bargaining, but also gained the support of employees.

The state should pay competitive salaries
State law requires DPA to establish and adjust salary ranges for each classification in the state civil service. In establishing or changing these ranges, consideration must be given to the rates for comparable service in other public employment and in private business. California cannot expect to recruit and retain the best and brightest unless employees are compensated competitively. The unions and the DPA have attempted to respond to market conditions by establishing various premium pay differentials, alternate range criteria and procedures to hire above the minimum. The resulting compensation system, however, is inflexible and inconsistent across classifications. For example, there are 284 different pay differentials, hundreds of alternate salary range criteria, and no universal set of salary bands or ranges. All of these compensation tools are specific to certain classes, bargaining units and/or other specific circumstances. Management needs greater flexibility to respond to changes in the labor market or to individual employee needs. These differentials should be replaced with broader compensation tools that may be implemented as appropriate to specific situations with oversight by the DPA.

Salary surveys
State law requires that an annual survey of the five largest law enforcement jurisdictions be conducted to set salaries for sworn members of the California Highway Patrol (CHP). The DPA does not routinely conduct, or enter into contracts to purchase, comprehensive statewide salary surveys to be used in labor negotiations for any other classifications, and has not done so in at least ten years. As a result, the state lacks information on which to compare the salary difference, or “lag,” between state civil service and other public and private sector employers. Salaries also can vary considerably throughout California. A salary survey would provide information on whether geographic pay differentials should be considered. A salary survey also should compare complete compensation packages, including health benefits, retirement benefits, holidays and vacation leave. California provides employees with extensive benefits that should be compared so that the total value of civil service compensation is not underestimated.

California does not typically use salary surveys when negotiating state employee compensation. The use of salary surveys to inform and guide compensation decisions is
standard practice in nearly every private and public organization studied as part of this analysis. Because salary surveys are so widespread, excellent surveys may be inexpensively purchased.

**Encouraging a performance-oriented workforce**

According to Roger Valine, CEO of Vision Services Plan, a company ranked 17th in *Fortune Magazine*’s 2004 list of the “Best 100 Companies to Work For,” salary is not the most important incentive for employees; respect, career development opportunities, performance incentives and developing good relationships between managers and their employees are all more effective. To attract and motivate quality employees, the state needs to pay a fair salary and develop a well-trained management team that promotes a performance culture in civil service.

The importance of creating a performance-oriented workforce cannot be understated. A 1995 report by the Legislative Analyst’s Office (LAO) criticized the California civil service system and strongly recommended that “a good system should foster a culture of excellence.” According to *The Economist* magazine, many public and private organizations are spending greater and greater percentages of their personnel service dollars on variable pay linked to performance. In addition, the Government Performance Project (GPP) noted that all of the high performing governments they surveyed “use multiple types of monetary and non-monetary rewards” to recognize and encourage performance. GPP cited Fairfax County, Virginia as an example. In 2000, the county launched a new pay-for-performance compensation system for all non-public safety employees, which dramatically changed the existing compensation and evaluation process.

While any new compensation system for California’s represented employees would have to be negotiated with labor unions, management can begin to foster a performance culture before structural reform is implemented. This could be accomplished by conducting more meaningful reviews of employee performance, by actively using progressive discipline to address poor performance, and by not automatically approving merit salary adjustments. Until performance-based compensation can be incorporated into the MOUs, the responsibility of establishing a performance culture is in the hands of management; and the first step is reforming excluded employee compensation so it encourages management performance.

**Setting compensation for excluded and exempt employees**

Managerial employees and employees involved in employee/employer relations (called “confidential” employees) are excluded from collective bargaining rights and are referred to as “excluded” employees. Employees appointed to managerial and support positions by elected officials are not covered by the laws and rules of the California civil service and are referred to as “exempt” employees. Excluded and exempt employee compensation is set by DPA. The compensation policy for excluded and exempt employees has been developed in an ad hoc manner as dictated by needs and politics. Although excluded and exempt employees are not represented by unions, general salary increases negotiated for represented state employees are
also received by these employees when there are sufficient funds. This makes supervisor, manager and exempt employee salaries unresponsive to actual market changes and has created a perceived conflict of interest at the bargaining table.\textsuperscript{16}

The Legislature recognized that excluded and exempt employees need a distinctly separate methodology for setting compensation and legislation was passed in 2002 that created the Excluded and Exempt Salary Setting Task Force.\textsuperscript{17} The Task Force is mandated to recommend to the Governor and the Legislature, by July 1, 2004, a process to identify and implement equitable salary and benefit changes over time for excluded and exempt positions in state government.\textsuperscript{18}

The Task Force conducted a survey of excluded and exempt employees and organizations representing excluded employees to determine the strengths and weaknesses of the excluded and exempt employee compensation system. In a draft report the Task Force wrote, “The most frequently mentioned weakness by stakeholders who responded to the survey was that salary increases are tied to rank and file employees rather than federal agencies or private industry. There was general dissatisfaction and what could be interpreted as anger noticeable in the comments made by stakeholders.”\textsuperscript{19}

While the policy of the DPA is to keep supervisor salaries 10 percent above their subordinates, over time this difference has eroded for a number of reasons. In many cases, the compensation of the supervisor is now less than one or more of the employees they supervise.\textsuperscript{20} This is commonly called “salary compaction.”

Tying pay to meeting performance goals is standard practice in private industry and in most public agencies.\textsuperscript{21} In 1985, the state established a performance bonus program that was ill-conceived and considered to be unpopular.\textsuperscript{22} The DPA implemented a limited pay-for-performance program in 1995, but it was ended in 2000 by the Davis Administration because the program was determined to be “unnecessary.”\textsuperscript{23} Despite warning that pay-for-performance “systems can potentially have more negative than positive consequences,” the Little Hoover Commission ultimately recommended creating performance incentives in their 1995 report on civil service system reform. The Commission wrote, “The success of pay-for-performance is essential to reforming the civil service system, improving government’s delivery of services and restoring public faith in the bureaucracy. DPA should continually work with departments to craft meaningful incentives appropriate to their missions.”\textsuperscript{24} It is necessary to develop a performance-based compensation system carefully to avoid creating conflicting or ineffective incentives.

\textbf{The Governor should have more control over exempt employee compensation}

According to state law, exempt employees are statutorily restricted from making more than the Governor.\textsuperscript{25} Most top executives at private and not-for-profit companies typically earn salaries that exceed the Governor’s $175,000 annual salary, as do the salaries of many city managers.
Even within civil service, executives in the public institutions of higher education and the state retirement programs make far more than the Governor. For example, the seven University of California vice-presidents earn from $161,700 to $395,000 per year and a senior investment officer at CalPERS earns $181,836 per year.²⁶

The limitation placed on exempt employees’ salaries is part of the reason salary compaction is occurring in middle management. This restriction also makes it difficult for the Governor to recruit highly qualified individuals for the top exempt management positions in state government. The Governor should have greater flexibility in determining exempt employee compensation. The compensation, however, should have a variable component that is directly tied to specific performance goals for the departments or agencies managed by these employees.

**Labor opposition**

Past attempts to initiate variable pay for represented employees or managers has resulted in opposition from labor unions and employee representatives. Any compensation reform should be developed and implemented transparently and collaboratively or it will certainly fail and negatively affect future labor negotiations.

**Recommendations**

A. **The Governor should direct the Department of Personnel Administration (DPA), or its successor, to immediately develop a request for proposal (RFP) to seek competitive bids for a comprehensive, statewide salary survey and analysis.**

The RFP should require the following minimum requirements:
- Survey all rank and file, supervisory and managerial classifications;
- Survey across all geographical regions of the state and report compensation variations by region;
- Survey all benefits and other monetary and non-monetary compensation in addition to salary; and
- Report to DPA the salary difference (lead or lag) for all classifications, including a cost estimate of paying all state employees salaries that are competitive with other public and private sector employers.

B. **The Governor should direct the Department of Personnel Administration (DPA), or its successor, to immediately develop a clearly stated compensation policy for represented employees to guide DPA, or its successor, in labor negotiations.**

The compensation policy should be developed by DPA and negotiated with the employee representatives. The policy should contain a universal salary schedule with a limited number of fixed salary relationships between different job types. The compensation policy should determine if additional steps should be created within each
salary range and the percentage between each step. The policy should direct DPA to use salary survey data to ensure salary ranges correlate to the mean market wages for each classification. The policy also should direct DPA to eliminate and/or consolidate premium salary differentials where they are redundant, outdated or factored into the new salary ranges. This policy should incorporate the values and principles of performance and accountability by directing DPA to integrate, where appropriate, monetary and non-monetary performance incentives into the 21 collective bargaining agreements.

C. The Governor should direct the Department of Personnel Administration (DPA), or its successor, to immediately develop a clearly stated compensation policy for excluded and exempt employees.

This policy should be a clear statement of the Administration’s policy for managerial compensation and should be used to guide DPA, or its successor, in setting compensation for excluded and exempt employees. The recommendations made by the Excluded and Exempt Salary Setting Task Force should be considered in developing this policy. The policy should direct DPA to establish market-based salaries when revenues allow. When the state does not have enough revenue to increase excluded and exempt employee salaries in a given year, salaries should be frozen and the difference should be made up in future years so that salaries stay current with the mean market rates. The policy also should require that part of excluded and exempt employees’ compensation be based on individual performance or the overall performance of the agency, department or division. The policy should provide for a variety of monetary and non-monetary performance incentives and should incorporate values and principles that emphasize performance and accountability.

D. The Governor should work with the Legislature to amend state law to require comprehensive statewide salary surveys to be conducted routinely.

Existing statutes should be amended to require timely analysis, completed before each negotiation cycle, of current salaries paid by other public and private sector employers for comparable occupations. The analysis of the survey should include information about the difference, or lag, between state employees’ salaries and other public or private sector employees’ salaries. The Salary and Wages supplement to the Governor’s Budget submitted to the Legislature annually should include an estimate of paying all state employees salaries that are comparable to other public and private sector employees. Existing statutes also should be amended to limit the salaries received by state employees to those determined by the survey of other public and private sector employees to ensure consistency with other statutes.
E. The Governor should work with the Legislature to amend existing statutes to end the salary survey conducted to set salaries of employees of the California Highway Patrol (CHP). The current law restricts the flexibility of the state in labor negotiations. There will be no need for a separate salary survey specific to the CHP if amendments to existing statutes are adopted, as discussed in recommendation D, above.

F. The Governor should work with the Legislature to amend existing statutes to allow exempt employees to earn annual salaries greater than the salary set by the Citizen’s Compensation Commission for the Governor. These amendments should include language that ties compensation for exempt employees in managerial positions to a specific performance contract.

**Fiscal Impact**

It is anticipated that the cost for determining and revising compensation policies will be absorbed by the DPA. However, the specific fiscal impact of implementation cannot be estimated.

The estimated cost of a salary survey and analysis will be about $150,000, including $84,000 General Fund, $49,500 other funds, and $16,500 federal funds. A routine salary survey will cost less than $50,000 including $28,000 General Fund. It is assumed that existing resources will be used for any supplemental analysis and reports.

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**Endnotes**

1. California Gov. C. Section 3517.5.
4. Interview with Michael Navarro, director of the California Department of Personnel Administration, March 9, 2004; and memorandum from Michael Navarro to Chon Gutierrez, executive director of the California Performance Review (April 15, 2004).
9. Interview with Michael Navarro.


12 “A Fair Day’s Pay,” “The Economist” (May 6, 1999).


15 The California Citizens Compensation Commission meets annually in June to review and establish salaries and benefits for elected officials. The salaries of most top level state officers who are appointed by the Governor are set in Chapter 6, Part 1, Division 3 of Title 2 of the California Gov. C.


17 Assembly Bill 2477 (Steinberg), Chapter 1044, Statutes of 2002, Sacramento, California September 28, 2002.

18 California Gov. C. Section 19836.1.


23 Former California Department of Personnel Administration Rules 599.799.1 and 599.799.2; and Department of Personnel Administration, “Initial Statement of Reasons for the proposed repeal of Rules 599.799.1 and 599.799.2,” October 6, 1999; and Department of Personnel Administration, Personnel Management Liaisons Memorandum 2000–040, July 13, 2000.


Merit Salary Adjustments Have Become an Automatic Entitlement

Summary
The existing merit salary adjustment concept is broken. Merit salary adjustments are automatic and reward mediocrity exactly the same as excellence. The merit salary adjustment process should be changed to better reflect performance and accountability.

Background
Employees receive annual merit salary adjustments (MSAs) until they reach the top of their salary range. There is a three-step salary range for each managerial classification and, typically, a five-step range for other classes. Employees move from the bottom to the top of these ranges by receiving MSAs, which are supposed to be based on their job performance.¹

The MSA concept was conceived to be a pay raise earned for meritorious service. Unfortunately, merit has very little to do with MSAs in practice. The MSA is awarded to an employee automatically unless the supervisor takes action to deny it.² If an MSA is denied, the employee has the right to file a grievance with the Department of Personnel Administration (DPA). Grievances are usually upheld due to a lack of documentation. Of the 42 MSA denial grievances filed since May 1, 2003, 34 were approved through the grievance process.³ Because of this, it is not surprising that 99.2 percent of all eligible employees received their MSA last year.⁴ Testifying before the Little Hoover Commission in August 1994, Lillian Rowett, DPA’s former chief deputy director, explained:

“We believe one of the primary reasons merit pay has evolved to longevity pay is the fact that it requires the same documentation and evidence to deny a 5 percent merit salary increase as it does to suspend or demote an employee. Supervisors and managers . . . simply avoid this issue in nearly all situations.”⁵

The automatic nature of the MSA provides no incentive for supervisors to conduct annual performance reviews with their employees. Supervisors generally just check the box next to the words “Meets the level of quality and quantity expected by the agency at this stage of an employees’ experience . . .” The MSA process offers no opportunity to differentiate between truly exemplary employees and those who perform at the minimum level required. Further, once employees reach the top of their salary range, there is no way to reward them for exemplary service other than through relatively small superior accomplishment or sustained superior achievement awards. An excellent and ambitious employee can be promoted, but it can take up to four years to get on an eligible list. High performing employees sometimes leave state service for better paying and more rewarding careers elsewhere.
**Merit salary increases should be tied to performance and performance only**
The Little Hoover Commission stated in a 1995 report that “... automatic pay raises have outlived their usefulness and are counterproductive to achieving effective and efficient government service.” The Commission report stated that “automatic pay steps should be replaced with a system that rewards employees based on improvement and performance.” The issue of performance was addressed by the Commission again in 1999 when it noted that any reform of the civil service system ultimately must focus on improving the delivery of public goods and services. They wrote, “The foundation for real reform must be performance.”

**California’s experience with pay-for-performance programs**
Tying pay to performance is complicated and California’s previous attempts have been largely unsuccessful. The Little Hoover Commission noted in its 1999 report that a lump-sum bonus program for managers established in 1985 “was unpopular and considered to be unsuccessful.” The Commission further noted, “In some departments the bonus was rotated among managers to supplement base pay. Other departments viewed the bonuses as a source of divisiveness.” It was discontinued in 1991 when management salaries were reduced across the board.

In 1993, former Governor Wilson announced a pay-for-performance program for managerial employees. According to a DPA memo, all salary increases for managers after January 1, 1994 were performance based, and could be withdrawn or reduced if performance declined. The program was supposed to be extended to supervisors the next year and, through collective bargaining, to all employees after that. Soon after, several lawsuits were filed by unions representing managers and supervisors and the courts required the DPA to refine the proposal. In December 1994, DPA adopted rules that instituted performance-based raises for managers and supervisors, respectively. For reasons that were not specified, the pay-for-performance rules were repealed by the Davis Administration in July 2000, and the old MSA rules were reinstated for managers and supervisors.

**Other organizations reward performance**
Many other state governments pay their managers and employees based on achievement rather than seniority or longevity. The Government Performance Project at Syracuse University found that 74 percent of state governments use pay for performance programs to allocate salary increases. Research done by the Washington State Department of Personnel found that “many states are moving towards some form of variable pay in addition to their base pay programs, at least for managers.”

There are also various programs that tie pay to performance throughout the world. In a 1999 survey on pay, *The Economist* magazine wrote:
According to Richard Meischeid of Towers Perrin, a consultancy that conducts an annual worldwide survey of compensation, “There is still a global trend away from programmes (sic) that reward tenure to those that allow more flexibility.” The principle of variable pay is being adopted even by employers not generally noted for bold management. In Britain, for instance, the Bank of England now puts nearly 10 percent of its wage bill aside for good-performance bonuses.16

Despite California’s prior difficulties implementing pay for performance programs, the state should follow the nationwide and worldwide trends and establish a variable pay program based on performance in California state government. To ensure success, the program should be based on three core qualities: flexibility, suitability and transparency.

The flexibility imperative
California’s MSA system, described above, offers supervisors only two choices; the employee either “meets” or “does not meet” expectations. A basic, intermediate reform to the MSA would allow supervisors to award salary adjustments on a simple graduated scale such as this:

<table>
<thead>
<tr>
<th>level of performance</th>
<th>number of steps</th>
</tr>
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<tbody>
<tr>
<td>Does not meet expectations…</td>
<td>0</td>
</tr>
<tr>
<td>Meets expectations…</td>
<td>1</td>
</tr>
<tr>
<td>Exceeds expectations…</td>
<td>2</td>
</tr>
<tr>
<td>Greatly exceeds expectations…</td>
<td>3</td>
</tr>
</tbody>
</table>

A graduated scale would give a supervisor more flexibility, and provide additional incentives for an employee to accomplish more than the bare minimum; however, a critical problem with the MSA is that it is a one size fits all solution that does not meet the specific needs of any one organization.

The Government Performance Project found that “all of the high [performing governments] use multiple types of monetary and non-monetary rewards; some use as many as 15 different types.”17 “Indiana, for example, allows agencies to customize their compensation strategy by selecting the appropriate methods from among competency-based pay, skill-based pay, gainsharing, and pay-for-performance.”18

A successful performance-based compensation program will eliminate the rigid MSA concept and provide a variety of tools that allow management to quickly respond to changing program goals by compensating employees with appropriate incentives that encourage a performance culture.
Creating suitable incentives is key
It is essential to create incentives that directly reinforce departments’ programmatic goals, not just gross outputs. In 1999, *The Economist* magazine cited Mark Huselid, a human resources expert at Rutgers University:

“The fear is not that incentive pay doesn’t work—but that it works so well that companies have to be careful about the incentives they create. Incentive pay should be the very last thing you do, once you have got your strategy right and understand your business.” It is easy to get even simple incentives wrong—as when AT&T paid computer programmers by the number of lines of code they produced.  

It can be more difficult to measure “soft” outcomes, like quality of customer service, as compared with easily measured outputs like the number of forms processed. A variety of incentives should be developed to address the many possible outcomes that can be measured.

Transparency is crucial for employee support
All previous attempts to reform MSAs have met with resistance from employee organizations. To be successful, the creation of performance incentives must take place in a public forum and employee representatives must be involved and engaged in a cooperative and collaborative process.

Donald F. Kettl, cited by the Little Hoover Commission in its 1999 report, stated: “Any civil service system that simultaneously seeks to protect employees and to manage programs has an inherent contradiction. The search for protection produces rules and generates inflexibility; the search for performance demands results and requires flexibility.” Any program that increases management flexibility likely will meet with opposition from employee representatives. To balance these two interests, a transparent process is critical.

In order to gain employee support for any performance concept, the process and application must be transparent, collaborative and interest-based. It may be necessary to implement such changes gradually. In the words of Dr. Jerry Mechling from Harvard University’s John F. Kennedy School of Government, “Plan radically—implement incrementally, when possible.”

Recommendations
A. The Governor should direct the Department of Personnel Administration (DPA), or its successor, to reinstate pay-for-performance for managers and supervisors.

B. The Governor should direct DPA, or its successor, to amend existing regulations so that MSAs are not automatically given to employees.

C. The Governor should direct DPA, or its successor, to negotiate with employee representatives to establish a process for graduated Merit Salary Adjustments during
the next available contract cycle. The subsequent memoranda of understanding may supercede existing statutes. The top step(s) of each salary range should not be part of the salary base, but will be considered a performance bonus contingent upon sustained superior performance.

D. The Governor should direct DPA, or its successor, to devise and implement a more flexible performance-based salary adjustment process for managers and supervisors who are excluded from collective bargaining. This may need to be implemented through a process to be determined by the Excluded and Exempt Employee Salary-Setting Task Force. This will require amendments to existing statutes and regulations.

E. The Governor should direct DPA, or its successor, to begin the process to limit the circumstances under which employees may file a denial of salary adjustment grievance.

The DPA should amend existing regulations to limit the circumstances under which employees may file a denial of salary adjustment grievance to the following reasons only:
1. Failure to receive a performance appraisal during the past 12 months; or
2. Circumstances clearly indicating that the salary adjustment was denied due to factors other than the employee’s job performance.

**Fiscal Impact**

It is anticipated that ending the practice of automatically processing merit salary adjustments will slightly lower the percentage of eligible employees receiving MSAs from the current 99.2 percent. Assuming that 95 percent of eligible employees receive their MSAs, the state would save about $10 million per year. This includes $5 million in General Fund, and $5 million in other funds.

The fiscal impact from implementing a graduated MSA will depend on what DPA and the employee associations negotiated. The fiscal impact of eliminating the MSA and instituting performance pay and performance bonuses for managers and supervisors will depend on how such a program were structured. The impact of these recommendations cannot be estimated.
## General Fund
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>$750</td>
<td>$0</td>
<td>$750</td>
<td>0</td>
</tr>
<tr>
<td>2005–06</td>
<td>$5,000</td>
<td>$0</td>
<td>$5,000</td>
<td>0</td>
</tr>
<tr>
<td>2006–07</td>
<td>$5,000</td>
<td>$0</td>
<td>$5,000</td>
<td>0</td>
</tr>
<tr>
<td>2007–08</td>
<td>$5,000</td>
<td>$0</td>
<td>$5,000</td>
<td>0</td>
</tr>
<tr>
<td>2008–09</td>
<td>$5,000</td>
<td>$0</td>
<td>$5,000</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

## Other Funds
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>$750</td>
<td>$0</td>
<td>$750</td>
<td>0</td>
</tr>
<tr>
<td>2005–06</td>
<td>$5,000</td>
<td>$0</td>
<td>$5,000</td>
<td>0</td>
</tr>
<tr>
<td>2006–07</td>
<td>$5,000</td>
<td>$0</td>
<td>$5,000</td>
<td>0</td>
</tr>
<tr>
<td>2007–08</td>
<td>$5,000</td>
<td>$0</td>
<td>$5,000</td>
<td>0</td>
</tr>
<tr>
<td>2008–09</td>
<td>$5,000</td>
<td>$0</td>
<td>$5,000</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

## Endnotes
1. Gov. C. Section 19832.
2. California Code of Regulations, Title 2, Division 1, Chapter 3, Subchapter 1, Article 5, Sections 599.683 and 599.684.
3. E-mail from Julie Chapman, Chief Labor Relations, Department of Personnel Administration, Labor Relations to Brian Weatherford, California Performance Review (May 17, 2004).
4 E-mail from Vicki Korach, State Controller’s Office, Personnel/Payroll Services Division, Program Management Analysis Bureau to Brian Weatherford, California Performance Review (May 14, 2004).
8 Little Hoover Commission, “Of the People, By the People; Principles For Cooperative Civil Service Reform” (Sacramento, California, January 1999), p. 27.
10 Memorandum from the Department of Personnel Administration to Personnel Management Liaisons (Memorandum 93–80) (December 10, 1993).
12 California Code of Regulations, Title 2, Division 1, Chapter 3, Subchapter 1, Article 14, Sections 599.799.1 and 599.799.2.
14 Sally Coleman Selden and Willow Jacobson, “Human Resources Management,” “Paths To Performance” (Syracuse, NY, 2002), pp. 111.
16 “A Fair Day’s Pay,” “The Economist” (May 6, 1999).
Controlling Retirement Incentive Costs

Summary
Effective organizations use a variety of strategies to manage the size of their workforce. One strategy, the “early retirement incentive,” increases retirements above natural attrition by enhancing employee retirement benefits. This tactic allows employers to decrease payroll costs, reorganize staff, and trim down higher-paid middle management without layoffs.¹ The organization achieves fiscal savings by keeping the positions vacant or else replacing retiring employees, who are typically at the top of the salary schedule, with entry-level employees. California has several retirement incentives available; however, the cost-effectiveness of these programs must be examined within the context of an aging workforce.

Background
Retirement plans
California employees are enrolled in “defined benefit” retirement plans. Upon retirement, they can expect to receive a set amount of benefits for the rest of their lives based on a formula that includes age, salary at retirement and number of years in service.² California offers several plans and divides employees into these plans based on the type of work they do. Exhibit 1 shows the percentage of state employees represented by each retirement plan.

<table>
<thead>
<tr>
<th>Employer/Category</th>
<th>Active</th>
<th>Inactive</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Miscellaneous</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Tier</td>
<td>158,687</td>
<td>32,183</td>
<td>190,870</td>
<td>60%</td>
</tr>
<tr>
<td>Second Tier</td>
<td>16,384</td>
<td>24,439</td>
<td>40,823</td>
<td>13%</td>
</tr>
<tr>
<td>State Industrial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Tier</td>
<td>7,564</td>
<td>826</td>
<td>8,390</td>
<td>3%</td>
</tr>
<tr>
<td>Second Tier</td>
<td>1,580</td>
<td>1,030</td>
<td>2,610</td>
<td>1%</td>
</tr>
<tr>
<td>Highway Patrol</td>
<td>10,463</td>
<td>1,496</td>
<td>11,959</td>
<td>4%</td>
</tr>
<tr>
<td>State Safety</td>
<td>15,103</td>
<td>2,679</td>
<td>17,782</td>
<td>6%</td>
</tr>
<tr>
<td>Peace Officer/Firefighter</td>
<td>41,531</td>
<td>5,068</td>
<td>46,599</td>
<td>15%</td>
</tr>
<tr>
<td>University of California</td>
<td>30</td>
<td>214</td>
<td>244</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total State Members</strong></td>
<td>251,342</td>
<td>67,935</td>
<td>319,277</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: CalPERS Comprehensive Annual Financial Report year ending June 30, 2003
Retirement formulas
Each retirement plan offers a different retirement formula based on planned attrition. For example, the plan for the California Highway Patrol (CHP) is based on the presumption that CHP members should retire before they can no longer maintain a level of fitness that would allow them to effectively protect the public. As such, their retirement formula encourages early retirements by providing members with 3 percent of their salary per year of service at age 50. Exhibit 2 shows the retirement formulas as well as the costs to the state and its employees for each retirement plan.

<table>
<thead>
<tr>
<th>Plans</th>
<th>Basic Benefit</th>
<th>Per Year of Service α</th>
<th>When Retiring at Age</th>
<th>Employee Contribution</th>
<th>2003–04 State Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miscellaneous:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tier 1</td>
<td>2.0%</td>
<td>55</td>
<td>5%</td>
<td>14.8%</td>
<td></td>
</tr>
<tr>
<td>Tier 2</td>
<td>1.25</td>
<td>65</td>
<td>–</td>
<td>10.3</td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td>2</td>
<td>55</td>
<td>5</td>
<td>11.1</td>
<td></td>
</tr>
<tr>
<td>Safety</td>
<td>2.5</td>
<td>55</td>
<td>6</td>
<td>21.9</td>
<td></td>
</tr>
<tr>
<td>Peace Officer/Firefighter</td>
<td>3</td>
<td>55</td>
<td>8</td>
<td>20.3</td>
<td></td>
</tr>
<tr>
<td>Highway Patrol</td>
<td>3</td>
<td>50</td>
<td>8</td>
<td>32.7</td>
<td></td>
</tr>
</tbody>
</table>

α Benefits vary by age, with smaller percentages at younger ages and higher percentages at ages above those listed in some cases.

β Percent of highest salary for 12 consecutive months.

γ Pursuant to collective bargaining agreements, some employees at the present time pay none or only a portion of the amount shown.

Source: Legislative Analyst’s Office, Analysis of the 2004–05 Budget Bill, Alternative Retirement Benefit Programs, 2/1/2004

California’s retirement plans compared with other states
A study conducted by the Legislative Analyst’s Office (LAO) in February of 2004 found that California offers employees a benevolent retirement package compared with other states. Exhibit 3 compares California retirement benefits to retirement benefits offered by other states.
Aging workforce does not equal increased retirements

California’s workforce is aging. In 1996, the state’s workforce consisted of about 29 percent employees over the age of 50. By 2002, this number rose to about 31 percent, and in early 2004 was about 34 percent. As this age “bubble” continues to shift along the age continuum, an increasing percentage of state employees are becoming eligible for retirement.

This increase in retirement-eligible employees should result in increased retirements; however, total retirements have actually declined in recent years. In 1998, 5,372 employees retired from state service. In 2000, this number grew to about 8,585, and then dipped to 7,658 in 2001 and 7,244 in 2002. Exhibit 4 shows annual retirement totals from 1998 to 2002.

<table>
<thead>
<tr>
<th>State</th>
<th>Employee Retiring in 2004 at Age</th>
<th>Employee Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>55</td>
<td>60</td>
</tr>
<tr>
<td>California</td>
<td>$25,200</td>
<td>$36,098</td>
</tr>
<tr>
<td>Florida</td>
<td>11,914</td>
<td>20,424</td>
</tr>
<tr>
<td>Illinois</td>
<td>—</td>
<td>24,250</td>
</tr>
<tr>
<td>Oregon</td>
<td>15,242</td>
<td>24,831</td>
</tr>
<tr>
<td>Texas</td>
<td>—</td>
<td>34,199</td>
</tr>
</tbody>
</table>

* Assumes employee started working for the state at age 34 and has earned $60,000 in salary in the last year before retirement.

* Not eligible for retirement at this age.

Source: Legislative Analyst’s Office, Analysis of the 2004–05 Budget Bill, Alternative Retirement Benefit Programs, 2/1/2004

Aging workforce does not equal increased retirements

This increase in retirement-eligible employees should result in increased retirements; however, total retirements have actually declined in recent years. In 1998, 5,372 employees retired from state service. In 2000, this number grew to about 8,585, and then dipped to 7,658 in 2001 and 7,244 in 2002. Exhibit 4 shows annual retirement totals from 1998 to 2002.

<table>
<thead>
<tr>
<th>Plan</th>
<th>Data as of June 30 each year</th>
<th>5 yr. avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1998</td>
<td>1999</td>
</tr>
<tr>
<td>Tier 1</td>
<td>3,769</td>
<td>4,439</td>
</tr>
<tr>
<td>Tier 2</td>
<td>272</td>
<td>238</td>
</tr>
<tr>
<td>Industrial</td>
<td>196</td>
<td>214</td>
</tr>
<tr>
<td>Safety</td>
<td>829</td>
<td>1,275</td>
</tr>
<tr>
<td>POFF</td>
<td>139</td>
<td>166</td>
</tr>
<tr>
<td>CHP</td>
<td>167</td>
<td>219</td>
</tr>
<tr>
<td>Total</td>
<td>5,372</td>
<td>6,551</td>
</tr>
</tbody>
</table>

Source: California Public Employees Retirement System—State & Schools Actuarial Valuation, Summary of Participant Data, 1998 through 2002 (Includes service, disability, and industrial retirements)
Analyses by both the California Public Employees’ Retirement System (CalPERS) and the Department of Personnel Administration (DPA) suggest that retirement shifts occur when employees anticipate upcoming retirement incentives. As such, the increase in retirements in 2000 was likely due to the passage of AB 400, which enhanced retirement formulas and decreased retirement age limits, while the more recent dips may be attributable to discussion of legislation known as the golden handshake.

The golden handshake
The golden handshake encourages retirements by offering employees two years of additional service time or two years of additional age, or both. Although legislation can enact a golden handshake, current law allows the Governor to grant two additional years of service credit to state employees if it is in the best interest of the state to encourage retirements.

Vetoed in 2003, AB 457 is a prime example of golden handshake legislation that would have granted two years of service in addition to two years of age to all retirement-eligible state employees. Senate Floor analysis of the bill claimed that if 12,400 employees with an average salary of $50,000 retired, and the state eliminated their vacated positions, the state would realize an annual savings of $620 million. The cost of this incentive was estimated at $2.26 billion or $185 million annually amortized over 20 years, resulting in a final net savings of $435 million per year. While these savings may seem significant, the analysis failed to capture other costs associated with offering the incentive, such as work disruptions resulting from staff shortages and the loss of institutional knowledge.

The bill analyses also failed to establish savings from naturally occurring attrition and possibly overestimated the number of additional retirements the incentive would encourage. In 2003, CalPERS estimated that 4,291 “miscellaneous tier 1” and “industrial” employees would retire in the next year, without retirement incentives. Using the same assumptions as the golden handshake, this would produce an annual salary savings of about $214 million. According to a study by CalPERS, 520 additional retirements would have occurred due to the golden handshake, although an analysis by the Department of Personnel Administration places this estimate at about 1,040. Either way, in order to realize a savings for an additional 520 to 1,040 retirees, the state would have to offer retirement incentives to 4,291 employees who would retire normally. In his AB 457 veto letter, Governor Davis cited the “very real potential that public employers will be paying to encourage retirements that would have occurred even without that incentive.”

Air Time
Instead of AB 457, the governor signed bills AB 719 and AB 55 that allow “State and local government employees to purchase up to 5 years of service in order to enhance their retirement benefits.” The air time program places both the responsibility and the cost of enjoying an early retirement incentive on the employee and it was the Governor’s hope that “these benefits will encourage early retirements at no cost to the public employer.”
**Retirement bonuses**
Like the golden handshake, retirement bonuses help encourage attrition by offering long-tenured employees an incentive to retire. Unlike the golden handshake, these are one-time benefits based on a set percentage of the employee’s salary. This strategy provides employers with an effective workforce reduction tool that produces a salary savings that can be used to hire a lower paid employee.

**Flexible retirement plans**
With flexible plans, employees can either choose a small lifetime supplement to their normal CalPERS’ retirement plan, or a larger fixed amount paid out over a 5–15 year period. With these plans, there can be fees that could significantly reduce savings and may even incur greater costs.

**Conversion of unused vacation into pension benefits**
The State of California has a large unfunded obligation to pay employees for unused vacation and other accrued leave time when the employee leaves state service. Converting this unused leave to pension plans is a win-win situation for both employees and the state since employees enjoy not immediately paying taxes on the entire accrued value of the unused time, while allowing the state to amortize the cost of the leave payout over a longer period of time.

**Recommendations**

A. The Governor should announce that there will be no early retirement package.

The administration can encourage employees to retire without offering retirement incentives by announcing that no early retirement package will occur during this term. In their respective analyses, both the California Public Employees Retirement System and Department of Personnel Administration suggested that retirement dates shift when members are aware of upcoming incentives and the current retirement data suggests that there are many retirement age employees in state service waiting for a golden handshake to retire. This recommendation may encourage these employees to stop waiting, thus resulting in a workforce reduction without cost to the state if the positions are kept vacant.

B. The Governor should request the California Public Employees’ Retirement System to continue to offer the air time program.

The airtime program encourages employees to take charge of their own retirement strategies and allows employees to retire at an earlier age.
C. The Governor should direct the Department of Personnel Administration, or its successor, to sponsor legislation for retirement bonuses.

This provides agencies with the ability to offer retirement incentives in the form of lump sum payments worth a percentage of the employee’s yearly salary. The agencies can simply give the money to the employee, or they can link it to succession planning whereby the employee receives the bonus only if they are willing to train incoming employees for a couple of months prior to retiring. A calculator can be placed online so that agencies can easily determine whether or not it is advantageous for the state to offer a retirement bonus to a superannuated employee.

D. The Governor should request the California Public Employees’ Retirement System to develop flexible retirement plans.

Estimates for implementing optional and flexible retirement plans should include, 1) one-time cash payment incentives, 2) defined contribution versus defined benefit plans, 3) flexible retirement plans and payment schedules. CalPERS should establish these estimates with the understanding that retirement options may be open to competitive bid.

E. The Governor should direct the Department of Personnel Administration, or its successor, to competitively bid for flexible retirement plans.

To ensure CalPERS is competitively serving the best interest of the state, the Department of General Services will administer the competitive bid process for optional and flexible retirement plans and incentives.16

F. The Governor should request the California Public Employees’ Retirement System to conduct studies and initiate legislation to ensure it is empowered with the authority necessary to remain innovative and flexible with the retirement options offered to state employees while ensuring competitive costs to its members and the state.

Fiscal Impact
Recommendation A
The fiscal impact is unknown. Any savings would result from keeping the positions vacant or else replacing retiring employees, who are typically at the top of the salary schedule, with entry-level employees.

Recommendation B
No fiscal impact.
Recommendation C
Used in tandem with the proposed recommendation for deeper classes, this recommendation has the potential for significant savings. The actual savings will depend on the percentage of the retirement bonus offered and the number of months that the agency would like the retiring employee and the new employee to overlap.

Recommendations D, E, F
The specific fiscal impact of these recommendations cannot be quantified.

Endnotes
3 Legislative Analyst’s Office, “Analysis of the 2004–05 Budget Bill, Alternative Retirement Benefit Programs.”
5 California Public Employees’ Retirement System, Actuarial & Employer Services Division, “Cost Estimate for Providing Early Retirement Incentives” (Sacramento, California, April 16, 2003); and Department of Personnel Administration, “Enrolled Bill Report DPA 107—AB 457” (Sacramento, California, May 30, 2001).
6 Senate Rules Committee, Office of Senate Floor Analyses, “SB 400” (Sacramento, California, 1999).
7 Gov. C. 20901; Department of Personnel Administration, “Enrolled Bill Report DPA 107—AB 457.”
8 AB 457, “Senate Floor Analysis” (Sacramento, California, 2003).
9 Department of Personnel Administration, “Enrolled Bill Report DPA 107—AB 457.”
10 California Public Employees’ Retirement System, Actuarial & Employer Services Division, “Cost Estimate for Providing Early Retirement Incentives.”
11 California Public Employees’ Retirement System, Actuarial & Employer Services Division, “Cost Estimate for Providing Early Retirement Incentives; and Department of Personnel Administration, Enrolled Bill Report DPA 107—AB 457.”
12 California Public Employees’ Retirement System, Actuarial & Employer Services Division, “Cost Estimate for Providing Early Retirement Incentives.”
13 California Office of the Governor, “AB 457—Veto Memo” (Sacramento, California, October 14, 2003).
14 AB 719, “Senate Floor Analysis” (Sacramento, California, 2003); AB 55, “Assembly Analysis” (Sacramento, California, 2003).
15 California Office of the Governor, “AB 457—Veto Memo.”
16 The Department of General Services has primary responsibility for contract administration.
Controlling Enhanced Retirement Costs

Summary
Legislation established enhanced retirement plans in California to compensate employees who protect the public. These employees must remain physically fit because they are at severe risk of injury or death in the course of their duties. Over time, however, union negotiations and legislation have increased the number of so-called “safety” designations by granting them to employee groups that do not meet established safety criteria. The purpose and applicability of safety designations should be reviewed to ensure that safety status criteria are well defined and applied consistently so the state does not accrue unnecessary costs.

Background
When Chapter 700 of the Statutes of 1931 created the California Public Employees’ Retirement System (CalPERS), all state members received the same retirement benefits.1 In 1935, the first “safety” category was created for the California Highway Patrol (CHP) and included an enhanced retirement formula in addition to special industrial death and disability benefits. In 1947, firefighters and fish and game wardens also received improved retirement benefits and since then, many other employee groups have received safety status as well.2

Due to the increasing number of employee groups attempting to achieve safety status through legislation, AB 927 was passed in 1974 mandating the State Personnel Board (SPB) to establish criteria for safety membership and determine which classes in the civil service met the criteria.3 The established criteria relied primarily on the following two principles: 1) the employee is actively engaged in protecting the public and 2) there is an expectation that the employee be physically fit in order to accomplish this duty.

In response to the State Employer-Employee Relations Act of 1977, the Department of Personnel Administration was created in 1979 to represent the Governor in collective bargaining. As a result of collective bargaining, another safety category was created for Peace Officers and Firefighters (PO/FF) in 1984.4

Defining the term “safety”
Safety retirements and industrial disabilities are a confusing topic, made more so by the fact that there are several retirement plans referred to as “safety” as well as a single and specific retirement plan called “State Safety.” In this paper, the term “safety” refers to all employees who work in the categories of California Highway Patrol (CHP), State Peace Officer and Firefighter (PO/FF), and State Safety. The term “State Safety” refers to just the State Safety retirement plan.
In 1996, DPA began to study the method used to determine safety membership and concluded it was overly cumbersome and lengthy. In response, AB 528 was passed in 1998 and granted increased authority to DPA and SPB to determine safety status via the collective bargaining process without the need for accompanying legislation. The criteria for membership in the “state safety” classifications was modified to require all of the following:
1) the protection and safeguarding of the public and property, 2) the control and supervision of inmates, youthful offenders, and state mental facility Penal Code offenders, and 3) the capability to respond in emergency situations and to provide a level of service to the public such that the safety of the public and of property is not jeopardized, as part of the conditions of employment.5

In 1999, SB 400 was passed and enhanced the retirement formulas as shown in Exhibit 1. This bill re-opened the door to safety legislation as an increasing number of employee groups argued for their right to be part of the safety retirement system without going through DPA and SPB safety status criteria and collective bargaining process.

<table>
<thead>
<tr>
<th>Exhibit 1</th>
<th>SB 400 Enhanced Retirement Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retirement Plan</td>
<td>Before</td>
</tr>
<tr>
<td>State Miscellaneous, Tier 1</td>
<td>2% at 60</td>
</tr>
<tr>
<td>California Highway Patrol (CHP)</td>
<td>2% at 50</td>
</tr>
<tr>
<td>State Peace Officers &amp; Firefighters (PO/FF)</td>
<td>2.5% at 55</td>
</tr>
<tr>
<td>State Safety</td>
<td>2% at 55</td>
</tr>
</tbody>
</table>

Source: Office of Senate Floor Analyses, Senate Bill SB 400, Senate Rules Committee, 19996

The current situation
In 2001, Governor Gray Davis signed SB 183. Effective July 1, 2004, this bill will bypass the established safety status criteria and reclassify 3,500 miscellaneous tier 1, tier 2, and industrial employees to the safety retirement classifications. The cost of providing these enhanced retirements is about $8.9 million annually.7 The reclassification includes members who work as milk inspectors, DMV examiners and CHP dispatchers.8

According to the bill’s sponsor, the California Union of Safety Employees (CAUSE), these reclassifications will help recognize their members for the public safety work they do and will place most of their members under the same retirement formula, thus resolving an issue that tended to divide their membership.9

Enhanced retirement benefits
Safety employees receive enhanced retirement benefits to encourage them to retire earlier than employees grouped into the state’s miscellaneous and industrial retirement plans. This benefit is based on the presumption that safety members in their late 50s and 60s are physically less capable of apprehending criminals, rescuing people, and responding quickly in emergencies.
The enhanced benefits include an increased retirement formula, a retirement cap that discourages them from working past a set age, and an industrial disability retirement that ensures that they will receive financial support in the event they are substantially injured in the course of their duties.

**Safety membership is growing**

As a whole, safety retirement memberships have grown significantly in the past few years. Exhibit 2 shows that from 1998 to 2003, CHP membership has grown 64.3 percent, Police Officers and Firefighters have grown 30.6 percent, and State Safety membership is up 39.8 percent.

<table>
<thead>
<tr>
<th>Plans</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>6 year changes by Members</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>102,287</td>
<td>103,898</td>
<td>131,306</td>
<td>145,727</td>
<td>158,244</td>
<td>158,687</td>
<td>56,400</td>
<td>55.1%</td>
</tr>
<tr>
<td>Tier 2</td>
<td>42,602</td>
<td>54,111</td>
<td>34,912</td>
<td>25,097</td>
<td>18,222</td>
<td>16,384</td>
<td>-26,218</td>
<td>-61.5%</td>
</tr>
<tr>
<td>Industrial</td>
<td>8,093</td>
<td>8,980</td>
<td>9,277</td>
<td>9,374</td>
<td>9,105</td>
<td>9,144</td>
<td>1,051</td>
<td>13.0%</td>
</tr>
<tr>
<td>Safety</td>
<td>10,801</td>
<td>13,766</td>
<td>13,972</td>
<td>15,262</td>
<td>15,436</td>
<td>15,103</td>
<td>4,302</td>
<td>39.8%</td>
</tr>
<tr>
<td>PO/FF</td>
<td>31,810</td>
<td>38,021</td>
<td>39,155</td>
<td>40,598</td>
<td>40,560</td>
<td>41,531</td>
<td>9,721</td>
<td>30.6%</td>
</tr>
<tr>
<td>CHP</td>
<td>6,370</td>
<td>6,542</td>
<td>6,557</td>
<td>6,677</td>
<td>6,830</td>
<td>10,463</td>
<td>4,093</td>
<td>64.3%</td>
</tr>
<tr>
<td>Total</td>
<td>201,963</td>
<td>225,318</td>
<td>235,179</td>
<td>242,735</td>
<td>248,397</td>
<td>251,312</td>
<td>49,349</td>
<td>19.6%</td>
</tr>
</tbody>
</table>

Source: CalPERS—State & Schools Actuarial Valuation, Summary of Participant Data, 1998 through 2003

**California’s retirement contribution costs**

Increases in the number of Safety, Peace Officer/Firefighter and Highway patrol memberships are significant because, as shown in Exhibit 3, the state’s annual retirement contribution costs for these safety employees are far greater than the costs for miscellaneous tier 1, tier 2, and industrial employees.
### Exhibit 3
California Retirement Plan Rates and Contributions

<table>
<thead>
<tr>
<th>Plans</th>
<th>Basic Benefit a</th>
<th>Contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Per Year of Service b</td>
<td>When Retiring at Age</td>
</tr>
<tr>
<td>Miscellaneous:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tier 1</td>
<td>2.0%</td>
<td>55</td>
</tr>
<tr>
<td>Tier 2</td>
<td>1.25</td>
<td>65</td>
</tr>
<tr>
<td>Industrial</td>
<td>2</td>
<td>55</td>
</tr>
<tr>
<td>Safety</td>
<td>2.5</td>
<td>55</td>
</tr>
<tr>
<td>Peace Officer/Firefighter</td>
<td>3</td>
<td>55</td>
</tr>
<tr>
<td>Highway Patrol</td>
<td>3</td>
<td>50</td>
</tr>
</tbody>
</table>

a Benefits vary by age, with smaller percentages at younger ages and higher percentages at ages above those listed in some cases.
b Percent of highest salary for 12 consecutive months.
c Pursuant to collective bargaining agreements, some employees at the present time pay none or only a portion of the amount shown.

