



OFFICE OF THE STATE CHIEF INFORMATION OFFICER

Teri Takai
Chief Information Officer

May 8, 2008

Stewart Drown, Executive Director
Little Hoover Commission
925 L Street, Suite 805
Sacramento, California 95814

Dear Mr. Drown;

Thank you for the invitation to participate in the hearing scheduled for May 22, 2008. I appreciate the opportunity to discuss the critical technology issues facing California. Please find attached my written testimony for the hearing.

Regards,

/s/

Teri Takai
Chief Information Officer
State of California

Teri Takai
Chief Information Officer, State of California
Little Hoover Commission Testimony

Thank you for the opportunity to testify at your hearing on information technology.

California is the birthplace of the information technology revolution and the home of the companies that are creating the future course of our information rich society. Great California companies like Google, Hewlett Packard, Apple, Sun Microsystems and hundreds more like them are transforming the way people live, work and communicate. They are creating a vibrant future for California. I share Governor Schwarzenegger's belief that California state government should be part of this transformation as well. When it comes to the use of information technology, we believe that if they can do it in Silicon Valley, we can do it in Sacramento. The Commission has long recognized the significant advantages of using information technology to provide needed services to the public. Consistent with their experience with businesses, the public expects government services to be accessible, convenient and available when they want them. With demands for service availability around the clock, California is strongly dependent on information technology, but we have acknowledged the need to improve how we manage and implement necessary information technology systems.

Building a Strong Foundation

In 2005, Governor Arnold Schwarzenegger proposed a significant early step in improving our management of information technology services with his proposal to establish the Department of Technology Services through the consolidation of the state's two multipurpose data centers. His plan called for aligning telecommunications with data, recognizing the convergence of data, voice and video technologies. The alignment also positioned state government to better deliver on the promise of technology to improve the lives of Californians.

In its May 2005 report, *Reconstructing Government: A Review of the Governor's Reorganization Plan to Create a Department of Technology Services*, the Little Hoover Commission indicated its support for the Governor's Reorganization Plan agreeing that the creation of the DTS was an important step in improving how the state uses technology to serve Californians. The Commission went on to state that the creation of DTS was not enough; *California needs a state Chief Information Officer with authority to effectively deploy technology to improve performance throughout state government.*

This recommendation was not new to the Little Hoover Commission, which had previously recognized the need for an empowered State Chief Information Officer. In its December 2004 report: *Historic Opportunities: Transforming*

California State Government, the Little Hoover Commission advised that the state needed: “A Chief Information Officer (CIO) with statutory authority to enhance technological capacity. The CIO should be a cabinet-level position. The CIO should facilitate the strategic use of technology to promote improvements in all government initiatives.”

In January 2007, Senate Bill 834, (Chapter 533), created the State Chief Information Officer as a cabinet-level official. Effective January 2008, Senate Bill 90, (Chapter 183), significantly strengthened the role and authority of the CIO to establish policy, create and implement strategic planning, and approve and oversee projects.

With the creation of the Office of the State Chief Information Officer, OCIO, the Governor and the Legislature have established the structure on which we can build a strong information technology program. The building blocks are in place. Now it is our responsibility to build on that foundation by using information technology to create a more efficient and responsive state government.

Many people have worked hard over the past few years to set the stage for success. I am privileged to have been chosen to serve under Governor Arnold Schwarzenegger to achieve a vision for California that enables quality, efficient program delivery and decision making using information technology.

Large Projects Require Experience, Judgment and Competence

A strong foundation on which to build a robust information technology program for government is the vital first step. The organizational foundation is so important because the information and program demands in California are like no other state. California is big and big translates into complex in the work of information technology. California’s large population, its vast geography, and its diversity of people and variety of economic opportunities challenge the best practices for developing information processing applications. This is true as our state government strives to serve populations that depend on state programs in areas including education, health services, social services, business, environmental protection and consumer protection. While California has competing priorities for resources, it needs technology to achieve its goals and serve the public effectively.