Source: Legislative Analyst’s Office, Analysis of the 2004-05 Budget Bill, Alternative Retirement Benefit Programs, 2/1/2004

### Recommendations

**A. The Governor should direct the Department of Personnel Administration (DPA), or its successor, and request that the State Personnel Board (SPB), or its successor, use traditional safety criteria to determine safety membership status.**

The pertinent question is: At what level of risk should the state offer enhanced retirement packages? The SPB and DPA should reevaluate and update the state’s safety status criteria and monitor and advise the Governor on all legislation affecting safety retirement memberships.

The criteria should also include the standard of “primary refusal” in addition to the criteria of “public protection” and “physical fitness.” In short, if an employee can refuse to respond in an emergency, then they do not meet the criteria for safety status. An example of “primary refusal” would be a scenario whereby an angry person enters a state building with a handgun. Most employees would refuse to respond and would instead dive under their desk to escape. A safety member, however, would be bound by their job duties to respond and it would be a clear dereliction of their duties if they did not.
B. The Governor should direct the Department of Personnel Administration, or its successor, to replace the use of safety designations with industrial memberships.

The purpose of safety retirement is to encourage “public protective” and “physically fit” employees to retire earlier and as such, it makes little sense to offer the same retirement benefits to employees in classifications that may improve over time such as psychiatrists and podiatrists. The Department of Personnel Administration, or the successor entity, should reward hard-to-recruit employees with better pay and industrial death and disability benefits instead of safety retirement. Reclassifying these classes from “safety” to “industrial” ensures that employees who work in risky jobs are compensated by pay and insurance in case of injury, but are not encouraged to retire early. This also reduces the number of safety retirement members, which in turn reduces the state’s overall retirement contributions.

C. The Governor should request the California Public Employee’s Retirement System to re-examine the state’s industrial disability presumptions.

As the costs of disability retirements continue to rise due to an increasing number of safety members, it would benefit the state to re-examine the Government Codes to determine if all of the presumptions in place are accurate and substantiated by empirical evidence. CalPERS should review the current criteria used to determine industrial disability and compare it with actuarial risk data used by insurance companies. The administration should use the results of this study to sponsor legislation that makes the criteria accurate and cost effective.

**Fiscal Impact**

**Recommendations A and B**

Exhibit 4 assumes an average salary of about $52,000 per employee and shows that the state’s retirement contribution costs for state safety retirement employees are significantly higher than the costs for industrial employees.
The state’s annual retirement contribution is about $11,388 for a state safety employee and about $7,696 for an industrial employee resulting in a difference of about $5,516 per employee per year. As such, if only 100 state safety employees are reclassified to the industrial retirement plan, the state would realize an annual savings of about $.5 million. If 500 state safety employees were reclassified, the savings would equal about $2.8 million per year.¹¹

The retirement system may also realize a savings from these reclassifications in the form of decreased annual benefit costs. Exhibit 5 assumes that an employee has 25 years of service and an average salary of about $52,000. The annual benefit paid by CalPERS for a state safety employee is about $32,500 while the benefit for an industrial employee is about $26,000. The annual retirement benefit cost difference between these is about $6,500 per employee per year.

### Exhibit 4
**California Retirement Plans**

<table>
<thead>
<tr>
<th>Plans</th>
<th>Per Year of Service</th>
<th>When Retiring at Age</th>
<th>Employee Contribution</th>
<th>2003–04 State Contribution</th>
<th>Average Salary (Rounded)</th>
<th>State’s annual contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miscellaneous:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tier 1</td>
<td>2.0%</td>
<td>55</td>
<td>5%</td>
<td>14.8%</td>
<td>52,000</td>
<td>7,696</td>
</tr>
<tr>
<td>Tier 2</td>
<td>1.25</td>
<td>65</td>
<td>-</td>
<td>10.3%</td>
<td>52,000</td>
<td>5,356</td>
</tr>
<tr>
<td>Industrial</td>
<td>2</td>
<td>55</td>
<td>5</td>
<td>11.1%</td>
<td>52,000</td>
<td>5,772</td>
</tr>
<tr>
<td>Safety</td>
<td>2.5</td>
<td>55</td>
<td>6</td>
<td>21.9%</td>
<td>52,000</td>
<td>11,388</td>
</tr>
<tr>
<td>Peace Officer/Firefighter</td>
<td>3</td>
<td>55</td>
<td>8</td>
<td>20.3%</td>
<td>52,000</td>
<td>10,556</td>
</tr>
<tr>
<td>Highway Patrol</td>
<td>3</td>
<td>50</td>
<td>8</td>
<td>32.7%</td>
<td>52,000</td>
<td>17,004</td>
</tr>
</tbody>
</table>

* Benefits vary by age, with smaller percentages at younger ages and higher percentages at ages above those listed in some cases.
* Percent of highest salary for 12 consecutive months.
* Pursuant to collective bargaining agreements, some employees at the present time pay none or only a portion of the amount shown.

The state’s annual retirement contribution is about $11,388 for a state safety employee and about $7,696 for an industrial employee resulting in a difference of about $5,516 per employee per year. As such, if only 100 state safety employees are reclassified to the industrial retirement plan, the state would realize an annual savings of about $.5 million. If 500 state safety employees were reclassified, the savings would equal about $2.8 million per year.¹¹

The retirement system may also realize a savings from these reclassifications in the form of decreased annual benefit costs. Exhibit 5 assumes that an employee has 25 years of service and an average salary of about $52,000. The annual benefit paid by CalPERS for a state safety employee is about $32,500 while the benefit for an industrial employee is about $26,000. The annual retirement benefit cost difference between these is about $6,500 per employee per year.

### Exhibit 5
**Annual Benefit for Retirement Plans**

<table>
<thead>
<tr>
<th>Plans</th>
<th>Per Year Of Service</th>
<th>Years of Service</th>
<th>Average Salary (Rounded)</th>
<th>Annual Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miscellaneous:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tier 1</td>
<td>2.0%</td>
<td>25</td>
<td>52,000</td>
<td>26,000</td>
</tr>
<tr>
<td>Tier 2</td>
<td>1.3%</td>
<td>25</td>
<td>52,000</td>
<td>16,250</td>
</tr>
<tr>
<td>Industrial</td>
<td>2.0%</td>
<td>25</td>
<td>52,000</td>
<td>26,000</td>
</tr>
<tr>
<td>Safety</td>
<td>2.5%</td>
<td>25</td>
<td>52,000</td>
<td>32,500</td>
</tr>
<tr>
<td>Peace Officer/ Firefighter</td>
<td>3.0%</td>
<td>25</td>
<td>52,000</td>
<td>39,000</td>
</tr>
<tr>
<td>Highway Patrol</td>
<td>3.0%</td>
<td>25</td>
<td>52,000</td>
<td>39,000</td>
</tr>
</tbody>
</table>
If 100 employees were reclassified from the state safety plan to the industrial plan, then the retirement system would realize an average annual savings of about $650,000. If 500 employees were reclassified, then the savings would increase to about $3.2 million per year.

**Recommendation C**

There would be no additional administrative costs for this; however, no fiscal savings may result since reducing the number of presumptions in the California Government Code may result in an increase in the number of lawsuits brought by employees against the state. An example of the types of lawsuits may be an employee trying to prove that fighting fires caused their lung cancer, as opposed to a heavy cigarette smoking habit.

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**Endnotes**

1. Gov. C. Section 20000.
3. AB 927, Sacramento, California, 1974.
5. Memorandum from the State Personnel Board, Merit Employment and Technical Resources Division, to State Personnel Board (June 8–9, 2004).
No Motivation, No Results: Creating a Performance Culture in the California Civil Service

Summary
In successful organizations, employees are accountable for achieving clear performance goals that are aligned with strategic goals and objectives. However, state employee performance expectations do not relate to the government’s strategic goals, and appraisal is not routine. As the state moves toward a performance-based philosophy and desires to improve customer service, a performance culture must be created in the California civil service.

Background
There is no central source of performance appraisal information in California state service. As such, with the exception of a review of the performance appraisal practices of the California Department of Water Resources (DWR), the references to state performance management activities for this section relied mostly on the experiences of those interviewed during the course of the California Performance Review study.

Authorities and current practices
Various laws and regulations require departments to establish performance standards, to conduct written performance appraisals annually, to provide recognition for effective performance, and to identify aspects of performance that need to be improved. For managerial employees, laws and rules require that merit salary increases (MSA) be awarded based on a system of performance appraisal reports. In addition, existing rules provide a system of bonuses for outstanding performance ranging from $1,250 to $5,000 for managerial employees, and $250 to $750 for supervisors. However, these bonus programs have rarely been funded.

In the mid-1990s, the Department of Personnel Administration (DPA) issued regulations to implement a pay-for-performance program for supervisors and managers. Departments developed performance appraisal systems to comply with this new direction; however, the regulations were repealed in July 2000 when they were deemed to be unnecessary.

For employees represented by unions, performance appraisal is generally found in the Career Development sections of their labor contracts (MOU). Also, MOU language has reduced the mandatory completion of performance appraisals to a discretionary activity that may, or may not occur. In the absence of an evaluation on file it is assumed that employee performance is satisfactory.
Most state agencies use a standard form to evaluate employees. This form assesses subjective employee factors such as work habits, quantity of work, quality of work and interpersonal skills. When done, the annual performance appraisal is conducted during the employee’s birth month. While this allows supervisors to complete evaluations and staff development plans on a flow basis throughout the calendar year, appraisals are not coordinated with other annual planning efforts such as the budget cycle, nor do they link employee activities to organizational goals and objectives.

For a host of reasons most state agencies do not routinely conduct annual employee performance appraisals. When performance appraisals are done, the appraisal systems employed do not relate to an agency’s business plan and they are unable to accurately assess the true contributions of employees.

The performance culture
High-performance organizations foster a work environment in which people are empowered and motivated to contribute to continuous learning, performance improvement and mission accomplishment while ensuring accountability and fairness for all employees. These organizations create and nurture a performance culture by recognizing that all employees, those directly involved in mission-critical functions and those involved in mission support roles, help create value. Job processes, tools and mission support arrangements are tailored to support mission attainment and customer service activities. Common attributes of high-performing organizations are as follows:

- Organizational mission, vision, goals and objectives are defined and communicated consistently and continuously;
- Top leaders support and model performance-based behavior;
- Individual and organizational competencies needed to accomplish the mission and achieve organizational goals are identified and defined;
- Job duties and responsibilities are aligned with the mission and goals;
- Employees know how they contribute to organizational success;
- Supervisors and employees jointly develop employee performance expectations that are linked to the department’s mission and strategic goals;
- Performance measures are developed and information systems capture performance data;
- Supervisors and employees communicate frequently about the status of performance expectations;
- Training is considered integral to high performance and quality customer service;
- Performance is formally evaluated at least annually;
- Exceptional performance is recognized and rewarded; and
- Poor performance is immediately addressed and remedial efforts are initiated.
Employee performance management
According to the Australian Public Service Commission, performance management is defined as “the use of interrelated strategies to improve the performance of individuals, teams and organizations.” The federal Office of Personnel Management says performance management is “the systematic process by which an agency involves its employees, as individuals and members of a group, in improving organizational effectiveness in the accomplishment of agency mission and goals.” These systems are used to award pay raises, to provide a basis for disciplinary actions, to identify training and development needs, as a factor in the order of layoff, and to approve promotions.

The primary purpose or goal of employee performance management, therefore, is to improve employee, and therefore organizational, performance. Researchers have concluded that the best organizations closely link their performance management system with their business strategy, mission statement, and vision and values. These organizations recognize that the performance management system is the primary driver for ensuring that mission, vision, and strategy are achieved in a continuously improving manner. As such, these systems drive operational strategy by creating a line of sight between strategic goals and objectives and the employees accountable for accomplishing them; and, each employee can ultimately tie their individual performance goals to the organizational goals.

The employee performance management model
From among the multitude of public jurisdictions, the Personnel Management team reviewed the performance management systems of Australia, the federal Office of Personnel Management (OPM), and the states of Texas and Washington. The employee performance systems of these public employers include some form of the following five management activities: planning, monitoring, developing, rating and rewarding.

Basically, these four organizations improve employee and organizational performance by linking business needs, current performance, and identified training and development needs systematically and consistently from one year to the next. For example, Texas has a Government Code section that requires agencies to link employee performance goals to agency goals.

Planning
Typically, performance expectations, key objectives, expected outcomes and developmental activities are clarified at the front-end of the evaluation process, normally at the beginning of the fiscal year cycle, such as the State of Washington described below. Having a consistent planning process before the start of the evaluation period provides the opportunity for managers and their subordinates to clearly state, understand, and agree upon the performance expectations and developmental needs for the coming year. This approach provides a continuum between evaluation periods since the planning for the next year considers the
status of current-year activities—the very information needed for the retrospective performance appraisal activity.

Washington initiated its performance management system with the Personnel System Reform Act of 2002. This bill authorized many civil service reforms including the creation of a collective bargaining process for Washington state employees, it streamlined personnel rules, and it established a performance management system that links employee efforts and the achievement of an organization’s strategic goals and objectives.

For example, Washington’s Governor Gary Locke requires each of his executive cabinet members to complete an annual written performance agreement to communicate, document, monitor and evaluate mutual expectations for the upcoming fiscal year. These agreements are two to four pages and include significant outcome-focused goals or objectives, at least one performance measure for each goal, and a description of activities or projects the agency staff will be doing to achieve the goal. The agreements are due on July 31 annually, and status reports are due quarterly.

**Monitoring and developing**

Throughout the year the periodic feedback and coaching features of performance management systems allow the parties to continuously communicate and document the results of performance discussions and monitor how well the stated goals and objectives are being met. If this continuous communication occurs throughout the rating period then there are no surprises when the formal performance appraisal is done. Recognition can be provided and noted when objectives are met, are progressing as planned, or when performance exceeds expectations. Areas needing improvement are identified and provide the basis for individual development plans (IDP).

**Rating**

The rating activities of the four organizations discussed here vary somewhat, but they all contain elements related to the accomplishment of key tasks or objectives and the emulation of behaviors consistent with their values and organizational culture. For instance, Australia’s Department of the Treasury conducts semi-annual performance appraisals of all of its employees on the same review cycle. These reports link to the reporting of organizational performance outcomes. Employees are rated on specific job responsibilities and against a matrix of behavior-based performance criteria.

The Texas Department of Health (TDH) uses an employee self-assessment process with supervisory evaluation for its rank and file and supervisory/managerial employees. These include the assessment of essential job functions and Universal Expectations (e.g., for non-supervisors: communication, knowledge of the job, teamwork; for supervisors: decision-making and judgment, strategic planning, leadership). Executives have a separate process which includes a self-assessment on such areas as mission, strategic plan objectives, activities
related to the strategic objectives and a performance summary. This document is then reviewed by the executive’s supervisor.

**Rewarding**
Rewards are an integral feature of the Australia, OPM, Texas and Washington performance management systems. For instance, most agencies in Australia’s Public Service award incremental base pay increases within a pay band for satisfactory or higher performance; and, they offer performance bonuses in recognition for higher than satisfactory performance. The bonuses are usually one-time lump sum awards which have to be re-earned each year.

Texas has a Total Compensation Package that includes a pay-for-performance component. These can be earned as a no-limit percentage merit increase up to the maximum of the pay band for consistently exceptional job performance. In addition, employees at the top step of their pay ranges can qualify for one-time merit increases for above-normal performance or productivity. Texas also offers administrative time-off with pay as a reward for outstanding performance.

Washington is developing a new salary structure that will have both longevity and performance-based pay features by July 1, 2005. Under this scheme employees will receive guaranteed annual progression increases of 5 percent until they reach the maximum of the salary range. Based on performance, though, an employer may accelerate or defer the timing and amount of progression increases.

In addition, Washington agencies will be able to grant a lump sum “recognition” payment to individual employees or to a group of employees to reward outstanding accomplishments or the achievement of pre-defined goals. The amount could be as high as 15 percent of the employee’s base salary, but would not become part of base pay and must be re-earned each year. State agencies must first receive “Performance Management Confirmation” from the Director of Personnel to ensure they have the performance management systems in place to adequately measure employee performance.

**The U.S. government’s experience with performance-based pay programs**
The federal government’s performance management system has evolved substantially since the federal merit system was established in 1883. While many changes occurred over time the Civil Service Reform Act of 1978 saw the introduction of new performance management programs, including the creation of the Senior Executive Service (SES), similar to the state’s Career Executive Assignment (CEA) employment category.

The Government Performance and Results Act of 1993 (GPRA) sought to shift the focus of government decision-making and accountability towards results rather than activities. Under the GPRA agencies were to develop specific, relevant metrics to measure their success in accomplishing their missions and to support their future budget requests.
The latest development in the federal civil service evolution occurred in 2002 with the establishment of the President’s Management Agenda which identified five areas for focused improvements, including improving the strategic management of human capital. Attention centers on identifying the skills needed to deliver the results valued by citizens and ensuring that employees have those skills, identifying and rewarding those employees who perform exceptionally well, and dealing with those who fail to perform.32

Federal government-wide regulations give agencies flexibility in designing their awards programs, and each agency designs its awards program in a manner that meets its needs and supports organizational goals and objectives. The types of awards agencies may grant Federal employees as individuals or members of a group include: cash, honorary recognition, informal recognition, or time-off without charge to leave or loss of pay.33 In addition, the federal government has a Quality Step Increase (QSI) policy that allows accelerated movement through the pay range based on outstanding performance.34

There also are incentives for federal supervisors and managers that are based on accomplishing organizational goals.35 Beginning January 1, 2004, the six-level SES pay system was replaced with a single, open-range pay band that has only its minimum ($103,700) and maximum ($144,600) rates fixed by statute.36 SES employees paid above the minimum rate will no longer receive automatic annual across-the-board pay adjustments; pay increases must be based on the employee’s individual performance and/or contribution to the agency’s performance. In addition, agencies that have a performance appraisal system certified by OPM can pay high-performing SES employees up to a maximum of $157,000.37

The role of human resources in performance management

Key to the success of the performance management systems described here is the involvement of human resources professionals in strategic planning and operational implementation activities. For example, the Texas State Auditor’s Office issued a report in January 2003 that suggested a strong linkage between the strategic planning process and human resources, as well as recommending decision-making status for chief human resources officers equal to that of financial, technology and operations executives.38

The U.S. General Accounting Office (GAO) has produced numerous publications on the relationship of human capital to organizational goal achievement. In 1999, the GAO reviewed such private sector organizations as IBM Corp., Federal Express and Xerox in order to identify any common human resources principles. One of the key things these organizations did was include human resources(HR) leaders as full members of their top management teams rather than isolating them to provide after-the-fact support.39

The development of any new system will result in new responsibilities and performance expectations for many of the human resource practitioners in California state government.
They will need to become change agents and be more involved in the business activities of their departments. They will need to become more consultative in their behavior in order to provide the performance management services described here. They will need to be trained in the fundamentals of this new expectation.

The role described here is not a new concept for California’s HR professionals. In 1998 DPA made a concerted effort to improve the skills of the State’s HR employees and all supervisors and managers. An advisory committee comprised of personnel officers and other high-level departmental executives and a representative from the California State Employees Association (CSEA) was formed to create the Human Resources Institute (HRI)—a virtual training and information resource designed to facilitate the achievement of agency business goals and objectives.

DPA staff conducted an extensive research effort and identified an HR competency model developed by the International Personnel Management Association (IPMA) that could be used in California. The committee envisioned that training modules and certificate programs would be developed for HR staff as well as for civil service managers. When DPA was close to a licensing agreement with IPMA, however, a decision was made to dissolve the HRI and the advisory committee in 2000.

A success story—California Department of Water Resources

As stated earlier, there is no centralized source of performance management information in California state government. Interviews conducted by the Personnel Management team, however, revealed that the Department of Water Resources (DWR) places value on its performance management system.

DWR connects the performance of its employees with its mission and the services it provides to the people of California. “We believe by assuring that employees receive supervisory feedback about their job performance and future employment objectives, both DWR and its employees will benefit” according to Jim Libonati, DWR’s Chief of Management Services. To this end, DWR developed the Appraisal and Development Program (ADP) many years ago to evaluate and track employee performance, and short and long-term development needs.

All employee performance appraisals are due to the DWR Training Office by December 1 of each year. The Training Office tracks the completion of the appraisals and follows up with supervisors that have not submitted them by this date. The tracking spreadsheet includes details for each division’s number of appraisals, individual development plans and probationary reports due and received by rank and file and excluded employees.

This level of detail and commitment has resulted in a performance appraisal completion rate of 96 percent for the 2002 and 2003 calendar years. Training plans were completed at an even
higher rate of 98 percent; and probationary reports experienced an 85 percent completion rate over these two years. By creating the necessary performance management infrastructure DWR has cemented the relationship between its human resources and mission accomplishment.

**Conclusion**

Without the consistent implementation of strategy-aligned goals and metrics, the state is ill-equipped to assess the performance of its own personnel. Opportunity for change is at hand, as the government possesses within its ranks an example to follow. To adopt a performance-based philosophy and improve customer service, a performance culture must be created in the state’s civil service.

**Recommendations**

A. **The Department of Personnel Administration (DPA), or its successor, should work with state agencies and unions to develop performance standards for rank and file employees.**

   In order to create a performance culture in the California civil service all employees will need to be on the same page when it comes to performance management and achieving organizational goals—this includes managers and their staff. The development of any performance standards for rank and file employees will require the cooperation of management and employee unions.

B. **DPA, or its successor, should develop and provide training to human resource and management staff responsible for implementing performance management programs.**

   The role of the human resource professional in state service will change based on these and other CPR recommendations. HR staff will need to enhance their competencies and skills in order to add value to their organizations. The Human Resource Institute (HRI) that was envisioned by DPA and the HRI Advisory Committee in the late 1990s could provide the venue and curriculum for this transformation. In addition, supervisors and managers will have to update their HR skills to effectively meet the performance management challenges of the 21st Century.

C. **The Governor should direct State agencies to: 1) Integrate all employee performance expectations with their missions, goals and outcomes; 2) Develop evaluation processes for supervisors and managers that include accountability for results and a requirement to conduct performance appraisals of their subordinates; 3) Create agency and statewide data bases to collect performance appraisal and individual development plan (IDP) information; and 4) Develop management reward systems to recognize outstanding performance and contributions to achieving organizational goals.**
The recommended databases would be developed by the Department of Personnel Administration (DPA) or its successor, for agency use and would capture on an annual basis such information as how many performance appraisals and IDPs should be done, how many were completed and the aggregate ratings by rating category assigned to those rated, exclusive of individual employee ratings. The data base could be developed using off-the-shelf software already in use by departments. With the exception of aggregate ratings, DWR has developed a spreadsheet to collect this type of information. Aggregate ratings will provide overall information that could be used to establish baseline performance and skill levels, to identify rating inconsistencies between programs, to identify potential best practices that could be implemented more broadly within organizations and across state agencies, to identify the need for appraisal process improvements, or to identify areas that require more focused workforce planning. DPA also would be responsible for working with state agencies and excluded employees to develop recognition and compensation systems that reward supervisors and managers for exceptional performance and their contributions to achieving organizational goals. These systems would be consistent with performance-based management requirements and the need to periodically review pay decisions to ensure they were made fairly and equitably, and consistent with established pay-for-performance criteria.

**Fiscal Impact**
Recommendation A, numbers 1 and 2 will be cost neutral. While the development and issuance of the executive orders could be absorbed within existing resources, it is difficult to assess the long-term fiscal impact of these recommendations since most departments do not conduct performance appraisals now. The cost of a DPA-developed performance appraisal database is nominal and could be deployed to all agencies to provide consistency.

There are expected to be significant cost savings due to increased performance of employees, development and implementation of work process improvements, and reductions resulting from efficiencies related to performance-based management. Even with only a 3 percent performance improvement the State could realize annual cost savings or personnel redirections of more than $300 million per year.41

Recommendation A, number 3, may require the purchase of off-the-shelf software and possible training if the database software chosen is not utilized in a department.

Recommendation A, number 4, costs cannot be determined. The fiscal implications of instituting a performance pay system for managers is nearly impossible to determine and is dependent on the specific performance incentive program each department implements. With performance-based management, departments will have the latitude to award performance incentives, or not. Examples of funding mechanisms for the bonus programs could be as
follows: 1) Allow individual departments to fund any bonuses from the savings they generate; 2) Create a central bonus fund from the savings generated by all participating department and agencies; 3) Allocate a portion of the salary budget for bonuses; or 4) A combination of all three of these alternatives.

Recommendations B and C are cost neutral as the workload could be managed within existing resources.

Endnotes

1 Gov. C. Sections 19992–19992.3; California Code of Regulations, Title 2, Division 1, Chapter 3, Subchapter 1, Article 5, Sections 599.683; and California Code of Regulations, Title 2, Division 1, Chapter 3, Subchapter 1, Article 14, 599.798.

2 Gov. C. Section 19992.14; and California Code of Regulations, Title 2, Division 1, Chapter 3, Subchapter 1, Article 14, Section 599.796.1.

3 California Code of Regulations, Title 2, Division 1, Chapter 3, Subchapter 1, Article 14, Sections 599.796 and 599.797.

4 California Code of Regulations, Title 2, Division 1, Chapter 3, Subchapter 1, Article 14, Sections 599.799.1 and 599.799.2, repealed in 2000.

5 Memorandum 99-047 from Department of Personnel Administration, to Personnel Management Liaisons, October 6, 1999.

6 State of California and California State Employees Association (CSEA), Memorandums of Understanding between Bargaining Units 1, 3, 4, 11, 14, 15, 20, 21, Article 13, July 2003–June 2005 contracts.

7 State of California and California State Employees Association (CSEA), Memorandums of Understanding between Bargaining Units 1, 3, 4, 11, 14, 15, 20, 21, Article 13, July 2003–June 2005 contracts.


9 Most frequent reasons performance appraisals are not done include: a lack of time, inadequate training, competing priorities, inexperience doing appraisals, use of a faulty appraisal system; and fear of engaging employees in frank discussions about performance.


The California Performance Review


18 Texas Government Code Section 659.2551. “PERFORMANCE LINKED TO AGENCY GOALS”. Each state agency shall adopt policies to ensure that an employee’s performance expectations are linked to the goals in the agency’s strategic plan adopted under Chapter 2056.


27 Texas Government Code Section 661.911. “Administrative leave with pay. (a) In addition to employee leave authorized elsewhere in this chapter, the administrative head of an agency may grant administrative leave without a deduction in salary to an employee as a reward for outstanding performance as documented by employee performance appraisals. (b) The total amount of administrative leave an employee may be granted under this section may not exceed 32 hours during a fiscal year.”


34 Federal Office of Personnel Management, “Quality Step Increases: Know the Costs,”
35 Federal Office of Personnel Management, “Using Balanced Measures as a Basis for Manager’s Incentive Pay,”
36 Memorandum from Kay Coles James, director, United States Office of Personnel Management, to Heads of Executive
June 13, 2004).
37 Memorandum from Kay Coles James, director, United States Office of Personnel Management, to Heads of Executive
June 13, 2004).
38 Texas State Auditor’s Office, “State Auditor’s Report on Major Areas of Risk Facing Texas State Government” (Austin,
Texas, January 2003), pp. 8–9.
40 Memorandum from Jim Libonati, chief, Division of Management Services, Department of Water Resources, to California
41 Calculated by using “Schedule 4: Governor’s Proposed Fiscal Year 2004–2005 Budget,” 3 percent of the salary cost
estimate of $10.2 billion for personnel years under administration control.
The Learning Imperative

Summary
California state government is embarking on a performance management effort that will require training and staff development programs that are integrated with strategic public policy goals, relevant to agency issues, and supported with a stable funding source. In addition, the imminent baby boomer retirements will deprive state agencies of the “institutional memory” needed to effectively achieve organizational goals.

Background
Training and staff development is authorized by various laws, rules and collective bargaining agreements (MOU). Training required and job related training is fully paid by the state, and career-related training and education may be reimbursable depending on agency policies. Employees also are encouraged to improve their knowledge and skills through such self-improvement activities as reading, college courses, and other self-directed methods. Many state agencies such as the Franchise Tax Board, Board of Equalization, Department of Transportation and the Employment Development Department use such techniques as team learning, and cross training to enhance performance.

In addition to formal training programs, various state and federal agencies have developed cost-effective mentoring programs to nurture potential supervisors and managers. In New York state, mentoring is viewed as a relatively low-cost method that serves the needs of the protégé, the mentor, and the organization in numerous ways including recruitment, retention, knowledge transfer, promoting diversity, and succession planning. Also, the U.S. Department of Transportation established the “Leaders for Tomorrow” mentoring program for technical employees in federal GS levels 13 and 14. This focus of this program is to address workforce gaps by developing new leaders and dedicated staff with minimum cost and time investment.

The statutory and regulatory intent of training programs is quite clear: training programs are conducted so that the quality of services rendered by persons in state civil service may be continually improved. The state, however, does not have a formal statewide training policy that captures the essence of these requirements.

An attempt was made in the late 1990s to integrate workforce development and human resources considerations with the strategic planning and budget processes. In March 1997 the 21st Century Training Action Team was tasked to, among other things, define models for integrating workforce development programs into organizational strategic plans and align workforce needs. In May 1998, the Department of Finance issued a budget letter directing state agencies to address workforce development and other human resources requirements in their strategic plans and resource requests.
In 1999, the Little Hoover Commission understood the necessity of a well-trained workforce when it said “State policy makers and program managers need to use training programs to improve the effectiveness of their organizations, to support re-engineering efforts and prepare workers for new assignments.” Workforce planning activities will impact training and development of state employees, as will the introduction of performance-based budgeting and work process re-engineering. These changes will create the need to train employees on new ways to do their jobs as well as retrain employees who will need to move to new and different jobs.

The private sector fully understands the relationship between performance-improvement and training. Even when downsizing during the early 1980s, Jack Welch, the Chief Executive Officer of the General Electric (GE) Corporation, was investing in GE’s training programs. More recently in 2000, for example, GE spent about $1 billion on its various training and education programs; which translated into 1 percent of GE’s 2000 revenues. As a frame of reference, California would spend about $300 million on training and education for its employees if it invested 1 percent of the proposed $30 billion Fiscal Year 2004–2005 state operations budget.

Training needs stable funding

Implementing the CPR recommendations coupled with large-scale retirements will dramatically change the way the state does its work and training and development will be more critical than ever before. Training, however, is invariably one of the first items targeted for reductions during tough fiscal times because training costs are viewed as one-time periodic expenses rather than as long-term investments in human capital. Revenue data from the State Training Center (STC) for the past several years and the current year corroborate this statement.

STC provides quality training to state departments on a reimbursement basis and is considered a barometer of state training activity. In FYs 2000–2001, 2001–2002 and 2002–2003, annual STC revenue was $4,210,051, $3,738,746 and $3,386,782, respectively. As of March 2004, revenue for FY 2003-2004 is projected to be $1,522,231; which is 148 percent below the average revenue for the past three fiscal years.

The State Personnel Board and the Health and Human Services Data Center (HHSDC) also provide training through reimbursements. While the reimbursement nature of these organizations fosters competitive pricing structures, funding for training is subject to economic conditions. This funding volatility not only reduces the amount of training agencies purchase, it also affects the central service agencies that provide the training. For example, reduced reimbursement revenue requires DPA to redirect STC staff to other areas until training is again a priority. Even in good fiscal times STC must fight for additional reimbursement authority in order to meet the training needs of its customers.
Reimbursable training programs require costly and labor-intensive billing, payment and collection processes to track costs between STC, SPB, HHSDC and user departments. The statewide cost estimate for the staffing and related operating expenses for this accounting function is conservatively estimated to be $500,000 per year for STC alone. And, while an agency may be billed for training there is no guarantee that it will pay for the services—STC has been unable to collect more than $1 million for services provided.

Another option for funding staff development and recouping training costs is through pro rata cost allocation. A number of central service agencies such as the Department of Finance (DOF), SPB, the Office of the State Controller and DPA are funded on a pro rata basis. The costs for these agencies are spread across all departments that receive their services based on appropriate workload measurements. While DPA and SPB are considered central service agencies the training functions they administer are not included in the pro rata rates. By law, DOF determines which central service agency costs should be pro rated and allocated to agencies benefiting from the services.

Current training administration and delivery systems
Several departments offer training to state employees across all departments. This training is on essential topics, systems and processes used by all agencies such as procurement and contracting, sexual harassment prevention, supervision and management, information technology, ethics, personnel and budgets.

While the training courses listed above could be offered more efficiently through one central training organization, none of the current training facilities are large enough to host a consolidated training program. For example, the STC has an eight-classroom facility in downtown Sacramento and its classrooms are not equipped to offer information technology (IT) and personal computer (PC) classes. The HHSDC Training Center and DGS classes have similar space constraints.

The learning and career development portal
A more realistic and cost-effective method to coordinate the management of these training services would be through the creation of a single training portal administered by STC. This website could be developed into a comprehensive portal that could provide access to the following training and career planning services:

- Comprehensive course catalog of state courses;
- Online training;
- Links to other course catalogs with useful subjects including University of California at Davis (UCD) Extension, California State University Sacramento—College of Continuing Education (CSUS-CCC), and the community colleges;
- Orientation to state service;
• Key word search capability that associates job classifications with available training and education offerings;
• Information on civil service classifications and salaries; and
• Career ladders and planning features.

As an example of how the training portal concept has been implemented, the Franchise Tax Board (FTB) designed the “Employee Opportunity Network” (EON) on its intranet. FTB found that many employees used it. Although FTB has 6,600 employees, the usage of the site passed 50,000 hits within a few weeks of implementation. In addition, Cisco developed a website to orient new employees to their large geographically-dispersed company. They found that the site also was very popular with employees who wanted to know more about the company.

In addition to providing available training information, the portal could be used to register employees for any of the training offered through the portal and track agency use of training courses, and employee training history. Each of the training providers noted above, with the exception of DGS which already uses STC’s registration system, have their own registration systems. STC currently uses TrainingServer, a learning management system that could be used to provide more comprehensive registration, facility and instructor management. Use of a current system could result in economies-of-scale cost savings, and instructors and classrooms could remain as they are now.

A state learning portal also could be a place to access cost-effective online training on a wide range of subjects. Some might be free and available to all and some would be available only to those who had paid a registration fee. Online learning is a cost-effective delivery method of required content to a large audience such as the Ethics Orientation class offered by the Department of Justice.15

Blended learning is another deliver method that combines online access with live interactive sessions. The Department of Transportation recently developed a project management course with California State University Sacramento in which some modules are online and others are classroom-based. As another example, IBM changed its 2-week first-line manager training to a series of online modules about policies and procedures, followed by a one week classroom session for discussion and activities. IBM also found an unintended benefit—senior managers started to use the site as a reference.

More coordination with higher education
Another area that could benefit from more coordinated efforts is the partnering with California’s higher education institutions. The state has occasionally and sporadically used higher education institutions for training of state employees. Some examples are the Management Certificate Program, the Virtual Classroom, the California Leadership Institute, and the Procurement and Contracting Academy.
A more coordinated approach to the use of public colleges and universities as a training source for state employees should be employed. Partnerships with these institutions could be used in the following ways to build strong state training curricula:

- Access to credentialed, well-qualified faculty with subject matter expertise. Topics that could be handled through interagency agreement include executive and management development, project management, and IT training. These higher education institutions could also develop courses for state agencies on critical cross-cutting topics such as workplace diversity, change management, preventing workplace violence, and sexual harassment;
- Provide expertise in integrating online learning into effective courses. The Community Colleges, California State University, and University of California systems are developing and using online course components and resources; and
- Allow state employees to earn course credits that could be used towards certificates, AA, BA, or even advanced degrees. Granting course credit for state-funded courses would contribute to the efficient use of public funds in these state-subsidized higher education institutions, and would enhance the state’s career development policies for state employees.

**Recommendations**

**A.** The Department of Personnel Administration (DPA), or its successor, should develop:

- A statewide training policy that describes the state’s commitment to staff development and its importance in achieving agency missions and providing quality customer service;
- A statewide training portal in conjunction with the human resources portal that lists all of the training for employees that is offered by state, private and educational institutions; and
- A consolidated training registration system for classes offered through the statewide training portal.

Training and development must have a high priority in order to achieve the goals set forth by the California Performance Review. A statewide policy that emphasizes staff development and the alignment of agency training activities with business needs would recognize the essential value of training and promote a learning-based philosophy. The creation of a learning portal and a consolidated training registration system would streamline training administration activities and provide better service to employees and managers.

**B.** A mentoring program should be established to groom potential managers and executives within their organizations.
Among others, the U.S. Army and Air Force have established inexpensive mentor programs for civilian employees who have an interest in management. The state must augment leadership training and education with mentor programs that provide role models to reinforce organizational values, enhance performance and facilitate career development.

**C. The Department of Finance, or its successor, should allocate to the State Training Center, State Personnel Board, or its successor, and Health and Human Services Data Center Training Center administration costs on a pro rata basis to all user state agencies based on number of employees.**

The administrative costs for these training operations would be spread on a pro rata formula based on the number of an agency’s employees. This would eliminate the costly administrative functions needed to support billing and payment for training as well as provide a stable funding source for training. Virtually every state agency sends their employees to these training facilities that use either state employee instructors or competitively bid training vendors. Agencies may be more willing to send employees to training if they have already paid for it, and the training providers would be able to manage their human resources in a more stable fiscal environment.

**D. The DPA, or its successor, should, in conjunction with state agencies and higher education institutions, develop appropriate learning strategies and programs for state employees.**

California is home to some of the most influential and respected institutions of higher learning in the world. California must do a better job of capitalizing on and partnering with this intellectual resource to develop its workforce.

**Fiscal Impact**

Recommendations A1, B and D can be absorbed within existing resources. Recommendation A2 requires an information technology solution to create a portal which will cost an estimated $500,000. The portal will generate cost savings as a result of the reduced amount of time employees will spend looking and registering for training, but this savings cannot be estimated. Recommendation A3 also requires an information technology solution. If the existing Training application is used for the centralized training registration system, a cost of $300,000 will be incurred. Costs for a new system would be substantially higher. Recommendation C will produce savings since there will no longer be a requirement to send,
pay, track and account for training invoices. It is estimated that the savings will be approximately $68,000 and 1 personnel year.

**General Fund**

(dollars in thousands)

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Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–2004 expenditures and PYs.

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**Endnotes**

5. Gov. C. Section 19995.
11. This estimate includes DPA and user department costs to produce, mail, review, approve, pay and track monthly training invoices, as well as costs associated with the completion, monitoring and paying of the interagency agreements related to training.
Create a Fair and Efficient Employee Discipline System

Summary
The state does not have effective ways to quickly resolve issues related to employee performance and conduct and to prevent simple management problems from turning into time consuming and costly personnel issues. A user-friendly system of employee discipline that strives to resolve issues of poor performance or misconduct in a timely manner and at the lowest possible level should be implemented.

Background
The California Constitution states, in part, “The board [State Personnel Board] shall enforce the civil service statutes. . .and review disciplinary actions.”1 The Department of Personnel Administration (DPA), on the other hand, is responsible for representing the administration in personnel matters related to collective bargaining. Until the most recent bargaining agreements, employee discipline was considered off-limits in contract negotiations.

The Little Hoover Commission noted in January 1999, “The State needs to continue to find ways to resolve disputes more quickly. But the state also needs to find ways to prevent simple management problems from turning into large personnel issues.”2 The Commission’s findings recognized the inherent conflict between the State Personnel Board (SPB) and DPA. They noted that “Under the merit system, crafting and administering discipline policy was a function of SPB. Under the collective bargaining system, disciplinary policies, including grievance procedures, are often a ‘bargainable’ issue.”3

Is justice served?
Although the majority of state employees will never receive an adverse personnel action, the complaint most often heard today from managers, supervisors and representatives of rank and file employees is about the way the state deals with poor performance or misconduct by a relatively few employees.

Many managers and supervisors interviewed for this issue criticized SPB’s decisions on employee discipline. Most indicated that the SPB overturns dismissals and other serious adverse actions despite what departments believe is the preponderance of evidence to support the department’s actions. Departments believe that this “fact” harms morale, returns unethical or incompetent employees to their former employment, discourages supervisors and managers from pursuing employee discipline, undermines the merit system, and adds costs to state government in loss of productivity. The state’s employee discipline process was the subject of a
series of articles in the *Contra Costa Times* in December 2003. The criticism levied against the SPB and state agencies in these articles prompted the California State Senate to conduct a hearing on the process.

On March 22, 2004, the Senate Government Oversight Committee held a hearing to discuss the performance of the SPB with respect to employee discipline. The Committee Chair, Senator Jackie Speier, titled the hearing “Is Justice Served?” The primary focus of the hearing was to determine if bad employees get punished and if the wrong employees get punished.

During the hearing, the SPB presented data indicating that departments frequently fail to meet statutory time frames for providing notice to employees of proposed adverse actions or commit other procedural errors that require SPB to dismiss the actions without considering the merits of the case. An SPB spokesperson also was critical of the quality of investigations conducted by departments. She testified that in about half of the cases revoked by SPB in 2002, the department failed to prove “by a preponderance of the evidence” that the incident even occurred. In 25 percent of the cases, the department failed to establish the legal cause for discipline. In other words, the department proved that the incident occurred but the behavior did not constitute a violation of the Government Code. In 2002, SPB revoked adverse actions against eight peace officers based on the appointing power’s failure to meet the one-year statute of limitations set forth in the Peace Officers Bill of Rights.

In a 2002 audit of the California Department of Corrections, the Office of the Inspector General reported that about 43 percent of investigations are not completed within the one-year time frame for peace officers. Thus, even if there was a finding sustaining the alleged violations, no adverse action could be taken. SPB staff testified that another reason department actions are overturned is that union lawyers are typically better prepared when presenting cases before SPB and have better prepared their witnesses for testimony.

In 2002, approximately 3,000 formal adverse actions were taken (both major and minor). Of these, 1,352 (45 percent) were not appealed. Most of these actions were minor in nature. Of the 262 decisions issued by SPB in 2002, 204 (78 percent) sustained some level of penalty, 138 (53 percent) were sustained completely. Only 58 were overturned by the SPB. This is less than two percent of the 3,000 adverse actions taken by state departments and 22 percent of the formal decisions rendered by SPB.

The “success” rate before SPB differs widely among departments. The California Highway Patrol (CHP), for example, wins 77 percent of the cases that go before SPB whereas the Department of Corrections wins only 46 percent of its cases. In another example, SPB modified or revoked the adverse action in 78 percent of the Department of Developmental Services’ appeals. In the case of the Highway Patrol, SPB observed that their investigations are timely and the Office of the Attorney General usually presents the cases before SPB. Other
departments, however, are frequently represented by non-lawyers, such as supervisors, managers, or staff from departments’ personnel or labor relations offices.

An SPB decision exhausts the administrative processes for adverse actions under the Civil Service Act. Either the employee or the affected department is free to appeal SPB’s decision to the Superior Court. Of the 760 decisions issued by the SPB in the past three years, 64 have been challenged in Superior Court and only two have been overturned.

**Alternative dispute resolution models are used by a few departments**

In 1996, the SPB established a Mediation Program for resolution of workplace disputes. SPB boasts that this process has resulted in written agreements between the parties in 95 percent of the cases. According to the Mediation Program analyst, the process has been used by more than half of all state agencies. Some departments, however, have been critical of this process claiming that SPB’s mediators are not “neutral” but rather appear to champion the employee’s position. This, according to one department’s employment law attorney, “only emboldens the employee” to persist in the offensive behavior. The mediators for this program include volunteers from among the participating agencies who have received special training for this process.

In 1997, DPA and the California Association of Highway Patrolmen (Unit 5) negotiated a streamlined procedure for resolving minor disciplinary appeals. SPB did not object because SPB Administrative Law Judges were used in the new process. In 1998, however, DPA and the union representing Department of Forestry firefighters also negotiated a streamlined process that did not use SPB Administrative Law Judges as hearing officers or reviewers. SPB sued DPA on the grounds that the State Constitution gives jurisdiction on employee discipline to SPB. That case is currently before the California Supreme Court.

**Georgia’s alternative dispute resolution model**

Ten years ago, the State of Georgia initiated a process called *Discipline Without Punishment*, based on a book of the same name by Dick Grote. The process has three steps intended to address the problems of absenteeism and poor performance:

- The first violation results in a discussion between the supervisor and the employee regarding his or her conduct, the supervisor’s expectations for future conduct, the gap between the two, and a mutually acceptable plan to correct the gap;

- The second violation results in another similar discussion followed up by a “written reminder” of the discussion, the expectations addressed by the supervisor and the mutually agreed-upon action plan; and

- The third violation results in a one-day (paid) “decision-making” leave where the employee decides what he or she will do; either establish a new plan of correction with
a firm commitment to comply, or resign. The leave is paid because the employer does not want the importance of the decision-making to be clouded by anger at an unpaid leave. If the employee decides not to resign but does not agree with the improvement plan, the employer terminates the employee. There are no demotions, suspensions or other forms of punishment.

Georgia’s experience with this process has been positive to date. Responsibility is placed on the employee, rather than the supervisor, and it is the employee who identifies what is needed to close the gap between current conduct and the conduct expected in the future. If the employee requests training or assistance, the employer provides what is requested if it is reasonable. The process has withstood the scrutiny of the Georgia Unemployment Appeals Board and the courts. The perception has been that the employer has been more than fair in assisting the employee to meet job performance expectations. Because the process is not an “adverse action” until the termination stage, none of the preceding stages are appealable.14

**Good employees save money; bad employees cost money**

There is some research, primarily that of Schmidt and Hunter (1983) and Schmidt, Hunter, and Judiesch (1990), that demonstrates that “a superior employee at the 84th percentile of productivity can add 40 percent or more a year above their salary.”15 If they are managers or other professionals, the increased productivity “is at least 48 percent of average salary.”16 For a Staff Services Analyst in the civil service earning about $50,000 a year, this amounts to $20,000 worth of increased productivity annually. On the other hand, a below-average employee at the 16th percentile of productivity costs a minimum of 40 percent more than their salary.17 In other words, poor performance or disruptive behavior increases the costs of government and cannot be tolerated.

The subject of employee discipline evokes far more controversy than the data would lead one to expect. Virtually everyone interviewed on this subject had an anecdote to illustrate the urgency of reforming this aspect of the personnel management system. The Little Hoover Commission ended its 1999 report by noting that “Clearly, the discipline appeals process has cost the state and the public more than it should. But even more money could potentially be saved by preventing discipline problems. . .”18

**Recommendations**

A. The Governor should direct the Department of Personnel Administration, or its successor, to work with the labor unions to implement, as an alternative dispute resolution methodology, a statewide process of performance management similar to the “discipline without punishment” program used in Georgia.

B. The Governor should direct the Department of Personnel Administration, or its successor, to evaluate the effectiveness and efficiency of the three current mediation
processes used by the California Highway Patrol, the Department of Forestry and the State Personnel Board, or its successor. The alternative which is most effective should be implemented in those departments with no alternative process and replace less effective processes.

C. The Governor should request the State Personnel Board, or its successor, to immediately begin to develop web-based training for department supervisors on the employee discipline processes. Emphasis should be placed on addressing the primary causes for revocation or modification of adverse actions. Models of well-written actions should be shared with departmental managers on this web site.

D. The Governor should request the State Personnel Board, or its successor, to track the success/failure rates of each method of employee discipline, including the traditional model, and report its findings on its web site at least every three years.

**Fiscal Impact**

It is not possible to estimate projected savings at this time. With better training and timely feedback from SPB, departments are more likely to draft adverse actions that will be upheld by SPB. This, however, is not likely to result in fewer adverse actions taken. On the contrary, when departments are more successful at SPB, it may serve to embolden managers and supervisors to pursue adverse actions that they previously were reluctant to undertake. While the result is an overall improvement in the quality of the state workforce because incompetent/unethical employees would not be allowed to remain on staff, it would probably not result in any immediate cost savings due to a reduction in adverse actions. There would, however, be an improvement in productivity by hiring competent and motivated replacements.

If a successful mediation or alternative resolution process is adopted, like the “Discipline without Punishment” program in Georgia, it would likely result in fewer overall adverse actions but an increase in terminations. Terminations would most likely be appealed to SPB because civil servants would not lose this avenue of appeal. It is not possible to project the net effect of this change with any accuracy. While the total numbers of appeals would decrease, those that are filed would be the most time-consuming to adjudicate.

Another factor to consider is the long-term impact. With departments more successful in sustaining adverse action sanctions and employees and departments opting to use alternative dispute resolution methodologies, in the long term there probably would be an overall reduction in the numbers of adverse actions and resulting appeals. This would be a cost savings. Additional cost savings would result from a more productive and motivated workforce. These cost savings cannot be determined at this time.
Endnotes

1. Article 7, Section 3 of the California Constitution.
6. Memorandum to Senator Jackie Speier, Chairperson, Senate Select Committee on Government Oversight from Laura M. Aguilera, Interim Executive Officer, State Personnel Board (February 17, 2004).
7. Memorandum to Senator Jackie Speier, Chairperson, Senate Select Committee on Government Oversight from Laura M. Aguilera, Interim Executive Officer, State Personnel Board (February 17, 2004).
10. Memorandum to Senator Jackie Speier, Chairperson, Select Committee on Government Oversight from Laura M. Aguilera, Interim Executive Officer, State Personnel Board (February 17, 2004). The SPB speculated that the high rate of revocations for the Department of Developmental Services was attributable to the “zero tolerance” policy on suspected abuse of developmentally disabled residents. Termination is the action generally taken by DDS managers regardless of the degree of the suspected abuse.
11. State Personnel Board, “The State Employee Mediation Program.” (Brochure.)
12. Interview with Robert Gaultney, California Department of Corrections (April 2004).
Improve Employee Suggestion Program

Summary
The State of California’s Employee Suggestion Program does not provide adequate incentives to encourage employees to develop and submit suggestions for reducing government spending and/or improving services. The program should be changed to enhance these incentives, and to decrease the time for reviewing and approving employee suggestions. This would allow the state to capture savings more quickly and assist it with fostering a culture of continuous improvement among its workforce.

Background
The Employee Suggestion Program is part of the state Department of Personnel’s (DPA) Merit Award Program, and is a formal process for rewarding employees who submit ideas that reduce or eliminate state expenditures and/or improve the safety or operation of state government. When an employee’s suggestion is adopted, the employee receives a monetary award ranging from $50 to $50,000. Awards in excess of $5,000 require approval by the Merit Award Board and the Legislature.¹

The Merit Award Program is managed by DPA. The State Merit Award Board, appointed by the director of DPA, consists of five members. One of the members is a representative from DPA, who also serves as the chairperson and the program administrator. The Merit Award Board’s primary responsibilities include:

- Conducting Board meetings;
- Conducting audits of the State departments and the Merit Award Program regarding compliance with DPA regulations;
- Distributing promotional information to agency Merit Award administrators and to state employees;
- Maintaining standard forms to be used for the award program;
- Providing training for agency Merit Award administrators; and
- Preparing annual legislative concurrent resolutions for awards exceeding $5,000.²

The Merit Award Board is responsible for “conducting meetings on a regular basis. Meetings are public and interested parties shall be given reasonable opportunity to be heard.”³ It has not conducted a board meeting since 2001.⁴ Board member positions are vacant.⁵ According to DPA, the board will meet later this year after the DPA director appoints members to these vacancies.

Employee suggestion program process
To participate in the employee suggestion program, employees submit completed suggestion forms to their department’s Merit Award administrator, or to the DPA’s Merit Award Program.
An employee whose suggestion is not adopted may appeal within one year from the date of their department’s denial. A written appeal must be accompanied by additional information not previously submitted. DPA’s Merit Award Program staff review these appeals, as well as the departments’ decisions to ensure that the employee suggestions were thoroughly analyzed. Despite this review, the Merit Award Board and departments routinely reject many employee suggestions because they may not result in savings, are repetitive, are part of the employee’s job duties, or involve an area not within the scope of the merit award. It typically takes six to twenty-four months for the entire review process to be completed. Therefore, implementation of the suggestions is sometimes delayed. In addition, the determination of funding for awards can delay implementation. The numbers of employee suggestions approved through the Merit Award Board are as follows:

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<td>1998–99</td>
<td>919</td>
<td>8</td>
<td>$2,293,275</td>
</tr>
<tr>
<td>1999–00</td>
<td>1,038</td>
<td>N/A</td>
<td>$401,205</td>
</tr>
<tr>
<td>2000–01</td>
<td>582</td>
<td>20</td>
<td>$7,863,223</td>
</tr>
<tr>
<td>2001–02</td>
<td>659</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>2002–03</td>
<td>791</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

N/A = Not available

These data suggest that very few employee suggestions are ever adopted.

**Employee suggestion programs in other states**

Other states also administer employee suggestion programs. The award structures of other states’ programs are similar to California’s. California’s cap of $50,000 for awards exceeds other states’ caps, with the exception of New York. Kansas, for example, awards up to 10 percent of the documented cost savings for a maximum award of $37,500. New York distinguishes between tangible and intangible benefits resulting from employee suggestions. Suggestions resulting in tangible benefits can be rewarded up to 10 percent of the first year’s net savings, or 10 percent of other financial benefit to the state, up to a maximum of $50,000. Suggestions that result in intangible benefits may be eligible for an award of up to $5,000.

Texas has an on-line employee suggestion program, the State Employee Incentive Program (SEIP). SEIP provides on-demand updates in the evaluation process and automatic e-mail
notification to submitters, evaluators and program coordinators on suggestion status. The government-domain source code produced to operate the SEIP online is freely available for adaptation by state government agencies interested in Internet and intranet automation projects.13

The Texas Incentive and Productivity Commission administers the SEIP. The SEIP and the commission have been a good investment for Texas; they have saved the state more than $80 million, or a savings of $29 for every $1 invested in the SEIP.14 With an online system, during a three-year period, the Texas SEIP experienced an estimated 45 percent increase in the number of employee suggestion submittals. One and a half percent of Texas state employees submitted ideas.

The Texas Incentive and Productivity Commission holds quarterly meetings to review, approve, and expedite suggestions resulting in savings. The Texas Incentive and Productivity Commission approved 120 ideas last year.15 Texas’s State Employee Incentive Program has approved 10 percent of employees’ suggestions over the past twelve years.16 In contrast, from July 1, 1998 through June 30, 2003, only 19 of the employee suggestions submitted to California’s program were approved and implemented, on average each fiscal year, representing an acceptance rate of 2.4 percent.17

As seen in Exhibit 1 above, less than three-tenths of 1 percent of California employees submitted suggestions in 2002–03. A successful implementation of an online employee suggestion program should include:

- a redesign of the suggestion form to make the form uniform for employees using an electronic or paper version of the form;
- a designee of the Governor’s office to serve as an executive sponsor for the project; and
- a strong marketing campaign to boost the usage of an online system to increase the efficiencies of California’s Employee Suggestion Program.

**Recommendation**

The Governor should direct the Department of Personnel Administration (DPA), or its successor, to:

- Propose legislation to eliminate the Merit Award Board’s oversight of the Employee Suggestion Program;
- Appoint a designee to serve as an executive sponsor of the project;
- Delegate approval for employee suggestions to departments;
- Increase the amount of an award approved by departments from $5,000 to $50,000;
- Eliminate the necessity for a concurrent resolution from the Legislature to approve monetary awards exceeding $5,000; and
- Develop, coordinate, and actively market an on-line employee suggestion system similar to the Texas on-line State Employee Incentive Program (SEIP).
The marketing effort would include redesigning the current employee suggestion submission form. The source code produced to operate the SEIP Online is freely available to other states. The merit award administrator at DPA, or this position’s successor, could continue to collect award information on a statewide basis.

Audits of the merit award program can be included as a review item in any traditional, ongoing audits of state departments conducted by the Bureau of State Audits.

**Fiscal Impact**

An increase in employee suggestions, and their implementation, could significantly benefit the state. The online system would assist existing DPA staff, department merit award coordinators and state employees with expediting the entire process. Savings would incur from the increase in the number of suggestions submitted, approved, and implemented. First year savings is estimated at $1,707,425 assuming 25 approved suggestions averaging $68,297 each in savings.

### General Fund
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>$853</td>
<td>$0</td>
<td>$853</td>
<td>0</td>
</tr>
<tr>
<td>2005–06</td>
<td>$1,024</td>
<td>$0</td>
<td>$1,024</td>
<td>0</td>
</tr>
<tr>
<td>2006–07</td>
<td>$1,366</td>
<td>$0</td>
<td>$1,366</td>
<td>0</td>
</tr>
<tr>
<td>2007–08</td>
<td>$1,878</td>
<td>$0</td>
<td>$1,878</td>
<td>0</td>
</tr>
<tr>
<td>2008–09</td>
<td>$2,561</td>
<td>$0</td>
<td>$2,561</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Other Fund
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>$854</td>
<td>$0</td>
<td>$854</td>
<td>0</td>
</tr>
<tr>
<td>2005–06</td>
<td>$1,024</td>
<td>$0</td>
<td>$1,024</td>
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<tr>
<td>2006–07</td>
<td>$1,366</td>
<td>$0</td>
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<td>2007–08</td>
<td>$1,878</td>
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<td>0</td>
</tr>
<tr>
<td>2008–09</td>
<td>$2,561</td>
<td>$0</td>
<td>$2,561</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.
Endnotes

2. Department of Personnel Administration, “Merit Award Program Guide Book” (Sacramento, CA), p. 5.
4. Interviews with Marilyn Moran, Statewide Merit Award coordinator, Department of Personnel Administration, Sacramento, California (April 7, 2004 and May 27, 2004).
5. Interview with Sue Kane, deputy division chief, Benefits Division, Department of Personnel Administration, Sacramento, California (May 14, 2004).
8. Interviews with Marilyn Moran.
9. Interview with Sue Kane.
12. Interview with Elizabeth Vargas, SEIP coordinator, Information Services Division, Texas Comptroller of Accounts, Austin, Texas (May 11, 2004).
15. Interview with Michael Dobbs, Program coordinator, Texas Incentive and Productivity Commission, Austin, Texas (May 19, 2004).
17. Interview with Sue Kane.
19. From Fiscal Year 1996–1997 through Fiscal Year 2000–2001, the total adjusted savings from approved suggestions in California was $5,190,550. This averages $68,297 in savings for each approved suggestion, and is the figure used in the estimates. In addition, a ten percent increase in submitted suggestions each year is assumed based on the Texas experience.
Splintered System of Reviewing Discrimination Complaints Creates Duplication of Work

Summary
There are at least four state entities with which complaints of employment discrimination can be filed. This results in overlapping state functions, increased costs and inconsistent decisions among entities. Individuals who wish to file a claim of employment discrimination should be limited to filing a complaint with the single entity of their choice.

Background
Individuals who believe they have been subject to employment discrimination by a state agency may file a complaint with at least four state entities, the specific department where the alleged discrimination occurred, the State Personnel Board (SPB), the Department of Fair Employment and Housing (DFEH) and most recently as a grievance with the Department of Personnel Administration (DPA). With few exceptions, these complaints may be filed simultaneously with each of these entities. Individuals may also file a complaint with the federal Equal Employment Opportunity Commission (EEOC) and/or take the case to court. Some states do not provide multiple options to individuals. This splintered system not only increases state costs but also lends itself to inconsistent decisions among entities.

Department of Fair Employment and Housing
DFEH is the largest state civil rights agency in the country. It was established by the Legislature in 1959 to protect the people of California from discrimination in employment, housing and public accommodations under the provisions of the Fair Employment and Housing Act. DFEH receives, investigates, conciliates and prosecutes complaints of discrimination and provides technical assistance to employers about their responsibilities under the law. In Fiscal Year 2002–2003, DFEH received 14,497 employment discrimination complaints statewide; 698 (about 5 percent) were cases filed against state agencies.

Fair Employment and Housing Commission
The Fair Employment and Housing Commission (FEHC) also was established in 1959 and consists of seven members appointed by the Governor. FEHC and DFEH are separate entities but together are responsible for the enforcement of several California civil rights laws. FEHC adopts regulations interpreting the laws within its jurisdiction, holds hearings and issues decisions on accusations prosecuted before it by DFEH. Where unlawful practice is found, FEHC may order a range of remedies. In FY 2002–2003, DFEH brought ten employment discrimination cases before FEHC for hearing.
The State Personnel Board
SPB was constitutionally established in 1934 and is responsible for the merit-related aspects of California’s civil service system. State law allows any person claiming employment discrimination within the state civil service to submit a complaint to the appointing authority or, in accordance with board rules, directly to SPB. All discrimination complaints within the board’s jurisdiction are referred for evidentiary hearing before an administrative law judge. In calendar year 2003, SPB received 137 complaints of employment discrimination and/or denial of reasonable accommodation.

The Department of Personnel Administration
DPA was created in 1981 and manages the nonmerit-related aspects of the state’s personnel system including collective bargaining. In calendar year 2002, a number of bargaining unit contracts began to allow employees to file grievances based on allegations of employment discrimination, including the denial of reasonable accommodation. Prior to this time, employee contracts specifically stated that allegations of discrimination were not subject to the grievance and arbitration procedure. According to DPA staff, the California State Employees Association, representing nine bargaining units, requested another venue to pursue allegations of discrimination because they did not believe their issues were addressed properly or timely by the other state processes; other unions indicated there were sufficient avenues available to voice employee concerns. Since 2002, DPA has received 146 discrimination-related grievances.

Alternative dispute resolution methods
Alternative dispute resolution methods, such as voluntary mediation programs, have been successful in resolving conflict including discrimination issues. DFEH reported approximately 50 percent resolution rate in employment discrimination cases participating in mediation. DFEH further indicates it spends, on average, 4.9 hours to mediate and close a case compared to 17.75 hours to investigate discrimination cases. SPB mediates about 125 merit-related cases annually and reports 95 percent of all cases result in written agreements with most disputes resolved in one, three-hour session. Finally, 48 percent of state departments indicate they offer mediation to complainants and report that 58 percent of complaints are resolved through the process. The state benefits by early resolution of disputes because departments are less likely to experience decreased productivity, stress in the workplace and escalation of issues. Equal Employment Opportunity Counselors, if adequately trained, also can be instrumental in resolving discrimination issues at informal stages of the discrimination complaint process.
Cost of discrimination cases

There is no state entity that captures complete information about which discrimination cases are filed with multiple state entities. The following chart provides cost and caseload information for each of the state venues where overlapping responsibilities exist.

Exhibit 1
Annual Caseload

<table>
<thead>
<tr>
<th>Year</th>
<th>State Entity</th>
<th>Type of Review</th>
<th>Cost Per Case</th>
<th>Number of Cases Received</th>
<th>Total Annual State Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2002–2003</td>
<td>DFEH</td>
<td>Investigation</td>
<td>$1,800 ²/ ³</td>
<td>698</td>
<td>$1,256,400</td>
</tr>
<tr>
<td>2003 ¹/ ²</td>
<td>DPA</td>
<td>Investigation</td>
<td>$1,800 ²/ ³</td>
<td>73</td>
<td>$131,400</td>
</tr>
<tr>
<td>2003</td>
<td>SPB</td>
<td>Hearing</td>
<td>$750 ³/ ⁴</td>
<td>137</td>
<td>$102,750</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,490,550</td>
</tr>
</tbody>
</table>

²/ Estimate of cost per investigation provided by DFEH, April 2004.
³/ Estimate of cost per evidentiary hearing provided by SPB Appeals Division, April 2004.
⁴/ Does not include cost of awards or settlements.

A 2000 review by SPB of state costs associated with discrimination complaints found that, while departments do not adequately track these costs, 38 departments identified more than $37 million spent for the investigation and litigation of discrimination complaints; an average of $973,684 per department.¹⁸ Considering there are over 100 state departments, boards and commissions in California, state costs associated with departmental discrimination issues could be significant. Legislation has been proposed which will require state agencies to track costs associated with discrimination issues and other related costs.¹⁹

Recommendations

A. The Governor should direct the Department of Fair Employment and Housing, and request the State Personnel Board, or the successor agencies, to amend or adopt regulations that will ensure acceptance of claims of employment discrimination against a state entity only if the individual has not filed a claim with the other state agency.

B. The Governor should direct the Department of Fair Employment and Housing and request the State Personnel Board, or the successor agencies, to implement procedures that will ensure claims of employment discrimination against a state
entity are accepted only if the individual has not filed a claim with the other state agency. This change will not prevent employees from first filing a complaint with the department alleged to have discriminated, filing directly with the Equal Employment Opportunity Commission, or taking their case directly to court.

The following chart illustrates the proposed process if DFEH is the venue of choice to pursue a complaint of discrimination.

C. The Governor should direct the Department of Personnel Administration, or its successor, to prevent allegations of discrimination or denial of reasonable accommodation from being subject to the grievance and arbitration procedures. Any existing bargaining unit contracts containing such allowances should be modified by the Department of Personnel Administration, or its successor, upon their expiration.

D. The Governor should direct all state agencies to implement methods to track state costs associated with the investigation and litigation of discrimination cases. This information should be incorporated into the existing annual reporting process to the Legislature on discrimination complaint activity, by the State Personnel Board, or its successor, as required by Government Code Section 19702.5(c). The State Personnel Board, or its successor, shall provide guidance to state agencies on the implementation of this directive.

E. The Governor should request the State Personnel Board, or its successor, to establish policy and implement procedures to ensure resolution of conflict, resulting from allegations of discrimination, at its earliest occurrence using informal methods such as mediation. Policy and procedures should be established and distributed to state departments.
Fiscal Impact
These recommendations are expected to generate some savings by improving the process for reviewing discrimination complaints. While the savings cannot be quantified at this time, it is possible that the state can realize about $3.5 million in annual savings. For example, the estimated annual state cost for investigating and conducting hearings on complaints of discrimination by the three aforementioned venues is $1,490,550. Assuming a 13 percent overlap in caseload, potential savings to the state due to elimination of overlapping state functions is $193,772 annually. Also, while DPA reports that, to date, no discrimination-related grievances have gone to arbitration, the average cost per case for these proceedings is between $5,000 and $6,000. Potential savings to state departments in the first year due to early resolution of disputes can be estimated at $3.5 million assuming a 95 percent resolution rate, as reported by SPB, and assuming a 10 percent increase in departmental cases mediated.

The state will also incur some nominal costs associated with the implementation of cost tracking systems. These costs will be offset by the savings.

Opportunity for additional savings to the state
Though not quantifiable, DFEH reports there is anecdotal evidence of savings to state and federal court systems due to resolution of complex workplace disputes that would otherwise require the full services of the civil justice system.

Endnotes
1 The State Personnel Board accepts complaints of discrimination directly from individuals if the remedy requested is outside the authority of the department, if the allegations directly concern a departmental director or member of their executive staff, or if individuals allege discrimination in a state examination process. In other cases, individuals must file their discrimination complaints with the department alleged to have discriminated prior to filing with the State Personnel Board.
2 States reviewed include Arizona, New York, Georgia.
4 California Fair Employment and Housing Act, Gov. C. Sections 12900–12996.
5 Letter from Jill Peterson, interim director, Department of Fair Employment and Housing, to California Performance Review, Personnel Management Team (April 23, 2004).
6 Gov. C. Section 12903.
8 California State Constitution, Article VII, Section 2.
9 Gov. C. Section 19702(2)(g).
11 As of April 2004, the California State Employees Association’s nine bargaining unit contracts allow the filing of grievances based on discrimination or denial of reasonable accommodation.
Interview with Julie Chapman, acting assistant chief, Labor Relations Office, Department of Personnel Administration, Sacramento, California (April 30, 2004).


Interview with Jill Peterson, Sacramento, California (April 23, 2004).


Estimate of 13 percent overlap determined by the lowest number of cases received by one of the three state entities with overlapping functions.

Interview with Julie Chapman.

The State Personnel Board’s “State Employee Mediation Program,”

Streamline the Layoff Process

Summary
The state layoff process is cumbersome to implement and net savings resulting from layoffs are difficult to achieve. The layoff process costs the state tremendous time and effort, and workforce productivity and quality suffer as a result due to the protracted process and multiple rounds of layoff notification. The process should be streamlined to increase savings to the state and to improve efficiency and workforce quality.

Background
Control Section 4.10 in the 2003–2004 Budget Act required that savings of over $1 billion be found and that at least 16,000 existing positions be abolished. The layoff implementation process, however, was not designed to achieve these kinds of short-term budget driven savings.

The layoff process
Generally, layoffs target employees in order of least seniority, so that the least senior employees, regardless of whether they are part-time, intermittent, or full-time, are laid off first. In practice, however, calculations to determine seniority are difficult to prepare. There are adjustment factors, such as time spent working for the Legislature, the University of California, and/or the state university system, as well as certain military service time. Also, seniority calculations differ between the 21 bargaining units and the state.

The layoff process is further complicated by alternatives that some departments offer their employees, such as a reduced time base, job-sharing, and unpaid leaves of absence. Savings from these options are calculated and then used to reduce the total number of layoffs required before seniority calculations are made. An additional difficulty comes from employees’ right to transfer or demote in lieu of layoff, and “bump” an employee less senior than themselves.

If the Department of Personnel Administration (DPA) could automatically determine the seniority and bumping calculations, the process would be much more efficient; but this is not possible because employee history is not stored in a single location in a format that can be used to determine calculations. According to DPA, the data cannot be manipulated electronically, and the calculations must be performed manually. The calculation process is time consuming and as layoffs are delayed, more people must be laid off to achieve the required net savings. Due to the unpredictability of bumping and other factors, it can be months between layoff notification and actual layoff, so at some departments layoff notifications must be sent to many more employees than will actually be laid off. At some departments, there have been at least three rounds of notification.
According to Government Code Section 19997.3(b), “[The] . . . department shall prescribe standards and methods by rule whereby employee efficiency shall be combined with seniority in determining the order of layoffs . . .” for professional, scientific, administrative, management, and executive classes. The use of these department-developed efficiency standards are not extended to the classes of employees which make up the majority of the workforce. Since efficiency and merit are not part of the layoff process for all classes, the state is losing the opportunity to sculpt a stronger, leaner, and more efficient workforce when it engages in the layoff process.9

**Cost savings are illusive**
After “contract concessions” of $295 million, and “miscellaneous” savings of $135 million, the Department of Finance (DOF) identified 9,313 positions for elimination that would generate an estimated annual savings of $491 million for the state.10 According to DPA, after eight months of layoffs, only about 250 employees have been laid off.11 Using DOF’s formula for position cost, this generates an annualized $13 million in savings for the state, not the projected savings of $491 million.12

However, this savings figure doesn’t take into account the cost of layoff implementation. The Legislative Analyst’s Office (LAO) noted that DPA requested an additional $3.5 million for staffing to implement the layoff process. Additionally, there are unquantified costs incurred by all departments for notification and placement activities.13 Significant amounts of resources are required, which generate very little benefit.14

There are other costs associated with the current layoff process which are hard to quantify. DOF has surveyed departments for their estimation of the impact of the 4.10 reductions on the department.15 These survey responses run hundreds of pages and detail some of the more difficult to quantify costs. These costs include the inability of the state to provide critical work (inspections, licensing, and construction) on a timely basis, the need to redo already completed work due to anticipated delays, and the reduction of law enforcement activities. For example, the Department of Justice cut 24 percent of investigators in the Sexual Predator Apprehension Teams and estimates that this will mean 120 arrests will not be made.

**Business needs are not the primary driver of layoffs**
Instead of targeting inefficiencies and prioritizing programs and services, the statewide reduction targets all departments. Short-term budget savings, generated by the layoffs, causes damage to the state, as shown in the Control Section 4.10 Impact Statements, and will likely generate long-term costs that far outweigh the benefits.16

For example, departments are supposed to designate surplus positions for layoff.17 But this process is somewhat arbitrary and departments frequently designate critical positions in an effort to obtain exemption from the process.18 For example, the Board of Equalization (BOE) is one of the General Fund’s two largest tax collection and administrative agencies, and is also
subject to the layoff. BOE was required to cut 141 positions and $16 million from ongoing costs. The Board has taken most of these cuts, about 91 positions, from those that have a direct revenue generating function. The LAO estimates that the revenue loss from these positions remaining unfilled is $27 million to the General Fund in Fiscal Year 2004–2005. In the Governor’s Budget May Revision, BOE had $8.3 million in funding restored to “. . . mitigate the adverse consequences . . . from reductions that were required in the 2003 Budget Act.” According to the May Revision, the funding restoration will be enough to fill 160 positions.

Additionally, because of bumping, a seniority-based layoff will eliminate the lowest paid employees, depriving the state of valuable new talent without significant savings. Many of the new employees were hired as a result of the dramatic increase in state spending in FY 1998–1999 and FY 1999–2000.

Recommendations

A. The Governor should direct the Department of Personnel Administration, or its successor, to work with the State Controller’s Office to develop an aggregate employee history database. The database would be used for calculation of multiple layoff scenarios.

B. The Governor should direct all state departments to be given a dollar target of savings to achieve rather than a headcount number. The state should allow departments and management the freedom to decide how to achieve savings.

By providing a dollar target, and requiring that departments live within their budget, departments will retain the flexibility to manage their positions and redirect their positions where they are most needed.

C. An employee’s merit should be included in the calculation of seniority.

The inclusion of merit in the process is necessary for the state to ensure talented employees will not be lost. For example, managers could be allowed to exempt a certain percent of their top performing employees from the layoff process. This would need to be documented through performance evaluations because of the possible grievances that may be filed by employees who were not exempted. If a layoff is necessary, the state should not allow it to weaken the workforce.

The Legislature should adopt changes to the following government codes that legislate the layoff process so that merit could be used to exempt the top performing employees: Government Code Section 19997–19997.15, Education Code Section 89550–89557, Education Code Section 88000–88040, Labor Code Section 1400–1408, Labor Code

**Fiscal Impact**
The policy recommendations will contribute to the streamlining of the process and should result in some cost savings if the state resumes the practice of layoffs in the future. At the very least, the state would avoid the additional cost of losing revenue-generating positions (such as occurred at BOE). The state achieved savings of $8 million through the reductions, but experienced an estimated $27 million loss in General Fund revenues.

Establishing a database that can aggregate employee history data could be integrated into existing enterprise information technology plans. The cost of the database is estimated at between $100,000 and $200,000 depending on the data complexity. This cost includes .3 PY for programming and increased data storage requirements for text. Savings would be realized when the database provided an automated calculation process, which would replace the manual process. This savings cannot be estimated at this time.

**Endnotes**

1. Department of Finance, “Budget Documents, Control Section 4.10,” (Sacramento, California, November 3, 2003), http://www.dof.ca.gov/HTML/BUD_DOCS/Bud_link.htm (last visited June 17, 2004). The stated number could be adjusted for concessions reached through employee bargaining and adjustments for reductions in personal services contracts.
3. Department of Personnel Administration, “Layoff Manual,” p. 300.2. DPA describes seniority as the most common method of selecting employees for involuntary layoff, although other methods could be considered and approved by DPA.
5. For example, bargaining units 5, 6, and 13 only count the time served in the unit in the seniority calculation.
7. Interview with Mike Navarro, acting director of the Department of Personnel Administration, Sacramento, California (March 9, 2004).
8. The number of rounds of notification differs between General and Special Fund departments. Caltrans had three rounds of notification, for example, while some General Fund departments had only one.
9. California Gov. C. Section 19997.3(b).
10. Department of Finance, “Control Section 4.1 Total Savings Reductions and Position Reductions” (Sacramento, California, November 3, 2003), http://www.dof.ca.gov/HTML/BUD_DOCS/Bud_link.htm (last visited May 10, 2004). The savings amount is determined by multiplying the number of positions by the Department of Finance estimate of the position cost, $52,688.
Interview with Mike Navarro.

The savings amount is determined by multiplying the number of positions by DOF estimate of the position cost, $52,688.


The Legislative Analyst’s Office commented on a total of $3.5 million in personnel requests specifically for DPA to use in implementing the layoff process.

Department of Finance, “Control Section 4.1 Total Savings Reductions and Position Reductions.”

Department of Finance, “Control Section 4.1 Total Savings Reductions and Position Reductions.”


Legislative Analyst’s Office, “Analysis of the 2004–05 Budget Bill, Board of Equalization (0860).”


Repeal the Six Month Rule for Vacant Position Abolishment

Summary
The State Controller’s Office is required to eliminate state positions after they have been vacant for six months on the premise that these positions are no longer needed. As a result, many departments perform personnel transactions that circumvent the requirement to eliminate the unfilled positions. Since there are many reasons why unfilled positions should be held beyond the six month period, the requirement to abolish the positions should be eliminated.

Background
Government Code Section 12439 mandates that the State Controller’s Office abolish positions that have been vacant for six consecutive months. Prior to July 2000, the period was nine months, but when the Legislature discovered that the number of vacancies was continuing to increase, the law was changed to six months.1

There are two personnel transactions used to alter state positions; the “120” changes or redirects a position, and the “607” creates a new position.2 These transactions can be and are used to circumvent the requirement to abolish positions which have been vacant for six months.3

In March 2002, the Bureau of State Audits published a report called Vacant Positions: Departments Have Circumvented the Abolishment of Vacant Positions, and the State Needs to Continue Its Efforts to Control Vacancies. The Bureau reported that in the year following the change in law, departments performed 53 percent more “120” transactions.4 Further, according to the Auditor, departments analyzed performed on average 22 percent of the “607” transactions to preserve positions.5 The Bureau acknowledged that this suggests that departments increased their efforts to retain vacant positions due to the change in law.6

In Fiscal Year 2002–2003 there were 69,590 “120” transactions and 52,014 “607” transactions performed.7 The Auditor estimated that from the five select departments analyzed, 89 percent of the “120” and 22 percent of the 607 transactions are performed to avoid the abolition of vacant positions.8

Departments cite many reasons for holding positions vacant, including the lengthy examination and hiring process. Sometimes multiple rounds of recruitment are required to find the right candidate. For instance, departments that perform health services and/or 24-hour services, have a difficult time recruiting.9 The Department of Finance (DOF) conducted its own study regarding vacant positions, and surmised that departments may use excess
salary savings for compensating employees with excess leave balances or personal leave at retirement, and for unfunded employee compensation increases.\textsuperscript{10} Salary savings is the amount of salary expense that a department saves when a position is vacant or filled at a lower salary level than the budgeted level. DOF noted other reasons for excess vacancies including the inability of departments to compete with the private sector for employees, or departments having to fill a large number of new positions with the creation of a new program.\textsuperscript{11}

Additionally, departments need the salary savings to redirect to cover merit salary adjustments, recruitment and retention benefits, overtime and operating expenses.\textsuperscript{12} For the FY 2005–06 budget cycle, DOF has instructed departments to exclude increases in merit salary adjustment and operating expense and equipment increases in their budgets, yet these increases will certainly occur.\textsuperscript{13}

Positions are also held open when employees are on approved leave such as disability leave, Family Medical Leave Act leave, California Family Rights Act leave, maternity leave, extended medical leave, military leave, and educational leave. In these cases, their positions are in jeopardy, and could be lost without the use of these transactions.\textsuperscript{14} Although changes have been made in law to accommodate some of these circumstances, departments are still dependent on approval from DOF or the State Controller’s Office to reestablish lost positions.

In their report, the Bureau of State Audits issued several recommendations, including that the Department of Finance should issue a policy prohibiting the use of these personnel transactions to preserve vacant positions, and to track how dollars from vacant positions are spent.\textsuperscript{15} The report briefly addresses the underlying causes behind the use of these transactions; yet, the solutions the Bureau proposed will harm departments.

The former director of the Department of Finance, Tim Gage, noted in his response letter to the Bureau of State Audits, “You recommend that personnel transactions to preserve vacant positions be prohibited . . .the consequence would be the elimination of thousands of vacant positions that it would be in the State’s best interest to restore quickly.”\textsuperscript{16} Further, the former director responded to the Bureau of State Audits’ recommendation that DOF staff review personnel transactions to ensure that they are not executed for the purpose of preserving positions by stating “Given that there were 67,000 such transactions last year, and 44,000 the year before, such a review . . .could generate a significant workload at a time when important public services are being squeezed because of the State’s fiscal condition.”\textsuperscript{17}

**Recommendation**

The Governor should work with the Legislature to repeal Government Code Section 12439. Vacancy elimination should be controlled through policy issued by the Department of Finance, or its successor.
Managing positions through policy allows departments the flexibility that they need. It allows for rapid change if needed due to changes in legislation, changes in program needs, budget situations, or other unforeseen events. Policy should be flexible enough for departments to manage their positions however they want, so long as they live within their budgets. Additionally, policy can be tailored to specific department, or even specific position needs (e.g., hard to fill positions). For example, current law does not allow for the preservation of positions that become vacant due to leave for military or health reasons. This could be easily remedied though a change in policy.

This recommendation addresses the current need to perform unnecessary personnel transactions to maintain positions. Implementation of performance based budgeting should address underlying budget based reasons for holding positions vacant.

**Fiscal Impact**

It is estimated that about $1.4 million annually, the equivalent of 17 PYs, will become available for redirection as the result of repealing the requirement to fill positions within six months. About half of the $1.4 million is attributable to the General Fund, a third to other Funds, and the remainder to federal funds.

The estimate assumes that implementation of this recommendation will be reflected as a process savings spread throughout the state and will not result in a decrease in positions.

**Endnotes**


E-mail from the State Controller’s Office (June 8, 2004).


Require Employees to Meet Minimum Qualifications Prior to Appointment

Summary
State law and regulation allow state employees who meet certain requirements to be appointed to classifications for which they have not been tested and may not meet minimum qualifications. To ensure the state has an effective and efficient workforce, employees should be required to meet minimum qualifications before they are appointed to any civil service position.

Background
“External” employment candidates, or individuals not currently employed by the State of California, must compete in civil service examinations and meet minimum qualifications prior to appointment. “Internal” employment candidates, or individuals currently employed by the state, also must meet the minimum qualifications of a class when competing in state examinations, but may be appointed to a different class without testing or meeting the minimum qualifications of the class. These types of appointments include transfers, demotions and reinstatements.

State law defines a “transfer” as the appointment of an employee to another position in the same class but under another appointing power, or the appointment of an employee to a position in a different class that has “substantially the same” level of duties, responsibility, and salary, as determined by board rule, under the same or another appointing authority. State regulations define “substantially the same salary range or salary level” as the maximum salary rate of one class being the same or less than two steps (10 percent) higher than the maximum salary rate of another class. Essentially, a transfer may be accomplished based on salary without examination and without meeting the minimum qualifications of the class.

State law defines “demotion” as an appointment to a position in a different class with a lower salary range. State law also allows any person having permanent or probationary status to reinstate to the same or different class to which the employee could transfer or demote.

How salary increases are determined
Salary increases of most rank and file employees are established at the collective bargaining table. Increases are negotiated for individual occupational groups and by 21 different bargaining units. The process of negotiating increases has resulted in varied increases for state employees in different occupational groups. A review of salary increases negotiated in calendar year 2003 revealed six different salaries ranging from no increase to a 7.7 percent increase.
The method for determining salary increases for some employees is determined by legislation. For example, sworn members of the California Highway Patrol, who are rank and file members of Bargaining Unit 5, receive salary increases based on the “…estimated average total compensation for each corresponding rank for the Los Angeles Police Department, Los Angeles County Sheriff’s Office, San Diego Police Department, Oakland Police Department, and San Francisco Police Department…”

**Allowing appointments based on salary may not make sense**
Because of the different factors that influence salary increases, allowing employees to be appointed to classes based solely on salary may not make sense. The relationship between the salary of the class from which an employee is reassigning, and the salary of the class to which an employee seeks an appointment does not provide a sound or consistent foundation upon which to ensure well-qualified candidates are appointed.

When evaluating the private sector experience of candidates for state employment, the court of appeals has recognized the application of a uniform standard of qualifications. In another ruling, after determining that less weight was given to experience gained in the private sector than to time accrued in the California civil service, the superior court found this “two-tiered” system to be “unreasonable and arbitrary.” There are no legal restrictions, however, on the movement of state employees between classes based on salary levels as described in state regulations, regardless of whether minimum qualifications are met.

**Californians want state employees to be effective and efficient**
Numerous e-mails were received by the California Performance Review expressing concern with the lack of productivity and accountability of state workers. There were allegations that appointments of unqualified employees are made, often based on favoritism. Writers recommend setting standards of performance for state employees, testing their qualifications prior to selection, or considering employees’ education and knowledge prior to appointment. While appointments based on salary cannot solely be blamed for a lack of state worker performance, a requirement that all state employees meet minimum qualifications prior to appointment would contribute toward a better qualified workforce and could result in productivity savings. According to researchers Dr. Frank L. Schmidt and Dr. John E. Hunter, a superior employee produces workload worth 40 percent more than their given salary.

When comparing the number of appointments made by internal transfer or reinstatement (prior to the current hiring freeze) with appointments made from an eligible list as a result of an examination, the State of California made 15,756 appointments by transfer/reinstatement (35 percent) and 28,951 as a result of an examination (65 percent). This means that 15,756 employees appointed in 1999 were not required to meet the minimum qualifications of the class in which they were appointed. In 2003, 7,621 (32 percent) of appointments were made by transfer/reinstatement when compared to 16,005 appointments (68 percent) made as a result of an examination.
Prior efforts to require minimum qualifications before appointments by transfer

In February 2001, the California Association of Professional Scientists (CAPS) sponsored legislation to require individuals appointed to any state scientist class have, at a minimum, a four-year degree in a scientific discipline from an accredited university. The Association believed that this action would ensure all employees who transfer into state scientist classes have the educational background to successfully perform the full range of professional duties of the class. CAPS believed that meeting the educational requirements was necessary for each employee to successfully evaluate, analyze and make recommendations regarding politically sensitive scientific data and/or permit requests. CAPS subsequently withdrew its sponsorship of the proposal and instead reached agreement with the State Personnel Board to revise state regulations to restrict transfer of employees to most scientific classes unless minimum requirements were met.

In the past, the State Personnel Board restricted transfers and reinstatements from clerical and technical classes to the entry-level analytical class of Staff Services Analyst (SSA). State employees were required to pass an examination prior to appointment, even though transfers to the class were technically allowed based on salary. In 1992, the State Personnel Board delegated to departments the authority to waive the examination requirement for transfers into the SSA class. Some departments continue to require successful completion of an examination prior to these appointments. Prior to the current hiring freeze, nearly 70 percent of appointments to the SSA class were made by employee transfers.

Training and development assignment options

Training and development assignments are temporary assignments for the purpose of training state employees and may be made for a period of up to two years. These assignments are always voluntary, may involve the performance of duties of a class other than the employees’ appointment class, and may be made between or within departments. State regulations describe eligibility requirements and parameters for these temporary assignments and the State Personnel Board provides policy guidance to departments. For these assignments, employees are not required to meet the minimum qualifications of the training class since they remain in their current class while on the training assignment. Written training plans are developed for each participating employee with the intent that minimum qualifications will be met by the end of the training period in preparation for examination. The state should continue to allow the use of training and development assignments; however, individuals will need to meet minimum qualifications prior to being appointed to the class.

Recommendations

A. The Governor should work with the Legislature to restrict appointments in the civil service unless individuals meet the minimum qualifications of the class.
B. The State Personnel Board, or its successor, should adopt regulations that interpret and implement the new law described in A, above.

**Fiscal Impact**

A. Fiscal savings are not quantifiable though the state likely will realize increased productivity as a result of better qualified employees. Costs associated with pursuing legislative and regulatory changes will be nominal and primarily limited in staff time. Since the proposed restrictions will limit employee movement between classes, there will be minimal savings associated with staff time for processing employee transfers, reinstatements and other appointments based on salary that otherwise would have been allowed.

B. The state likely will see an increase in training and development assignments, requiring additional, but nominal, staff time to develop training plans for each assignment.

**Endnotes**

1 Gov. C. Section 18525.3.
2 California Code of Regulations, Title 2, Section 431.
3 Gov. C. Section 18525.2.
4 Gov. C. Section 19140.
5 Department of Personnel Administration, “General Salary Increases—History, 1976 through 1999” (Sacramento, California, March 2004). Note: 7.7 percent increase granted with a minus of 4.62 percent for personal leave pay (PLP).
6 Gov. C. Section 19827(a)(1).
11 There is no statewide tracking system to identify whether employees that transfer or reinstate to a different class meet the minimum qualifications of that class.
12 State Personnel Board listing entitled “Employee Appointments from 07/01/1999 thru 03/31/2004, By Occupational Group & Type of Appointments.”
14 California Code of Regulations, Title 2, Section 433.1; and State Personnel Board, “Board Meeting Minutes,” Sacramento, California, January 23, 2002.
Memorandum from the State Personnel Board to All State Agencies and Employee Organizations (March 3, 1992).

There is no statewide tracking system to distinguish which departments have implemented restrictions on transfers to the Staff Services Analyst class.

Interview with Daisy McKenzie, manager, Examination Services, State Personnel Board (April 2004).

Chapter 7
D. Procurement

California should drastically modernize its present procurement system that adds additional cost to its purchases and often does not deliver, in a timely fashion, goods and services needed to serve the people of California.