Information technology is necessary to service people in an efficient and effective way. In almost every venue, activities in California are big. The sheer magnitude of size causes even seemingly simple projects to become large, difficult and complex. Often the only solution is a big project solution.

Big information technology projects can be daunting. They require experience, judgment and management skill in addition to creative thinking, structured

planning and collaboration. The costs are significant, the benefits may be difficult to quantify and risk can be overwhelming. Because we fear failure, we dwell on past disappointments at the expense of learning, improving and doing better. However, I have no doubt that California needs to undertake big projects as the only way to meet our service needs at reasonable cost. The cost may seem high, but the benefits are great and it often costs even more to do nothing. Projects are not just technology engineering efforts; they transform how business is accomplished and how services are provided. My experience tells me that large projects can be managed successfully.

I am reminded of the now legendary C.C. Myers accomplishments delivering large projects. After the 1994 Northridge earthquake destroyed a stretch of the Santa Monica Freeway, Myers contracted to fix the highway in 140 days instead of the 12-18 months predicted by Caltrans. He did it. In 2007, when a gasoline tanker truck accident destroyed part of Interstate 580 in San Francisco's McArthur Maze, Myers said he could complete repairs in 25 days, half the time that Caltrans estimated. He did it. Myers is able to deliver large projects because of his planning, know-how and experience. He understands the risks and mitigates them.

While we are not pouring concrete or setting rebar, we can learn to manage large projects by applying leading practices, relying on judgment and experience and actively managing risks. What C.C. Myers is to big construction projects, we can be to big information technology projects.

Risk is inherent in all IT projects; the bigger and more complex the project, the greater the risk. We have reacted to risk by implementing layer upon layer of oversight. While oversight is necessary, it is not sufficient if it perpetuates a culture that is completely adverse to risk. We must accept that risk exists and work to mitigate it. Simply put, we must move from risk that paralyzes, to risk that motivates.

The history of information technology in California is one of many successes and a few failures. We must remind ourselves that California has achieved many successes over the years. For instance, during the past 4 years alone, California successfully implemented 90 projects (see attached list).

These projects provided services and benefits such as statewide food and cash benefits to more than one million households, through 30,000 retailers and ATMs. The Franchise Tax Board collected \$790 million in revenue, through the Tax Amnesty programs. They also implemented social security number protections on all materials and media benefitting all taxpayers. Prison health care workers were able to be hired much more expeditiously after implementing electronic improvements for fingerprinting through Department of Justice. The State Controller improved the apportionment of \$38 billion annually to local

governments through electronic and web systems, and developed an internet system for locals filing cost claims.

Three departments (Health Care Services, Developmental Services and Mental Health) implemented successful projects related to federal Medicare Part D eligibility for citizen's prescriptions and the related cost recovery. The Commission on Teacher Credentialing provides internet capability for teachers to apply or renew credentials, check status, and for the public to check on teacher credentials. They have eliminated a backlog that persisted for years, with processing now complete in 10 working days.

Currently California has nearly 120 projects under development valued at \$6.8 billion dollars over 11 years. These projects span a wide variety of technology activities including improving service delivery, providing customer services over the Internet, meeting Federal requirements for services, maintaining and improving our infrastructure, and reengineering California's administrative functions to increase efficiencies in government operations and avoid the high costs of redundant systems.

Given my background, I'd be happy to discuss my experiences in the private sector and as CIO for the State of Michigan.

Make No Mistake, the Work We Need to Do Won't Be Easy

To change the culture, however, we need effective processes and procedures for managing IT, a robust infrastructure to support delivery of services, and a skilled workforce to enable and support IT. It is my job to provide direction from the top - - to make things happen. We need an enterprise orientation even as we develop separate applications which service the business needs of our departments and agencies.

Make no mistake about it – the challenges are great and change will be difficult. But, I believe the information technology professionals across government are up to the challenge. In addition, we need to invest appropriately in the infrastructure, the skills and the processes that will determine our success. Here are some of the things we need to do:

- *Enhance our processes and procedures for managing IT*
 - Establish an Enterprise Program Management Office focused on project and risk management.
 - Establish standardized project management methodologies and tools to be applied to all projects.
 - Identify risk and develop best practices in risk mitigation.