State purchases range from simple to complex, from a few dollars to millions of dollars, from low risk to high risk. However, one common thread applies to all procurements, whether they are goods, services or Information Technology (IT). They are essential to the work of state government. Without them, civil servants—janitors, engineers, educators, law enforcement, nurses and other employees—cannot serve the public needs.

It has long been recognized that the state’s procurement process is complicated, costly, time consuming and unable to ensure that quality goods and services are obtained for state programs. Each year the state uses this process to acquire billions of dollars in goods and services essential for the state to provide service to the public.

Except for minor improvements made in past decades, the need to modernize California’s procurement system has been well documented. Today, the state’s purchasing system remains fragmented, subject to delays and unable to deliver cost effective purchases. The system needlessly taxes the time of users, suppliers, and procurement professionals with laws, policies and procedures in such a patchwork fashion that they conflict in many areas. This labyrinth of codes and statutes no longer facilitates a system that ensures quality products are obtained in the most efficient and cost effective manner. Even during a weak economy with few opportunities, the cost of providing bids discourages suppliers from doing business with the state, and hampers state employees from initiating innovations and process improvements.

The following examples illustrate the need to modernize the state’s procurement system:

- Suppliers with records of poor performance remain eligible to bid;
- Non Competitive Bid (NCB) process problems interfere with programs and their ability to provide services to the state;
- IT procurement is over burdened with process approvals and the process can take more than a year to award a contract;
- Delegations are slow to increase and little training is offered to increase user competency;
• Costs of procurement (cents per dollar spent or cost or cost of purchase order) are unknown but likely are above the national average; and
• California pays millions of dollars in late payment fees due to the slow procurement payment process. The state is also unable to take advantage of prompt payment discounts offered by suppliers.

Since California’s statutes and codes have been patched together over the years, the current procurement process has become overly complicated for suppliers, costly to taxpayers, time consuming for state employees, and has delivered less than acceptable quality goods and services. Since the 1970s, the State of California has recognized the need to streamline and innovate the procurement process (California Public Contract Project 1978, 31 recommendations). Again in the 1990s, several reports highlighted the need to restructure the state procurement process and bring it up to date with current best practices (Little Hoover Commission Report 1993, 26 recommendations, and DGS “Procurement 2000’”). In all cases, only limited improvement has occurred. More recent studies exemplify the need for a major overhaul of procurement for the state agencies.

The State of California can no longer afford an archaic and expensive procurement system that does not effectively manage the state’s contracting of billions of dollars in goods and services per year. The recommendations outlined in this report will provide the state with various opportunities to reduce costs as well as improve the business climate for suppliers seeking the state’s business.

**The Modern Approach**

The intent of modernizing the state’s procurement system through a fundamental redesign is to produce major improvements in momentum, cost and value. Many other states are benefiting from these same significant advancements in both modern procurement process and the use of technology in place of complex and time-consuming practices.

The key focus areas of California Performance Review’s (CPR) modernization approach to procurement are as follows:

*Establish a central procurement unit at a level that removes core Department of General Services (DGS) resources from the role of single transaction mode to the level of strategic sourcing, and central oversight with a greater emphasis on user enablement.* The Department of General Services has not fully achieved the vision of a decentralized, knowledge-based strategic partner in procurement. Recent studies, however, evidence the need for centralization in a progressive and technology-driven purchasing environment. The National Association of State Procurement Officers (NASPO) advocates in “State Procurement: Strategic Positioning for the 21st Century,” the grand strategy of moving from a process-based to knowledge/accountability-based organization. In its 1993 report “Procurement Reengineering Project: Final Report,” the State of Texas recommends that the role of the central purchasing
organization should be of a service provider, standard setter, and procurement planning consultant. California’s efforts have focused on transactions and control. According to NASPO, “The next step is to demystify the process through simplification and delegation of the routine processes where value cannot be added. This allows the central procurement office the opportunity to function as a knowledge/management-based organization, a strategic player in the business management of the state. The professional procurement managers serve as consultants, instructors, business process designers and problem-solvers. The central office retains control of complex, high risk, high-dollar transactions where trained experts add value.” California needs to take this step.

Review and change statutes and regulations to facilitate a modern procurement system and enable the appropriate management of the state’s acquisition of goods and services. California’s procurement statutes are needlessly complicated, sometimes contradictory, and are interspersed throughout various codes. According to the 2002 Governor’s Task Force on Contracting and Procurement Review, “there are laws governing one or more aspects of contracting and procurement in nearly every one of California’s 29 Codes,” and “. . . at least 140 known exemptions from (1) the provisions of the Public Contract Code, (2) competitive bidding, (3) DGS review and approval, and (4) any possible combination of the first three.” Developed in piecemeal fashion over the years, California’s complex maze of statutes are inconsistent, conflicting, and require tremendous effort to manage. This translates into a costly and lengthy process to acquire even the simplest of goods and services as stated in the “1996 Senate Commission on Cost Control in State Government.” The failed California Acquisition Reform Act (CARA) attempted to address this, however the proposed legislation proved to be so lengthy and detailed that it could not pass the legislature. Statute changes should reorganize, simplify and streamline state statutes into a single, uniform and understandable code.

Implementation of a single statewide electronic procurement system that collects all state procurement and contracting information will facilitate a greater ability for the state to strategically source its procurement and contracts. An integrated statewide procurement system would capture transaction detail on all purchases, and automate and streamline requisitioning, receiving, and payment activities. This must be a complete system that encompasses all areas of the procurement process: sealed bids, reverse auctions, requisitions, purchase orders, contracts, supplier performance ratings, workflow management, business rules enforcement, auditing tools, and connect to the State Controller’s Financial System for prompt payment.

Utilize progressive procurement strategies to increase value like strategic sourcing, performance-based contracts. The state should develop innovative procurement vehicles that maximize the state’s buying power and facilitate life cycle procurement techniques.
Develop a shared service of procurement resources to centralized locations within each department to further facilitate the efficiency of processing and training. According to NASPO, “Purchasing should occur as close to the point of need and use as feasible. The dilemma is often in determining what is ‘feasible’. Strategic decentralization means extending the reach of feasibility—decentralizing the purchasing process, while maintaining centralized procurement authority and management.” The modernization approach depends heavily on shared services of procurement professionals and vested procurement authority in state agencies. CPR recommends vesting virtual procurement authority in state agencies, increasing the accountability to make the most appropriate purchasing decisions, increasing the technical and automation support for agencies and decreasing state-imposed bureaucracy and DGS involvement in individual procurements.

Redefine supplier relations and develop vendor-rating, vendor-certification and vendor-tracking programs. A new concept of “fairness” is the foundation for many of CPR’s recommendations regarding supplier relations.

The State of California has traditionally strived to achieve a “level playing field” for all suppliers. In pursuit of that goal the state has placed the supplier’s interest ahead of the taxpayers. This environment obligates the state to do business with entities it knows little about and encourages suppliers to maximize short-term profits rather than invest in long term business relationships. The state does not certify its vendors or effectively track their performance. In the event of problems with a vendor, agencies have no central entity to submit complaint notices to maintain or catalog complaints. While DGS has a Dispute Resolution Unit that addresses vendor problems on a case by case basis, it does not have an entity that tracks overall vendor performance. The number of complaints against a vendor remains unknown and there is no system in place that prevents awards to substandard vendors. Subsequently, DGS does not rate vendors or evaluate them for their past performance on state contracts even though it has been provided statutory authority to do so.

California should create an environment where suppliers are encouraged to participate but are also encouraged to provide the timely delivery of quality goods and services. The most effective way to accomplish this is to develop a program that evaluates and screens vendors for their product offerings and their record of past performance. CPR recommends that the state implement a program that will develop a rating system to motivate vendors to provide on-time deliveries of the best products and services. The state should develop criteria to evaluate vendors based on the quality, delivery, service, past performance, financial capability, technical competence and other non-price factors to determine their capability.

Improve programs designed to increase Small Business and Disabled Veteran Business (DVBE) participation in state contracting and procurements. In the 1980s the Legislature enacted statutory changes to enable California Certified Small Businesses the ability to have greater
participation in the state competitive bid process by allowing a 5 percent bidding preference over large businesses. In 1999, the legislature also enacted AB 1933 to establish a 3 percent goal for the participation of DVBE in state contracts. While both the bidding preference and the goal have facilitated DVBE sub-contracting and allowed small business to be competitive in the bid process, it has also created an environment in which the state has paid higher prices, received less competition, and in some cases allowed businesses to fraudulently represent themselves in order to achieve the preference or DVBE standing.

CPR recommends that legislation be adopted to eliminate any preferences or goals and develop set-a-side programs that requires all state agencies, departments, boards, and commissions to maximize the opportunity offered to them under Government Code Section 14838.5 and competitive bid contracting opportunities to certified Small Business firms and certified DVBE firms for the acquisition of goods, services, IT and construction.

Eliminate Preference Programs (Target Areas, Enterprise Zones and Military Base Recovery Area, etc.). In the 1980s and 1990s the Legislature enacted statutory changes to enable California businesses the ability to have greater participation in the state competitive bid process by allowing up to 15 percent or $100,000 in bidding preferences if their businesses were located in economically distressed areas, local military base recovery areas, or if they employed high risk employees. These programs were established as a partnership between state government and businesses to improve California’s overall economy. While the intent behind the statutes is well intentioned in improving the contracting participation of California businesses, the impact of these programs has been fiscally detrimental by driving up state contracting costs. Although the programs have created a focus on supporting the participation of California businesses, the existing benefits of the programs provide ample tax incentives and rewards that will allow them to operate and provide a business service in the state.

CPR recommends that legislation be adopted to eliminate incorporating these bidding preferences in formal bid solicitations.

Eliminate the state’s current protest processes and replace it with a more streamlined and simplified process. The state procurements system’s current dispute resolution process is complex, protracted, and not responsive to the interests of state agencies and the suppliers of goods and services. It is very disruptive to the delivery of essential state services and produces significant unwarranted costs to state agencies.

CPR recommends that legislation be adopted to reform and streamline the protest process.

Improve the state’s receiving and accounts payable process. In Fiscal Year 2002–2003 the state paid almost $5 million dollars in late payment penalties. While several of these late payment penalties were attributed to delays in the approval of the state budget, state agencies need to improve the invoice payment process by streamlining the paper payment process, reduce late
payment penalties paid to vendors, increase vendor rebates received, and improve the overall business climate. Although late budgets have been common over the years, some state agencies have not adjusted their budgeting or payment processes to create sufficient funding sources to pay contractors during the critical time between fiscal years. Instead this burden of inefficiency has been passed on to the taxpayers.

CPR recommends the state streamline the invoicing process by incorporating a statewide e-procurement system and a statewide accounting system to process payments.

**Expand the Software Licensing Program to achieve greater saving in the acquisition of software products.** As a large purchaser of computer software products and applications the state needs to leverage its buying power to achieve the best possible costs for all state entities. CPR recommends that the state expand site licensing/strategic sourcing opportunities for software and renegotiate where possible existing software licensing programs for potential price breaks. Any software used by state, cities, counties and other government entities should where feasible be strategically sourced, and where the state can co-op with other states and or the federal government the state should review those options. In addition, the State should reduce limitations to the requirement for the purchase of state used software.

**Report Organization and Recommendations**
The recommendations that follow in this report outline specific issues, background and recommendations needed to modernize California’s procurement system.

The CPR Procurement Team recommendations will require a multi-year commitment to ensure all links in the chain are complete. Substantial time, resources and resolve will be required.
The State Must Create a New Procurement Organizational Structure to Maximize Efficiency and Minimize Costs

**Summary**
The State of California is not organized to buy goods and services in the most cost-effective way to meet its needs. The responsibilities for procurement do not place accountability and authority at the appropriate level in state departments. The California statutes primarily vest the state’s procurement authority and responsibility in the Department of General Services (DGS). The modernization of the California procurement system requires the realignment of the procurement organizational structure and the redefinition of its roles and responsibilities.

**Background**
The administration of the state’s procurement system is a complex mixture of centralized authority and control by DGS, decentralized authority and control by many state agencies, and autonomy from any oversight authority or control for other state agencies.

Statutory authority for the competitive and non-competitive procurement of goods, information technology goods, and services for state government resides with DGS. DGS has the authority to delegate its purchasing authority to state departments and, in Fiscal Year 2003–2004, approved 216 purchasing delegations. State departments have demonstrated, through their delegated authority, accountability and responsibility related to the integrity of the procurement system. Furthermore, state departments have managed this in a system that is difficult to navigate and process driven. Eskel Porter Consulting, Inc. reported, “This system of delegation is overly complex and difficult to manage for both DGS and the delegated agencies. The lack of consistency in levels, rules, and management of the various delegations causes confusion and inefficiency.”

Statutory authority for procurement of non-IT services is vested in the agencies, with DGS providing oversight and approval for individual contracts in excess of $75 thousand. Some state entities have their own statutory authority for all types of purchases; for example, the University of California System, State Universities, Public Employees Retirement System, State Lottery and Community Colleges. These entities are held fully accountable for the procurement transactions that they complete.
Accountability/compliance reviews

State departments are held accountable by the DGS Procurement Division. This review is for adherence to state procurement law, regulation, policy, procedure, and best practices. This program may also conduct random reviews of state agencies’ procurement and contracting activities more frequently than every three years as it determines may be necessary.6

No state department has had its delegated authority revoked after a compliance review was conducted and errors in their purchasing process discovered.7 Through these compliance reviews, state departments have demonstrated that they have the ability and accountability to have full authority for procurement activities reviews. Full procurement authority would allow the state departments to make appropriate and efficient purchases.

Progressive and strategically focused procurement models

The procurement of goods and services is an essential support function to the timely delivery of state services. However, routine day-to-day procurement activities should be assigned to the lowest level within a state agency where employees become responsible and accountable for results. By placing more emphasis and focus on accountability in the procurement process, the state could achieve a more effective and efficient procurement system. State departments have demonstrated, through their delegated authority, accountability and responsibility related to the integrity of the procurement system. Furthermore, state departments have managed this in a system that is bifurcated and difficult to navigate.

Progressive procurement providers use procurement models that are different from California’s. They generally de-emphasize process controls and oversight in favor of a more strategic approach with authority and accountability at the appropriate level. The Federal Government procurement organizational structure relies on a centrally led organization that provides strategic focus and policy development and vests purchasing authority at agency level.8 The State of Oregon, as part of its procurement reform has created an organization that provides strategic leadership centrally and allows agencies/department tactical procurement authority as long as they follow the rules and use the tools Oregon Procurement provides.9 The State of Texas, in a 1993 report, recommended that the role of the central purchasing organization should be as a service provider, standard setter, and procurement planning consultant.10 The National Association of State Procurement Officers (NASPO) advocates moving from a process-based system to a knowledge and accountability-based organization.11

In these progressive procurement organizations they have, in effect, a strategic level “corporate headquarters” that is staffed with professional and educated procurement professionals. This headquarters focuses on policy development, strategic planning, consultation services, and training. It also is responsible for managing the more complex, enterprise-wide procurement projects.
**Shared services**

In addition to the strategic level, there is a group of professional practitioners who perform the complex operations to meet the ongoing business needs of the organization. The core competencies of this level include tactical procurement planning, subject matter expertise, and ability to conduct technical purchasing processes to meet the organization’s needs for goods and services.

These practitioners serve the organization’s specific business needs. This model delivers economy of skill and is built around the concept of developing “centers of excellence” for the functions to be performed. These centers allow individuals to develop highly specialized skills, which can then be leveraged across an entire government. The end result is higher employee productivity, reduced error rates, increases in process speed and reduced cycle times. Management and key employees can focus on strategic activities that add more value to the state’s program delivery goals.

One way to organize support functions is as a shared service model. The consulting firm, Accenture, reports that ‘shared services’ is the place to start for organizational and process improvements. Shared service is a way to trim operating costs and reallocate the time employees spend on low-value routing functions. Accenture further reported that the typical cost reduction achieved by moving to a shared service delivery model is 25 percent. Xerox corporation’s procurement organization went from a transaction focus to strategic, using shared services, reducing staff by 20 percent over a five-year period.

In addition to Accenture’s analysis, the Citizen’s Budget also noted that the federal government has begun implementing a streamlined and consolidated shared services operation. According to this report, these shared services could be implemented by the State of California to streamline some government processes and save a substantial amount of resources.

In the event that all of the state departments are reorganized, a tactical, centralized procurement staff would be established in the new support business units for each agency. This shared services model will combine staff with specialized buying skills, eliminate duplication, streamline leveraged buying, support diverse and changing organizational models, as well as standardize business practice.

**Time for change**

California must adopt a progressive procurement organizational model that uses resources in the most effective manner and place accountability and responsibility at the appropriate level. The current structure does not make the best use of resources to meet the state needs. At the “corporate level” the emphasis is misdirected on process control and transactional analysis instead of strategic planning and the development of tools necessary to support the
procurement workforce. Across the state, resources are rarely shared resulting in duplication of effort, inability to use resources in the most effective manner, and hinders the transfer of knowledge among procurement personnel.

Agencies currently spend a considerable amount of time and effort submitting documentation necessary to obtain annual procurement authority, complying with reporting and review requirements, and providing supporting information for procurements that are being completed at DGS instead of at the tactical or operational level. The process has become more important than the product.

Additionally, organizational autonomy and accountability are bifurcated with DGS delegating authority for some procurement and the agencies having total authority for procurements in other areas. This does not promote organizational efficiencies, results in duplication of effort, and artificial “organizations within organizations” as agencies strive to cope with the fractured approach. Vesting full authority in the agencies will improve timeliness, customer satisfaction and costs.

The time is at hand to establish a statewide organizational structure that focuses on procuring goods and services at the best possible prices in the most effective manner. Strategic procurement planning, shared services and operational efficiencies are the keys to success.

Recommendations

A. The Governor should work with the Legislature to develop legislation that would statutorily vest full procurement authority in agencies under the guidance and leadership of DGS, or its successor.

As interim measure, the Governor should direct DGS to delegate full procurement authority to those state agencies that currently lack full authority for all types of acquisitions under the general control and leadership of DGS or successor entity. This full delegation would be effective as each agency is re-organized and adopts the shared services model for procurement.

B. The Governor should direct DGS to work with all state agencies to create a statewide procurement organizational structure. This new structure should have the following levels:

Tier 1 — Strategic Level: A new procurement unit should be created to work at this level in the Department of General Services or its successor entity with staff that has procurement education and experience. This new procurement unit will provide professional services matching customer needs with leadership, knowledge, and expertise. They will be center-led, strategic, customer centric and will create the lines of business, leverage buying and the tools to be utilized at the Tier 2 and Tier 3 level.
Examples of core competencies functions include: consultants to agency/departments, innovators, performance based contracting, vendor management, strategic sourcing, Small Business/Disabled Veteran Business Enterprise Programs, policy and procedures, training, CAL-Card (Visa card) program, legal counsel for procurement.

Tier 2 — Tactical Level: This tier consists of procurement staff from the reorganized department procurement organizations consolidated into a shared services model to meet the business of each agency.

Examples of core competencies functions include: tactical procurement planning, subject matter experts, conducting reverse auctions, preparing request for proposals and invitation for bids, awarding contracts, and collaborating with departments to meet their tactical needs.
Tier 3 — Operational Level: This tier consists of staff that is engaged full time or part time in procurement activities at the operational level. They are embedded in various programs and need basic procurement skills to meet their day-to-day requirements.

Examples of core competencies functions include: transactional processing, placement of orders from established contracts, conducting routine day-to-day procurement, and use of CAL-Card for simplified purchases.

C. The Governor should direct agency secretaries to ensure all procurements that occur within their departments are validated by regular audits. The audit would regularly review the state department’s purchasing activities. This audit will ensure that the state departments remain accountable while operating at the highest levels of efficiency and effectiveness. Complete procurement authority ensures agencies can take action and meet specific reporting and performance targets.

Fiscal Impact
According to U.S. Bank, there are currently 15,000 Cal-Cards issued to California state employees involved with procurement. These could be considered Tier 3 procurement employees. The DGS has identified, through the state agencies’ Procurement and Contracting Officers and several focus groups, about 4,000 individuals involved in the higher-level procurement and contract process. This number does not include employees of state agencies that have their own statutory authority (e.g., Lottery, Public Employees Retirement System).

However, not all 4,000 individuals are involved in the procurement and contract process to the extent that they would be affected by shared services. Based on responses from the state agencies (about a 49 percent response rate), about 1,330 personnel years (PYs) would be consolidated in the plan at the Tier 1 and Tier 2 levels, and so would be directly affected. Based on information obtained from state agencies, about 18 percent would be at the Tier 1 level and 82 percent at the Tier 2 level.

The implementation cost of these recommendations would be absorbed in the reorganization.
### General Fund
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings (dollars in thousands)</th>
<th>Costs (dollars in thousands)</th>
<th>Net Savings (Costs) (dollars in thousands)</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
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<td>0</td>
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<td>2005–06</td>
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<tr>
<td>2008–09</td>
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<td>$12,462</td>
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Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Other Funds
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings (dollars in thousands)</th>
<th>Costs (dollars in thousands)</th>
<th>Net Savings (Costs) (dollars in thousands)</th>
<th>Change in PYs</th>
</tr>
</thead>
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<tr>
<td>2004–05</td>
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<td>2008–09</td>
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</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Endnotes
Interview with Department of General Services, Procurement Division management and selected staff, Sacramento, California (April 20, 2004).

U.S. Code Title 41, Public Contracts, Section 7, Office of Federal Procurement Standards, Section 414 Executive Agency Responsibilities.

Oregon Department of Human Services.


Accenture, “Focus on Value: The Case for Shared Services in the Public Sector.”

Xerox, Non-production Purchasing, powerpoint presentation, April 2004, pg. 4 and 14.

Reason Public Policy Institute and the Performance Institute, “Citizen’s Budget” (April 30, 2003), pp. 44–45.
The State Needs to Professionalize its State Procurement Workforce

**Summary**
Generally, the skills associated with California’s procurement workforce are inadequate to meet the needs of a modernized procurement system. The modernization of the California procurement system will require professional procurement service providers skilled in the areas of, price and market analysis, negotiation, strategic sourcing, finance, acquisition planning, performance based contracting and contract administration. To develop such a workforce, the state will need to create new civil service classifications and develop and implement new training and skills development curricula.

**Background**
Many organizations tend to have neither the internal expertise nor the physical capability to effectively source and manage the supply base for the goods and services that will be purchased through the state’s procurement system. Aberdeen Group Incorporated, an international business advisor, believes a new approach is necessary in order to deliver and deploy procurement automation. This new approach must marry automated procurement solutions, reverse auctions and other technologies with a comprehensive range of procurement services, such as a deep level of product sourcing, supply based management expertise and capability. However, the state lacks a comprehensive professional procurement series with well-defined skill requirements for rank and file employees and supervisors to adequately meet the needs of modernized procurement system.

Procurement activities take place at the Department of General Services (DGS) and in state agencies under statutory authority and, in some cases, through delegations. Each location may conduct procurements in three distinct categories: goods, services, and non-information technology goods and services. There are over 20 civil service classifications used for procurement that have non-aligned skill levels and responsibilities.

For example, DGS uses the Electronic Data Processing Acquisition Specialist series for staff that procures information technology (IT) goods and services. In the 1990’s, DGS began transitioning from a transaction-based, central purchaser to a decentralized mode, and changed from using “buyer” classifications because those classifications no longer described
the nature of the work and did not attract candidates with the needed skills. DGS now uses generalist administrative classifications such as Associate Materials Analyst, Associate Governmental Program Analyst and Staff Services Analyst classifications for positions that perform procurement in the non-IT goods and services area.²

In September 2002, DGS submitted two classification proposal requests to the Department of Personnel Administration. One proposal primarily addressed the supervision and entry level classifications used in IT procurement. This class series has no defined entry level classification and provides no technical training avenue for incumbents new to the IT acquisition field.³ The other proposal outlined the need for a class series for non-IT goods. None of the generalist administrative classifications currently in use at DGS for non-IT goods and services were established to specifically perform acquisition functions. General administrative classifications lack skill requirements specific to procurement. The lack of an adequate acquisitions classification series has hindered DGS’s ability to appropriately allocate, test and fill positions required to perform acquisition duties. This also minimized the department’s hiring of well-qualified staff, limited its ability to provide cross-training, and upward mobility opportunities.⁴

**Upping the ante for the procurement professional**

Governor Schwarzenegger stated in his first State of the State address, “We have a state purchasing program that is archaic and expensive. I say modernize it.”⁵ The elements of a modernized procurement system, which varies greatly from the current system, include:

- Changes to the Public Contract Code that would uniformly address goods, services, and IT goods and services;
- Procurement authority that rests with the agencies;
- A process and control oriented central authority that performs the role of strategic partner and procurement planning consultant;
- Shared services procurement units at the agency level that combine staff with specialized acquisition skills, while supporting diverse and changing organizational models, as well as standardized a business practice; and
- Tiered levels of responsibilities for strategic, tactical, and transactional procurement.

Procurement authority vested in the agencies would require trained, certified procurement professionals. Aberdeen Group, Inc. identified the characteristics of the new procurement professional in the 21st century and commonly refers to this profession as procurement services professional. The characteristics of a service provider include:

- Flexible, “best-of-breed” technology. The procurement service providers must identify the optimal mix of e-Procurement, auction, content management and other procurement opportunities it can deploy in order to support the procurement activities of its clients.
• Procurement Services. Procurement staff must demonstrate significant expertise in a wide range of product categories and be able to support a comprehensive range of procurement activities, including spot buys, sourcing and purchase aggregation.

• Supply Based Management Services. Procurement staff becomes the supply based manager for its clients, developing partnerships, and overseeing an optimal network of supplies in specific product categories. They must be proficient in evaluating and managing the performance of its supply partners.6

Procurement professionals need to step into the marketplace and must be able to compete on equal footing. The state must be able to alert the private sector to its market needs and must be able to conduct market analysis. It must welcome vendor participation in preparing specifications and defining statements of work. These new skills require training, and in some cases require new authorities.7

**Procurement professional accountability**

There are federal government models that California can adopt for contracting expertise. Adapting such models to California’s needs, however, will require state staff to acquire new skills. For instance, in the federal government, procurement authority is vested with agency secretaries, and several use a warrant system to vest procurement authority to specific individuals throughout the department.8 The Department of the Interior’s Contracting Officers Warrant System is one example, and according to its manual, contracting authority may be delegated to individuals who meet the specific standards delineated in the manual. The highest level, which may have an unlimited purchasing authority, has specific training requirements, experience, and continuing education requirements.9

**Investing in the procurement professional**

California’s state budget and economy are more on the scale of a country rather than a state. Looking to the federal government, one finds models that can be appropriately and manageably downsized for California rather than adopting procurement practices of other states, which may not fit California’s need. According to a General Accounting Office report, “The Congress and others have been addressing the question of how to strengthen the acquisition workforce since 1974 . . .” The federal government recognizes the need for training and continuing education in its acquisition workforce. It funds two separate procurement learning institutions, the Federal Acquisition Institution for the civilian agencies and the Defense Acquisition University (DAU) for the defense agencies.10

The DAU’s course offerings include a full spectrum from “Contracting 101” (acquisition planning, contract formation, and contract administration) to courses on specification selection, market research, architect-engineer contracting, construction contracting, software cost estimating and cost risk analysis. The Department of Defense required training classes for the entry-level contracting officials include Contracting 101 and Principles of Contract Pricing.
This is in addition to one year of contracting experience, a baccalaureate degree, and at least 24 semester hours among certain business courses for the entry level. Requirements that meet the needs of California’s acquisition workforce can be drawn from the federal model.

The state faces a complex marketplace and obtaining high quality goods and services in the most cost effective manner are not always easily accomplished. There are significant hurdles to overcome and a variety of skills must be brought to bear to ensure that the citizens are well served. This is not just “administrative work,” but requires trained and well educated professionals to meet the challenge. It requires ongoing investment in continuous improvements and learning to meet today’s ever changing business climate. Current civil service classifications are inadequate, inconsistent and too divergent to meet the procurement and contracting needs. Additionally, accountability and responsibility should be vested in the lowest possible level to promote the efficiencies needed to make the system work well. This can be accomplished if you have a workforce that is well trained, experienced and up to the challenge. The federal government and many other states have recognized this important concept, and California needs to adopt it as well.

**Recommendation**

The Department of General Services (DGS) should provide leadership to upgrade the skills of the state’s procurement workforce through the accomplishment of the following:

**Short-term:**
- Develop a legislative proposal for an Acquisition Workforce Improvement Act that includes training and continuing education and addresses other transition needs;
- Assess procurement skill levels throughout all organizational tiers;
- Develop a basic contract officer warrant system framework;
- Determine new focused training and certification needs for each organizational tier; and
- Recruit mentors from other public procurement systems, academia, nonprofits and the private sector.

**Mid-term:**
- Adapt DGS-developed basic contract officers warrant framework and apply it as necessary to best fit the agency’s needs;
- Develop and implement a procurement professional mentor program;
- Develop and implement interagency, inter-disciplinary and industry exchange programs to aid in staff development; and
- Begin delivering new focused training for each organizational tier.
Long-term:
  • Develop a professional acquisition classification series restructure proposal, to create a series of procurement job classifications. There should be a requirement for continuing education and incentives for certifications and a career path within the profession. Improving opportunities for procurement staff to advance within their profession will encourage and retain the most capable and productive professionals.

**Fiscal Impact**

Once an investment in the acquisition workforce is made, the workforce will become more proficient and skilled in progressive and modern procurement and contracting methods. By using these progressive and modern procurement techniques the state will save significant resources.

The estimated cost of implementing a training and continuing education program for the state’s 1,330 procurement staff that will be phased in over the next five years is $8.4 million. This includes $4.25 million in General Fund and $4.25 million in other funds.

This training will begin in Fiscal Year 2005–2006 and be focused on three different levels. The first tier is a strategic level requiring development of the highest level of expertise and skill in procurement and contracting. The second level is tactical and made up of practitioners who require training and continuing education in progressive procurement and contracting practices. The next level of procurement is transactional in nature. The staff conducting these procurements needs to be trained on new laws and regulations.

The estimated costs of implementing the other proposed recommendations are minimal and will be absorbed within current allocations.

**General Fund**

(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
</tr>
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<tbody>
<tr>
<td>2004–05</td>
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<td>2006–07</td>
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</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.
Other Funds
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
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<tr>
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<td>$0</td>
<td>$414</td>
<td>($414)</td>
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</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

Endnotes

2 California Department of General Services, Procurement Division, “Acquisition Specialist Classification Proposal Concept” (West Sacramento, California, 2002), pp. 2 and 4.
3 California Department of General Services, Procurement Division, “Information Technology Acquisition Specialist Classification Proposal Concept” (West Sacramento, California, 2002), p. 4.
4 California Department of General Services, Procurement Division, “Acquisition Specialist Classification Proposal Concept” pp. 2 and 13.
Eliminate a Major Source of Conflict Between the Central Procurement Agency and its Agency Clients

Summary
The Department of General Services relies on fees received from transactional activities of the procurement process to finance the state’s centralized procurement organization. This financing system helps steer the focus of attention toward procurement process transactions and diverts attention away from strategic procurement issues. More importantly, it has become an economic wedge that creates working disharmony between the central procurement agency and its customer state agencies. In order to successfully transition to the knowledge based, strategically-focused central procurement organization that attracts cooperative participation of its client state agencies, the conflict created by the financing fee structure must be resolved.

Background
Modern procurement systems have achieved great success in obtaining procurement savings by focusing attention on strategic procurement issues. To accomplish the transition, the procurement process must be first simplified, and routine procurement processes delegated away from the central procurement agency, where little value is added. This provides the central agency with the opportunity to function as a knowledge/management-based organization, as a strategic player in the business management of the state. The central procurement office retains control of complex, high risk, high-dollar procurements where professional procurement expertise can add value.

It is critical that the professional managers of the central agency work in harmony with its clients, serving as consultants, instructors, business process designers, problem solvers, and helping to resolve complex, high risk, high-dollar procurements where procurement expertise adds value.

In Fiscal Year 2002–2003 DGS collected approximately $43.7 million, largely based on transactional procurement fees.¹
Typical procurement fees include:

- Purchase order (for purchase estimates)—2.13 percent of the net value of order, maximum charge of $7,500;
- DGS Form 42 Emergency Authorizations—2.13 percent of the net value of order, maximum charge of $10,000;
- DGS Commodity Contracts—2.13 percent of the net value of order, maximum charge of $7,500;
- DGS IT goods and services developmental payment orders or contracts—$74 per hour;
- Delegation Procurements, including purchases under DGS State Price Schedules—2.13 percent of the net value of order—no limit;
- DGS Master Purchase Agreements—2.13 percent of the net value of order; and
- California Multiple Award Schedule—2.13 percent of the net value of order—no limit.2

The transactional procurement fees have been a source of fundamental conflict between DGS and most state agencies. Many state agencies interviewed by the Procurement Team questioned the financing structure by asking: “Why is DGS funded this way? Why isn’t DGS funded like everyone else? DGS should have its own budget”. 3

Several expressed belief that DGS is a fee-driven agency, and that fees sometimes are the primary focus. Several state agencies were frustrated with policies that seemed to be less related to procuring goods and services in a timely manner or at best value and more related to the ability of the central procurement agency to generate revenues. Some indicated that they could not understand why DGS cannot provide good data on the total value of state purchases, or provide data/information about the major items the state buys, when all the purchases of most client agencies are reported to the central procurement agency via Standard State Form 65. Many of the state agencies felt that while the data was available to the central agency, the data was being used primarily to assess fees on an agency’s procurements.

A survey of ten state departments was conducted to gain a further understanding of the procurement process and the interactions of these departments and DGS. Every department expressed concerns regarding the value of procurement services relative to the fees being charged for such services. All believed that the fee-based cost recovery structure is not equitable—that the direct cost of a service such as a contract review— is inflated to include DGS overhead activity which pertains to, and should rightfully be allocated to, all state government. Consequently, those departments that are heavy users of procurement services (which are transaction fee-based) believe they are unfairly subsidizing those departments that do not use such level of service. In addition, almost all surveyed indicated a belief that some procurement activity was undertaken by DGS to maximize its revenue, based on this fee-driven structure (i.e., contracts by individual item as opposed to contracting for multiple items within the same contract).4
While it is easy to understand why state agencies are so sensitive to the transactional fee structure, it is also a source of concern for the staff at DGS. In an interview with a DGS representative, the representative expressed concern that collection of fees was being undermined by the actions some agencies were taking to “get around” the amount of fees they were obligated to pay. The DGS employee complained that some agencies were combining a number of monthly purchase orders that they formerly filed into one quarterly purchase order. Since the DGS fee is paid up to a maximum of $7,500 per purchaser order, the agencies that employ such practices will reduce the fees that must be paid to DGS.

California Performance Review interviewed the top procurement officials with Hewlett-Packard Company and Xerox Corporation to gain insight into their successful deployment of modern procurement strategies. Both firms indicated that they approach procurement very strategically. They shifted their focus away from a single procurement activity such as purchasing toward a much broader management role embracing the entire procurement process from initial identification of need through contract. They organized their most senior procurement officials at the corporate level where they focus on high-value, high-touch, and big risk procurement items. They simplified and delegated procurement authority to middle management for those items that held little promise that the senior level could add much value. Finally, they delegated day-to-day purchases that are characteristically low-touch, routine, repetitive, low-risk, and relatively low-value as close to the point-of-need and use as possible.

In addition, interviews with the officials from North Carolina, Oregon, and Virginia—states that are rapidly modernizing their procurement programs—resulted in similar conclusions. While both businesses and state organizations were in support, the state programs placed greater importance upon a proactive relationship between the central procurement staff and the client agencies as a key factor for success. This also reflected a policy position that the National Association of State Procurement Officials (NASPO) took in a 1999 whitepaper on state procurement:

“The supply chain management mission becomes one of knowledge and decision disbursement as opposed to just the laborious and sometimes technically complex formulations of contracts for goods and services. When contracts are created, central procurement should play less of a gate keeper role and become more of a facilitator of relationships between client agencies and suppliers through cross-functional work teams. Central procurement staff must understand the big pictures of the agencies they serve and perform strategically to drive results that achieve client agencies’ missions. End users and agency procurement specialists must have equal status with central procurement on the cross-functional team that develop the best acquisition strategy to get the end users what they need.”
In order to achieve the degree of proactive relationships between the central procurement agency and their customers, the client state agencies, it is necessary and appropriate to eliminate a fundamental and major source of conflict between the central procurement agency and its client agencies. The current fee structure based on transactional procurement processes must be replaced with a more appropriate funding mechanism. Rather than subjecting the central procurement agency and their client agencies to the constant conflict over the fee issue, the new funding mechanism must serve the interests of all parties. Funding the central procurement agency on a pro rata basis is in the interests of all parties and will facilitate the central agency and its client agencies, to work more proactively as a team toward common interests and objectives. Additionally, pro rata funding will provide some economic incentive to those state agencies that have separate procurement authority to be more interactive with the state’s central procurement agency.

**Recommendation**
The Department of General Services, or its successor, should develop a cost allocation model that will equitably recover the costs of the central procurement organization via pro rata funding by state agencies. DGS, or its successor, shall use the model to determine the pro rata fees that will only finance the necessary costs of the state’s central procurement agency.

**Fiscal Impact**
This recommendation would be cost neutral. General Fund monies would be redirected to the DGS, or its successor agency, from departments currently paying fees for procurement activities. Special fund and federal fund costs would be recovered through an annual pro rata assessment, similar to the process currently used for the Department of Finance and the State Controller’s Office. There would be some minor one-time costs to redirect General Fund monies to DGS and to incorporate DGS into the state’s existing pro rata assessment processes. There would be ongoing savings, however, from no longer having to collect fees for procurement activities.

**Endnotes**
2. As reported in a completed survey by a state agency.
3. Ten state agencies were either interviewed or submitted completed surveys during the month of April and early May 2004. The state agencies included Department of Transportation, Department of Water Resources, Department of Justice, Department of Corrections, State Controller’s Office, Department of Motor Vehicles, Department of Food and Agriculture, Department of Health, CalPERS, and Department of Forestry.
4. Ten state agencies were either interviewed or submitted completed surveys during the month of April and early May 2004. The state agencies included Department of Transportation, Department of Water Resources, Department of...
Justice, Department of Corrections, State Controller’s Office, Department of Motor Vehicles, Department of Food and Agriculture, Department of Health, CalPERS, and Department of Forestry.

5 Interview with Chris Connors and Larry Welch, Hewlett-Packard Development Company, L.P., Sacramento, California (March 17, 2004); and interviews with Ron Speno, the national account manager, Public Sector Operations, Xerox Corporation, Sacramento, California (April 2, April 20, and May 20, 2004); and interview with Cynthia Veri, vice president, general manager, Western Education & Government Operations, Xerox Corporation, Santa Ana, California (April 2, 2004); and interview with Ken Syme, vice president, Global Non Production Procurement and Bob Greeslade, vice president, Global Purchasing, Xerox Corporation, New York, New York (April 20, 2004); and interview with Bob Castle and Pat Bischa, Procurement Office, Xerox Corporation, New York, New York (May 20, 2004).

Consolidate and Simplify Procurement Statutes and Policies

Summary
California’s procurement laws and policies are fragmented, incomplete in many areas, and overly complex in others. The codes are prescriptive and do not promote innovative business solutions. Policy documentation in support of the statutes and codes resides in several areas, is controlled by different organizations and often prescribes different rules for similar procurement actions. This structure is ineffective, expensive and discourages firms from doing business with the state.

Background
The statutes, regulations and written policies governing contracts and procurements by state agencies are extremely complex. While contained mostly in the Public Contract Code, statutes governing contracting and procurement also reside in other codes including the California Government Code, the Military and Veterans Code, the Civil Code, Education Code, Public Resources Code, Streets and Highway Codes, Vehicle Code, the Water Code, and Welfare and Institutions Code. In fact, there are laws governing one or more aspects of contracting and procurement in nearly every one of California’s 29 codes.

In addition, there are at least 140 known exemptions from the provisions of the Public Contract Code, competitive bidding, Department of General Services (DGS) review and approval, and any possible combination of the first three.1

Several major state entities such as the University of California and numerous agency programs are included within this group of exemptions. While some of the exemptions may be appropriate, others may no longer be necessary. Approximately 30 of the exemptions are from the requirements for competitive bidding. There may be valid reasons for the approaches used. However, if the state is to obtain the best pricing and value for the products and services it buys, these exceptions should be reviewed to ensure they still meet the need for which they were developed.

Additionally, different code sections and rules apply to the procurement of various types of items and services. This is particularly troublesome in the case of statutes regarding the procurement of goods, information technology goods and services, (including telecommunications); and non-information technology services. These three “silos” are often interrelated and would benefit greatly from a single statutory approach.
The silo approach used for purchasing goods, information technology goods and services, and non-information technology services results in the creation of several policy and process documents.

The State Administrative Manual (SAM) is the primary policy document, which is fragmented, incomplete and outdated in many procurement areas. In addition to the SAM, there’s the State Contracting Manual, which provides information on service contracts, and the Purchase Authority Manual (PAM) which provides “guidance” in the procurement of goods and information technology goods and services. PAM was recently reissued as Volume 2 of the State Contracting Manual. The two volumes, Volume I for services and Volume 2 for goods and information technology goods and services, have not been reconciled, simplified and developed into a cohesive single policy document.

Yet another state purchasing document, the draft California Acquisition Manual (CAM), which contained procurement policy and practical information applicable to many types of procurements, was recently removed from the DGS website after several years of effort to complete and publish it were unsuccessful. Additionally, each department or office which obtains procurement authority from DGS is required to maintain its own set of procurement policies and procedures.

Because of this silo approach to different procurement areas mandated by existing codes, the effort to maintain policy is often done in triplicate and is found in several different places. The following table provides examples of the differences between just a few of the state’s various statutes and codes used in these three silos.
### Exhibit 1. Examples of Disparate Procurement Approaches

<table>
<thead>
<tr>
<th>Issue</th>
<th>Goods</th>
<th>IT Goods &amp; Services</th>
<th>Non-IT services</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract Amendments</td>
<td>Generally not permitted for any dollar amount without a Non Competitive Bid Justification. Statutes silent in this area</td>
<td>Generally not permitted for any dollar amount without a Non Competitive Bid Justification. Statutes silent in this area</td>
<td>May be amended once for no more than one year PCC 10335(d)(1) and no more than 30% of the original contract dollar not to exceed $250,000 SCM – 3.09A113</td>
<td>This is extremely restrictive for goods, and IT goods and services contracts. No cost time extensions or amendments for any dollar amount must go through a review and approval process that is often protracted and of questionable value, particularly for small dollar value amendments.</td>
</tr>
<tr>
<td>Non-Competitively Bid Contracts</td>
<td>Allowed if a particular vendor is the only source or as an emergency. Public Contract Code (PCC) 10301 and 10302</td>
<td>Allowed if the goods or services are the only ones which can meet the state’s need or as an emergency. Public Contract Code (PCC) 12102 (a) (1) and 12102 (a) (2)</td>
<td>Several exceptions identified including only known source, emergency, or in the states best interest. Public Contract Code (PCC) 10340 and 10348</td>
<td>Different codes used for various categories. Again, more flexibility in the area of non-IT service contracting where the department may determine conditions appropriate for awarding without competition.</td>
</tr>
<tr>
<td>Value Effective Bid Contracts</td>
<td>Not Authorized Public Contract Code (PCC) 12100, 12100.7, and 12102</td>
<td>Public Contract Code (PCC) 12100, 12100.7, and 12102</td>
<td>Public Contract Code (PCC) 12120 and 12121</td>
<td>There are many circumstances where value effective evaluation processes should be used in goods procurements and could lead to substantial savings for the state.</td>
</tr>
</tbody>
</table>
Another example of the problems with the current approach to development of procurement policy is the use of the information technology statutes to procure relatively minor IT goods such as keyboards, or a computer mouse, which should more properly be purchased using much simpler approaches. Many suppliers refuse to sell these and similar low dollar value IT goods to the state because they must comply with the extensive IT terms and conditions prescribed by the statutes. The IT procurement statutes were developed because of the determination at that time that all “IT procurements” were by nature complex and multifaceted, and that is still true for the major statewide systems that the state procures today. However, that is no longer true for many of the commercial hardware, software and peripheral items that are routinely procured in today’s environment. Another example of the state’s overzealous attempts to put various types of procurements in their respective boxes involves classifying photocopiers with a capability to be networked as “IT purchases” while classifying stand alone photocopiers as a good, triggering a different set of rules for each of the procurements.

Another example of the outdated, prescriptive codes is found in the purchase of goods. Existing codes specify that goods will be purchased on a low-bid basis. Other states and the federal government have abandoned this archaic approach to buying goods in favor of a best value or value effective approach. Today, California’s procurement codes require the same low bid approach to buying a pencil as buying a $500,000 highway paint striping vehicle, or a $400,000 snow blower. No consideration is given for operating and maintenance costs, warranties, and similar sound business principles. The codes related to the purchase of IT goods and services and non IT services recognize the importance of a value effective approach when appropriate. This ability to buy smarter to meet business needs should apply across the board to all the procurements that the state accomplishes.

There is also no permanent governance structure in place to maintain and update codes, regulations and policy. What policy is disseminated is generally accomplished with Management Memorandums that “put a bandage” on a particular issue or set of issues without making the corresponding changes in the SAM or addressing the overall need for fundamental change in the regulations and codes. Since there is no formal process for reviewing the development of policy, changes are sometimes made without adequate input from all affected stakeholders.

At the operating level, the silos are often still evident. Because of the complexity of the statutes and the different rules that apply to the three basic procurement areas, procurement personnel tend to specialize in one area or another instead of becoming truly rounded procurement professionals who could be used in a more effective and efficient manner in all procurement situations.
California studies and reports
Numerous studies have pointed out the inherent ineffectiveness of the state’s existing statutory, regulatory, and policy environment, the need for change, and the likely benefits that would occur from such an action:

- As early as July 1978, the California Public Contract Project recommended re-coding and reorganizing the existing contracting codes into a single act, establishing uniform contracting policies and establishing an independent commission to periodically review the procurement process;2

- In March 1993, the Little Hoover Commission’s Report, California’s $4 Billion Bottom Line: Getting Best Value Out of the Procurement Process noted that previous efforts to improve the complex web of statutes, regulations, and administrative procedures that govern procurement were not achieved and “the Governor and the Legislature should enact comprehensive legislation to reorganize, simplify and streamline statutes related to procurement”;3

- In 1994, Executive Order W-73-94 was issued directing the Department of General Services to undertake a comprehensive procurement reform initiative. The Executive Order directed that the process be effective and user friendly while maintaining public trust and ensuring that each tax dollar used to purchase goods and services was well spent.4 A key part of the procurement reform initiative was the introduction of two legislative bills to create the California Acquisition Reform Act (CARA). One of the primary goals of CARA was to move to a single integrated procurement statute where the codes and regulations were consolidated, simplified and clarified.5 The legislation was not adopted, but the framework for this approach has been established;

- Similarly, in the April 1996 Senate Advisory Commission Report on Cost Control, State Procurement Practices, the Commission noted that “procurement officials are dealing with an extensive and complex set of laws and codes which drive away many qualified vendors and add to procurement costs. Common sense is litigated away and compliance becomes the main focus. The ponderous and often conflicting body of legislation and administrative codes must be significantly streamlined to restore common sense . . .”;6

- A more recent study in August of 2002, the Governor’s Task Force Report on Contracting and Procurement, noted that statutes governing contracting and procurement reside in many codes. “For the most part these statutes are separate and distinct from each other, and different rules apply.” The report recommended the “DGS shall develop a uniform set of policies, procedures, and processes for contracting and procurement activities. As part of this effort, DGS should undertake an initiative to align the laws governing contracting and procurement of goods, services and IT . . .” and;7

- Finally, a very recent private sector study in August of 2003, The CORE Project, Review and Analysis of Uniform Purchasing Practices, concentrated on the lack of uniform state procurement policies, noting that “The lack of a centralized uniform purchasing policy and the associated governance, organizational, and process structure is at the root of the problem that ails the state’s purchasing system.”8
Federal government and other states
The federal government and several states have undertaken efforts to streamline their procurement statutes. The Federal Acquisition Streamlining Act (FASA) of 1994 simplified and streamlined the federal procurement process. The intent was to reduce costs. The key provisions of the law include the following:

• Transforming the acquisition process to electronic commerce including the implementation of a Government-wide Federal Acquisition Computer Network (FACNET);
• Promoting the acquisition of commercial products;
• Enhancing the use of simplified procedures for small purchases (those under $100,000);
• Streamlining acquisition procedures;
• Establishing uniformity in the procurement system; and
• Improving protest and oversight processes.9

This Federal Acquisition Streamlining Act was followed shortly thereafter by the Federal Acquisition Reform Act (FARA) of 1995 which included provisions for increasing the authority of selected contracting officials to approve higher dollar value contracts; provided that certain procurement statutes would be inapplicable to the purchase of commercial off the shelf items, thereby greatly simplifying the procurement process; and directed the elimination of all contractor certification requirements not specifically imposed by law.10

Other states have also been pursuing initiatives to improve and simplify the way they procure goods and services. The Texas Performance Review, as part of a procurement reengineering project, clearly identified the need to consolidate and streamline the procurement statutes as an integral part of the overall reengineering effort. The Texas consolidation involved 11 statutes and constitutional provisions, parts of which needed to be included in the single statute.11 The State of Virginia recognized the need to modernize its procurement process that was governed by rules established nearly twenty years ago. Surveys of other states that are members of the National Association of State Purchasing Officials indicate that many, including Oklahoma, Tennessee, Arkansas, New York, and Washington, have, or are moving towards, a single statute providing the rules for conducting statewide procurements.12

Another effort to standardize state procurement statutes throughout the United States is well underway. The American Bar Association’s (ABA) Sections of Public Contract Law and State and Local Government Law jointly developed the 2000 ABA Model Procurement Code. This update of the code originally developed in 1979 has been adopted in full by 16 states and in part by several more. It sets forth basic procurement principles in clear, concise language, establishes common definitions and concepts and “provides badly needed flexibility to senior procurement officials to flexibly adapt procurement procedures to unusual circumstances with appropriate safeguards and reporting requirements . . .”13
Time to move forward
California should enhance its competitive position in the marketplace. To accomplish this, California should take a fresh look at how it does business including the laws that govern how it satisfies its own needs for a variety of products and services. Many of the other procurement reform recommendations, if accepted, will require legislative change. Therefore, it is an appropriate time to take a look at not only these individual issues, but at the overriding problem of outdated procurement and contracting statutes and policies and create a modern, uniform approach that truly reflects the realities of the current business environment and will deliver supplies and services in a cost-effective, timely manner to the taxpayers of the state.

Recommendations
A. The Governor should direct the Department of General Services, or its successor, to conduct an analysis of the current statutory review and approval, and competitive bid exemptions authorized in various state codes, and validate the need for continuing the exemption. Legislation should be proposed to remove any exemptions if it is determined that the state could reduce costs by doing competitive bids in accordance with the Public Contract Code requirements.

B. The Governor should work with the Legislature to amend the Public Contract Code, the Government Code, and any other California Codes necessary to simplify and streamline state procurement and contracting statutes into a single, uniform, understandable act, eliminating artificially compartmentalized goods, information technology and service procurement regulations. The act should define “small purchase” and provide for an expedient and efficient process to accomplish these types of actions and mandate the use of credit cards for payment. The act should also incorporate the other procurement and contracting legislative changes recommended by the California Performance Review to create a comprehensive, cohesive modern system that will attract companies to do business with the state and promote efficiencies and economies in the procurement process.

C. The Governor should direct the Department of General Services, or its successor, to update the pertinent parts of the California Code of Regulations, as necessary, to reflect the changes to the codes as a result of the new act.

D. The Governor should issue an Executive Order immediately establishing a governance structure to manage, maintain, update and communicate statewide procurement policies. In order to ensure that all stakeholders are adequately represented, the structure should include a senior level advisory committee composed of Executive, Legislative, and private sector representatives.
Fiscal Impact

Legislative change is the cornerstone for developing many of the recommendations made by the Acquisition and Procurement Team. However, it is difficult to quantify the actual cost savings that will accrue as a result of this initiative. At a minimum, significant administrative savings will stem from agencies’ and the business communities’ ability to do “one stop shopping” to determine the rules and policies that govern a particular purchase. This reform will result in efficiencies not possible under the current fragmented system.

Examples of likely areas that will yield savings include:

- Elimination of unnecessary exceptions from bidding requirements will increase competition and lower state costs;
- Elimination of duplicate policy and procedures documents will reduce administrative and overhead costs;
- Standardization of solicitation documents, forms and terms and conditions will provide process savings for both the state and business communities;
- Development of a simplified, streamlined “small purchase process” for goods and services will significantly reduce costs by eliminating excessive paper documentation to place an order, providing for faster payment to vendors by using credit cards and result in a corresponding reduction in invoicing costs;
- Enhanced ability to meet customers’ needs at reduced costs through value effective procurements;
- Reduced overhead and bid submittal costs for vendors;
- Increased ability to monitor and amend contracts to meet ever changing business needs with reduced processing costs for routine changes; and
- Increased vendor participation will promote competition and lower costs to the state.

Endnotes

1 Governor’s Task Force Report on Contracting and Procurement, August, 2002.
2 Department of General Services, the California Public Contract Project, July 1978.
6 Senate Advisory Commission on Cost Control in State Government, April 1996.
7 Governor’s Task Force Report on Contracting and Procurement, August 2002.
12 CPR Survey questionnaire released to members of the National Association of State Procurement Officials, March 17, 2004.
Streamline and Reform the Vendor Protest Process Used in the Procurement of Goods and Services

Summary
In an effort to reduce the number of frivolous protests filed by the losing bidders on state contracts, and shorten the length of time it takes the state to resolve those protests, legislation was enacted that created an alternative pilot protest process. While the alternative protest process has achieved some slight success, the system for processing vendor protests remains cumbersome, complex, and expensive. It is in the interests of all parties involved to preserve the ability of vendors to have their concerns heard while at the same time resolving bid protests in an efficient, timely, and fair manner.

Background
California statutes have established quasi-legal rights for the vendors who participate in the state’s general procurement process. Vendors have been given access to challenge even the most minor of issues in the state’s general procurement process.

While many state agencies do not maintain statistics on the number of protests that are filed with their agencies, the Department of General Services (DGS) averaged one formal protest per week at its Dispute Resolution Unit in Fiscal Year 2002–2003. Of these, only three to four formal protests per year are found to be valid challenges to the procurement process.

The actual filing, or threat of filing a bid protest, is a generally accepted business practice in California’s procurement process. Since vendors have very little to risk and everything to gain in challenging a contract award, the potential for a protest is present in most bid solicitations.

If a business has a state contract which will soon be ending, it can stop the commencement and award of a new state contract to a winning bidder simply by filing a formal protest. The constant threat of the filing of a protest creates a procurement atmosphere in which the bidders are constantly pressuring the system to change the procurement parameters so their bid will be in a more favorable position. This practice adds to the cost of participating in the state’s procurement process, frustrates bid participants and discourages bid participation.

The process used to consider the formal protests is legal in nature. It often involves the added expenses of employing attorneys, witnesses and other formalities embodied in the state’s legal
system. The system is not designed to reach a timely resolution, but like the court system it is designed to methodically examine all the evidence in order to arrive at a judicial decision.

The current system is overly sophisticated and complex. It requires both vendors and the state to make significant commitments of personnel, time, and financial resources. It often involves lengthy procedural delays that are neither in the state or the vendors’ interest.

**Protest process is costly and encourages frivolous claims**

California’s contract bid protest system is made more bureaucratic by the establishment of different protest systems for different procurement methods. One system has been established to handle protests involving the purchase of goods, information technology products, and information technology services. Another system has been established to handle protests involving the acquisition of services (with the exception of information technology services). Both systems involve different time frames and different processes. Two of the protest systems require the Victim Compensation and Government Claims Board to make the final decision, and the other system gives DGS the final decision making authority.

In FY 2002–2003, bid protest cases involving goods, information technology goods and information technology services involved the Victim Compensation and Government Claims Board and averaged 120 days to complete. While there is no data available regarding the length of time each case takes to complete, DGS reported that a number of the protest cases took several years to resolve.

The Legislature recognized the various problems caused by the filing of frivolous protests when it enacted a temporary statute to establish a third “alternative protest process pilot” to resolve bid protest cases involving the purchase of goods, information technology products, and information technology services. The legislation called upon the Office of Administrative Hearings to resolve protests under the pilot process within 45 days.²

In enacting the alternative protest provisions, Public Contract Code Section 12130 states, “the pilot shall be considered a success if there is at least a 10-percent reduction in the number of frivolous protests filed with DGS and if the length of time for the state to resolve protests is reduced by at least 20 percent, or if there is a substantial reduction in the number of protests filed under the pilot project than under the existing protest procedures.”

In the final analysis, many of these protests were proven to be frivolous and used valuable state resources to process. In FY 2002–2003, nearly 80 percent of the 193 protests received were withdrawn or denied, and of those, 56 percent were withdrawn.³ During this same period, DGS expended 3,829 hours to process these cases.⁴ This translates into 2.5 personnel years spent on processing protest cases that, for the most part, resulted in very little substantive changes.⁵
Vital state programs delayed during protest period

The total costs for handling these unwarranted claims is relatively minor compared to the adverse impact on the operations of state programs. The unforeseen delays caused by processing a formal protest can be a key issue in preventing an agency from providing a service. This can present special problems in the replacement of major equipment or information technology hardware where specified maintenance contracts are established for the useful life of the term. If the replacement purchase is delayed, the maintenance contract would expire prior to the receipt of the replacement equipment. This can result in substantial and needless repair costs of worn and depleted equipment that no longer can perform at the required level. While none of the agencies interviewed had data available to share, all were of the strong opinion that the adverse impact of the procurement delays added significantly to the state’s cost.6

Several of the state agencies expressed the opinion that given the delays involved in handling a formal protest, it is often in the state’s interest to simply terminate action on a procurement bid process and reissue a new bid when there is a threat of a formal protest.

Other states protest processes hold promise

According to a survey of other state procurement agencies, a number of states reported receiving very few bid protests per year.7 They also reported that the bid protests they do receive take significantly less time to process compared to California. Most of the state agencies either based their protest process directly on the American Bar Association’s Model Procurement Code or operate programs that are very similar to the model. South Carolina’s procurement system and protest process is based directly on the ABA Model.8

The American Bar Association model provides for a relatively simple and straightforward administrative protest process. Disputes or procurement protests and contract controversies must be submitted in writing to an appropriate procurement officer. The procurement officer must promptly render a decision within a relatively short period—normally between seven to 10 days. The decision can be appealed to the state’s highest procurement official or, in a few cases, to a procurement review panel which must render a final decision within a week or a week-and-a-half. Any further action to protest the final decision can be taken to a court of law.

Bill Joplin, assistant director for procurement for the State of Washington, reported that Washington state law provides that written protests must be filed, and an administrative decision must be made, within ten days of receipt of a claim. Written appeals of the decisions can be filed and a final administrative decision must be rendered within ten days. Further recourse relating to a protest can only be taken through the court system. Mr. Joplin reported that the State of Washington received 16 protests during 2003.9

The State of Massachusetts reported that prior to 1996, procurement protests in that state were almost automatic. Philmore Anderson estimated that Massachusetts was experiencing a
95 percent protests-to-procurement bid ratio prior to the 1996 reform. Massachusetts recognized that even with the state’s administrative system for handling protests, legal action could still be filed in the state’s court system, as currently is the case in California. Consequently, the State of Massachusetts eliminated much of their administrative process for handling protests, providing only an administrative debriefing process to allow the protesting vendor to express their opinion. To date, no cases have been filed in court protesting the Massachusetts program.10

On November 19, 2002, the State of California issued a request for proposal to develop uniform contracting policies and procedures. The contract was awarded to Eskel Porter Consulting, Inc. through a competitive procurement. Eskel Porter began work on the project in March 2003 and issued its completed report in August 2003. The report made a number of findings and recommendations to reform the protest, dispute, and grievance process.11 To date, their recommendations to consolidate the fragmented dispute process into a uniform and more responsive system have not been implemented.

The state’s procurement system for purchasing goods and services provides for a protest process that remains complex, protracted, and not responsive to the interests of state agencies or the vendors who offer to supply the goods and services. It is disruptive to the delivery of essential state services and produces significant unwarranted costs. The well intended protest and dispute resolution process has engendered a hostile business environment and is in serious need of reform.

**Recommendations**

A. The Governor should work with the Legislature to amend the Public Contract Code to reform the procurement protest processes.

B. The Governor should work with the Legislature to create an informal process to resolve procurement appeals uniformly by the affected Agency Secretary within 10 days of filing. The Agency Secretary would have the responsibility to make the final decision. The vendor would have the option to use the court system for any further appeal, if desired.

**Fiscal Impact**

If the formal protest hearing process is eliminated, departments would not need to staff positions to do this workload. Department of General Services (DGS) has allocated 2.5 personnel years (PYs) for the protest workload.12 The Department of Transportation (DOT) has allocated 2.5 PYs to handle their protest workload.13 Assuming that all large departments are staffed like DGS and DOT, and small departments have only 1 personnel years (PY) to do this workload, a potential reduction of 75 staff positions (using the small department estimate) would result in $6 million in savings.14 The costs associated with an informal protest process should be absorbable by each department.15
### General Fund
(dollars in thousands)

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<th>Change in PYs</th>
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Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Other Funds
(dollars in thousands)

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</tr>
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Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Endnotes

1. Interview with Susan Chan, Dispute Resolution Unit, California Department of General Services, Sacramento, California, March 1–5, 2004.
2. Interview with Susan Chan.
3. E-mail from Susan Chan, Dispute Resolution Unit, California Department of General Services, to the California Performance Review, April 1, 2004; and e-mails from Patricia Whitfield, Office of Legal Services, California Department of General Services, to the California Performance Review, March 19, 2004 and April 2, 2004. The 193 in total comprised of 55 from Dispute Resolution Unit and 138 from Office of Legal Services. Of the 193 total, 109 were
withdrawn consisting of 27 from the Dispute Resolution Unit and 82 from the Office of Legal Services. The total number of protests withdrawn of 109 divided by 193 is 56 percent.

Dispute Resolution Unit reported 50 hours per case x 55 protests = 2,750 hours. The Office of Legal Services reported 17.5 hours per case x 55 protests = 962.5 and 888 hours on related issues. Memorandum from Judith Kopec of the Victim Compensation Plan Board, to the California Performance Review, June 3, 2004, reported 104 hours for this workload. Total workload is 2,750 + 962.5 + 888+ 104 = 4,704.5 hours for this workload. Assuming that each PY can work 1,944 hours this equates to 2.5 PYs.

E-mails from Susan Chan; and Patricia Whitfield.

Interviews with Steve Alston, Marcella Harrison, Megan Rettke, Tom Sanborn, Joanne Ottens, Author Lichtman of the California Department of Transportation, Sacramento, California (April 2, 2004); Bill Holtz, Joan Kirtlan, Denise Cimino, Steve Napaoli of the California Department of Justice, Sacramento, California (April 8, 2004); Cindy Shamrock, Roger Desrosiers, David Garcia, Toni Frederickson, Barbara Rowe, Duane Richard of the California Department of Forestry, Sacramento, California (April 14, 2004); Frank Renwick, Gail Tanaka, Sue Summersett of the California Department of Corrections, Sacramento, California (April 7, 2004); Dave Dawson, Sharlene Christianson of the California State Controller’s Office, Sacramento, California (April 9, 2004); Ed Stahlberg, Terri Anderson of the California Department of Health Services, Sacramento, California (April 13, 2004); and Richard Aldama, Rick Nelson, Sylvia Valverde, Charleen Maxwell of the California Public Employees Retirement System, Sacramento, California (April 16, 2004).

Survey responses from the National Association of State Procurement Official Members, to the California Performance Review, Voight Shealy of South Carolina, March 9, 2004; letter from Kenneth Ellsworth, Division of Purchase and Property, New Jersey, March 9, 2004; Don Green of New York, March 18, 2004; John Adler of Arizona, March 9, 2004; interview with Philmore Andersen of Operational Services Division, Department of Procurement and General Services, Massachusetts (March 8, 2004); Mike Kuckenmeister of Nevada (March 12, 2004); and Diane Lancaster of Oregon (March 12, 2004).


Interview with Bill Joplin, assistant director of Procurement, Washington State Office of State Procurement, Olympia, Washington (March 5, 2004).

Interview with Philmore Anderson.

California Department of General Services, “The Core Project Final Report to the California Department of General Services, Review and Analysis of Uniform Purchasing Practices,” by Eskel Porter Consulting (Sacramento, California, August 2003). “Modify the PCC to allow for the DGS to find a protest frivolous and require a bond . . . be posted for the hearing body to decide the protest.” This recommendation exists under the Alternative Protest Pilot (PCC 12125), but has not been implemented under the standard rules governing protest.

E-mail from Susan Chan.

E-mail from Steve Alston, chief of the Division of Procurement Services, California Department of Transportation, to the California Performance Review (June 7, 2004).

Assumption is that each PY costs $83,000 comprised of a statewide average salary of $75,000 and operating expense and equipment of $8,000. This assumes full year costing beginning July 1, 2006. Effective date for these recommendations would be July 1, 2006.

Assumption is that minimal staffing is required to handle informal protests.
Remove Bidding Preferences From State Contracting Programs

**Summary**
In the 1980s and 1990s, the Legislature enacted statutory changes to give California businesses the opportunity for greater participation in the state competitive bid process by allowing up to 15 percent or $100,000 in bidding preferences for businesses located in economically distressed areas, local military base recovery areas or businesses employing workers at high risk for unemployment. While the intent behind the statutes was to improve contracting participation by California businesses, the programs have driven up state contracting costs. In addition, there are state tax incentives for some of those same businesses.

**Background**
In California there are 131 state agencies that purchase and bid contracts for goods, services and information technology. It is a requirement in competitive bid documents that Enterprise Zone Act (EZA), Local Agency Military Base Recovery Area Act (LAMBRA), Target Area Contract Preference Act (TACPA) and the State Assistance for Recycling Markets Act (STAR) programs be included in the bid packages. Qualifying entities receive bidding preference of up to 15 percent over other competitors which can result in a contract that may cost as much as $100,000 more than the low bid. Most importantly, these preference programs receive multiple tax incentives from the state as an incentive for conducting business in California.

Listed below is the history of the preference programs.

**Enterprise Zone Act (EZA)**
Government Code Section 7084 established EZA that denotes when the state prepares a solicitation in excess of $100,000, except if the worksite is fixed, the state shall award: for goods, a 5 percent preference for companies that certify a minimum of 50 percent of the labor hours shall be done at worksite(s) located in an identified enterprise zone; for services, a 5 percent preference to companies that certify that not less than 90 percent of the labor hours shall be done at worksite(s) located in an identified enterprise zone. The maximum preference a bidder may be awarded is limited to 15 percent or $50,000 for the bid. The combined cost of all preference programs is limited to $100,000.

**Local Agency Military Base Recovery Area Act (LAMBRA)**
Government Code Section 7118 established under LAMBRA that dictates that when the state prepares a solicitation in excess of $100,000, except if the worksite is fixed, the state shall award: for goods, a 5 percent preference for companies that certify that a minimum of 50 percent of the labor hours shall be done at worksite(s) located in an identified local agency
military base recovery area; for services, a 5 percent preference to companies that certify that not less than 90 percent of the labor hours shall be done at worksite(s) located in an identified local agency military base recovery area.

**The Target Area Contract Preference Act (TACPA)**

Government Code Section 4531 established TACPA to encourage and facilitate job maintenance and job development in distressed and declining areas of the state by preferences to companies submitting proposals for contracts to be performed at worksites in distressed areas by persons with a high risk of unemployment when the contract is for goods or services in excess of $100,000.

**State Assistance for Recycling Markets Act (STAR)**

Public Contract Code Section 12150 established STAR Markets in 1989 and directed the Department of General Services to work with all state departments, agencies, the Legislature, the California Integrated Waste Management Board, and the Department of Conservation to draft, establish and implement policies that ensure the procurement and use of recycled resources.

Additionally, EZA and LAMBRA offer state tax incentives to business conducting their business in California.

**Enterprise zone incentives**

The Enterprise Zone Program targets economically distressed areas throughout California. Special state and local incentives encourage business investment and promote the creation of new jobs. The purpose of the Zone program is to provide tax incentives to businesses and allow private sector market forces to revive the local economy. Enterprise Zone companies are eligible for substantial tax credits and benefits including:¹

- Hiring Tax Credits—firms can earn $31,574 or more in state tax credits for each qualified employee hired;
- Sales and Use Tax Credit—zone companies may receive a sales tax and use tax credit for manufacturing or processing machinery, data processing and communications equipment and motion picture manufacturing equipment central to production and post production, to be used in the zone. Individuals can claim a credit on the first $1,000,000 of qualifying purchases, while corporations can claim credit on the first $20,000,000 per year;
- Business Expense Deduction—up-front expensing of certain depreciable property;
- Net Operating Loss Carryover—up to 100 percent of the NOL may be carried forward for 15 years;
- Net Interest Deduction—lenders to zone businesses may receive a new interest deduction;
- Unused tax credits can be applied to future tax years; and
- Enterprise Zone companies can earn preference points on state contracts.
**LAMBRA incentives**
The designations allow communities to extend California tax incentives to companies locating in a LAMBRA Zone. These credits include:

- Up to 100 percent Net Operating Loss (NOL) carry-forward;
- NOL may be carried forward 15 years;
- Firms can earn $26,894 or more in state tax credits for each qualified employee hired up to $2 million per year with a few provisions;
- Corporations can earn sales tax credits on purchases of $20 million per year of qualified machinery and machinery parts;
- Up-front expensing of certain depreciable property, up to $40,000 annually; and
- Unused tax credits can be applied to future tax years, stretching out the benefit of the initial investment.

In addition to the California tax credits, LAMBRA communities also have community incentives as a part of the business attraction package. Each community is marketing base property and existing buildings to attract expanding and new businesses. The incentives may include the use of machinery, tools or office equipment left behind by the military.

**Business gains are state’s costs**
While the existing program bidding preferences have allowed some California businesses to be competitive, they also are causing the state to pay higher prices because contracts are awarded to a qualifying business for its original bid amount, resulting in a potential increase of up to $100,000 per contract, not counting tax credits, depending on the contract amount and the number of preferences applied. The majority of contracts awarded where the preferences are claimed are for goods. Very few businesses request the preferences for services and information technology bid solicitations. The percentage of contracts awarded to businesses and the advantages afforded them through the preference programs has very little economic impact versus the valuable tax credits already received from the state.

The Department of General Services, Procurement Division’s program coordinators have to evaluate each bid solicitation for preference compliance, and after contract award must monitor and audit the businesses. In Fiscal Year 2002–2003, a total of 723 bid solicitations were evaluated. The number of contracts approved was 426, and 297 were denied. The number of contracts that were monitored for compliance, after award, totaled 40. For the current fiscal year, there are only two post-award contracts being monitored. This administrative cost involves two program coordinators.

**How preferences are calculated**
Worksite preference programs include the TACPA, LAMBRA, and EZA programs. Bidders are eligible to receive an additional 1 to 4 percent preference if they agree to hire people with a high unemployment risk to perform the contract labor hours. Bidders cannot claim a workforce preference unless they qualify for the corresponding worksite preference.
worksite preference can be claimed as a stand-alone without claiming the workforce preference. Each incentive program offers a 5 percent worksite preference, with an additional 1 to 4 percent workforce preference. When bidding on state contracts, the combined preferences cannot exceed 15 percent or $100,000, whichever is less.

The following table displays how preferences are calculated.\(^5\)

**Exhibit 1**

<table>
<thead>
<tr>
<th>Preference Type (TACPA, LAMBRA, and EZA)</th>
<th>Goods Requirement</th>
<th>Service Requirement</th>
<th>Preference Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worksite</td>
<td>At least 50% of the labor must be performed at the approved worksite(s).</td>
<td>At least 90% of the labor must be performed at the approved worksite.</td>
<td>5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Preference Type</th>
<th>Goods Requirement</th>
<th>Service Requirement</th>
<th>Preference Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce</td>
<td>Bidders may receive an additional 1–4% preference if they agree to hire persons with a high unemployment risk to perform the contract labor hours. Depending on the percentage of contract labor hours performed by the qualifying workforce, the bidder may receive an additional preference as shown below. Percentage of Contract Labor Hours</td>
<td>Preference</td>
<td></td>
</tr>
<tr>
<td>5 to 9</td>
<td>1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 to 14</td>
<td>2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 to 19</td>
<td>3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 or more</td>
<td>4%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recycle</th>
<th>Fine Printing and Writing Paper</th>
<th>Paper-based products</th>
<th>Tire-derived products</th>
<th>Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10%</td>
<td>5%</td>
<td>5%</td>
<td></td>
</tr>
</tbody>
</table>

---

1712 Issues and Recommendations
Other governmental organizations offer alternatives

The Federal Government uses set-asides in lieu of preferences. In addition to these set-asides, some businesses qualify for the federal Small Business programs under 13 Code of Federal Regulations (Historically Underutilized Businesses, Program for Investment in Micro Entrepreneurs, and 8(a) Business Programs). At least one of these programs, New Markets Venture Capital Program (NMVC), provides investment capital, guaranteed by the Small Business Administration, which also provides assistance to businesses not defined as Small Businesses under Title 13. In addition, they receive numerous tax credits under federal and state tax laws.

The State of Alaska offers a 5 percent bid preference for the Alaska Bidder Preference, Alaska Products Preferences and the Recycled Products Preference. An additional 3 percent preference applies to the Employment Program Preference, Alaskans with Disabilities Preference, Employers of People with Disabilities Preference and the Local Agricultural and Fisheries Products Preference. If more than one preference applies to a group, the bidder can total all applicable percentages in that group and deduct them as a combined total. For example, if a bidder qualifies for the 5 percent Alaska Bidder Preference and a 3 percent Products Preference, their bid would be reduced by 8 percent.

The States of Kansas, Mississippi, North Dakota, and Tennessee, do not offer bidding preferences based on geographical location within their states, but offer a domiciliary preference where a state-domiciled contractor receives a bidding preference over an out-of-state bidder.

The States of Rhode Island and Wisconsin will award a contract to a certified Minority Business Enterprise who submits a fully responsive bid that is priced within 5 percent of the lowest responsive bid.

The State of Colorado works to ensure that minority and woman-owned businesses have an equal opportunity to compete for the state’s business and to ensure that state purchasing policies and activities do not facilitate illegal discrimination. To that end, purchasing offices collect information about the goods and services they buy and the vendors from whom they buy. The state does not use preferences or set-asides to reach specific levels of minority-owned business and women-owned business participation, and it does not require businesses to be “certified” to be considered minority or woman-owned enterprises.

Recommendations

A. The Governor should work with the Legislature to amend Government Code and Public Contract Code, effective January 1, 2006, to repeal the worksite and workforce bid preferences (TACPA, LAMBRA, EZA) allowed in contracts in excess of $100,000.
B. The Governor should direct the Department of General Services or its successor to eliminate the recycle preference program.

**Fiscal Impact**

In FY 2002–2003, the last year for which data is available, a reported overall total value of $3.8 billion in contracts for goods, services, and information technology were awarded. Data collected from the Department of General Services, Procurement Division and Office of Legal Services showed that 3,571 contracts in excess of $100,000 were awarded for commodities, services and information technology totaling $3.07 billion. The number of contracts successfully claiming the bidding preferences was 426, which is 12 percent of the contracts awarded. Average cost per contract is calculated at $860,780, therefore if the maximum number of preferences were requested the preference cost would be capped at $100,000. Historically, the preferences are predominantly requested in goods bid solicitations only.

The cost of applying the Target Area Contract Preference Act, Local Agency Military Base Recovery Area Act, Enterprise Zone Act, and State Assistance for Recycling Markets Act preferences, are reflected in the table below.¹¹

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Total Contract $</th>
<th>Total Goods and I.T. $</th>
<th>Total Services and I.T. $</th>
<th>Total Goods, Services, and I.T. in excess of $100,000</th>
<th>Minimum $ Spent Applying Preferences (5%)</th>
<th>Potential Spent Applying Maximum Preference ($100K)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002–2003 actual</td>
<td>$5.6 billion</td>
<td>$1.4 billion</td>
<td>$2.4 billion</td>
<td>$3.07 billion</td>
<td>$18 million</td>
<td>$43 million</td>
</tr>
<tr>
<td>2003–2004 estimate</td>
<td>$4.9 billion</td>
<td>$1.2 billion</td>
<td>$2.1 billion</td>
<td>$2.64 billion</td>
<td>$15 million</td>
<td>$37 million</td>
</tr>
</tbody>
</table>

The cost savings realized by eliminating the bidding preferences in all applicable contracts, which includes two personnel years, would be at about $15 million.
General Fund  
(dollars in thousands)  

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>$3,799</td>
<td>0</td>
<td>$3,799</td>
<td>(.5)</td>
</tr>
<tr>
<td>2005–06</td>
<td>$7,598</td>
<td>0</td>
<td>$7,598</td>
<td>(1)</td>
</tr>
<tr>
<td>2006–07</td>
<td>$7,598</td>
<td>0</td>
<td>$7,598</td>
<td>(1)</td>
</tr>
<tr>
<td>2007–08</td>
<td>$7,598</td>
<td>0</td>
<td>$7,598</td>
<td>(1)</td>
</tr>
<tr>
<td>2008–09</td>
<td>$7,598</td>
<td>0</td>
<td>$7,598</td>
<td>(1)</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

Other Funds  
(dollars in thousands)  

<table>
<thead>
<tr>
<th>Fiscal Year</th>
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<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
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<td>$7,598</td>
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<td>(1)</td>
</tr>
<tr>
<td>2008–09</td>
<td>$7,598</td>
<td>0</td>
<td>$7,598</td>
<td>(1)</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

Endnotes

3 Interview with William Fackenthal, Procurement Division, Department of General Services, Sacramento, California (June 7, 2004).
4 Interview with Gary Rains, Preference Program coordinator, Dispute Resolution and Preference Programs, Procurement Division, Department of General Services, Sacramento, California (June 4, 2004).
5 Interview with Steven Casarez, recycle coordinator, Dispute Resolution and Preference Programs, Procurement Division, Department of General Services, Sacramento, California (March 12, 2004).
8 E-mail from Lee Ann Pope, National Association of State Procurement Officials (NASPO), to Linda Lange, customer relations liaison, Procurement Division, Department of General Services (February 2 and February 12, 2004); and e-mail from George Street, Tennessee, to Linda Lange, customer relations liaison, Procurement Division, Department of General Services (March 15, 2004).


11 Department of General Services, “Small Business and Microbusiness Statewide Statistical Annual Report 2002–2003,” Sacramento, California, March 9, 2004, p. 14; and e-mail from Kathy Havey, Contracts Unit, Procurement Division, Department of General Services, Sacramento, California, to Tracey McDaniel (March 12, 2004); and e-mail from Patricia Whitfield, Office of Legal Services, Department of General Services, Sacramento, California, to Tracey McDaniel (March 16, 2004).
Eliminate Duplicative Reports

Summary
California requires duplicative, costly reports to the Legislature on state contracts and business ownership. Historically, only 70 percent of state agencies have complied with these cumbersome legislative reporting requirements, casting doubt on the accuracy of information transmitted to the state’s decision makers. The Department of General Services, or its successor entity, should have sole responsibility for generating accurate reports to the Legislature on contracts.

Background
Contracting Reports
The Legislature has required state agencies to submit annual reports on contracting to various entities in the Legislature, so all contracting can be monitored. Through current mandates, numerous duplicate reports also are submitted to the Department of General Services (DGS). DGS is responsible for providing statewide annual reports on small business contracting, disabled veteran business enterprises contracting and consulting services contracting.

It is a time-consuming effort to submit annual reports to DGS on one particular due date, and to the various entities at the Legislature on a different due date. Other than the State Contracting and Procurement Registration System (SCPRS), there is no centralized or automated method to collect the required data, leaving room for human error.

The following code sections require duplicative contracting reports:

Public Contract Code Section 10359:
(a) Each state agency shall annually prepare a report pursuant to this section that includes a list of the consulting services contracts that it has entered into during the previous fiscal year.
(c) Copies of the annual report shall be sent within 60 working days after the end of the previous fiscal year to the Legislative Analyst, the Department of Finance, the Department of General Services, the State Auditor, the Joint Legislative Budget Committee, the Joint Legislative Audit Committee, the Senate Appropriations Committee and the Assembly Appropriations Committee.
(e) Within 120 working days after the close of the fiscal year, the department (DGS) shall furnish to the officials and committees listed in subdivision (c), a list of the departments and agencies that have not submitted the required report specified in this section.
(f) The department (DGS) shall annually submit to the Legislature, the Legislative Analyst, the Department of Finance, and the Auditor General, a report describing the information furnished to the department pursuant to this section.
Military & Veterans Code Section 999.7:
(a) (1) On January 1 of each year, each awarding department shall report to the Governor, the Legislature, the Department of General Services, and the Department of Veterans Affairs on the level of participation by disabled veteran business enterprises in contracts identified in this article for the previous fiscal year.
(b) On April 1 of each year, the Department of General Services shall prepare for the Governor, the Legislature, and the Department of Veterans Affairs a statewide statistical summary detailing each awarding department’s goal achievement and a statewide total of those goals.

Business ownership reports
The Ethnicity, Race and Gender Business Ownership report, and the Minority, Women-owned, and Disabled Veteran-owned Business Enterprise Business Ownership report are duplicate in content and were mandated by two bills that changed provisions of the Public Contract Code and Government Code. The data for these reports has proven difficult to collect, because pursuant to Proposition 209, the state cannot identify the race, ethnicity, or gender of the business owners with whom it does business. Therefore, the collection of data by the state, for these reports, is based solely on the voluntary submission of data from the business owners. This collection method does not provide accurate reports to the Legislature. A brief history of mandates for this report is as follows:

- **Assembly Bill 1084 added Section 10116 to the Public Contract Code, to read:** On January 1, of each year, each awarding department shall report to the Governor and the Legislature on the level of participation of business enterprises, by race, ethnicity, and gender of owner, in contracts as identified in this article for the fiscal year beginning July 1 and ending June 30.
- **Senate Bill 1045 added Section 11139.8 to the Government Code to read:** Commencing January 1, 2003, each state department or agency . . . shall . . . collect information and report to the Governor and the Legislature on the level of participation by minority, women, and disabled veteran-owned business enterprises. The reports shall be submitted annually, on or before July 1 of each year.
- **Public Contract Code 10115.5 reads:** On January 1 of each year, each awarding department shall report to the Governor and the Legislature on the level of participation by minority, women, and disabled veteran business enterprises in contracts as identified in this article for the fiscal year beginning July 1 and ending June 30.
### Legislative reports and due dates

The following chart reflects the various due dates for the same contracting and business ownership information, and the recipients of the reports.

<table>
<thead>
<tr>
<th>Report</th>
<th>Code</th>
<th>Send Report to</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statewide Statistical Small Business Annual Report</td>
<td>Government Code Section 14840</td>
<td>Legislative Counsel Chief Clerk of the Assembly Secretary of the Senate</td>
<td>January 1</td>
</tr>
<tr>
<td>Department DVBE Participation Annual Report</td>
<td>Military &amp; Veterans Code Section 999.7</td>
<td>Legislative Secretary Legislative Counsel Secretary of the Senate Chief Clerk of the Assembly Department of Veterans Affairs Department of General Services</td>
<td>January 1</td>
</tr>
<tr>
<td>Department Minority, Women, DVBE Business Ownership Report</td>
<td>Public Contract Code Section 10115.5</td>
<td>Legislative Secretary Legislative Counsel Secretary of the Senate Chief Clerk of the Assembly</td>
<td>January 1</td>
</tr>
<tr>
<td>Mid-year Small Business, Microbusiness, and DVBE Contracting Activity Report</td>
<td>Government Code Section 14839 and Military and Veterans Code Section 999.5</td>
<td>Department of General Services</td>
<td>March 1</td>
</tr>
<tr>
<td>Statewide Statistical DVBE Annual Report</td>
<td>Military &amp; Veterans Code Section 999.7</td>
<td>Legislative Counsel Chief Clerk of the Assembly Secretary of the Senate</td>
<td>April 1</td>
</tr>
<tr>
<td>Department Ethnicity, Race, and Gender Business Ownership Report</td>
<td>Government Code Section 11139.8, Public Contract Code Section 10116</td>
<td>Legislative Secretary Legislative Counsel Secretary of the Senate Chief Clerk of the Assembly</td>
<td>On or before July 1</td>
</tr>
<tr>
<td>Annual SB, MB, and DVBE Contracting Activity Report</td>
<td>Government Code Section 14840 and Military &amp; Veterans Code 999.7</td>
<td>General Services</td>
<td>September 7</td>
</tr>
<tr>
<td>Department Consulting Services Contracting Annual Report</td>
<td>Public Contract Code Section 10359</td>
<td>Joint Legislative Audit Committee Joint Legislative Budget Committee Senate Appropriations Committee Assembly Appropriations Committee Legislative Analyst California State Auditor Department of Finance Department of General Services</td>
<td>September 24</td>
</tr>
<tr>
<td>Statewide Statistical Consulting Services Contracting Annual Report</td>
<td>Public Contract Code Section 10359</td>
<td>Joint Legislative Audit Committee Joint Legislative Budget Committee Senate Appropriations Committee Assembly Appropriations Committee Legislative Analyst</td>
<td>December 22</td>
</tr>
</tbody>
</table>
Utilize electronic data tracking
Based on recommendations from the Governor’s Task Force on Contracting and Procurement Review, DGS published Management Memo 03-09 of the State Administrative Manual. Effective July 1, 2003, the registration of all contracts for commodities, services and construction in excess of $5,000 are to be registered in SCPRS. The SCPRS’ diverse reporting mechanism can report multiple contracting methods and specific dollar amounts or a range of dollar amounts. It can provide total state contracting activity by department, small business and disabled veteran business enterprise data by department, and consulting services contracting information by department. DGS’s CAL-Card program can retrieve reports from U.S. Bank for purchases of less than $5,000 using the state’s credit cards. By utilizing these electronic reporting methods, DGS has the ability to obtain all of the statewide contracting data and submit the statewide reports independently to the Legislature. The implementation of e-procurement and the enhancement of the SCPRS would thereby eliminate the need in the future for state agencies, departments, boards and commissions to submit their contracting data to DGS.

Other states’ reporting and data tracking methods
The state governments of Washington and Oregon can retrieve their contracting statistics through their e-procurement systems.

North Carolina can provide instantaneous procurement data on its website. The site shows the number of purchase orders issued, total purchase order value, total number of vendors utilized, total number of purchasing users and the number of purchasing entities using the e-procurement system.

In addition to the duplicative and time-consuming reports required by state agencies, the cost to provide staff to complete the reports is wasteful as well. For example, California State University at Long Beach estimates it costs $336,580 a year—roughly the equivalent of 6.6 full time employees—to comply with state law requiring annual reports on the school’s contracting efforts with small businesses, minority-owned and women-owned businesses, and businesses owned by disabled veterans.

Recommendations
A. The Governor should work with the Legislature to discontinue requiring all state agencies, departments, boards, and commissions to submit:
   1. The original detailed Consulting Services Contracting Report due 60 working days after the end of each fiscal year to the Legislative committees, Legislative Analyst, California State Auditor and the Department of Finance.
   2. The DVBE Contracting Activity Report due January 1 each year to the Legislative Secretary, Legislative Counsel, Secretary of the Senate, Chief Clerk of the Assembly and the Department of Veterans Affairs.
3. The Ethnicity, Race, and Gender Business Ownership Report due on or before July 1 each year to the Legislature.
4. The Minority, Women, and Disabled Veteran-Owned Business Enterprise Business Ownership report due January 1 each year to the Legislature.

For fiscal year 2003-2004, the sole recipient of the Consulting Services and Disabled Veteran Business Enterprise reports should be the DGS (or its successor entity), which is also responsible for submitting statewide annual reports to the Legislature for the level of contracting participation with disabled veteran business enterprises and consulting services contracting activity.

The registration system would be a stand-alone source for the legislature to request up-to-date reports directly from DGS, or its successor, throughout the fiscal year, and would be the most accurate source, because it would not have to rely on manual input by multiple analysts completing all of the individual reports; or

**B. DGS’, or its successor’s, CAL-Card program will be responsible for authorizing all agencies to use the state’s credit card to pay for all purchases less than $5,000, and would make this usage mandatory. This would track all purchases under $5,000, because any usage of the cards will show up in the statements U.S. Bank, which issues the state’s CAL-Cards.**

The combination of the CAL-Card U.S. Bank statements and the State Contracting and Procurement Registration System report would be a more accurate source for statewide reports.

**Fiscal Impact**

Statewide, there are 131 reporting agencies, departments, boards, and commissions. On average, each department’s reporting analyst spends two hours per report, ensuring that the reports are copied and distributed to comply with the statutory requirements, resulting in 2,358 working hours spent on reports compliance. Assuming the requirement that the reports be copied and sent to numerous recipients is eliminated, total cost savings of one personnel year (PY) could be realized. The estimated savings, which includes personnel service dollars for staff costs and operating expense overhead, is potentially $56 thousand per year.

If the SCPRS is implemented and all contracting reports to the Legislature will be generated and issued by the Department of General Services, a potential cost savings of 23 PYs could be realized. On average, each reporting analyst spends 38 hours per report ensuring that the reports are compliant with the statutory requirements. This results in 44,802 working hours spent on reports compliance. The estimated savings by eliminating the need for state agencies, departments, boards, and commissions to submit reports, which includes personnel
service dollars for staff costs and operating expense overhead, is potentially $1.3 million per year. Costs to implement this new process would be minimal because the system already exists.