- *Ensure a robust technology infrastructure is in place to support delivery of services*
 - Create an enterprise architecture and data sharing model.
 - Develop enterprise infrastructures and funding to maintain them.
 - Establish technical IT standards to be used by all projects.

- *Ensure we create and retain a skilled workforce to deliver and support IT*
 - Establish competencies, standard skills, and a career path for project managers.
 - Update the technical skills of our IT professionals to current technologies consistent with the state's standards and prepare them for future technologies.
 - Modernize our hiring practices by making them more flexible.

The state collects vast amounts of data to meet our program mandates. State decision makers want to use these data to evaluate program effectiveness and drive policy decisions. Efforts are currently underway to address data sharing in three areas: education, health records, and the state's financial information.

- The sharing of education data will contribute to decisions on student achievement and teaching programs at the state and local levels, and in meeting federal program requirements.
- The standardization of common medical records with associated security protections will contribute to improvements in health care delivery, quality and timeliness, regardless of geographical barriers.
- An integrated, standardized financial system will allow transparency, accountability, and informed decision making on common fiscal data. This will provide benefits in the management of the state's business operations, and in the reduction of duplicative systems and manual processes in departments.

As we focus on an enterprise orientation and implement common infrastructure, we position our systems to more easily share data across agencies and departments, and with the public.

Finally, a Few Words about Procurement

Much has been said and written about the state's procurement process. But, under the leadership of Will Bush, director of the Department of General Services, aided by Adrian Farley, the procurement process is undergoing a significant overhaul that will produce more competition and better proposals at lower cost to the state.

Procurement is essential to our success in information technology. We need strong support from the private sector to achieve outstanding results from the expenditure of our IT dollars. We get that support through procurements, which

invite companies with excellent solutions to offer their software, hardware and integration expertise to state departments.

The procurement process must be tied to the approval and funding process. Procurements, especially for large projects, need to adhere to California infrastructure standards and support the states enterprise architecture. Departments should use the process that fits their requirements and the process should make provision for change before award or to fit funding realities. I believe IT projects would improve if the state negotiated final Terms and Conditions.

My office has the responsibility for approving IT projects. We also need the authority to approve the technology solution that derives from the procurement process. It is essential that we buy the technology and expertise we need to solve the problem that was approved for acquisition. Finally, procurements must recognize that state IT leadership is responsible for outcomes and, while the vendor will be held to contract provisions, IT projects are first and foremost activities conducted under the authority of state IT professionals.

Complex, large information technology projects are best done in conjunction with private sector companies that bring their solutions, technologies and experience to the projects. We value the relationships with vendors and systems integrators, which work with state government and are proud that so many of these great companies call California home. We want to strengthen these relationships through the procurement process.

Thank you for the opportunity to share my views with the Commission and I'd be happy to answer any questions you may have.