### General Fund
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
</tr>
<tr>
<td>2005–06</td>
<td>$28</td>
<td>$0</td>
<td>$28</td>
<td>(.5)</td>
</tr>
<tr>
<td>2006–07</td>
<td>$650</td>
<td>$0</td>
<td>$650</td>
<td>(12)</td>
</tr>
<tr>
<td>2007–08</td>
<td>$650</td>
<td>$0</td>
<td>$650</td>
<td>(12)</td>
</tr>
<tr>
<td>2008–09</td>
<td>$650</td>
<td>$0</td>
<td>$650</td>
<td>(12)</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Other Funds
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
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<tbody>
<tr>
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<td>(12)</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Endnotes
1. Gov. C. Sections 11139.8 and 14840; and Pub.Con. C. Sections 10115.5, 10116, and 10359; and Mil. & Vet. C. Sections 999.5 and 999.7.
2. Specifically the Small Business & Disabled Veteran Business Enterprise Services Branch, Procurement Division, within the Department of General Services is responsible for producing the reports.
3 Department of General Services, “State Contract and Procurement Registration” (May 12, 2003),
4 Department of General Services, “State Contract and Procurement Registration.”
5 Interview with Roberta Hinchman, CAL-Card program coordinator, Procurement Division, Department of General
Services, Sacramento, California (April 9, 2004).
6 Washington State Department of General Administration, “GA Services For,” www.ga.wa.gov (last visited
June 10, 2004); and Oregon, “State Procurement Office,” www.das.state.or.us/DAS/PFSS/SPO/index.shtml (last visited
June 10, 2004).
June 10, 2004).
8 Interview with Pat Dayneko, director, Contracts and Procurement, California State University, Long Beach, Long
Beach, California (March 29, 2004). Provided cost impact of requirements.
9 Interview with Sheri Huber, manager, Employment Development Department, Sacramento, California (June 7, 2004).
10 Interview with Mark Dougherty, Legislative Liaison Office, Employment Development Department, Sacramento,
California (June 8, 2004); and e-mail from Mark Dougherty, Legislative Liaison Office, Employment Development
Department (June 8, 2004).
Procurement of Prison Industry Authority Products

Summary
California Penal Code Section 2807 mandates that state agencies must purchase from the Prison Industry Authority (PIA) all products and services provided by PIA at a price fixed by the Prison Industry Board. State agencies have historically voiced concern with PIA products’ price, quality, and timeliness of delivery. The historical concern that the State’s mandate increases the costs of state operations takes on critical significance during California’s budget crisis. State agencies should be allowed to purchase from commercial vendors if the price and quality are superior to PIA.

Background
The PIA is a state-operated organization created by the Legislature in 1982 to provide productive work assignments for inmates in California’s adult correctional institutions. The intent was “to operate a work program for prisoners which will ultimately be self-supporting by generating sufficient funds from the sale of products and services to pay all the expenses of the program, and one which will provide goods and services which are or will be used by the California Department of Corrections (CDC), thereby reducing the cost of its operation.” The PIA’s programs are designed to assist inmates in gaining employment upon parole, reduce prison violence, reimburse crime victims, save taxpayer dollars, develop work skills, and produce quality products.

The PIA produces more than 1,800 goods and services including office furniture, clothing, dormitory items, printing services, metal signs, digital services, laundry services, dental services, optical services, food products and cell equipment. The products and services are produced by approximately 6,000 inmates in more than 60 service, manufacturing, and agricultural industries at 22 prisons throughout California. State agencies are mandated to purchase any product or service produced by PIA. The PIA established a waiver process; however, the ability to obtain a lower price is not a valid reason for granting a waiver request.

State agencies and their employees continue to voice concern about PIA products and services. The Procurement Team received 36 complaints or recommendations regarding PIA, which represented about 15 percent of the total number of messages received, and the largest number of responses the team received on any one procurement issue. The correspondence expressed concerns and frustrations about the high cost, poor quality, and lengthy time periods to receive PIA products. While a considerable number of the complaints mentioned furniture specifically, most of the complaints were general in nature and expressed the belief that terminating the mandate to purchase PIA products would alleviate government waste.
Little Hoover Commission—1993
Since its inception, PIA has been subject to criticism. The Little Hoover Commission’s (LHC) March 1993 study found that PIA was “holding state departments hostage to high prices and delayed deliveries.” The report cited numerous examples of poor quality, high prices, and delayed deliveries. The LHC found that PIA was being heavily and unwillingly subsidized by other state agencies as a result of the mandate to procure PIA products. The net effect of this subsidy was the transference of the social cost for prisons to every state agency that procured goods and services from PIA. The LHC recommended state agencies should be free to buy goods and services from any entity able to provide the best product at the best price.

Bureau of State Audits—1996
In April 1996, the Bureau of State Audits (BSA) issued a report entitled *Prison Industry Authority: Statutory and Cost Control Problems Adversely Affect the State* that was very critical of PIA and its operations. The report found the following:

- PIA’s focus is on its overall profitability and not on managing the costs of each enterprise it operates. PIA operated 41 factories that generated $18.5 million in excess of their costs during Fiscal Year 1994–1995 (FY 94–95);
- PIA used the excess revenues for FY 1994–1995 to fund 30 factories that had a net loss of $8.6 million;
- PIA’s net profit for FY 1994–1995 of $9.9 million ($18.5 less $8.6) was derived from the state agencies purchasing goods from the 41 factories at a higher price than PIA’s costs, causing the state agencies to unknowingly subsidize the inefficiencies of 30 PIA factories;
- The true cost of inmate employment is therefore hidden in the procurement expenditures of state agencies. Taxpayers are losing the benefit of efficient PIA operations by paying more than the true cost for PIA products;
- The California Department of Corrections (CDC) paid $6.9 million more for PIA goods than was necessary for PIA to recover its costs;
- The Department of Motor Vehicles paid $1.8 million more for license plates during FY 1994–1995 than the actual cost of producing those plates;
- More than one-half of the PIA products would not have been competitive in standard state procurements because PIA’s prices are higher than the private sector;
- PIA continues to operate enterprises that are not self-supporting, or charging state customers excessive prices;
- PIA did not have Prison Industry Board’s authority to buy and resell finished goods to its customers; and
PIA had dissatisfied customers, especially because of PIA’s lengthy delivery times and high prices.5

To address the issues cited in the audit report, BSA made 37 recommendations, including the following:

- Establish policies and practices to ensure PIA prices do not exceed market prices;
- Perform comprehensive review of all industries and products to determine which are self-supporting or should be scaled back or eliminated; and
- Determine how to reduce operating costs from current levels.

**Bureau of State of Audits—1997**

Due to the significant and serious nature of the 1996 audit findings, BSA performed a follow-up audit 15 months later. In August 1997 BSA issued a report entitled *Prison Industry Authority: Has Failed to Take Significant Corrective Action on Many State Auditor Recommendations*. BSA found that of the 28 major recommendations made in its 1996 report, CDC and PIA had not taken any corrective action on nine recommendations, including four with which PIA and CDC disagreed. PIA and CDC had partially implemented 17 recommendations, and had fully implemented only two recommendations.6 BSA’s August 1997 report on PIA’s actions included the following:

- PIA partially implemented BSA’s recommendations to revise pricing policies, perform product financial analysis, conduct comprehensive reviews of all industries and to establish optimal production levels;
- PIA partially implemented the recommendation that PIA should formalize a process to systematically identify and track prices competitors charge for similar products that produce 80 percent of PIA’s annual sales;
- No action was taken to assign responsibility of each industry to a single individual;
- PIA partially implemented the recommendation to reduce administrative overhead;
- PIA partially implemented the recommendation to implement the activity-based overhead allocation to costs; and
- PIA had not hired a cost-accounting manager.

**Joint Legislative Audit Committee and Bureau of State Audits—1998**

In accordance with a request by the Joint Legislative Audit Committee, the Bureau of State Audits conducted an audit on purchase and resale of finished goods and services by PIA. The September 1998 BSA report found that PIA bought finished goods and services from the private sector 656 times with a resale value averaging 1.7 percent of total sales, and in conducting these buyouts lost $208,000 during July 1994 to December 1997.7 These losses were offset by PIA’s profits in the sales of other goods and services. The net effect was that some PIA customers are subsidizing PIA losses from the buyout transactions.
The PIA’s practice of buying finished products and reselling them to state agencies at potentially higher prices coupled with the state’s mandate to buy PIA products raise a number of serious policy questions. While employing little or no inmate labor for the sale of these goods or services is contrary to the mission of Prison Industry, the practice provides significant potential for abuse. It can increase the state’s costs for buying goods and services at prices much higher than the agencies can find in an open, competitive market. Documentation regarding a case involving food products was submitted to the Procurement Team. Although the 1998 BSA recommendations included legislative clarification of its intention regarding PIA authority to purchase and resell finished goods and services to its customers, and to terminate PIA’s authority to act as an agent for CDC or other state agencies to purchase items it does not produce, no legislative solution was enacted.

**Legislative Analyst’s Office echoes previous findings of others**

The Legislative Analyst’s Office (LAO) also conducted a review of PIA and released its report in April 1996, about the same time that the first BSA audit report was released. The LAO concurred with many of BSA’s findings and made similar recommendations to do away with PIA’s protected market by eliminating the mandate that state agencies buy only PIA goods and services.8

The issues and concerns raised by the various studies and reports culminated in several legislative proposals in the late 1990s. The Legislature proposed the elimination of the requirement that state agencies must buy goods and services from PIA. None of the proposed legislative reforms were enacted.

In an era when available government revenues have become very limited, government agencies outside California are increasingly removing the mandate to procure goods and services produced by prison industries. They are giving state and federal agencies the authority to purchase goods and services that directly compete with products produced by their prison industries, especially when the price and quality provide better values and helps stretch limited financial resources.

**Other state and federal government efforts**

Several other states are providing alternatives to mandated purchasing from prison industries including the following:

- North Carolina mandates that all state departments, institutions and agencies shall give preference to the goods and services produced by the North Carolina Correction Enterprise (NCCE), but the state also requires NCCE to keep the price of such articles or commodities substantially in accord with similar articles or commodities of equivalent quality that are available in the private sector through competitive bidding. According to a representative from NCCE, waivers are routinely and informally granted to state agencies for products that can be purchased at lower prices than those produced by the NCCE.9
• While the State of Iowa mandates that state agencies must purchase goods and services produced by its Iowa Prison Industries (IPI), there is a major difference in the manner in which this program functions. IPI operates on the premise that its products must be competitive and produced at competitive prices in order to remain viable and to obtain the business of state agencies.\textsuperscript{10}

• Prior to 1995, the State of New York required its state agencies to purchase all the goods and services that the state’s prison industries produced. Since there was little enforcement of the requirements, many New York agencies were not complying with the state’s mandate. In 1995, New York’s laws were amended to allow state agencies to purchase goods and services from commercial sources. According to a representative from Corcraft Products, despite the change in the statutes, the sales of New York prison industries products has remained relatively constant.\textsuperscript{11}

On the federal level, the Federal Prison Industries Board (FPI) has loosened mandates on federal agencies to purchase goods and services from federal prison industries. In January 2004, Congress passed the Transportation, Treasury and General Appropriations Act.\textsuperscript{12} This federal law eliminates the mandatory requirements placed on federal agencies to purchase products produced by FPI, and also requires FPI to be competitive.

The Procurement Team met with and obtained a significant amount of data from the Prison Industry Authority (PIA). Despite the numerous studies and recommendations to eliminate or modify the mandate on purchasing PIA products, legislative proposals to do the same, and numerous recommendations to make PIA products more efficient, competitive, and comparable with products on the open market, concerns involving PIA persist. There is ample evidence to substantiate that the many concerns that were first raised 11 years ago by the Little Hoover Commission and validated in subsequent reports by the Bureau of State Audits, the Legislative Analyst’s Office, and the Senate Advisory Commission on Cost Control, remain valid concerns today.

The Procurement Team obtained sufficient documentation to show that in recent fiscal years, the cost of PIA products are consistently higher than the cost state agencies would pay if allowed to buy similar products from other sources. For example:

• A state law enforcement agency paid $24,000 for safety decals produced by PIA. The agency said the same product would have cost $2,200 from a private vendor.
• A state agency had a PIA shelving system installed for $19,566. A private business could have done it for $9,538.
• One of California’s college systems estimates it could save more than $400,000 annually if not required to buy PIA products.
In addition to inflated costs, the issue of product quality continues to plague PIA. Despite assurances by PIA that its product quality problems have been resolved, the Procurement Team has received numerous complaints and documentation to the contrary.

Data obtained by PIA shows that while its sales revenue has declined the past three fiscal years, returns of PIA products by state agencies are on the rise.

- In FY 2000–2001, sales of PIA products totaled $93.6 million while the value of returned products totaled more than $810,000.
- In FY 2001–2002, PIA sales dropped to $88.2 million while the value of returned products increased to more than $909,000.
- In FY 2002–2003, PIA sales declined further to $86.7 million while returned products increased once again to more than $1 million.

The Procurement Team concurs with previous recommendations that state agencies should be allowed to buy goods based on competitive pricing, quality and value, and that they should no longer be required to purchase those same types of products at higher cost and often times inferior quality from the Prison Industry Authority.

**Recommendations**

A. The Governor should work with the Legislature to amend current law relating to mandatory requirements that state agencies “shall” buy all the goods and services from Prison Industry Authority by providing that state agencies can purchase from a commercial supplier if the value and price are superior to the goods or services offered by PIA.

B. The Governor should work with the Legislature to eliminate the Prison Industry Authority’s authority to procure goods and services in the open market and resell those goods and services back to state agencies with little or no value added by the inmate population.

**Fiscal Impact**

The state can reduce the cost of buying goods and services by allowing state agencies to make purchases based on value and price, not mandatory purchasing from PIA. At this time it is not possible to determine the cost savings of having a competitive purchasing process. The Department of Health Services, Department of Water Resources, Employment Development Department and Department of Transportation project that if competitive bidding for all purchases were allowed it would result in a 24 percent reduction in PIA sales. In FY 2002–2003 PIA reported sales of $35.5 for furniture and $162 million in annual sales. Assuming that the 24 percent saved is applied to total PIA furniture sales and total annual sales, estimated savings could be realized between $8 million and $39 million. At a minimum savings are projected to generate $8 million statewide savings.
### General Fund
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings (dollars in thousands)</th>
<th>Costs (dollars in thousands)</th>
<th>Net Savings (Costs) (dollars in thousands)</th>
<th>Change in PYs</th>
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</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Other Funds
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings (dollars in thousands)</th>
<th>Costs (dollars in thousands)</th>
<th>Net Savings (Costs) (dollars in thousands)</th>
<th>Change in PYs</th>
</tr>
</thead>
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<td>2008–09</td>
<td>$4,000</td>
<td>$0</td>
<td>$4,000</td>
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</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Endnotes

1. Pen. C. Section 2800 et seq.
Bureau of State Audits, “Prison Industry Authority: Its Outside Purchase of Goods and Services is Neither Well-Planned or Cost Effective” (Sacramento, California, September, 1998).

Legislative Analyst’s Office, “Reforming Prison Industry Authority” (Sacramento, California, April 30, 1996).

Interview with George Lipsomb, North Carolina Correctional Enterprises, Raleigh, NC (March 25, 2004).


Average potential savings for Department of Health Services (20 percent), Department of Water Resources (20 percent), Employment Development Department (20 percent) and Department of Transportation (38.5 percent) as projected by each department averages to 24 percent potential savings percentage (20+20+20+38.5= 98.5 divided by 4 = 24 percent). Most departments do not have the accounting systems in place to determine the exact amount of purchases by vendor type. Therefore, these estimates are based on available information for each department.

Average potential savings for Department of Health Services, Department of Water Resources, Employment Development Department and Department of Transportation as projected by each department averages to 24 percent in total expenditure savings. Total sales for PIA is $162 M. Total sales $162 M x 24 percent average potential savings = $39 million. If the potential savings were based on just furniture purchases and each department could buy based on a lower price then using the same 24 percent average savings times $35.2 (PIA furniture sales) the savings could be $8 million.
Establish Small Business and Disabled Veteran Business Enterprise Set-Asides

**Summary**
California has rarely met the goal set by prior administrations of having 25 percent of the state’s contracting dollars go to small businesses. In addition, the state has never met the legislatively mandated three percent contract participation goal for businesses owned by disabled veterans. The establishment of mandatory set-asides will greatly improve contracting opportunities with state certified small businesses and disabled veteran business enterprise firms, and help the state to meet its participation goals.

**Background**
In the 1980s, the Legislature enacted statutory changes to enable small businesses, certified through the Department of General Services (DGS), the ability to have greater participation in the state competitive bid process by allowing a five percent bidding preference over large businesses. Executive Order D-37-01 established a certified small business participation goal of 25 percent for state agencies, departments, boards and commissions to achieve. In 1999, the Legislature enacted Assembly Bill 1933 to establish a three percent goal for the participation of DGS’ certified disabled veteran business enterprise firms in state contracts.

**Exhibit 1. Program Mandates**

<table>
<thead>
<tr>
<th>Mandate</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Code Section 14836(b)</td>
<td>The state should aid, counsel, assist, and protect . . . the interests of small business concerns . . . in order to preserve free competitive enterprise . . . for property and services for the state.</td>
</tr>
<tr>
<td>Executive Order D-37-01</td>
<td>All state agencies are required to pursue aggressively an annual 25 percent small business participation level in state contracting.</td>
</tr>
<tr>
<td>Military &amp; Veterans Code Section 999.7</td>
<td>State agencies to award 3 percent of their contracting dollars to certified disabled veteran business enterprises.</td>
</tr>
<tr>
<td>Public Contract Code Section 10115.2</td>
<td>The awarding department shall award the contract to the lowest responsible bidder meeting or making good faith efforts to meet the disabled veteran business enterprise goal.</td>
</tr>
<tr>
<td>Mandate</td>
<td>Summary (cont.)</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Public Contract Code Section 10115.15</td>
<td>An awarding department shall accept the submission by a bidder of a disabled veteran business enterprise utilization plan that has been approved prior to the solicitation due date by DGS.</td>
</tr>
<tr>
<td>Government Code Section 14838.5</td>
<td>Allow state agencies to award a contract for the acquisition of goods, services, and information technology between $5,000 and up to $100,000 to a certified small business or disabled veteran business enterprise, by obtaining quotes from at least two firms.</td>
</tr>
<tr>
<td>Government Code Section 14838</td>
<td>Provide a bidding preference equal to 5 percent, and not to exceed fifty thousand dollars, of the lowest responsive, responsible bid from a non-certified business.</td>
</tr>
</tbody>
</table>

**Current situation**

There are 131 state agencies in California that purchase and bid contracts for goods, services, information technology and construction. There are 14,119 small business firms and 344 disabled veteran business enterprise firms currently certified through DGS to do business with the state.¹

The 5 percent bidding preference for certified small business firms used in contracting, the mandate for departments to award at least three percent of their total contracting dollars to certified disabled veteran business enterprises, and the former administration’s goal to award 25 percent of the total contracting dollars to certified small business firms, is resulting in the state paying more money than it should for goods, services, information technology and construction.

While both statutes are intended to improve the financial conditions of small business firms and disabled veteran business enterprise firms, the impact of these programs, as currently structured, has been fiscally detrimental to the state by driving up costs and delaying the implementation of state programs and services.

A more effective approach is needed to allow the state to conduct its business in a more cost effective manner while delivering programs and services in a more timely fashion. The opportunity for improvement exists under Government Code Section 14838.5, which allows but does not mandate that state agencies award contracts for the acquisition of goods, services and information technology between $5,000 and up to $100,000 to a certified small business or disabled veteran business enterprise. By making this statute mandatory certified businesses will greatly benefit by being better utilized by the state.
\textbf{Small business}

The five percent bidding preference has allowed certified small businesses to be competitive, but is costing the state more money because it awards the contract to the certified small business (SB) for its original bid amount, resulting in a \textit{potential} increase of up to $50,000 per contract, depending on the contract amount.$^{2}$

\begin{center}
\textbf{Exhibit 2. Example}
\end{center}

<table>
<thead>
<tr>
<th>Bidder</th>
<th>Bid Amount</th>
<th>Bid After Preference Applied (if applicable)</th>
<th>Small Business Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
<td>Does not claim to be a small business</td>
</tr>
<tr>
<td>B</td>
<td>$1,020,000</td>
<td>$1,020,000</td>
<td>Claims SB status but is not certified</td>
</tr>
<tr>
<td>C</td>
<td>$1,049,000</td>
<td>$999,000</td>
<td>Claims SB status and is certified</td>
</tr>
</tbody>
</table>

(Bidder A—lowest non-certified bid) \(\quad \) $1,000,000 \times 0.05 = $50,000 (5 percent preference)

(Bidder C—certified small business) \(\quad \) $1,049,000 - $50,000 = $999,000

The evaluated total for Bidder C is lower than the evaluated total for Bidder A. Bidder C is ranked number one. \textit{Contract awarded to Bidder C for full amount of $1,049,000.}

This example shows an additional cost to the state of $49,000. Therefore, if the small business preference were eliminated, the state would realize undetermined savings. For Fiscal Year 2002–2003, 75,817 contracts for goods, services, and construction were awarded to certified small business firms for a value of $1.004 billion.$^{3}$

\textbf{Disabled Veteran Business Enterprise}

Pursuing the three percent Disabled Veteran Business Enterprise (DVBE) contract participation goal (as required in Military & Veterans Code Section 999.7) has proven difficult. Historically, the statewide mandated goal of three percent has never been achieved.$^{4}$ In an effort to meet the legislative mandate, DGS requires \textit{all} bid solicitations to include the disabled veteran business enterprise participation requirement. A small business enterprise said they have experienced difficulty in quoting to the state offices because of the requirement of getting DVBE participation with any proposal submitted.$^{5}$ This is difficult for vendors to comply with, as there are only 344 certified disabled veteran business enterprise firms, and 556 firms certified as both disabled veteran business enterprise and small business, who are doing business in the State of California.$^{6}$ There are three methods to meet the three percent goal: utilize a disabled veteran business enterprise firm, document a good faith effort or file an approved Business Utilization Plan with DGS.

If a certified disabled veteran business enterprise firm cannot be utilized to perform a function of the contract, then a good faith effort per Public Contract Code Section 10115.2 must be
documented to comply with the bid solicitation. The good faith effort’s five-step process, documented in ten pages, shows that certified disabled veteran business enterprise (DVBE) firms were sought, and could not be located to perform a function of the bid solicitation. DGS allows 14 days for prospective bidders to find a certified DVBE firm, and five days for internal processes to review the disabled veteran business enterprise compliance in the bid responses. This is a very time-consuming process, both for the vendor and contract analyst working the bid solicitation. It adds little value to the process, and does not result in achieving the three percent contracting rate. Instead, it is commonly used as an alternative means to meeting the DVBE requirement in state contracts, rather than sub-contracting to DVBE firms. The good faith effort has proven to be ineffective in promoting contracting opportunities for DVBE firms.

An approved Business Utilization Plan on file with DGS can substitute for the disabled veteran business enterprise requirement in all contracts that a vendor can potentially bid on within a one-year period, and currently there is only one approved plan on file.

For Fiscal Year 2002–2003, 15,623 contracts for goods, services, and construction were awarded to certified disabled veteran business enterprise firms for a value of $142 million. Using the yardstick model, the average cost per contract to administer the compliance requirement of the disabled veteran business enterprise contracting process is $61.75.

Eight investigations in FY 2002–2003, into disabled veteran business enterprise program abuse by the Attorney General’s office cost the state $50,000 per case.

In February 2004, DGS rejected a solicitation on behalf of its client agency, the Prison Industry Authority. If DGS had awarded the contract to the lowest, compliant bidder, Bidder A, it would have cost the state an additional $389,836.66. The lowest bid was disqualified because it failed to include a list of certified DVBE firms as part of the good faith effort to comply with the requirement. It should be noted that Bidder A’s bid included no actual disabled veteran business enterprise participation, only a better documented good faith effort than the lowest compliant bidder. The contract is now going out for re-bid, and as a result, the delivery of goods the Prison Industry Authority needs to deliver its services will be delayed. The additional working hours involved in re-bidding the contract are accumulating, and resulting in additional costs to the state.

An e-mail the California Performance Review received from a small business owner stated “the cost of re-bidding to the state from the private sector is expensive to say the least. For DGS to re-issue the bid is a costly matter for both DGS and the taxpayers.”

Other governmental organizations’ set-aside programs
The federal government and other states use small business set-asides in lieu of preferences, mandates, and goals. The federal government uses a flexible set-aside system for small
business in the procurement arena of $2,500 up to $100,000 (with some exceptions). Procurements in this range are automatically reserved exclusively for small business concerns and are to be set aside for small business unless the contracting officer determines there is not a reasonable expectation of obtaining offers from two or more responsible small business concerns that are competitive in terms of market prices, quality and delivery. If the contracting officer does not proceed with the small business set-aside and purchases on an unrestricted basis, the contracting officer must document the reason for this unrestricted purchase. If the contracting officer receives only one acceptable offer from a responsible small business concern in response to a set-aside, the contracting officer should make an award to that firm. If the contracting officer receives no acceptable offers from responsible small business concerns, the set-aside shall be withdrawn and the requirement, if still valid, shall be re-solicited on an unrestricted basis. The small business reservation does not preclude the award of a contract with a value not greater than $100,000.

Recent changes to the Illinois Procurement Code established that a representative number of Illinois procurements be designated as small business set-asides and awarded to the lowest responsive and responsible bidder who is qualified under the definition of a small business.

The Connecticut Minority and Small Contractors’ Set-Aside Program was established for the purpose of assuring that Connecticut’s small and small minority-owned businesses have an opportunity to bid on a portion of the state’s purchases. Under this program, 25 percent of state-funded purchases are set aside for small businesses. In addition, 25 percent of that amount is reserved for small businesses which are minority/women-owned. Once certified, a business can bid on contracts covered by the program. This certification does not exclude companies from bidding on statewide contracts.

**Recommendations**

A. The Governor should work with the Legislature to establish a competitive environment where certified small business (SB) firms and certified disabled veteran business enterprise firms (DVBE) can only compete with other certified small business firms and certified disabled veteran business enterprise firms for contracts up to $100,000, known as set-asides, for the acquisition of goods, services, information technology, and construction.

This would allow both small business firms and disabled veteran business enterprise firms the ability to compete for the opportunity first, and when there are no certified small business firms and certified DVBE firms available, the opportunity would then be open for competition with large businesses.

B. The Governor should work with the Legislature to make mandatory the use of a streamlined bidding process, and require all state agencies, departments, boards, and
commissions to maximize the opportunity offered to them under Government Code Section 14838.5, and competitively bid contracting opportunities, to certified small business firms and certified disabled veteran business enterprise firms for the acquisition of all goods, services, information technology, and construction from $5,000 up to $100,000.

Government Code Section 14838.5 does not make mandatory the use of the streamlined bidding process. It is therefore recommended that if a certified small business firm or certified DVBE firm cannot provide the goods, services, information technology, or construction, or is not considered to be the best value for the state by the contracting officer, only then should other businesses be utilized. By implementing this process, certified SB firms and DVBE firms compete against each other, and not with larger businesses. Departments should be encouraged to use this approach to achieve both small business and disabled veteran business enterprise participation goals. Subsequently, the implementation of this streamlined bid process will positively impact state departments by reducing the need for formalized bids and the reduction of time and staffing needs in contracting efforts, while improving contracting opportunities for small business and disabled veteran business enterprise firms.

C. The Governor should work with the Legislature to amend Government Code Section 14838.5 to include the acquisition of all goods, services, information technology, and construction up to $100,000 and establish the set-asides.

D. The Governor should work with the Legislature to amend Government Code Section 14838 to repeal the five percent small business bidding preference, which has had a detrimental impact on the state’s contracting and procurement processes.

The success of the set-aside recommendation would negate the bidding preference, and provide a more level and competitive contracting environment for certified small businesses.

E. The Governor should work with the Legislature to amend statute to remove the DVBE Good Faith Effort.

The good faith effort has proven to be ineffective. Large businesses use it as an alternative means to sub-contracting with DVBE firms, therefore negating business opportunities for those firms.

F. The Department of General Services (DGS), or its successor, should promote and encourage businesses to adopt a Business Utilization Plan as the alternative means of
complying with the disabled veteran business enterprise requirement, until Public Contract Code Section 10115.2 is amended.

**Fiscal Impact**
Approximately 673 purchasing and contracting analysts are employed by the state. In FY 2002–2003, 15,623 contracts were awarded for goods, services, information technology, and construction to disabled veteran business enterprises. In the same period, 75,817 similar contracts were awarded to small businesses. On average, each state analyst handled 136 contracts and purchases for their department, and spent 1.5 hours per contract ensuring that the bid documents and bid submittals were compliant with either the Disabled Veteran Business Enterprise requirement or the Small Business Preference.

**Disabled Veteran Business Enterprise program savings**
If the DVBE program compliance and the Small Business Preference were to be eliminated, an estimated cost savings of 71 personnel years (PYs) could be realized. The estimated dollar savings is $5 million.

**Small Business Preference program savings**
The cost savings by eliminating the 5 percent bidding preference in all applicable contracts will be realized from increased competition due to the proposed revision to the streamlined process between certified SB firms and the establishment of set-asides, but cannot be determined at this time.

**Overall Savings**
The total savings to the state could be $5 million and a reduction of 71 PYs. There would be no costs associated with eliminating the reporting requirements for small business and disabled veteran business enterprise set-asides.

### General Fund
*(dollars in thousands)*

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
</tr>
<tr>
<td>2005–06</td>
<td>$2,500</td>
<td>$0</td>
<td>$2,500</td>
<td>(35.5)</td>
</tr>
<tr>
<td>2006–07</td>
<td>$2,500</td>
<td>$0</td>
<td>$2,500</td>
<td>(35.5)</td>
</tr>
<tr>
<td>2007–08</td>
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<td>$0</td>
<td>$2,500</td>
<td>(35.5)</td>
</tr>
<tr>
<td>2008–09</td>
<td>$2,500</td>
<td>$0</td>
<td>$2,500</td>
<td>(35.5)</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.
Other Funds
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>0</td>
</tr>
<tr>
<td>2005–06</td>
<td>$2,500</td>
<td>$0</td>
<td>$2,500</td>
<td>(35.5)</td>
</tr>
<tr>
<td>2006–07</td>
<td>$2,500</td>
<td>$0</td>
<td>$2,500</td>
<td>(35.5)</td>
</tr>
<tr>
<td>2007–08</td>
<td>$2,500</td>
<td>$0</td>
<td>$2,500</td>
<td>(35.5)</td>
</tr>
<tr>
<td>2008–09</td>
<td>$2,500</td>
<td>$0</td>
<td>$2,500</td>
<td>(35.5)</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

Endnotes

1. Data provided by Mariel Dennis, chief, Office of Small Business & Disabled Veteran Business Enterprise Certification, Procurement Division, Department of General Services, Sacramento, California, April 1, 2004.
2. State of California, Small Business Program.
5. E-mail from Nick Garcia (April 19, 2004).
6. Data provided by Mariel Dennis, chief, Office of Small Business & Disabled Veteran Business Enterprise Certification, Procurement Division, Department of General Services, Sacramento, California, April 1, 2004.
7. Interview with April Gibson, contract analyst, Procurement Division, Department of General Services, Sacramento, California (March 5, 2004).
11. Data provided by Bob French, manager, One-Time Buys Contracts Unit, Procurement Division, Department of General Services, Sacramento, California, March 5, 2004.
12. E-mail from Maureen Conway, Comade (April 12, 2004).


Interview with Joan Kirtlan, manager, Administrative Services, Department of Justice, Sacramento, California (June 8, 2004).

Assumption is that total contracts 15,623 (disabled) plus 75,817 (small business) equals 91,440 contracts; 91,440 contracts times 1.5 per hour workload for 1 Associate Management Auditor equals 137,160 workload hours that could be eliminated; 137,160 hours divided by 1,944 projected workload hours per Associate Management Auditor equals 71 PYs workload that may be eliminated.

Assumption is that total contracts 15,623 (disabled) plus 75,817 (small business) equals 91,440 contracts; 91,440 contracts times 1.5 per hour workload for 1 Associate Management Auditor equals 137,160 workload hours that could be eliminated; 137,160 hours divided by 1,944 projected workload hours per Associate Management Auditor equals 71 PYs workload that may be eliminated.
Create Efficiencies and Cost Savings by Establishing a Central Supplier-Based Management System

Summary
The State of California lacks a central vendor-based registration and management information system. Suppliers must deal with state departments individually rather than the state as a single customer. State departments generally only have knowledge of vendors that they have done business with, and have vendor performance information only to the extent documented or tracked. Such a decentralized system is inefficient, costly, and provides little to no value.

Background
In order to do business with the state, suppliers of goods and services are required to file paperwork separately with each state entity they wish to do business with. Departments that track supplier information do so differently, and information that is captured is typically not shared with other state entities. In addition, although state departments are required to conduct vendor performance evaluations for consulting services contracts, staff at seven state departments and the Department of General Services (DGS) indicated that they do not compile or track supplier performance or the quality of goods and services suppliers provide. Consequently, state departments contracting with a supplier the first time may be totally unaware that other agencies have ongoing problems with that company.

The redundancy of paperwork and inconsistent collecting and recording of vendor information creates an administrative burden for both the state and the supplier. This is a major source of administrative error and expense of both time and money. Also, the lack of a centralized data collection system makes it very difficult if not impossible to extract or compile vendor data for decision-making purposes.

Other states’ experiences
In 2001, the State of Maryland took the concept of a centralized vendor registration process, added refinements, and implemented a statewide electronic online procurement system known as eMaryland Marketplace. Since its inception, eMaryland Marketplace has posted more than $270 million in business opportunities on its website, and the system has grown to include more than 100 state and local government agencies, 500 trained government buyers and more than 2,300 bidding vendors. In addition, the State of Maryland pays nothing for eMaryland Marketplace technology services because companies using the system pay fees and those fees are used to fund
operations. According to Boyd K. Rutherford, Secretary of the Technology Services Department: “Our system delivers savings for government organizations and our private sector suppliers — both are realizing financial and resource efficiencies. In addition to savings, eMaryland Marketplace makes government contracts more available and levels the playing field for participating suppliers, regardless of their location or company size. It can be especially helpful for small businesses.” Maryland also reported that it has shifted its $8 billion in annual state purchasing to the Internet.4

The State of Virginia also implemented a centralized electronic procurement system based around a central supplier management system. The system is called eVA (electronic Virginia). The State of Virginia reports that using this system results in better processes, such as electronic orders and e-payment efficiencies. Suppliers only need access to the Internet to participate. Table 1 shows information collected on eVA.5

<table>
<thead>
<tr>
<th>Exhibit 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Procurement Benefits Derived By Virginia from Vendor Registration</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of suppliers registered with eVA</td>
</tr>
<tr>
<td>4,612</td>
</tr>
<tr>
<td>Number of catalogs available for searching</td>
</tr>
<tr>
<td>426</td>
</tr>
<tr>
<td>Number of items that can be purchased</td>
</tr>
<tr>
<td>1.7 million items, including fuel, vehicles, technology and services</td>
</tr>
<tr>
<td>Who conducts business using eVA</td>
</tr>
<tr>
<td>169 Virginia agencies; 36 local governments</td>
</tr>
<tr>
<td>Number of orders and their value</td>
</tr>
<tr>
<td>14,000 orders valued at over $70 million</td>
</tr>
</tbody>
</table>

**Elements of a vendor registration system**

An electronic supplier registration system would be the single database used to track supplier information and activities and interface with a complete e-procurement system. The system would capture general supplier information: contact, tax identification, commodity codes, etc., and interface with a payment system allowing the supplier to receive timely payment from the state. Basic registration would be a nominal fee plus a transaction fee that would be a percentage per order received. The State of Virginia charges 1 percent with a cap of $500 per order.6 Also, the system would include electronic requests for quotations, invitation for bids, requests for proposals, purchase orders, contracts, invoices, or other electronic procurement information and notices electronically transmitted.
**Benefits of a central vendor registration**

A central vendor registration benefits both the state and suppliers. State entities benefit by accessing more vendors from which to choose and have more vendors respond to request for proposals. A centralized system will facilitate better decision-making by extracting and analyzing purchasing data. Vendor benefit because they will only have to register once with the state. Through this single registration, suppliers would automatically receive solicitations via email or fax. A centralized supplier management system would capture supplier performance data and give both problem suppliers and excellent performers high visibility. This, in turn, would allow the state to purge substandard suppliers from its databases and bar problem suppliers from doing business with the state until corrective action is taken.7

**Recommendation**

The Department of General Services, or its successor, should implement a statewide electronic vendor registration system. The central vendor registration system should be part of an integrated e-procurement system. Basic registration would require a nominal fee plus a transaction fee that would be a percentage of the ordered received, with an established cap per order. The system would include electronic order receipt, supplier catalog posting, online registration and electronic bidding.

**Fiscal Impact**

The electronic vendor registration system would be funded through the basic registration fees and transaction fees paid by suppliers similar to the system used in Virginia. No moneys would be expended by the state for the vendor-based management system.

Efficiencies would be realized as existing state procurement and accounting staff statewide no longer log, track and file vendor information as the system would eliminate these tasks. This would streamline the time required to perform these functions. Actual savings from these efficiencies cannot be determined at this time.

---

**Endnotes**

1 Interviews with Michelle Ogata, Mary Kuwamoto, Earl Santee, Scott Norton, Bob Riola, George Hortin, Janice King, Procurement Division, Department of General Services (April 20, 2004).

2 Interviews with procurement staff at the Departments of Health Services, Water Resources, General Services, Child Support Services and Forestry and Fire Protection, Franchise Tax Board and State Controller’s Office (April 4–6, 2004).


Taking Steps to Contain State Drug Costs

Summary
In Fiscal Year 2002–2003, California state government spent more than $4 billion on pharmaceuticals, one of the fastest growing components of the state’s expenditures. To contain the cost of drugs, the state should immediately obtain the services of a Pharmacy Benefits Manager and take steps to purchase drugs in a coordinated, unified fashion to take full advantage of its significant purchasing power. The state should also access federal 340B pricing to further reduce and contain drug costs.

Background
The cost of prescription drugs purchased by state departments has increased dramatically in recent years, with most of the increase attributed to the rise in mental health prescription costs for inmates in the corrections system. In January 2002, the California State Auditor reported that the annual drug expenditures for the five departments that procured drugs through the Department of General Services (DGS) increased from $41.6 million in FY 1996–1997 to $135.1 million in FY 2000–2001. In FY 2002–2003, drug expenditures for these same departments increased to $153.6 million (see Exhibit 1). For the Department of Corrections, in FY 1996–1997, the average cost of pharmaceuticals was $197 per inmate; by FY 2001–2002, the cost of pharmaceuticals had increased to approximately $770 per inmate. In FY 2004–2005, DGS estimates it will spend more than $175 million on these commodities. The cost increase can be attributed to several factors, including: new and more expensive drugs are being prescribed; the populations in the institutions are aging; outdated purchasing procedures are being utilized; and the state is not fully leveraging its buying power.

In order to help control drug costs, DGS contracts directly with drug manufacturers for 850 different drugs. Additionally, through its participation in a group purchasing organization, the Massachusetts Alliance for State Pharmaceutical Purchasing (Alliance), the state procures 4,000 drugs at preferred pricing. For those drugs not available through direct contract with the manufacturer or through the Alliance, DGS contracts with a drug wholesaler, McKesson Drug Company, to obtain drugs at the average wholesale cost price plus 0.5 percent.
Exhibit 1
Dollar Volume of Pharmaceuticals Purchased by State Departments

<table>
<thead>
<tr>
<th>Department</th>
<th>Department Administering Drug Procurement</th>
<th>Dollar Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Services (Medi-Cal)</td>
<td>Health Services</td>
<td>$3.8 Billion</td>
</tr>
<tr>
<td>Corrections</td>
<td>General Services</td>
<td>$101.7 Million</td>
</tr>
<tr>
<td>Mental Health</td>
<td>General Services</td>
<td>$35.4 Million</td>
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<tr>
<td>Youth Authority</td>
<td>General Services</td>
<td>$1.7 Million</td>
</tr>
<tr>
<td>Developmental Services</td>
<td>General Services</td>
<td>$13.2 Million</td>
</tr>
<tr>
<td>Calif. State Univ.</td>
<td>General Services</td>
<td>$1.6 Million</td>
</tr>
</tbody>
</table>

Market structure
Understanding the market structure of the prescription drug industry and the manner in which drugs are marketed is critical to understanding this procurement issue. The brand-name pharmaceutical manufacturing industry is characteristic of an oligopoly, meaning that relatively few drug manufacturers sell to numerous and diverse drug buyers. This gives pharmaceutical manufacturers the market power to price differentiate between buyers because they have control over supply and prices.

Pharmaceutical purchasers, on the other hand, are large in number and have diverse needs. This allows drug manufacturers to easily segment buyers into separate markets whereby their diversity helps ensure that there is relatively little opportunity for them to collaborate.

Yet, buying groups with the strongest market positions, due to their purchasing power, are charged the lowest prices. Major third-party buyers, such as health maintenance organizations (HMOs) and pharmacy benefit managers (PBMs), who collectively purchased approximately 90 percent of all drugs sold in 2000, extract lower prices because of their volume purchases. At the same time, buying groups with a weak market position due to limited purchasing power or a lack of coordination are charged the highest prices for pharmaceuticals.

To reduce the cost of prescription drugs, the state must emulate the practices of major third-party buyers and leverage its significant purchasing power.

Large volume purchasing, weak market position
Although the state’s purchasing power should result in a market position strong enough to reduce the price of prescription drugs, this is not the case. Several state agencies purchase drugs independently of each other, segmenting themselves into smaller markets. DGS is the
state’s designated purchaser of drugs for the departments listed in Exhibit 1 as well as most other state departments, except for the Medi-Cal program. The Department of Health Services (DHS), the designated state entity responsible for administering the state’s Medi-Cal program, has the authority to negotiate prices and rebates on pharmaceuticals; however, the rebates DHS obtains are confidential and are not shared with other state entities. In addition, the California Public Employees’ Retirement System (CalPERS), the California State Teachers’ Retirement System (CalSTRS), the Department of Veterans Affairs and the University of California have the legislative authority to buy drugs independently of DGS.

Although each state entity attempts to get the lowest price possible for pharmaceuticals, these independent efforts weaken the state’s market position and result in overall higher costs. Working together to consolidate drug purchases would significantly increase the state’s purchasing power and reduce the price of prescription drugs.

**Pharmacy Benefit Management**

PBMs manage prescription drug benefits on behalf of a benefit sponsor, health plan, health maintenance organization or employer. PBMs control costs by employing mechanisms such as formularies, prior authorizations, tiered co-payments, therapeutic and generic substitutions, mail order pharmacy services, specific disease management and drug utilization reviews. Many private and public organizations with health care responsibilities employ PBMs to provide the same type of pharmacy management that Sutter Health, Kaiser and UC Davis Medical Center provide. CalPERS and CalSTRS have also employed PBMs to help contain and manage drug costs.

The County Medical Services Program (CMSP), which operates in 34 small and rural counties, procured the services of a PBM in January 2003. CMSP provides medical services to 40,000 indigent adults and children who do not qualify for Medi-Cal or have health insurance. In the first year of the PBM contract, drug expenditures for CMSP declined by 34 percent, from $58 million to $38 million, at a cost of approximately $700,000 (1.7 percent of total program costs).7

**Pharmacy benefit management for the state**

While PBMs have been very successful in managing drug costs for their government benefit sponsors, the successful cases have largely been for single, specific state entities such as CalPERS. However, in 2002, legislation was enacted that authorized DGS to enter into a contract with a PBM to negotiate pharmaceutical prices.8 The legislation required mandatory participation in the drug purchasing program by the Department of Mental Health, Department of Developmental Services, California Youth Authority and the Department of Corrections. While DGS has entered into a contract with a pharmaceutical wholesaler to distribute pharmaceuticals to departments and established a Common Drug Formulary Committee to develop the common drug formulary, it has not obtained the services of a PBM to manage the program.
The Federal 340B Program

The Public Health Service drug discount program, also known as the federal 340B Program, requires manufacturers whose drugs are covered by Medicaid to enter into an agreement with the federal Secretary of Health and Human Services to provide discounts to covered entities. The covered entities are those that serve the most vulnerable patient populations and include: certain disproportionate share hospitals, federally qualified health centers (FQHC), state AIDS drug assistance programs, Ryan White CARE Act, Title I, Title II and Title III programs, family planning, tuberculosis, black lung, hemophilia treatment centers, homeless clinics, urban Indian clinics and Native Hawaiian Health Centers. Manufacturers may not charge covered entities more than the negotiated rate, but 340B covered entities can further negotiate drug prices.9

There are more than 10,000 covered entities nationwide and more than 1,000 covered entities in California. In addition to local clinics, FQHCs and AIDS Drug Assistance Programs (ADAP), many disproportionate share hospitals and the University of California teaching hospitals are among the covered entities in California.10

Pharmaceutical purchases under this program have two key provisions. First, covered entities cannot transfer or offer the resale of the drugs to anyone other than a patient of the covered entity. Second, the law states that entities that purchase drugs through the 340B Program cannot receive both this discount and the established Medicaid rebate from the manufacturer. Comparison of 340B prices against other measures of pharmaceutical prices indicate that 340B prices are 51 percent less than the Average Wholesale Price (AWP), and 21.5 percent less than the net Medicaid price after rebates (see Exhibit 2).11

Exhibit 2
Comparison of Pharmaceutical Prices as a Percent of AWP

<table>
<thead>
<tr>
<th></th>
<th>0%</th>
<th>20%</th>
<th>40%</th>
<th>60%</th>
<th>80%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>AWP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>100.0%</strong></td>
</tr>
<tr>
<td>AMP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>80.0%</strong></td>
<td>100.0%</td>
</tr>
<tr>
<td>Medicaid (Min.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>67.9%</strong></td>
<td>80.0%</td>
</tr>
<tr>
<td>Medicaid Net</td>
<td></td>
<td></td>
<td></td>
<td><strong>60.5%</strong></td>
<td>80.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>FSS</td>
<td></td>
<td></td>
<td><strong>51.7%</strong></td>
<td>80.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>340B</td>
<td></td>
<td><strong>49.0%</strong></td>
<td>80.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>FCP</td>
<td></td>
<td><strong>47.9%</strong></td>
<td>80.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>VA Contract</td>
<td><strong>34.6%</strong></td>
<td>80.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Prime Institute, University of Minnesota, 2001
A provision of the program, put in place in 1996, allows covered clinics to contract with local pharmacies to dispense discounted drugs. Many clinics are simply too small to make it cost effective to dispense their own drugs. Special tracking systems must be put in place to insure that these drugs are dispensed only to patients of the clinics at the discounted price.

**Others are maximizing 340B savings**

Other states have expanded the use of 340B certification to significantly reduce pharmaceutical expenditures and improve access to pharmaceuticals for selected populations. In New Bedford, Massachusetts, the Greater New Bedford Community Health Center has significantly expanded access to pharmaceuticals using the 340B program. New Bedford is a community in which 40% of the residents live at or below 200 percent of the federal poverty level. The health center provides a full array of health services to 30,000 individuals annually.

In New Bedford, low-income residents were taking bus trips to Canada to purchase medications at a deep discount. Now, these same residents have access to pharmaceuticals at the 340B price through a program operated by the Greater New Bedford Community Health Center. In an effort to improve patients’ access to pharmaceuticals, the clinic has contracted with four local pharmacies in New Bedford.

In Texas, the University of Texas and Texas Tech University provide medical services to the state’s prison system through a managed care program. Both institutions are 340B covered entities and as a result the state is able to access 340B pharmaceutical prices for prison inmates. Prior to 2001, the universities provided pharmaceuticals through a drug consortium similar to California’s contract with the Alliance. Section 340B prices are significantly lower than the prices available to group purchasing organizations. In Texas, it is estimated that there will be at least a 22% savings associated with changing to the 340B program.

In Utah, the state took action to control rising costs associated with the treatment of hemophilia patients. The state’s Medicaid agency developed a hemophilia case management contract with the University of Utah, a covered 340B entity. The program has a nurse who travels around the state to monitor the well-being of hemophilia patients. Because patients are under the care of a 340B provider of health care, Utah is allowed to purchase high-priced drugs for the treatment of hemophilia patients at the 340B rates. As a result, Utah has reduced the real cost of treating hemophilia patients.

**Application and Benefits of Pharmacy Benefit Management in California**

The following illustrates how a PBM offers real opportunity for savings. The County Medical Services Program (CMSP) procured a PBM for its drug purchasing in January 2003. The CMSP program operates in California’s 34 small and rural counties, while large counties operate their own Medically Indigent programs. CMSP provides medical services to approximately 40,000 indigent adults and children who meet certain residency and income
requirements but do not qualify for either Medi-Cal or health insurance. In the first year of the PBM contract, CMSP drug expenditures went down by 34 percent, from $58 million to $38 million. PBM contractor costs amounted to $650,000–$700,000 (.017 percent of total program costs).  

CalPERS has used a PBM for its self-funded Preferred Provider Organization members since 1989. The PERS self-funded programs provide health coverage to more than 1.2 million members in rural or non-urban areas. Use of a PBM has been essential in assuring utilization and cost controls. Caremark, the contracted PBM for CalPERS, uses its entire $24 billion book of business to leverage discounts with manufacturers for mail order pharmacy.

The 20 largest PBMs manage approximately 70 percent of all prescriptions covered by private third-party payers and approximately 47 percent of all prescriptions dispensed through retail pharmacies. Twenty-two states contract with PBMs to manage their drug purchasing. A PBM contract is also relatively easy to put in place because several entities are available to provide the service.

Possible applications and benefits of Federal 340B pricing in California

Several possibilities exist for the expansion of federal 340B pricing in California. One option is to replicate the arrangement the State of Texas has for the care of its prison population. In California, the University of California medical facilities are 340B covered entities. The Department of Corrections could enter into an agreement with the University to manage health care services. This would extend 340B pricing to the Department for the purchase of pharmaceuticals and could save the state more than $50 million (see Exhibit 3).

Another option is for the state to select a 340B covered entity to provide case management services to a selected population, which would then have access to 340B pharmacy discounts. Arrangements similar to those in Utah could be made for various populations in California, including the prison inmate population.

Other areas for application of 340B pricing include contracting with a 340B covered entity to provide health care services for state hospitals and developmental centers.

Finally, based upon the experience in New Bedford, Massachusetts, it is possible to obtain 340B pricing for state employees who receive health care services from 340B covered entities. Such a linkage would lower the cost of pharmaceuticals for state employees and reduce the cost of certain state health plans.

As illustrated in Exhibit 3, utilizing a 340B pharmacy program would allow the state to reduce the cost of prescription drugs by $62.7 million relative to using a PBM.
Exhibit 3
Potential Savings for State Programs of Improving Pharmacy Purchases
(dollars in millions)

<table>
<thead>
<tr>
<th>Department</th>
<th>Annual Dollar Volume</th>
<th>Savings with PBM*</th>
<th>Savings with Federal 340B Pricing**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrections</td>
<td>$101.7</td>
<td>$10.2</td>
<td>$51.8</td>
</tr>
<tr>
<td>Mental Health</td>
<td>$35.4</td>
<td>$3.5</td>
<td>$18.0</td>
</tr>
<tr>
<td>Youth Authority</td>
<td>$1.7</td>
<td>$0.2</td>
<td>$0.9</td>
</tr>
<tr>
<td>Developmental Services</td>
<td>$13.2</td>
<td>$1.4</td>
<td>$6.7</td>
</tr>
<tr>
<td>Calif. State Univ.</td>
<td>$1.6</td>
<td>$0.2</td>
<td>$0.8</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

Data Source: California Department of General Services
* Assumes a 10%, mid-range, savings due to PBM.
** Assumes a 51% savings for application of Federal 340B pricing.23

Comparison of Options
Pharmacy benefit management and the federal 340B pricing program offer the potential for significant savings over current practices employed by DGS. In the short term, the use of a PBM provides the state with a significant opportunity to reduce the cost of the pharmaceuticals it purchases. In the medium and long term, the 340B program offers an even greater opportunity to reduce the cost of pharmaceuticals; a PBM could be utilized concurrently to control costs for programs that are not eligible to participate in the 340B program.

Recommendations

A. The Department of General Services, or its successor, should enter into a contract with a Pharmacy Benefit Manager to administer the state’s drug purchasing program.

B. The Governor should direct the Health and Human Services Agency and the Youth and Adult Correctional Agency, or their successor entities, to work together to develop cooperative agreements with the University of California and other 340B covered service providers to reduce the cost of pharmaceuticals.

C. The Health and Human Services Agency, or its successor entity, should promote the 340B program among hospitals, community health centers and other eligible entities that do not participate in the program.
D. The Health and Human Services Agency, or its successor entity, should partner with 340B covered providers to leverage the state’s purchasing power to further reduce drug prices.

E. CalPERS and CalSTRS should explore cooperative agreements with 340B covered service providers for the provision of health care benefits for employees who participate in sponsored health plans.

**Fiscal Impact**

The state can significantly reduce the cost of pharmaceuticals by contracting with a Pharmacy Benefit Manager. Based on a projected first year savings of 10 percent, the state will realize a net savings to the state of $15,800,000 based on expenditures of $190 million. In subsequent years, the rate of savings is projected to increase to 12 percent annually.

The cost of contracting with a PBM is estimated at 1.7 percent of pharmaceutical expenditures.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings</th>
<th>Change in PYs</th>
</tr>
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<tr>
<td>2004–05</td>
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<tr>
<td>2007–08</td>
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<td>$(3,500)</td>
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<tr>
<td>2008–09</td>
<td>$24,900</td>
<td>$(3,600)</td>
<td>$21,300</td>
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</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

There is a significant opportunity for savings upon the implementation of a 340B pharmaceutical purchasing program. Based on current spending levels, the Department of Corrections alone could yield annual savings of more than $50 million. However, the aggregate savings that would result from this recommendation cannot be estimated.
Endnotes

1 Interview with Jim Klien, Fiscal Forecasting and Data Management Branch, Medical Care Statistics Section, Department of Health Services, Sacramento, California (March 5, 2004).


3 Interview with Ron La Sala, Pharmacy Contracting, Department of General Services, Sacramento, California (April 28, 2004).

4 Senate Advisory Commission on Cost Control, “Controlling the Costs of California’s Prison Pharmacy Operations” (Sacramento, California, July 2002), cover letter.


7 Interview with Lee Kemper, administrative officer, County Medical Services Program, Department of Health Services, Sacramento, California (April 13, 2004).

8 Senate Bill 1315, Sacramento, California, September 12, 2002.

9 Section 340B (10), Public Health Service Act.

10 Section 340B (4), Public Health Service Act.


15 Special report, State Spending on Medical Supplies and Pharmaceuticals, The Joint Legislative Audit Review Commission of the Virginia Assembly, p. 20.

16 Ibid., p. 22.

17 Interview with Lee Kemper, Administrative Officer, County Medical Services Program Board, Sacramento, California (April 13, 2004).

18 Ibid.


Increase the Use of Performance-Based Contracting

Summary
California should use performance-based contracting activities to save money, maximize performance, encourage innovation and competition and improve services. This is a type of contracting “best practice” procurement method that the state has been hesitant to promote. The state should adopt a broad implementation of this type of contracting.

Background
Typical procurement documents are now prescriptive in nature, specifying how the contractor should perform the work. When the state issues a prescriptive procurement, the contractor is unable to find better, more cost-effective ways of doing business, such as performance-based contracting. As an example, the US Air Force found that it saved 50 percent on its maintenance agreement by specifying that floors must be “clean, free of scuff marks and dirt, and have a uniformly glossy finish,” rather than requiring its contractor to strip and wax floors weekly.1

About $7.6 billion per year of the state’s budget is spent on the purchase of goods and services.2 Various types of contracts are used for these purchases, depending on agency needs and applicable state laws and rules. Based upon the state’s current budget crisis, a dramatic change in the nature of government requires fundamental organizational changes. The state cannot afford doing business as usual. With fewer budget dollars available, the state needs to look for more innovative ways to reduce costs and increase service quality.

For example, some of the performance-based contracting opportunities the state can consider include the following:

• Janitorial services;
• Landscaping and maintenance services;
• Information Technology (IT);
• Health services; and
• Other non-IT services (food services, security guards, laundry services, elevators, etc.)

Performance-based contracting objectives
By describing requirements in terms of performance outcomes, and not requiring detailed specifications, agencies can help achieve all of the following objectives:

• Maximize performance—allow a contractor to deliver the required service based on its own best practices and the customer’s desired outcome;
• Maximize competition and innovation—encourage innovation from the supplier base using performance requirements;

1 US Air Force
2 State of California, Office of the Controller
• Minimize burdensome reporting requirements and reduce the use of contract provisions and requirements that are unique to the state;
• Shift risk to contractors so they are responsible for achieving the objectives in the Statement of Work through the use of their own best practices and processes; and
• Achieve cost savings through performance requirements.

**Elements of performance-based contracts**

Traditionally, government service contracts have emphasized inputs rather than outcomes. Performance-based contracts clearly spell out only the desired end result expected of the contractor. These types of contracts typically detail the procedures and processes to be used in delivering a service; amount and type of equipment; and time and labor to be used. At a minimum, there are five elements of performance-based contracting:

1. **Performance Statement of Work**—describes the requirements in terms of measurable outcomes rather than by means of prescriptive methods.
2. **Measurable Performance Standards**—determines whether performance outcomes have been met. Measurable performance standards define what is considered acceptable performance.
3. **Quality Assurance Plan**—describes how the contractor’s performance will be measured against the performance standard.
4. **Remedies**—procedures that address how to manage performance that does not meet performance standards. While not mandatory, incentives should be used, where appropriate, to encourage performance that will exceed performance standards. Remedies and incentives work hand-in-hand.
5. **Performance Assessment Plan**—describes how contractor performance will be measured and assessed against performance standards. (Quality Assurance Plan.)

**Types of incentives and remedies**

Incentives can be monetary, non-monetary, positive or negative. They can be based on cost, schedule, or quality of performance. It is important that incentives are built upon performance objectives and performance standards. Regardless of the final composition and structure of the incentives, the goal is to encourage and motivate the best quality performance.
Exhibit 1
Types of Incentives and Remedies

<table>
<thead>
<tr>
<th>Type of Incentive/Remedy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost-based</td>
<td>Relate profit or fee to results achieved by the contractor in relation to identified cost-based targets.</td>
</tr>
<tr>
<td>Award Fee</td>
<td>Allows contractors to earn a portion (if not all) of an award fee pool established at the beginning of an evaluation period.</td>
</tr>
<tr>
<td>Share-in-savings</td>
<td>Contractor pays for developing an end item and is compensated from the savings it generates.</td>
</tr>
<tr>
<td>Share-in-revenue</td>
<td>Generates additional revenue enhancements; compensation based on sharing formula.</td>
</tr>
<tr>
<td>Balanced Scorecard</td>
<td>Used when performance is less tangible, i.e., quality of lead personnel or communication and resolution of issues.</td>
</tr>
<tr>
<td>Past Performance</td>
<td>Information used as part of the decision process to exercise contract options or to make contract awards.</td>
</tr>
<tr>
<td>Non-performance Remedies</td>
<td>Specified procedures or remedies for reductions in payment when services are not performed or do not meet contract requirements.</td>
</tr>
</tbody>
</table>

The types of incentives utilizing performance-based contracting arrangements include the following:

**Schedule incentive**
After the Northridge earthquake, Caltrans offered the contractor substantial performance incentives, as well as penalties for rebuilding a freeway overpass damaged by the quake. Caltrans proposed a $200,000 per day bonus for completing the project ahead of schedule, and a $200,000 a day penalty for each day the project was delayed. The contractor finished the project significantly ahead of schedule.4

**Share-in-savings**
The U.S. Department of Energy (DOE) needed to identify facility improvements that would not only reduce operational costs, but also help achieve a 20 percent reduction in federal energy use by year 2000 as mandated by the Energy Policy Act of 1992. The Department of Energy knew even greater savings were possible, especially in the area of inefficient lighting. The DOE was able to achieve a 27 percent annual savings for the first three years of the performance-based contract in its 13-building headquarters. The remaining four years of the contract produced a total of 85 percent savings. Through various changes and modifications in lighting throughout the buildings, the contractor was able to achieve a reduction of 5.8 million kilowatt hours per year. This translated into electric rebates of more than $1 million from the power company and a savings of $400,000 per year for DOE.5
Share-in-revenue
In May 1996, Jersey City, New Jersey turned over the operation of its water system to United Water. When the system was run by the city, the actual amount of water being paid for was only 66 percent. The new contract provides financial incentives for the contractor to increase this percentage. If the percentage rises to 70–75 percent, United Water keeps 5 percent of the increased collections. If the percentage rises to 75–80 percent, the water company keeps 10 percent of the increase in collections, and if the collection rate exceeds 80 percent, the company’s percentage rises to 25 percent of the increase in collections.

Share-in-savings
At the Illinois Department of Children and Family Services Foster Care each caseworker is assigned 33 cases per year. Caseworkers are automatically paid for processing 25 cases. If they place eight of the 33 children assigned, they “break even.” If they place less than eight of the 33 children, they “lose” in that they must service 26–33 cases and get paid for 25 cases. If they place more than eight of the 33 children, they share in the savings. In the first year, the number of placements increased by 120 percent. By the second year, the increase was 390 percent. The home care caseload declined by 41 percent while the number of placements doubled.

Share-in-revenue
The California Franchise Tax Board initiated its Accounts Receivable Collection System project to solve several business problems including the following:

- Separate collection system within Franchise Tax Board generated individual billings resulting in taxpayers or debtors receiving separate bills for each debt type;
- Duplication of effort in contacting taxpayer or debtor regarding the various liabilities owed; and
- Automated account modeling to select accounts for collection activity was limited and inflexible.

The Accounts Receivable Collection System benefits were projected to be $35 million annually. Since implementation in 1998, the actual results have continued to exceed the projected annual benefits.

Federal contract reform
The federal government has been working on contract reform for many years. The U.S. Office of Management and Budget has published a guide to the use of performance-based service contracts. This contracting method has been used by the Department of Defense (DOD) with a great deal of success. They use DOD conflict resolution mechanisms to avoid protests and disputes, identify services convertible to performance-based contracting, work with the government to eliminate obstacles implementing this initiative and identify commercial contracting practices adaptable for use by the government.
By 1998, 15 federal agencies had converted 26 contracts with an estimated value of $585 million to performance-based methods. These agencies reported an average 15 percent reduction in contract prices and an 18 percent improvement in satisfaction with contractors’ work from switching to performance contracts. Reduced prices and increased customer satisfaction were noted at all price ranges, for technical, non-technical and professional services.9

The pilot program found that the adoption of performance-based service contracts initially increased the time needed for the purchasing process at many agencies. Most of this increase was attributable to agencies’ unfamiliarity with the process, and their need to develop performance-based criteria for various contracts.10 To improve this situation, the Office of Federal Procurement Policy is developing “boilerplate” contracts for standard services and making them readily available to all federal agencies via agency websites. Agencies will reuse these templates for multiple contracts, a step that should greatly reduce the time required for the contracting process. The Office of Federal Procurement Policy and the Department of Defense are also providing staff expertise to assist federal agencies in developing performance requirements for complex service contracts.11

**Recommendations**

A. The Governor should direct the Department of General Services, or its successor, to promote the use of performance-based contracting where applicable.

B. The Governor should direct the Department of General Services, or its successor, to design and place template contracts on the web with separate sections for contract specifications, deliverables, sample timelines for deliverables, and recommended standard terms and conditions. The Department of General Services, or its successor entity, should develop guidelines and evaluation criteria, as well as provide training in performance-based contracting to appropriate department staff.

C. The Governor should direct the Department of General Services, or its successor, to direct state agencies to convert at least 10 percent of new and renewal service-related contracts to performance-based contracts by Year 1; 20 percent by Year 2; 40 percent by Year 3; and 50 percent by Year 4.

**Fiscal Impact**

Significant savings ranging from 15 percent to over 18 percent are possible using performance-based contracting.12 The number of contracts and projects that use this approach will be relatively small at inception, but will grow as the policies and processes are developed to fully implement this program. Estimated first full-year savings could range from $45.2 million and $91.2 million based on $7.6 billion of annual state purchases of goods and services. Savings over a five-year period could range from $684 million to nearly $1.36 billion.
The following assumptions were used when formulating the fiscal impact:

- A three-year average of what the state spends on goods and services, or $7.6 billion, (Fiscal Year 2000–2001—$7.2 billion, FY 2001–2002—$10.3 billion, and FY 2002–2003—$5.5 billion);
- Some contracts are multi-year and are therefore not part of the pool of contracts used in the above estimate;
- There will be no effect on personnel years (PYs) attributed to this contracting method. There will be a shift in staff responsibilities and staffing levels; and
- The estimated $7.6 billion spent annually for goods and services is a three-year estimate, and may not include all categories of state purchasing since a single contracts database does not currently exist.

The table below assumes total spending on goods and services of $7.6 billion with an estimated 11 percent savings per year. It also assumes first fiscal-year savings at half-year implementation.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
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<td>$16,720</td>
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</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from 2003–04 expenditures, revenues and PYs.

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<tr>
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</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from 2003–04 expenditures, revenues and PYs.
Endnotes

2 E-mail from the California Department of General Services, a three-year average total expenditure of $7.6 billion in state contracts based on total expenditures for FY 2000–2001—$7.2 billion, FY 2001-2002—$10.3 billion, FY 2002–2003—$5.5 billion.


8 Interview with Joan Rabang and Maria DeAngelis, Accounts Receivable Collection System project and Balanced Scorecard Approach, Procurement Office, California Franchise Tax Board, Sacramento, California (April 8, 2004).


Implementing More Strategic Sourcing Procurement Strategies

Summary
Under increasing pressures to operate more efficiently, California is quickly realizing that procurement provides a tremendous lever to improve processes, increase productivity and reduce costs. Strategic sourcing is an effective procurement strategy that the state should employ to better leverage its massive spending power and reduce costs.

Background
What is strategic sourcing?
In many businesses, the secret to lower costs, improved profits and a more competitive operation lies in the supply chain. At present, organizations are taking a fresh look at how they purchase products and services, and many are adopting a process called “strategic sourcing.”

Strategic sourcing is a rigorous, systematic process by which the organization analyzes its expenditures, evaluates both internal and external influences, and determines the appropriate supplier relationships necessary to support overall organizational goals. Strategic sourcing is a core activity in purchasing and supply management. It is a process which requires extensive knowledge and competence.

Strategic sourcing attempts to determine the total cost of a particular action before making a decision to purchase a good or service rather than just a decision based on purchase price alone. For example, a business may purchase low cost computers for its office without realizing that most of the costs over the three to four year life are not related to initial price. A strategic source approach considers the cost of purchasing, installation, software upgrades, maintenance and disposal. An ad hoc approach to the purchase of office computers results in variations in operating systems, software, etc. and an increase in support costs.

Information about products and the needs of the buyer and supplier are essential to strategic sourcing and issues can be explored in a collaborative environment. Internal barriers are common in both the buyer and seller organizations and these add cost to both parties. Working together on strategic sourcing reduces those costs.
Leading companies have realized value from strategic sourcing for many years, and many have already achieved impressive cost reductions and supply chain improvements. Strategic sourcing has delivered value as these corporations have aggregated volume, developed common purchasing specifications, negotiated corporate-wide contracts and implemented cooperative relationships with strategic suppliers.\textsuperscript{5}

Strategic sourcing is also good for innovative and competitive suppliers, including small and medium-sized businesses that might not have imagined they could compete against larger companies for major contracts. Strategic sourcing can even be used by suppliers themselves to achieve similar savings and benefits.\textsuperscript{6}

\textbf{Savings examples}
Reports from mid-sized and large North American, European and Asian companies adopting the strategic sourcing approach suggest the reduction in a business’ non-interest expense can be 10–30 percent.\textsuperscript{7}

Aberdeen Group research suggests savings on sourcing opportunities to be:
- An average of 5 percent to 20 percent unit price reductions;
- 25 to 30 percent reduction in time-to-market cycles;
- 10 to 15 percent reduction in sourcing cycles.\textsuperscript{8}

\textbf{Strategic source implementation}
The CPR Procurement Team worked with Department of General Services to expedite the development and offering of a Strategic Sourcing Request for Proposal (RFP). The vendor selected to implement strategic sourcing will be required to determine the state’s total spending, conduct market analysis, develop and implement saving opportunities and train staff on strategic sourcing techniques.

\textbf{Recommendation}
The Department of General Services or its successor entity should expand strategic sourcing opportunities throughout state government.

\textbf{Fiscal Impact}
With strategic sourcing, major manufacturers, retailers, governments and financial institutions are achieving cost savings while strengthening ties with suppliers offering the best quality products and customer service. Savings estimates are based on actual results realized by companies who have implemented strategic sourcing. The estimates are net of estimated implementation costs.
### General Fund
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
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</tr>
</thead>
<tbody>
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Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Other Funds
(dollars in thousands)

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<td>0</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Endnotes

6 Royal Bank of Canada Financial Group, “About Strategic Sourcing” (April 17, 2003),

7 Aberdeen Group, “Making E-sourcing Strategic: From Tactical Technology to Core Business Strategy,”

Create a Statewide Contract Management Policy

Summary
California government lacks comprehensive statewide contract development and administration policies and procedures to ensure that its contracts and purchase orders are administered effectively. Improving contract management practices will improve contractor performance so the government receives goods and services it buys on time and within budget.

Background
California spends about $7 billion on goods and services annually.\(^1\) Given such stakes, the state should do everything it can to ensure that these contracts are managed effectively. The primary objective of contract management is to establish “best practices” that agencies can use to improve contract administration to ensure responsiveness to customers and best value to taxpayers.

In March 2003, the Legislative Audit Office (LAO) overview and the Department of Finance (DOF) assessment of 117 state information technology (IT) projects over $10 million uncovered a number of instances in which departments were not properly managing IT projects.\(^2\) The assessment revealed that 90 of the 117 projects (77 percent) had at least a 10 percent change in schedule, cost, or scope, which may adversely impact the delivery of the projects. State IT projects not only encounter serious problems, but in addition, the departments do not adhere to state policy that requires reporting of these problems. In comparison, Digital Consulting Institute reports that in Europe and North America 25 to 50 percent of all significant software development projects are ending in catastrophic failure and abandonment.\(^3\) In a February 2001 article in *Software Magazine*, Standish Group reported that in 1994 only 16 percent of application development projects met the criteria for success, completed on time, on budget and with all features/functions originally specified. Project success has been rising. Standish reported that in 2000, 28 percent of projects were in the successful column.\(^4\)

State projects continue to be in jeopardy and detailed information revealing the problems is lacking. DOF is unable to provide answers to important questions, such as the following:

- Are state Information Technology projects properly managed with oversight by their departments;
- What can the state do to ensure projects stay on schedule and within budget; and
- Why are departments experiencing problems adhering to state policies on IT projects?
The DOF assessment found that for an IT project to be successful, strong contract administration and management is essential. A case in point is the $55 million Advanced Toll Collection & Accounting System (ATCAS) project.

**Case Study: ATCAS project**

**Project Background:** This project involved the implementation of the $55 million Electronic Toll Collection (ETC) on California state-owned toll bridges (FasTrak™), and, it is part of a project to replace at all state-owned toll bridge sites all existing toll collection equipment with electronic transponder units installed in the windshield of commuter vehicles. The FasTrak™ overhead antenna reads your transponder as a motor vehicle passes through the toll plaza and automatically deducts the appropriate toll from the owner’s prepaid account.

**Problem:** The contract was awarded in 1992. Over the 11-year term of the contract, several problems were encountered, including a changing scope or work and related funding overruns, and lack of oversight leading to a $7 million settlement (1999–2000) with Adesta Communications to extend the contract. Contractor ownership changed hands four times over the course of the contract.

**Contract Management Resolution:** Because this specific project was on the verge of failure, a Department of General Services (DGS) Procurement Division contract manager was assigned to resolve contract management issues. In 2000, a contract revision was implemented. Additionally, direct oversight by the DGS for contract management became mandatory. These changes improved contract management and fiscal accountability. All changes, however minor, had to be approved by DGS. A change order process was implemented. DGS then coordinated with DOF for budget oversight and with an independent verification and validation contractor for receipt of monthly reports. The contract manager was present at monthly meetings and copied on all documents. A contract management file was created and managed, bond monies were better managed and corporate ownership agreements and financial institution agreements were executed properly in coordination with legal counsel.

The state could have lost its entire investment due to the inconsistencies of contract management by both the state and the contractor. Only a major amendment negotiated by both sides’ attorneys and DGS/PD provided for a settlement of the outstanding issues, and it initiated contract management procedures that put the project back on track.

**Conclusion:** Had these management procedures been in place and diligently practiced at the time of contract issuance, many of the problems would not have occurred. The state would have been in a proactive mode rather than reactive mode—perhaps saving millions of dollars.³

As noted in a Bureau of State Audits report in 2001, state agencies and departments have not considered risks early in the procurement process. The report states that departments might overlook problems that could be corrected before they are too expensive and time-consuming...
There is little evidence to suggest the state has recognized that good contract administration and management best practices can be utilized to ensure that risks are identified and mitigated throughout the contract lifecycle. The state should learn from other government entities how good contract administration and management practices can reduce these risks.

Currently, the state does not place emphasis on contract administration and management related to procurements. Departments typically do not incorporate contract management goals into employee’s annual job performance evaluations. It is time for the state to incorporate contract administration and management best practices that is currently available to the federal government and other states.

There are no formal state training classes on contract management. The few procurement officials hired by the state who possess contract management skills received their formal training elsewhere.

Some of the skills necessary for a contract manager include the ability to:

- Review contractor’s compensation structure;
- Review contractor’s insurance plans;
- Negotiate/resolve issues in controversy and know when to involve legal counsel;
- Review/approve or disapprove the contract’s requests for payment when progress payments or performance-based payments are part of the contract;
- Monitor contractor’s financial condition so it doesn’t jeopardize contract performance;
- Negotiate/issue/approve change orders and amendments;
- Issue administrative changes, correcting errors, etc;
- Negotiate and execute contractual documents when a contract is cancelled;
- Process/issue novation agreements, change of name agreements and assignments, and to know the difference between each and when they apply;
- Ensure contractor compliance with contractual requirements;
- Ensure contractor compliance with subcontracting plans including DVBE contracts;
- Ensure timely submission of required reports from contractor as well as agency and oversight contractors such as Independent Verification and Validation;
- Accomplish administrative closeout of contract;
- Support the program department in guiding its performance to meet contract needs;
- Administer any financing obtained if applicable;
- Oversee bond and/or line of credit securities for the contract;
- Prepare evaluations of contractor performance;
- Perform all necessary functions of protecting the state in cases where a contractor is in bankruptcy;
- Manage show cause, suspension of work and stop work orders;
- Terminate contracts; and
• Fully understand the implications of the provisions/terms & conditions that effect the contract.

Other efforts in contract management reform

States Requiring Contract Management

Colorado and Georgia have both published contract management manuals that all state contract managers must follow, and they have realized savings and efficiencies as a result. Since Colorado began using its Contract Procedure and Management Manual, contract processing time has dropped from an average of 12 days to five days. Moreover, prior to the use of the manual, many contracts had to be reviewed by the state Attorney General’s Office at a charge-back rate of $58 per hour. In most instances, this requirement now is waived as a result of a methodology developed in the manual. Both manuals emphasize that the contract managers' responsibilities do not end after a contractor begins work. A consistent level of oversight is needed from the time a contract is written until it is closed.

In July 2003, Georgia issued an audit report listing best practices in governments and effective contract monitoring.8

Federal Government Requires Contract Management

In September 2003, the Office of Federal Procurement Policy identified several weaknesses in federal contract administration.9 The main problem involved contracting officials allocating more time to awarding new contracts instead of administering existing contracts. This practice often led to contractor cost overruns, delays in receiving goods and services, confusion over roles and responsibilities among contracting officials, excessive backlog in contract closeout and incurred costs audits, improperly trained officials performing contract oversight, unclear instructions that hinder contractor performance and inadequate guidance on voucher processing and contract closeout.

As a result, the federal government now provides online training through the Federal Acquisition Institute for individuals seeking a career in the procurement field.10 The online training reviews the entire contracting cycle, not just the initial phase of awarding a contract.

Private Sector Contract Management Practices

In a recent National Contract Management Association Contract Management magazine article, “Contract Management Can Improve Corporate Governance,” a survey of 150 global companies revealed that more than half the companies were unable to analyze their contracts or orders by supplier or customer, which limits their ability to optimize contract performance. More than 40 percent said they could realize large incremental revenues and cost savings through better contract management.11
Recommendations

A. The Department of General Services, or its successor, should institute contract management policy and develop common guidelines and training curriculum that all state-employed contract managers must follow. At a minimum, the new policy and guidelines for contract managers should train state employees how to:

- Develop a contract management plan approach;
- Participate, as necessary, in solicitation development and writing the contract;
- Monitor the contractor’s progress and performance to ensure that the goods and services provided conform to the contract requirements;
- Manage any state property used in contract performance;
- Make payments consistent with the contract requirements;
- Exercise state remedies, as appropriate, when a contractor’s performance proves deficient;
- Resolve disputes in a timely manner;
- Maintain appropriate records and performance data; and
- Properly close out contracts.

B. The Department of General Services, or its successor, should provide strong contract administration training to procurement officials and program or project representatives. Contract management training should promote a systematic methodology for identifying, assessing, treating and monitoring risks associated with the contract lifecycle.

C. The Department of General Services, or its successor, and the California Procurement & Contracting Academy (CAL-PCA) should begin to develop the contract management guide and training curriculum no later than Fiscal Year 2004–2005. All state agencies and institutions should be required to report the training of contract managers or their designated representatives (i.e., program/project managers) in their next scheduled strategic plan.

D. Each state department should conduct annual contract administration and management performance evaluations for purchasing and contracting employees.

Fiscal Impact

The potential savings from this recommendation are difficult to estimate. In December 2000, the Texas Comptroller made a similar recommendation estimating savings of 0.5 percent on contracts by applying “best practices” contract management skills. The 0.5 percent savings rate assumes that by providing better contract administration oversight, potential contractual issues can be resolved in a proactive, cost effective manner related to changes in contract scope, schedule, or cost. Based on an estimated $7.6 billion in average state procurement costs for FYs 2000–2001 through 2002–2003, annual savings could reach $38 million.
The guidelines and subsequent training should be implemented within the existing resources of DGS or its successor entity.

Endnotes

1 Department of General Services, A three year average total expenditure of $7.6 billion in state contracts based on total spend for Fiscal Years 2000–2001, $7.2 billion; FY 2001–2002, $10.3 billion; and FY 2002–2003, $5.5 billion.


5 Interview with Kristine French, Department of General Services, procurement division analyst (May 10, 2004).


7 Interview with Phil Holtman, director of Statewide Contract Approval, Colorado State Controller’s Office, Denver, Colorado (August 16, 2000).


Alternative Service Delivery Techniques and Competition in the State’s Procurement of Goods and Services

Summary
California does not systematically consider alternative service delivery techniques or reap the benefits of competition to deliver government services. Consideration of different approaches, such as reengineering services in-house, managed competition, and other alternative service delivery techniques can create an environment for efficiency, improve customer service, enhance accountability and save taxpayer dollars. California should remove barriers that prohibit using alternative service delivery techniques and lay the groundwork for institutionalizing competition to deliver government services.

Background
In today’s marketplace, private sector businesses must constantly evaluate their own operations, understand the costs of their activities, and differentiate between activities that do and do not add value to their operations, benchmark activities and reengineer their business processes. This continual reassessment and improvement of an organization’s operations results in reduced cycle times, improved service delivery, and reduced costs. Companies that do not perform this continual assessment will find that their services are not competitively priced. By contrast, most government services are monopolies, which can often lead to inflated prices and poor service quality due to lack of competitive pressure. Recently, however, governments are breaking the monopolies through implementing alternative service delivery techniques and competition.

Benefits of competition
The federal government has recognized the benefits of competition and embraces the concept that government should focus on performing its core functions and rely on the private sector to perform services that are outside of those core functions if they can do so with improved quality and lower cost. The federal Office of Management and Budget’s Circular A-76 describes why competition should be fundamental in providing government services: The competitive enterprise system, characterized by individual freedom and initiative, is the primary source of national economic strength. In recognition of this principle, it has been and continues to be the general policy of the government to rely on commercial sources to supply the products and services the government needs.
Managed competition example

A variety of alternative service delivery techniques can be employed to maximize efficiency and increase service quality. Some methods will be more appropriate than others depending on the service. One proven method, “managed competition” (also known as competitive sourcing) is a process by which government employees compete with private vendors to determine which would be the best value provider for a particular government service. Managed competition facilitates government employees to rethink and reengineer existing business processes to ensure that governmental goods and services are delivered as efficiently and effectively as possible. Successful managed competitions are designed to facilitate accurate and fair comparisons between public and private providers of similar functions and services to determine the best course of action for maintaining or enhancing agencies’ effectiveness while lowering their costs. In order to mitigate the disruption and cost of changing service providers, however, many managed competitions require outside proposals savings to exceed the current in-house proposals by pre-determined amounts (depending on the circumstances).

Other alternative service delivery techniques

Managed competition is not the only solution to address the government service monopoly. The following partial list describes other alternative service delivery techniques for cutting costs and increasing delivery:

- internal markets;
- commercialization or service shedding;
- volunteers;
- outsourcing or contracting out;
- public vs. public competition;
- private infrastructure development, operation; and
- asset sale or long-term lease.

Government services that could be delivered with these techniques include:

- information technology;
- health and managed care services;
- transportation (highway maintenance, fleet services, transit services, etc.);
- water resources (lakes, reservoirs, pumping plants, etc.);
- State facilities operation (prisons, state parks, Cow Palace, etc.);
- higher education services; and
- non-professional services (e.g., food service, security guard, laundry, janitorial, landscaping and building maintenance).

The federal approach

The federal government rigorously evaluates its activities. The Federal Activities Inventory Reform (FAIR) Act of 1998 was designed to reduce federal agencies’ operating costs and
increase their efficiency through the use of public-private competition. The FAIR Act of 1998 was intended to encourage government agencies to assess their core functions and determine which could be subjected to competition with the private sector. The FAIR Act direct federal agencies to submit to the Office of Management and Budget an annual inventory of their “commercial” activities, defined as activities performed by federal employees that are not inherently governmental. The act allows the government to choose the source—public or private—that is most cost effective and in the best interest of the taxpayer. At the federal level, government agencies typically win half of all competitions.⁵

The federal government is using managed competition to reduce costs. In 1996, the Center for Naval Analysis studied 2,138 A-76 competitions at the Defense Department between 1978 and 1994. The average cost savings was projected to be 31 percent. A General Accounting Office analysis of 286 Defense competitions from 1995 to 1999 noted that 40 percent were won by the private sector and 60 percent by the government, with a reported average competition cost savings of 39 percent. Additionally, a report by the Defense Department Commercial Activities Management Information System (CAMIS) reported that about 314 public/private competitions between fiscal 1997 and 2001 showed the average staff reduction was 35 percent, even though only 40 percent of these competitions were won by the private sector. When agencies are required to compete, they can do the same work as well or better than they did before, but with significantly fewer people—frequently with 20 percent to 40 percent fewer. In 2001, the Center for Naval Analysis reported on 16 public/private competitions for an average savings of 34 percent.⁶

**State and local government**

Much of government’s early experience with the various forms of competition came at the local level. Results of a 1995 survey of 66 of the largest U.S. cities by Robert J. Dilger were published in the January 1997 issue of Public Administration Review. Eighty-two percent of the cities reported they were satisfied or very satisfied with the resulting performance, and the remaining 18 percent were neutral. None were dissatisfied. The report found a 25 percent improvement in service on average. The shift to a competitive environment not only improved performance, but also resulted in savings of up to 60 percent.⁷

Various governments have instituted programs of managed competition as one of the alternative service delivery techniques, which has resulted in achieving high in-house winning percentages.⁸ Some managed competition is structured so that there is a “share-in-the savings” component for the competition winners, which can result in bonuses for the in-house staff if they win the competition.
Managed Competition (In-house Winning Percentage)

- Charlotte, NC 71%
- Indianapolis, IN 72%
- Phoenix, AZ 39%
- Bethesda, MD 69%

Other states are adopting organizations and practices that continually seek alternative service delivery options. Virginia created an independent council, as part of their Government Competition Act of 1995, to find better and less costly ways to provide government services for Virginia’s citizens. Virginia developed comprehensive policies, practices and tools for evaluating competitions, making a toolkit available on-line. The council’s recommendations are currently estimated to be saving at least 40 million a year.

Likewise in 1993, Texas created the Council on Competitive Government to “explore” alternative service delivery methods, such as managed competition, outsourcing, reengineering and public/private partnerships. Through FY 2002, the council has saved the state more than $84 million.

**Time for California to adopt competitive procurement techniques**

The time is right for California to reconsider its broad statutory monopoly for delivery of government services. California faces the worst fiscal crisis of any state in the nation with its mind-numbing budget deficit. It’s widely accepted that managed competition is a sound business practice that government can use to redesign its programs to be more efficient—producing cost savings of 30 percent on average each time it is applied. Reason Institute lists a menu of possible reductions as high as $9 billion in budget line items for competitive sourcing programs.

Alternative service delivery techniques can be a powerful tool for improving quality and saving money when properly used. These techniques along with performance-based contracting, when applicable, achieves high quality, competitive services, and is good for economic investment, and is a critically important strategy in achieving higher quality and competitively priced services.

The wholesale contracting out of services provided by the government may not always serve the taxpayer; the key is to subject government services to the same competitive pressures in which private markets operate tied to clear and enforceable performance outcomes. However, civil service laws hinder or preclude the use of alternative service delivery techniques. If California is to meet the needs of the public, it will need to change the laws that prevent it from moving towards using proven alternative service delivery options.
**Recommendation**
The Governor should appoint a Competitive Government Panel comprised of representatives from state government.

The Panel should conduct public meetings as necessary from a variety of interested parties such as the business community, employee representation groups and citizens. The Panel should be charged with developing a strategy to address the barriers impeding the use of alternative service delivery techniques and make recommendations to overcome those barriers. The Panel should also make recommendations about how best to implement and oversee alternative service delivery projects. The Panel should be supported by a team of “Competition Corps” within the Department of General Services, or its successor, to implement and oversee competition goals and efforts of agreed upon alternative service delivery projects. The initial team should consist of five staff redirected within the Department of General Services or its successor.

**Fiscal Impact**
The initial fiscal impact to California is difficult to estimate due to existing constitutional barriers. As a result of these barriers, there are limited opportunities to apply alternative service delivery techniques.

In the event these constitutional barriers are addressed, significant savings can be realized. The federal government is averaging cost reductions of about 20 percent through competitive sourcing techniques.14

**Endnotes**
7 Government Executive Outlook, “Myths of Competition,” by Jacques S. Gansier (July 14, 2003),
8 Reason Public Policy Institute, William Eggers, Director of Privatization and Government Reform, “Competitive
Neutrality: Ensuring a Level Playing Field in Managed Competitions, How to Guide No. 18” (Los Angeles, California,
March 1998).
June 10, 2004).
10 Manhattan Institute No. 41 Civic report, “Private Competition for Public Services: Unfinished Agenda in New York
12 Reason Public Policy Institute and the Performance Institute, “Citizens’ Budget 2003–05, A 10 Point Plan to Balance
the California Budget and Protect Quality-of-Life Priorities,” signature page.
13 Reason Public Policy Institute and the Performance Institute, “Citizens’ Budget 2003–05, A 10 Point Plan to Balance
the California Budget and Protect Quality-of-Life Priorities,” Appendix B, Competitive Sourcing Line Items.
14 U.S. Office of Management and Budget, Testimony of John A. Koskinen, Deputy Director for Management, Office of
Management and Budget, before the Senate Committee on Governmental Affairs Regarding the “Freedom from
California Can Save Millions of Dollars by Modernizing its Procurement System

**Summary**
The State of California must modernize and reform its purchasing and buying patterns in an effort to take full advantage of its massive purchasing power and to foster open competition.

**Background**
Procurement in the state relies primarily on manual processes driven by traditional low tech tools such as phones, fax machines, and paper catalogs. While some departments have developed stand alone procurement systems, and others have employed varying degrees of automation, e-procurement at a statewide level remains elusive.

Electronic procurement is the use of electronic technology to customize and streamline the procurement process of an organization to improve efficiency and reduce costs.¹

The IBM report “e-procurement and the Path to Profitability” states “More than ever before, key decision makers need precise information about procurement, expenditures by entity and personnel, as well as a complete and up to date picture of the business.” Accurate and timely procurement information is critical to reducing costs, leveraging spending power, managing expenditures and measuring supplier performance.²

**Benefits of e-procurement**
E-procurement solutions will benefit the state by reducing the cost of doing business by eliminating inefficiencies and finding smarter ways of doing business. E-procurement focuses on improving the transactional side of buying by reducing purchasing lead times and costs. Costs savings are maximized where the implementation of an e-procurement system is used as an impetus for business process improvement.³

Xerox Corporation reduced the in procurement staff by 20 percent when it implemented e-procurement.⁴ The State of North Carolina reported achieving process savings of 26–50 percent through the use of an e-procurement system.⁵

In addition to achieving costs savings through process improvement, e-procurement can bring other benefits as well.⁶ These benefits include the following:
• Better access to information and greater opportunities for businesses, especially small business;
• More efficient purchasing within government agencies;
• Automated compliance with purchasing codes and statutes;
• Increased ability to assist service providers and industry to better meet government procurement needs;
• Improved financial management;
• Lower prices for goods and services offered to government agencies;
• Innovation in procurement (e.g. reverse auctions); and
• Greater access for regional and small business.

An IBM Executive Strategy Report states that IBM experience shows that a company can save between 5 and 15 percent of their total of procurement spending when committing to a well planned deployment of an e-procurement solution. Much of these savings will come from the reduction in operating costs resulting from streamlined processes, improved management information, an increase in enterprise-wide contracts, improved supplier relations and an increase in approved contracts. An e-procurement solution plays a fundamental role in transforming the buying process and provides the information needed to make more intelligent purchasing decisions.7

Marrakech Consulting noted that Morgan Stanley Dean Witter estimated the cost of processing a purchase order ranges from $125 to $175, and that e-procurement can reduce this cost to $10 to $15 per purchase order. In addition, it noted that Aberdeen surveyed buying organizations which spend an average of $31.50 processing an order through an automated procurement system compared with $114 per requisition for orders processed manually.8

In Fiscal Year 2001–2002, the State of California processed a total of 247,993 purchase orders. The average cost per purchase order is not known.9

Other states have implemented e-procurement systems
The State of Virginia implemented an electronic procurement system called eVa (electronic Virginia). Virginia reports that using this system results in better processes, such as electronic orders and e-payment efficiencies. Suppliers only need access to the internet to participate. The State of Virginia charges 1 percent with a cap of $500 per order. This funds the costs of maintenance for the system.10

The State of North Carolina also implemented an electronic procurement system called NC E-Procurement @ Your Service. A fee of 1.75 percent is charged to the entity that receives the purchase order.11

Both Virginia and North Carolina did not have any start-up costs do to the fees charged to their vendors. The fees paid for the systems start-ups and future maintenance.
E-procurement is both a significant opportunity and major challenge for California. The benefits of streamlining and integrating procurement processes and channeling procurement through a centralized system are too valuable to ignore. Even modest process and purchase savings could result in significant cost savings for the state. E-procurement will ultimately develop a common look for business entities interacting with the state, and business must be able to view the state as a single procurer of their goods and services.