Completed IT Projects

Projects Suggested by Departments

1	Electronic Benefits Transfer (EBT)	<i>Office of Systems Integration</i>
<p>The project automated paper-based processes for delivering food stamp and cash assistance benefits, replacing printed coupons and checks with electronic benefit transfer cards. California EBT processes approximately \$5.1 billion in benefits annually, serving 1.4 million households and accessing thousands of commercial endpoints. Businesses and financial institutions experience lower costs and improved efficiency; taxpayers benefit from lower costs and an increased ability to detect and prosecute fraudulent benefit usage.</p>		
2	SB 950 Armed Prohibited Persons System	<i>Dept of Justice</i>
<p>The system provides law enforcement with data on individuals prohibited from buying or possessing firearms. The data is available to DOJ and law enforcement through the California Law Enforcement Telecommunications System (CLETS). The system is queried as a part of the required background check for individuals buying a gun and is used by law enforcement to identify those who are prohibited for gun possession.</p>		
3	Apportionment Payment System (APS) Replacement	<i>State Controller's Office</i>
<p>This project allows the SCO to apportion over \$38 billion annually to local governments, agencies, and special districts within California via the internet. As a result, the SCO is able to process more payments thru the APS via Electronic Funds Transfer to cities and counties. With the implementation of the APS the Remittance Advices are no longer sent by mail. But rather produced as part of the APS and are posted to the SCO website where local governments can print them directly.</p>		
4	Increase Program Efficiencies (IPE)	<i>Dept of Fair Employment and Housing</i>
<p>The Department of Fair Employment and Housing's new Online Appointments System allows citizens to make an appointment over the Internet to file a complaint of employment¹-related discrimination or harassment. Previously citizens could only make appointments over the phone - often in a whisper - on weekdays between 9 a.m. and 5 p.m. This project has helped make state government more accessible to all Californians through technology.</p>		
5	Phase III Voice and Data Infrastructure	<i>Franchise Tax Board</i>
<p>This project provided voice communication and data networking services to over 4,000 FTB staff relocating to the new Butterfield Way state office complex. 54 new data switches and 108 Uninterruptible Power Supply units were purchased. With voice and data communications, the staff was able to communicate by telephone or access their computers.</p>		
6	Tax Amnesty (TA)	<i>Franchise Tax Board</i>
<p>The project promoted a self-service Tax Amnesty program via the Internet to reduce the tax gap and accelerate revenue. The effort generated \$790 million over 3 years in increased revenue. The effort also increased taxpayer compliance as approximately 174,000 taxpayers participated in tax amnesty by filing 124,000 tax amnesty returns.</p>		

¹ Note that the Governor's press release of March 5, 2008 mistakenly says that the system can be used "to file complaints of employment and housing discrimination". Housing discrimination is not included, and the system makes appointments for an intake interview - it does not file complaints.

Completed IT Projects

7	SSN Privacy (SB 25)	<i>Franchise Tax Board</i>
<p>This project prohibits the FTB staff from printing a taxpayer's Social Security Number (SSN) on any materials via any media that are mailed to individual taxpayers as mandated by SB 25. The project resulted in over 1,000 forms and notices being modified and successfully providing security of taxpayers SSN.</p>		
8	Plata Live Scan	<i>Dept of Corrections and Rehabilitation</i>
<p>This project allows the department to submit fingerprints for pre-employment background checks directly from the department to the Department of Justice. The process was previously outsourced to local law enforcement agencies requiring additional appointments for the hire candidate and resulting in coordination problems in receiving results. The project has reduced the average time for this process from 14 days to 3 days contributing to an overall goal of reducing hire times for healthcare staff from months to 10 days.</p>		
9	CalParole	<i>Dept of Corrections and Rehabilitation</i>
<p>This project replaced a number of aging parolee systems with one system, better coordinating information across multiple jurisdictions. The system is used by parole agents, local law enforcement, and the Department of Justice to insure both their safety and public safety.</p>		
10	Staff Identification Card System	<i>Dept of Corrections and Rehabilitation</i>
<p>This project lowered the risk of escapes by inmates using altered laminated Department of Corrections and Rehabilitation staff identification cards. The department had reverted to using the laminated cards because of system failures of the digital cards due to aging system equipment.</p>		
11	Governor's Budget Presentation System	<i>Dept of Finance</i>
<p>The project provides California budget information through an interactive website. With this effort, the Governor's Budget is available to millions of Californians in a citizen-friendly format on the World Wide Web. The website provides both summary level information and detailed department information and makes the publication of the budget more efficient.</p>		