**Recommendations**

A. **The Department of General Services (DGS), or its successor, should develop and implement e-procurement solutions on a statewide basis.** This approach will collect all state procurement information and will facilitate a greater ability for the state to strategically source its procurement.

DGS, or its successor, should develop a statewide methodology that consolidates all state procurement activities through a single Internet portal by June 30, 2005. The methodology should enable electronic payment for online purchases of goods and services and address reconciliation issues with banking institutions.

DGS, or its successor, should partner with an application service provider that provides e-procurement technology that can be used by all state agencies. This allows for a vendor-state partnership, and funding based on shared revenues from the e-procurement system. In addition, a percentage of these fees will be deposited in the state technology investment fund and can be applied to any other business/technology application.

B. **The Chief Information Officer (CIO) should develop an overarching strategic plan—with benchmarks—for the entire State providing guidance and direction outlining specific priorities on interfaces between procurement, asset management and financial applications.**

- Strategy to include clear direction to enforce consolidation of purchases and require all agencies to participate in e-procurement.
- All state agencies, with certain exceptions—to be defined by the CIO—shall use the EP system.

C. **The Department of Finance, or its successor, should identify all development projects enhancing or expanding the many computer applications being used for procurement in the agencies pending the completion of a statewide strategic plan.** It should immediately freeze those procurement applications that do not conform to the new plan—or are duplicating efforts. Fixes to keep the business applications running should be exempted.
In order to realize full cost savings ‘stove pipe’ application development must be halted and revisited with a statewide global view for development. Exemptions should be allowed for fixes to keep the business going.

**Fiscal Impact**

Similar to the eVa model, the e-procurement system will be a vendor funded model. The system contractor will collect a service fee from any contractor who is awarded a bid through the system. A percentage of that fee will be kept by the system contractor in reimbursement of services provided. The remainder will be directed to fund a statewide enterprise resource planning (ERP) system.


The savings identified in the chart below were developed using the costs estimates from the Aberdeen survey and the number of actual purchase orders processed in FY 2001–2002. At the end of a phased implementation, the state would achieve savings of $20 million annually.

### All Funds

(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>General Fund Savings</th>
<th>Other Fund Savings</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2005–06</td>
<td>$2,000</td>
<td>$2,000</td>
<td>(47)</td>
</tr>
<tr>
<td>2006–07</td>
<td>$4,500</td>
<td>$4,500</td>
<td>(105)</td>
</tr>
<tr>
<td>2007–08</td>
<td>$7,000</td>
<td>$7,000</td>
<td>(164)</td>
</tr>
<tr>
<td>2008–09</td>
<td>$10,000</td>
<td>$10,000</td>
<td>(235)</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

**Endnotes**

2. IBM Executive Strategy report, “e-procurement and the Path to Profitability” (January 2002).
7. IBM Executive Strategy report, “e-procurement and the Path to Profitability” (January 2002).
Marrakech Consulting, “Connecting Commerce, E-Procurement: Delivering Rapid and Quantifiable Results.”

Department of General Services, Procurement Division, “Purchasing Stats for Fiscal Year 2001–02” (May 20, 2004).

State of Virginia, Electronic “Virginia Supplier Registration Guide.”

North Carolina, NC “Procurement @ Your Service, Fee Topics.”

IBM Executive Strategy report, e-procurement and the Path to Profitability (January 2002).
State Needs To Reduce Late Payment Penalties, Increase Early Payment Discounts

Summary
In Fiscal Year 2002–2003, the state paid nearly $5 million in late payment penalties to companies doing business with the state. The invoice payment process needs to be improved to reduce late payment penalties to vendors, achieve greater early payment discounts from vendors, and enhance the overall business climate.

Background
The Prompt Payment Act (Gov. C. Section 927) requires state agencies to pay undisputed invoices within 45 days of receipt or late payment penalties will incur. According to the Department of General Services, the biggest cause for payment delays is that “end users,” the state agencies and departments that buy goods and services, do not approve and forward invoices to their accounting offices on time, while some state agencies cite the inability to pay invoices on time whenever there is a state budget impasse. In the meantime, many vendors are not being compensated in a timely fashion putting pressure on those businesses that do not have the financial reserves to endure late payments from the state.

The state process for receiving invoices and approving payments to vendors includes many manual steps and paper hand-offs. During this process, each state agency has its own multiple levels of approval prior to its accounting office auditing and batching invoices for payment through the State Controller’s Office. This maze of time-consuming processes makes it difficult for payments to be made within the legislatively mandated 45–day timeframe.

Payment methods
State agencies primarily use two payment methods when buying goods and services. One method is a typical paper process, which requires state agencies to go through many administrative functions and results in processing numerous individual invoices. The second method is a state charge card process, which allows state agencies to pay vendors at the point of sale and to receive payment performance and sales volumes rebates for those purchases.

DGS entered into an agreement with U.S. Bank allowing state agencies to make procurement transactions for goods and services through the purchase card system known as CAL-Card. The state charge card program benefits state agencies by assuring prompt payment, improving access to supplies and materials, reducing paperwork with the need for a single, monthly invoice, and providing a payment performance rebate.
The payment performance rebate is calculated on a monthly basis and refunded to each state agency on a quarterly basis. The rebate is a sliding percentage based on the number of days from invoice date to check date. The greatest rebate of 0.62 percent is achieved if the invoice is paid within three days. During FY 2002–2003, state agencies captured nearly $100,000 payment performance rebates.

The CAL-Card Program also established a sales volume rebate, which DGS receives on a quarterly basis. This rebate is based on net sales for the CAL-Card Program for all state agencies and local government entities. During FY 2002–2003, DGS received $1,954,800 in sales volume rebates.

If state agencies were more diligent in using the CAL-Card for their purchases, the sales volume rebate percentage would increase resulting in a higher overall return. The rebates offset funding ultimately provided by taxpayers. During FY 2002–2003, the state could have captured an additional $1.6 million in sales volume rebates.³

### Exhibit 1
**CAL-Card vs. Non-Card Purchases**

<table>
<thead>
<tr>
<th>Potential Sales Volume Rebates Not Captured</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchases Under $5,000</td>
<td>$180,000,000</td>
<td>$147,000,000</td>
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<tr>
<td>Purchases $5,000 to $25,000</td>
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<td>Total</td>
<td>$447,000,000</td>
<td>$158,000,000</td>
<td>$289,000,000</td>
</tr>
</tbody>
</table>

**Purchase card successes**

Several other government entities are using purchase cards with positive fiscal results, for example:

- Since 1988 the U.S. Air Force has significantly expanded its Government-Wide Purchase Card program. Ninety-six percent of the Air Force’s three million transactions during 2003 used the purchase card program. The Air Force received $11 million in rebates on $1.6 billion worth of purchases. The Air Force estimates the savings from using the Government-Wide Purchase Card, instead of a traditional purchase order, is $20 per transaction.⁴

- The State of Florida established its Purchasing Card Program in September 1997 and continues to expand it.⁵ It is aimed at replacing the traditional paper-intensive purchase and payment process with a totally electronic system that saves the state 60 percent of the $100 cost of processing a typical purchase order.
McKinsey & Company estimated the State of Illinois could save in excess of $4.5 million by expanding procurement card spending from $60 million to $350 million.\(^6\)

DGS determined the average processing cost of a purchase order is $62.88, while a CAL-Card payment averaged $38.39 resulting in a savings per transaction of $24.49 or 38.9 percent by using the CAL-Card.\(^7\)

**Recommendations**

The Governor should direct the following:

A. The Department of General Services, or its successor, should submit to the Governor an annual report of late payment penalties paid by state agencies. As part of the report, state agencies that incur late payment penalties should provide the reason for the late payment penalties when submitting their annual reports and provide a corrective action plan to change their payment processes to avoid further late payment penalties within 60 days of the reporting period;

B. Department of Finance should expand the State Administrative Manual Internal Control guidelines to include an audit review of all state agencies that do not report their late payment penalties by the required due date;

C. The Department of General Services, or its successor, should develop policies mandating the use of the CAL-Card for purchases $5,000 and below. The policy should also address the use of CAL-Card for other procurements as necessary.

**Fiscal Impact**

The recommendations may result in savings and additional revenue for state agencies. There would be no costs to expand the CAL-Card Program. The estimated savings to the state is based on a reduced number of staff to perform the manual purchasing function. This may result in a reduction of PYs (see following chart).\(^8\) The estimated increase in revenue is based on the projected increase in sales that will result in rebate dollars paid to the state. This would be additional revenue to the state.
All Funds
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings General Fund</th>
<th>Savings Other Funds</th>
<th>Revenue General Fund</th>
<th>Revenue Other Funds</th>
<th>Costs</th>
<th>Total Impact General Fund</th>
<th>Total Impact Other Funds</th>
<th>Total Impact All Funds</th>
<th>Change in PYs</th>
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</thead>
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<tr>
<td>2004–05</td>
<td>1,750</td>
<td>1,750</td>
<td>700</td>
<td>700</td>
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<tr>
<td>2005–06</td>
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<td>3,150</td>
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<td>6,300</td>
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<td>2006–07</td>
<td>2,150</td>
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<td>1,500</td>
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<td>2007–08</td>
<td>2,150</td>
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<td>1,500</td>
<td>0</td>
<td>3,650</td>
<td>3,650</td>
<td>7,300</td>
<td>(52)</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

Endnotes

1. Gov. C. Section 927 et seq.
7. Interview with Roberta Hinchman, Department of General Services Procurement Division, Sacramento, California (April 9, 2004).
8. Assumption is that each PY costs $83,000 ($75,000 salary and $8,000 operating expense and equipment). Workload reduction is based on reduced number of purchase paper transactions.
Using the Reverse Auction Procurement Method to Save Millions

Summary
The state saves money when vendors compete against themselves to provide goods or services. A reverse auction procurement methodology is an electronic based process whereby vendors bid and then re-bid until the lowest price is reached. When the Department of General Services fully implements the reverse auction process, state departments will have a procurement tool that increases competition and reduces costs.

Background
What is a reverse auction?
How does a buyer know for certain they are getting a good deal when purchasing products and services? There’s only one way—to have suppliers compete for your business. Competition is the key to unlocking favorable deals, letting you discover and capitalize on the best terms the market is willing to offer. Competition is exactly what reverse auctions provide.

The reverse auction process is a competitive strategy being deployed by many procurement organizations as an advanced procurement tool allowing purchasing staff to shift from administering the procurement process to managing tools that automate many steps in the manually intensive sourcing process. It is a process of “selling in reverse,” meaning the buyer and seller reverse positions; it is the buyer who drives the event. A reverse auction operates similar to an on-line auction website: a state department advertises a need to purchase a certain good or service and interested qualified vendors have the opportunity to bid and re-bid on the contract to provide the good or service. At the end of the specific time limit, the lowest bidder would get the contract.

Numerous studies and research data have shown that savings of 5 percent to 15 percent, and in some cases even higher, can be achieved over prices previously paid. Yet another report indicated that a properly executed reverse auction has the potential to yield an additional 8 percent to 20 percent savings for an organization below its current price. William Brandel, research director for e-business at Aberdeen Group in Boston, notes that on-line reverse auctions can reduce the time it takes to purchase goods and services from months to a few days. In addition, buyers and procurement agents are able to make their requests for service known to a much wider audience.
Reverse auctions should be a component of any well developed procurement sourcing strategy. They allow companies to minimize the cost of goods and services purchased while maximizing the value received. In addition, reverse auctions provide an unbiased method that avoids the intent and appearance of unethical or compromising practices in relationships, actions and communications.

**The benefits offered by reverse auctions**

The most tangible benefits come from reducing the cost and enhancing the value of purchased goods and services. Secondary benefits come from automating parts of the sourcing process, and increasing the efficiency of the purchasing organization.

### Exhibit 1

<table>
<thead>
<tr>
<th>Buyer Benefits</th>
<th>Vendor Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lower purchase prices (find out the market price);</td>
<td>• View others’ bids real time;</td>
</tr>
<tr>
<td>• Consolidation of the supplier base;</td>
<td>• If firm is unsuccessful they know immediately;</td>
</tr>
<tr>
<td>• Increase competition among existing supplier base; and</td>
<td>• Less resources have to be committed to win a contract;</td>
</tr>
<tr>
<td>• Very disciplined and much faster process.</td>
<td>• Break into existing business (reverse auctions challenge incumbent suppliers); and</td>
</tr>
<tr>
<td></td>
<td>• Fast efficient and fair process (i.e., less paperwork, short negotiation time, short cycle time between bidding and contracting).</td>
</tr>
</tbody>
</table>

**Savings examples**

The U.S. General Services Administration (GSA) noted that the Defense Finance Service (DFAS), Air Force, and the Coast Guard experienced savings of 12 percent to 48 percent under various reverse auctions conducted during the GSA Buyers.gov pilot program.

The Reason Public Policy Institute and the Performance Institute stated that the U.S. Postal Service has achieved cost savings totaling more than $100 million on purchases of supplies and services using the reverse auctioning method. Reverse Auctions are most efficient for high dollar, large quantity, clearly defined purchases.

Reverse auction case studies for personal computers and carpeting show a reduction of costs for personal computers of 34 percent and for carpeting, 22 percent.

**Status of reverse auctions in California**

**Recommendation**

The Department of General Services, or its successor, should complete the Request for Proposal process as soon as possible. The sooner the select vendor can implement the reverse auction process and train state procurement staff to conduct reverse auctions, the sooner the state will start saving money.

**Fiscal Impact**

Although no funding currently exists to procure a reverse auction system, there is potential to implement the technology through achieved savings. Several vendors offer reverse auctions as an out-sourced service through which the state can obtain the electronic environment necessary to conduct the auctions. Cost of implementation will be a part of the value of the auction, meaning that the state will have no direct start-up costs. Savings estimates are therefore shown net of estimated implementation costs.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings (dollars in thousands)</th>
<th>Costs (dollars in thousands)</th>
<th>Net Savings (dollars in thousands)</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>$17,100</td>
<td>$0</td>
<td>$17,100</td>
<td>0</td>
</tr>
<tr>
<td>2005–06</td>
<td>$22,800</td>
<td>$0</td>
<td>$22,800</td>
<td>0</td>
</tr>
<tr>
<td>2006–07</td>
<td>$28,500</td>
<td>$0</td>
<td>$28,500</td>
<td>0</td>
</tr>
<tr>
<td>2007–08</td>
<td>$34,200</td>
<td>$0</td>
<td>$34,200</td>
<td>0</td>
</tr>
<tr>
<td>2008–09</td>
<td>$39,900</td>
<td>$0</td>
<td>$39,900</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

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</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.
Endnotes

3 BottomLine, “What is a Reverse Auction?”
12 Interview with Michelle Ogata, Mary Kuwamotto, Earl Santee, Scott Norton, Bob Riola, George Hortin and Janice King, Procurement Division, Department of General Services (April 20, 2004).
California Can Save Millions by Utilizing the General Services Administration’s Advantage Program to Purchase Goods and Services

Summary
The federal General Services Administration (GSA) allows states and local governments to use its multiple award schedule program, GSA Advantage, to purchase selected goods and services. The GSA Advantage program is a proven electronic procurement system that saves time and money. California state agencies, however, are precluded from entering into purchase agreements with GSA Advantage vendors because certain California-required terms and conditions are not reflected in the contract.

Background
By establishing the GSA Advantage program, the federal government uses its massive buying power to leverage its purchasing of goods and services to ensure it gets the best price. The GSA Advantage program is a multiple award schedule, meaning that vendors have agreed to provide customers various goods and services at set, discounted prices. All users of the GSA Advantage receive a “best customer discount” no matter the quantity of their individual purchase.¹

GSA Advantage is an easy to use online service that requires no state resources to maintain. GSA created an online tutorial, which takes the user through the steps in a typical shopping session and points out many of the features of GSA Advantage. Goods and services are easily found by a number of different criteria and results are displayed by user selected preferences. GSA also provides online vendor catalogues which include products ranging from information technology goods, hospital goods, security and fire equipment and vehicles. Payment can be made online by using a purchase card. The most recent enhancement to the GSA Advantage system is an e-buy system that allows buyers to prepare Request For Quotations (RFQs) for products and services supplied by GSA Schedule vendors. The e-buy tool allows buyers to publicize their Requests for Quotations (RFQs) online, enabling commercial vendors to bid for the business.²

¹ Summary
² Background
GSA Advantage customers are charged an Industrial Funding Fee (IFF) of 0.75 percent which is built directly into vendor pricing. This means that customers pay the IFF when the transaction is completed.¹

**Federal partnership: granting states access to GSA programs**

Over the years, the federal government has granted state and local governmental entities access to its GSA procurement programs. Starting in the 1950s, GSA, in conjunction with the U.S. Department of Agriculture, established the National Wildfire Protection Program. This program allows all federal, state and local government firefighting agencies to purchase, through a partnership with the USDA, all equipment and supplies needed in the use of fire safety, control and prevention. While over 900 of these agencies are eligible to participate, about 50 percent of state and local governmental agencies actually utilized this program in 2004.²

In November 1993, the National Defense Authorization Act (Section 1122) established procedures developed by the Department of Defense that enabled state and local governments to purchase any law enforcement equipment suitable for counter-drug activities through GSA. The commodities available for purchase ranged from body armor, helicopter accessories, automobiles (pursuit vehicles), night vision goggles, radio equipment, first aid items and computer equipment.³

In 1997, California began utilizing this program, allowing 294 law enforcement agencies to take part. These agencies have begun saving relatively significant funds within the past few years, however, while only seven local law enforcement agencies utilized this program, savings have been realized. For example, the Sacramento Police Department purchased two Dell Optiplex GX270 with accessories for $1,684. The cost to procure these goods would have been $1,905, showing a savings of $442.44 or about 23 percent. Also, the Woodland Police Department purchased 20 gas masks at a cost of $176.96 each. The cost to procure these goods would have cost $232.84 per unit, or a savings of $1,117.60, or 24 percent.⁴

In response to the e-Government Act of 2002, GSA began to pilot a program whereby all 50 states can procure information technology goods and services through the GSA Advantage program. As of May 2003, about 30 states enacted the cooperative purchasing provisions allowing the use of federal GSA information technology contracts.⁵

**CMAS program**

In 1994, the Department of General Services established a multiple award schedules with vendors throughout the State of California called the California Multiple Awards Schedule (CMAS). CMAS was established using the contracts for products, services and prices primarily from the GSA’s multiple award schedule program.
What began as a very creative and time effective purchasing option soon gave way to more bureaucracy and time consuming procurement practices. California requires all vendors to agree to specific contractual terms and conditions in addition to those required by the federal government. The additional contractual terms and conditions cover a variety of issues, mostly relating to information technology goods and services (limitation of liability, intellectual property and liquidated damages). Also, effective January 1, 2004, legislation affecting procurement and contracting may have added more contractual terms and conditions that the federal government does not require of GSA Advantage vendors such as complying with the Domestic Partners Act and the Electronic Waste Recycling Act.

Due to California’s additional vendor contract terms and conditions, GSA Advantage vendors may opt not to become CMAS vendors. Instead, some GSA vendors make their products available to California departments through a “reseller” vendor, who is a CMAS vendor. However, a resale vendor acts as a middleman between the GSA Advantage vendor and a state department, buying a product from the GSA Advantage vendor at the “best customer discount” price and then resells the product to the state department at a 15–20 percent markup.

If state departments could enter into vendor contracts required by the federal government, it would allow the departments to participate in the GSA Advantage program and purchase goods and services directly from GSA Advantage vendors, and save millions of dollars because they would receive the “best customer discount” price and pay reduced administrative fees.

**Recommendation**

The Governor should direct the Department of General Services, or its successor, to work on a strategy that would allow state departments to purchase its goods and services through the GSA Advantage program. Specifically, the Department of General Services, or successor, should:

- Identify all California required contractual terms and conditions that the federal government does not require and pose a barrier to fully utilizing the GSA Advantage program, and develop a strategy to overcome those barriers including administrative waivers and legislative action;
- Notify and provide assistance to all law enforcement agencies on the use of the National Defense Authorization Act (Section 1122) and notify all firefighting state and local governmental agencies about opportunity to the National Wildfire Protection Program; and
- Present the Governor’s Office with a strategy of administrative actions and necessary legislative proposals to allow state departments to enter into vendor contracts required by the federal government and participate in the federal GSA Advantage program to the fullest extent possible.
Fiscal Impact
Implementation of this recommendation can be accomplished at no additional cost to the state. The state would simply be adding an additional source for the purchase of goods. By adding GSA approved vendors, the state would benefit from the lower prices on the GSA schedule.

Projected savings are based on the price differences between similar goods on the CMAS and the GSA schedules, specifically, information technology goods and services. These items account for 90 percent of all CMAS contract purchases. In Fiscal Year 2000–2001, the latest year that data is available, the state spent $519 million dollars on CMAS contract purchases, and $467 million on information technology goods and services.

The cost for these goods is generally higher on the CMAS schedule than GSA. The items listed below are an example of the price differences of information technology goods purchased. The CMAS price is about 12 percent higher.

<table>
<thead>
<tr>
<th>Item</th>
<th>CMAS Price</th>
<th>GSA Price</th>
<th>Total</th>
<th>% Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple XserveRaid 3.5TB</td>
<td>$9,899.00</td>
<td>$8,799.00</td>
<td>$1,100.00</td>
<td>13%</td>
</tr>
<tr>
<td>Mac OS X Server G5</td>
<td>$5,119.00</td>
<td>$4,639.00</td>
<td>$480.00</td>
<td>10%</td>
</tr>
<tr>
<td>PowerBook G4 17&quot; screen</td>
<td>$2,799.00</td>
<td>$2,520.00</td>
<td>$279.00</td>
<td>11%</td>
</tr>
<tr>
<td>Dell Optiplex GX270 w/ Accessories</td>
<td>$1,905.00</td>
<td>$1,683.00</td>
<td>$222.00</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>$19,722.00</td>
<td>$17,641.00</td>
<td>$2,081.00</td>
<td>12%</td>
</tr>
</tbody>
</table>

Additionally, GSA price is a final price, inclusive of administrative fees. DGS adds an administrative fee on top of the CMAS price. DGS charges each CMAS customer a fee of 2.13 percent of each purchase order (small businesses are exempt), however, this fee will rise to 2.56 percent in FY 2004–2005. Allowing GSA approved vendors would save this additional fee, for a total estimated savings of about 14.6 percent.

Assuming a 10 percent savings on information technology goods and services purchased after the implementation of this recommendation, annual savings of about $47 million would be realized. The recommendation will affect statewide purchasing, so potential savings will be divided among funds statewide. Note that savings could be used to reduce cost, or to purchase more goods for the state. No funds would be lost as a result of the recommendation. Estimated savings by fund are provided below.
### General Fund
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)*</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>$11,750</td>
<td>$0</td>
<td>$11,750</td>
<td>0</td>
</tr>
<tr>
<td>2005–06</td>
<td>$23,500</td>
<td>$0</td>
<td>$23,500</td>
<td>0</td>
</tr>
<tr>
<td>2006–07</td>
<td>$23,500</td>
<td>$0</td>
<td>$23,500</td>
<td>0</td>
</tr>
<tr>
<td>2007–08</td>
<td>$23,500</td>
<td>$0</td>
<td>$23,500</td>
<td>0</td>
</tr>
<tr>
<td>2008–09</td>
<td>$23,500</td>
<td>$0</td>
<td>$23,500</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Other Funds
(dollars in thousands)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Savings</th>
<th>Costs</th>
<th>Net Savings (Costs)</th>
<th>Change in PYs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004–05</td>
<td>$11,750</td>
<td>$0</td>
<td>$11,750</td>
<td>0</td>
</tr>
<tr>
<td>2005–06</td>
<td>$23,500</td>
<td>$0</td>
<td>$23,500</td>
<td>0</td>
</tr>
<tr>
<td>2006–07</td>
<td>$23,500</td>
<td>$0</td>
<td>$23,500</td>
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<td>$23,500</td>
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<td>2008–09</td>
<td>$23,500</td>
<td>$0</td>
<td>$23,500</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: The dollars and PYs for each year in the above chart reflect the total change for that year from FY 2003–04 expenditures, revenues and PYs.

### Endnotes

5. U.S. General Services Administration, “Fire and Security Program.”
6. E-mail from Liz Belenis, General Services Administration (May 13, 2004). Documentation is unaudited.
8 California State Auditor, Bureau of State Audits, “Department of General Services: The California Multiple Award Schedules Program Has Merit But Does Not Ensure the State Gets the Best Value For its Purchases,” (Sacramento, California, August 26, 1999).


10 California State Auditor, Bureau of State Audits, “Department of General Services: The California Multiple Award Schedules Program Has Merit But Does Not Ensure the State Gets the Best Value For its Purchases.”

11 Department of General Services, “PIN data, Fiscal Year 2001–02,” West Sacramento, California.

Make Use of All Purchasing Methods Available to Ensure Lowest Costs

Summary
California state government does not participate in U.S. Communities Government Purchasing Alliance (U.S. Communities), a cooperative purchasing program used by most local governments in California and by many local governments in other states. This may mean the state is paying more than local governments for exactly the same goods and services. The state should expand its cooperative purchasing programs to include U.S. Communities and enter into an agreement with them.

Background
The Department of General Services’ Procurement Division is responsible for overseeing a number of purchasing programs for California. State law allows local agencies to participate in state procurements, including agreements for goods, information technology and services. Cooperative purchasing programs provide valuable benefits to state and local governments. By attaching to national or regional cooperatives, an agency has access to legitimately solicited contracts and guaranteed pricing and delivery options. Pricing is often attractive because of the purchasing power of these cooperatives. Governmental entities that participate in these programs are sometimes required to pay a fee to cover administrative costs.

California has a long history of participating with local agencies in various cooperative purchasing programs to buy such things as cars, trucks, police vehicles, ammunition and pre-fabricated classrooms. Several purchasing programs are available to California state, county, city, special district, education, and other governments. Among them are CAL-Buy—Online Buying; California Multiple Award Schedule (CMAS); CAL-Store State Computer Store; Master Agreements; Natural Gas Purchasing Program; State Price Schedules; Statewide Commodity Contracts; Western States Contracting Alliance (WSCA); and others. U. S. Communities, a cooperative purchasing program used by most California local governments and many local governments in other states, is not among the programs used by the state.

U.S. Communities government purchasing alliance
In 1991, the California State Association of Counties (CSAC) and the League of California Cities (the League), among others, sponsored the creation of U.S. Communities Government Purchasing Alliance (U.S. Communities). U.S. Communities is a nonprofit organization that helps public agencies reduce the costs of purchased goods by pooling the purchasing power of public agencies nationwide. There are currently 7,000 government agencies participating in the program. As mentioned above, the state is not among them.
Staff of the Department of General Services’ Procurement Division was approached at the time U.S. Communities was established, but declined to participate. The reason for the decision is not known.3

CSAC and the League encourage local governments to participate in U.S. Communities through their membership in those organizations.4 Among the benefits of participating in U.S. Communities are:

- A broad range of goods and services are available under U.S. Communities, compared to other cooperative purchasing programs;
- The contracts are not negotiated, which eliminates barriers to some local governments whose ordinances require competitive bids for local purchases; and
- There is no administrative fee; therefore, no cost to governments that use U.S. Communities.5

**Local governments’ experience with U.S. Communities**

Fairfax County, Virginia, estimates it has saved $1.4 million from 2001 through the first quarter of 2004 and has received $565,616 in rebates during the same period. The county receives the rebates because it is the lead contracting jurisdiction for two contracts and the rebate is based on the annual procurement volume from using those contracts. Other “soft” savings and benefits cited include suppliers’ guarantee of lowest available pricing nationwide, and no “administrative or user fee” to use the contracts.6

Officials in Chesapeake, Virginia, cite the benefits of purchasing office supplies through Office Depot under the U.S. Communities cooperative. Those benefits include, among other things, greater control and flexibility in product selection, and a savings of more than 45 percent.7

**Recommendation**

The Governor should direct the Department of General Services or its successor to immediately begin participating in U.S. Communities.

**Fiscal Impact**

Implementing this recommendation will cost the state nothing. Based on the experiences of other state governments, California could see significant savings through participation in U.S. Communities, which would function as another avenue through which the state may compare prices and purchase goods. Hard dollar savings figures would have to be estimated on a case by case basis.
Endnotes

1 Pub. Con. C. Section 10298.

2 U.S. Communities, “Frequently Asked Questions—What is U.S. Communities?”

3 Interview with Steve Hamill, general manager, U.S. Communities, Walnut Creek, California (May 14, 2004).

4 California State Association of Counties, “U.S. Communities,”
   http://www.csac.counties.org/partnerships/us_communities.html (last visited June 2, 2004); and League of California
   Cities, “City Purchasing Programs—U.S. Communities,”
   http://www.cacities.org/index.jsp?displaytype=11&zone=locc&section=vendor&sub_sec=vendor_financ&tert=&story=4116
   (last visited June 2, 2004).

5 Interview with Steve Hamill, general manager, U.S. Communities, Walnut Creek, California (May 14, 2004).

6 U.S. Communities, “The Following Summarizes the Estimated Savings and Revenue Generated to Fairfax County by
   Participating as a “user” and a “lead jurisdiction” in the U.S. Communities Government Purchasing Alliance,”

   June 3, 2004).
Using Innovative Techniques to Enhance Sale of State Surplus Property

Summary

Each year, California sells thousands of surplus property items—from personal property confiscated by law enforcement to used, but useful equipment, furniture and vehicles. Some of these items are sold through traditional “cash-and-carry” methods at live public auctions. A few agencies sell items on the Internet. The lack of an integrated reuse program that takes full advantage of available technologies and partnerships with the private sector is costing the government significant dollars in unnecessary costs and lost revenues. The state should establish a single surplus property reuse program that leverages the best technologies and public/private partnerships to reduce costs and maximize state revenues.

Background

The state continually sells property deemed to be “surplus” to other governmental entities, nonprofit organizations and the general public. This includes automobiles, furniture, computers, tools, jewelry and other personal property. Surplus property is also generated from items confiscated by law enforcement agencies. Annually, the state collects thousands of items for sale. The Department of General Services (DGS), one of the major sellers of surplus property, receives about 16,000 shipments each year with each shipment containing anywhere from a single item up to 200 different pieces of surplus property.

The traditional method for property reuse has been through public sales at Sacramento warehouse facilities. But with a limited marketplace, this method typically only realizes highly discounted “garage sale” values for the items sold. This method is very slow in terms of the average time-to-sell products, adding to the costs of warehousing and maintaining these items. Overall, the current method of state property disposal yields a lower-than-desired return on investment.

Some state departments are looking to the Internet

The rising popularity of selling and buying items on the Internet through eBay and other similar services has some state departments turning to technology and partnerships with the private sector to reduce costs and enhance revenues from surplus property. Participating departments are reporting some encouraging results.

DGS began selling surplus property to the public via a partnership with eBay in April 2000 under a program called CaliforniaGold2000. DGS established itself as an entity accountable for the receipt, warehousing, sale or donation and distribution of state and federal surplus personal property to qualified agencies and to the general public through two warehouse facilities. The objectives are to sell and move the surplus property more quickly and increase
DGS reports that it will typically sell an item on eBay for up to three to five times more than it had sold at previous in-house auctions.\(^5\)

For example, a forklift that had a noted mechanical problem, sold for $2,000 on eBay; a similar make and model item that had no mechanical defect had sold for only $700 under the previous auction system.\(^6\) Additionally, it typically took months for an item to sell under the old auction system but most items sell within nine days on eBay.\(^7\)

Since its inception, the CaliforniaGold2000 surplus eBay program has sold more than 3,654 items generating income of $668,000 for the state. It is estimated that the previous reuse program would have only realized approximately $207,000 from the same items sold in the CaliforniaGold2000 program.\(^8\) In addition to traditional items such as laptop computers, cameras, tires, cell phones and tools, the state has also sold many unique items including: \(^9\)

- A Continental aircraft engine for $18,201;
- A 2.75 carat diamond ring for $6,729;
- An Ikegami video camera for $3,726; and
- A Clark forklift for $1,926.

DGS contends that it could significantly increase sales and revenues in the eBay program, but has been hampered from doing so because of a loss of staff due to budget constraints.\(^10\)

The California Department of Transportation recently posted three vehicles on eBay as a pilot project. The department intends to evaluate this “pilot effort” and will probably expand its use if proves worthwhile.\(^11\)

The State Controller’s Office (SCO) sells escheat or unclaimed property that it receives and stores. In 2003, SCO ran a pilot project by selling items on the Internet, and as a result, entered into a contract in May of 2004 with a private company to manage the sale of all of its unclaimed properties.\(^12\) The contractor takes a percentage of every item sold as its fee. Experience has demonstrated that the actual amount received on a given item often exceeds the amount that would have been received via the traditional auction and is often greater than the appraised value.\(^13\)

**Oregon leads the way**

Since 1998, the State of Oregon has used eBay to auction off various items from cars confiscated from drug dealers to surplus office equipment.\(^14\) The heart of the program lies with an enterprising organization within that state’s Department of Administration. Offering a full-spectrum of online auctioning services to other Oregon state agencies—from photographing, posting, online auctioning, receipt of payment, shipping and distribution of revenues to donor organizations—the program is self-funded, supported solely by taking a percentage of revenues from sold items. The program requires no state general fund dollars.\(^15\)
According to Oregon officials, the program has been paying dividends. Earlier this year, the state sold 80 surplus police cruisers and received an average of 125 percent of the Kelly Blue Book value for the vehicles, according to Nole Bullock, the marketing director for the program. “Most agencies would get wholesale value and they’d probably be happy with that,” says Bullock. “They’re getting about seven percent of the acquisition value, and we’re getting about 18 percent. It’s the speed of the market and the size of the market.” According to Bullock, the average speed-to-market (the time it takes to sell an item) has been reduced from an average of 75 days to 15 days. This is not surprising considering that eBay has 105 million registered users on its system.

Bullock labels the innovative Oregon program as the new “click-and-mortar” operation of the 21st century and summarizes the scope as follows:

“Through aggressive use of emerging technologies, Oregon’s Surplus Property Program provides nationwide disposal/sale of surplus vehicles, heavy equipment and personal property. Agency costs are reduced, while visibility is elevated to national levels by utilizing the world’s largest online vendor (eBay). Pioneers of ‘Virtual Custody,’ Oregon has developed a method whereby property can remain with the custodial agency throughout the entire sale process; eliminating the need for additional handling and/or costly transportation to a centralized sale site.”

The program has proven to be a significant revenue generator. “In 2002, the Oregon surplus program sold $7.3 million and gave about 84 percent of the money back to the sellers,” declares Stacey Koller, the program’s business manager. “We don’t take money from the state, we give it back.”

The program’s success has attracted other customers, including the federal government and the city of Lynchburg, Virginia. Oregon’s “click-and-mortar” program is selling cars and heavy equipment for the U.S. Department of the Interior, as well as fire truck and four-wheel drive vehicles for Lynchburg. California could likewise take advantage of Oregon’s success.

**California can move ahead**

California is poised to learn from the Oregon experience and create a surplus property program that can build on the state’s current experience with online selling and use of public/private partnerships. The state has the opportunity to create a program that would have the following features of a 21st century government:

- Create an enterprising, self-funded and competitive state operation that would generate revenues for other state agencies;
- Leverage the power of online and other technologies;
- Seek the strengths of public/private cooperatives;
- Enhance its customer service to the public; and
- Pave the way for other creative ventures in California state government.
Recommendations

A. The Governor should direct the Department of General Services, or its successor, to establish an online surplus property program using the Oregon program as a “best-practice” model.

The program should be based upon a prescribed “fee-based” per-item-sold system with the intent of becoming self-funded and not require any state general fund dollars. The program should leverage the power of technologies and the strengths of public/private partnerships. All state surplus property programs within the Governor’s jurisdiction will be consolidated into the newly created program.

B. The Department of General Services should work with the State Controller’s Office to determine whether a single, consolidated statewide public/private partnership surplus property program is warranted.

Fiscal Impact

While there will be some initial upfront operational costs, the program is expected to become self-funded and no longer in need of state general fund dollars. State revenues are expected in the form of increased and faster sales and a reduction in costs due to efficiencies realized in the new system. Actual savings cannot be determined at this time.

Endnotes

1 Interview with Dan McDonough, manager, Materials Management, California Department of General Services, Sacramento, California (July 12, 2004).
5 Interview with John Hilton, associate materials analyst, Department of General Services, Sacramento, California (July 9, 2004).
6 Interview with John Hilton.
7 Interview with Dan McDonough.
8 Department of General Services, “E-Surplus, An Online Auction Program for the Property Reuse Program.”
9 Department of General Services, “E-Surplus, An Online Auction Program for the Property Reuse Program.”
10 Interview with John Hilton.
Interview with Rob Huarte, chief, Division of Collections, State Controller’s Office (Sacramento, California) (July 9, 2004).

Interview with Rob Huarte.

“Oregon turns to eBay for massive surplus sale,” “USA Today,” June 5, 2003, p. 1

Interview with Nole Bullock, marketing director, Oregon’s Surplus Property Program (Salem, Oregon, July 9, 2004).

“Caltrans to sell cars on eBay,” “Contra Costa Times.”

Interview with Nole Bullock.


http://tpps.das.state.or.us/surplus/oregon.ppt


## Statewide Operations Fiscal Impact Table
(Dollars Displayed in Thousands)

<table>
<thead>
<tr>
<th>Issue Number</th>
<th>Issue Description</th>
<th>2004-05 Savings(Costs)/Revenue</th>
<th>2005-06 Savings(Costs)/Revenue</th>
<th>2006-07 Savings(Costs)/Revenue</th>
<th>2007-08 Savings(Costs)/Revenue</th>
<th>2008-09 Savings(Costs)/Revenue</th>
<th>5-Year Cum. Total All Funds</th>
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# Statewide Operations Fiscal Impact Table

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<td>Consolidation of E-Mail Will Improve Services and Save State Millions</td>
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<td>Create a Function in the Governor's Office Charged with Implementing a Performance Management System</td>
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<td>Devise Useful Performance Measures to Improve State Government</td>
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<td>Implement a Budget Development Process That Links Statewide Goals, Program Performance and Funding Decisions</td>
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<td>Repeal the Six Month Rule for Vacant Position Abolishment</td>
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<td>Require Employees to Meet Minimum Qualifications Prior to Appointment</td>
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<td>The State Must Create a New Procurement Organizational Structure to Maximize Efficiency and Minimize Costs</td>
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<td>$1,874</td>
<td>$1,446</td>
<td>$4,404</td>
<td>$8,152 $6,289 $12,462 $9,616 $47,641</td>
</tr>
<tr>
<td>SO 61</td>
<td>The State Needs to Professionalize its State Procurement Workforce</td>
<td>($25)</td>
<td>($25)</td>
<td>($1,304)</td>
<td>($1,304)</td>
<td>($1,236)</td>
<td>($1,210) $(414) $(414) $(8,378)</td>
</tr>
<tr>
<td>SO 62</td>
<td>Eliminate a Major Source of Conflict Between the Central Procurement Agency and Its Agency Clients</td>
<td>CBE</td>
<td>CBE</td>
<td>CBE</td>
<td>CBE</td>
<td>CBE</td>
<td>CBE CBE CBE CBE CBE</td>
</tr>
<tr>
<td>SO 63</td>
<td>Consolidate and Simplify Procurement Statutes and Policies</td>
<td>CBE</td>
<td>CBE</td>
<td>CBE</td>
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<tr>
<td>SO 64</td>
<td>Streamline and Reform the Vendor Protest Process Used in the Procurement of Goods and Services</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$3,000</td>
<td>$3,000 $3,000 $3,000 $3,000 $18,000</td>
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<tr>
<td>SO 65</td>
<td>Remove Bidding Preferences From State Contracting Programs</td>
<td>$3,799</td>
<td>$3,799</td>
<td>$7,598</td>
<td>$7,598</td>
<td>$7,598</td>
<td>$7,598 $7,598 $7,598 $7,598 $68,382</td>
</tr>
<tr>
<td>SO 66</td>
<td>Eliminate Duplicative Reports</td>
<td>$0</td>
<td>$0</td>
<td>$28</td>
<td>$28</td>
<td>$650</td>
<td>$650 $650 $650 $650 $3,956</td>
</tr>
<tr>
<td>SO 67</td>
<td>Procurement of Prison Industry Authority Products</td>
<td>$0</td>
<td>$0</td>
<td>$4,000</td>
<td>$4,000</td>
<td>$4,000</td>
<td>$4,000 $4,000 $4,000 $4,000 $32,000</td>
</tr>
<tr>
<td>SO 68</td>
<td>Establish Small Business and Disabled Veteran Business Enterprise Set-Asides</td>
<td>$0</td>
<td>$0</td>
<td>$2,500</td>
<td>$2,500</td>
<td>$2,500</td>
<td>$2,500 $2,500 $2,500 $2,500 $20,000</td>
</tr>
</tbody>
</table>
# Statewide Operations

## Fiscal Impact Table

(Dollars Displayed in Thousands)

<table>
<thead>
<tr>
<th>Issue Number</th>
<th>Issue Description</th>
<th>Savings(Costs)/Revenue</th>
<th>Savings(Costs)/Revenue</th>
<th>Savings(Costs)/Revenue</th>
<th>Savings(Costs)/Revenue</th>
<th>Savings(Costs)/Revenue</th>
<th>Savings(Costs)/Revenue</th>
<th>5-Year Cum. Total All Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>SO 69</td>
<td>Create Efficiencies and Cost Savings by Establishing a Central Supplier-Based</td>
<td>CBE</td>
<td>CBE</td>
<td>CBE</td>
<td>CBE</td>
<td>CBE</td>
<td>CBE</td>
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</tr>
<tr>
<td></td>
<td>Management System</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>SO 70</td>
<td>Taking Steps to Contain State Drug Costs</td>
<td>$0</td>
<td>$0</td>
<td>$15,800</td>
<td>$0</td>
<td>$20,500</td>
<td>$0</td>
<td>$21,300</td>
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<tr>
<td>SO 71</td>
<td>Increase the Use of Performance-Based Contracting</td>
<td>$16,720</td>
<td>$16,720</td>
<td>$66,880</td>
<td>$66,880</td>
<td>$100,320</td>
<td>$100,320</td>
<td>$133,760</td>
</tr>
<tr>
<td>SO 72</td>
<td>Implementing More Strategic Sourcing Procurement Strategies</td>
<td>$48,032</td>
<td>$48,032</td>
<td>$72,048</td>
<td>$72,048</td>
<td>$84,056</td>
<td>$84,056</td>
<td>$103,269</td>
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<tr>
<td>SO 73</td>
<td>Create a Statewide Contract Management Policy</td>
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<tr>
<td>SO 74</td>
<td>Alternative Service Delivery Techniques and Competition in the State's Procurement of Goods and Services</td>
<td>CBE</td>
<td>CBE</td>
<td>CBE</td>
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</tr>
<tr>
<td>SO 75</td>
<td>California Can Save Millions of Dollars by Modernizing its Procurement System</td>
<td>$0</td>
<td>$0</td>
<td>$2,000</td>
<td>$2,000</td>
<td>$4,500</td>
<td>$4,500</td>
<td>$7,000</td>
</tr>
<tr>
<td>SO 76</td>
<td>State Needs to Reduce Late Payment Penalties, Increase Early Payment Discounts</td>
<td>$0</td>
<td>$0</td>
<td>$2,450</td>
<td>$2,450</td>
<td>$3,150</td>
<td>$3,150</td>
<td>$3,650</td>
</tr>
<tr>
<td>SO 77</td>
<td>Using the Reverse Auction Procurement Method to Save Millions</td>
<td>$17,100</td>
<td>$17,100</td>
<td>$22,800</td>
<td>$22,800</td>
<td>$28,500</td>
<td>$28,500</td>
<td>$34,200</td>
</tr>
</tbody>
</table>
# Statewide Operations
## Fiscal Impact Table
*(Dollars Displayed in Thousands)*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>SO 78</td>
<td>California Can Save Millions by Utilizing the General Services Administration’s Advantage Program to Purchase Goods and Services</td>
<td>$11,750</td>
<td>$23,500</td>
<td>$23,500</td>
<td>$23,500</td>
<td>$23,500</td>
<td>$211,500</td>
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<tr>
<td>SO 79</td>
<td>Make Use of All Purchasing Methods Available to Ensure Lowest Cost</td>
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<td>CBE</td>
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<tr>
<td>SO 80</td>
<td>Using Innovative Techniques to Enhance Sale of State Surplus Property</td>
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<td>CBE</td>
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<td>CBE</td>
<td>CBE</td>
<td>CBE</td>
</tr>
</tbody>
</table>

The amounts shown for each year in the above chart reflect the total change for that year from Fiscal Year 2003-04.

CBE - Cannot Be Estimated