Completed IT Projects

Additional Projects Suggested by ctec

12	Local Government e-Claims	<i>State Controller's Office</i>
<p>This project allows California cities, counties, schools, and community colleges (locals) to file their mandated cost reimbursement claims with the State Controller's Office (SCO) electronically, via the Internet. This eliminates the manual preparation and submission of the paper claims by the locals and the receiving, processing, key entry, verification, and storage of the paper claims by the SCO. The effort has reduced erroneous and incomplete claims by 90%, and provided electronic storage for approximately 90% of the paper claims currently received by SCO.</p>		
13	Child Welfare System/Case Management System Application Hosting Move to DTS	<i>Dept of Technology Services</i>
<p>The project relocated the hosting of the Child Welfare Services/Case Management System (CWS/CMS) from the IBM data center in Boulder, Colorado to the State Data Center. The re-hosting effort was part of the larger Go Forward Plan project, which succeeded in restoring federal funding levels for CWS/CMS. The elimination of vendor hosting of the application is expected to improve the competitive environment for the subsequent CWS Web project procurement. Also, the data center increased processing capacity and operations providing economies-of-scale that benefit other departments.</p>		
14	I-15 Reversible Lane Closure System (RLCS)	<i>Dept of Transportation</i>
<p>This new system positions Caltrans to complete several planned transportation projects that will improve the I-15 corridor between San Diego and Escondido. These include extending the existing eight-mile RLCS to twenty miles; converting the existing two-lane RLCS into four-lane; and construction of SR-56 to connect I-5 to I-15. The new system allows the lanes to be opened/closed more quickly providing additional relief from traffic congestion.</p>		
15	Performance Measurement System (PeMS) Statewide Implementation	<i>Dept of Transportation</i>
<p>This system provides performance reports about traffic volumes, speeds, travel times, and highway system reliability. It allows traffic planners and engineers to improve highway system performance. The information is also available via the Internet to commuters as they plan trips.</p>		
16	Computer Aided Dispatching	<i>Dept of Forestry and Fire Protection</i>
<p>The new Computer Aided Dispatching (CAD) system is capable of handling the complexities of wildfire response as well as all types of emergencies dispatched by CalFire Command Centers. It uses a Geographical Information System (GIS) based system to determine the closest unit to send to an incident. This means that help gets there faster and resources are used more efficiently.</p>		

Completed IT Projects

17	Water Rights Information Management System (e-WRIMS) Replacement	<i>State Water Resources Control Board</i>
<p>A myriad of stakeholders benefit from the implementation of the eWRIMS, including, holders of water rights permits, those who seek new permits, various local government entities, the WRCB and other state agencies. The system provides a timely response to the public's need for water rights information as required by legislative mandate. Additionally, eWRIMS increases the reliability and quality of water rights data. Also, it integrates accurate Geospatial Information System data to enable more complete understanding of water availability and compliance. The eWRIMS improves the Board's ability to manage and collect water rights fees, track payment, and coordinate fee-related activities.</p>		
18	Medicare Modernization Act (MMA) Part D Implementation	<i>Dept of Health Care Services</i>
<p>This project established web services resulting in significant improvement to the accuracy and speed of Medicare enrollments, better care coordination for the dual eligibility population, and increased data available for staff and management to better serve Medi-Cal beneficiaries. Enrollment and dual-eligibility issues previously taking up to six weeks are now resolved in minutes, resulting in increased cost savings to the State.</p> <p><i>Awards for the project include:</i></p> <ul style="list-style-type: none"> • EC3 Award 2007 (C3 - National Electronic Commerce Council) - Best use of technology to improve business processes • Best Fit Integrator 2007 - presented by the Center for Digital Government - For an innovative and practical solution resulting in improved business operations 		
19	Medicare Part D - IT Systems Adjustments	<i>Dept of Developmental Services</i>
20	Medicare Modernization Act (MMA) Part D	<i>Dept of Mental Health</i>
<p>These projects enhanced existing IT systems for compliance with transaction and code sets mandated by the federal government enabling cost recovery from Medicare and savings in Medi-Cal for prescription drugs.</p>		
21	Teacher Credentialing Service Improvement Project	<i>Commission on Teacher Credentialing</i>
<p>This project allows California teachers to apply for or renew a credential through the internet and allows the public to search for credentials held by California public school teachers. The department now processes 145,000 online credential applications per year within 10 working days. In addition, the backlog of 80,000 applications that persisted over the last four years has been eliminated.</p>		