Carlos Ramos – Secretary, California Technology Agency
Written testimony for the Little Hoover Commission
August 25, 2011

Chairman Hancock, Vice Chair Mitchell, members of the Commission, thank you for the opportunity to join you today to update you on the progress made by the Technology Agency toward the implementation of the Governor's Information Technology Reorganization Plan as well as the state's IT infrastructure consolidation program.

While I've only been in my role for a month, I am honored to be a part of the significant efforts being undertaken by the Technology Agency and technology professionals across state government.

Governor Brown has been clear from day one that increasing the efficiency and effectiveness of state government is a top priority for his administration. The state's consolidation efforts are consistent with the Governor's direction, and we will continue to work collaboratively with departments and agencies to realize the full potential of the consolidation program underway.

Since my appointment, I have reached out to agency secretaries, department directors and other state program leaders to discuss their business needs and will partner with them to enhance both service delivery and programmatic efficiency through the application of technology.

As many of you will recall the Governor's Reorganization Plan, approved by the Commission in March 2009, integrated the Office of the State CIO, Office of Information Security, the Department of Technology Services, and the Telecommunications Division of the Department of General Services into what is now the California Technology Agency. These changes were codified last year by AB 2408, which was approved unanimously by the legislature.

Our responsibilities include:

- Enterprise Information Technology Strategy, Policy & Management;
- Enterprise Information Security;
- Data Center and Shared Services;
- IT Procurement Policy;

- Oversight of the 9-1-1 network and about 500 police, fire, and paramedic dispatch centers; and
- Engineering and technical support services for public safety related communications systems.
- IT project oversight

<u>Savings</u>

The state has made significant progress on both the IT reorganization and consolidation efforts (see metrics in Appendix Item A).

One significant achievement was the closure of our Cannery data center facility. This eliminated over 100,000 square feet of data center space, accounting for nearly 1/3 of the entire state square footage. This was done by increasing the efficiency of other data center capabilities to absorb the same workload.

More importantly, closing the dated Cannery facility enabled the state to:

- Cancel a planned new data center for a cost avoidance of at least $40 million, plus the annual operating expenses that were avoided.
- Eliminate $3.7 million in annual lease and facility costs.
- Reduce power consumption by approximately 39,000 KWh/day

By achieving economies of scale, the Office of Technology Services (OTech) has reduced rates consistently over the past several years (see Appendix B - charts 1, 2 and 3). These rate reductions total more than $75 million in avoided costs since consolidation began in 2005. In addition, another round of rate reductions valued at $10 million in cost avoidances will be proposed at September's Technology Services Board hearing.

Through reorganization, we also implemented a structured IT capitol planning and portfolio management process. This process has allowed us to better manage what projects move forward, thereby avoiding nearly $700 million in project costs.

We've also implemented a more structured approach to IT acquisition planning. Certain IT purchases over designated price thresholds must be reported and approved through our Agency. This process has allowed us to monitor, review and rationalize IT expenditures. This enabled CA to avoid $17 million of consultant contract expenditures and $52 million of IT project costs .

Consolidation
Statewide consolidation efforts are moving forward successfully.
We've already succeeded in reducing energy consumption from IT by over 1/3
(see Appendix B - chart 4). This was achieved through implementation of data
center efficiency measures, the closure of the Cannery data center, server
virtualization and a statewide IT policy that requires state agencies to utilize
power management software throughout their offices.

The consolidation targets laid out in AB 2408 are as follows:
- Reduce the total amount of energy used by IT and telecommunications
  equipment by 20 percent by July 2011 and by 30 percent by July 2012.
- Reduce data center square footage by 50 percent by July 2011.
- Transition all mission critical and public-facing applications to Tier III data
  centers.
- Close all non-network data centers and server rooms by 2013.
- Begin migration to a unified data network by July 2011.
- Begin migration to a shared e-mail solution by June 2011.

As mentioned, not only have we met our 2011 energy reduction goals, we have
already surpassed the 2012 targets, and we will continue to reduce our energy
consumption in every way possible.

Agencies have the option of transitioning their email service to either the Office of
Technology Services (OTech) hosted CA.MAIL service, or the Microsoft hosted
California Email Service (CES). Approximately 77,000 mailboxes have opted for
CA.MAIL, with the remaining approximately 100,000 boxes moving to CES. 98%
of all mailboxes for the state have either transitioned already, or are in the
planning/implementation phase of the move. All those moving to the CA.MAIL
solution have already transitioned their service, while those utilizing CES will be
implementing the transition in 6 waves through 2013 to mitigate the risks
associated with a project of this magnitude.

Data Center square footage has been reduced by more than 100,000 square
feet, a reduction of approximately 45 percent. The purpose of the consolidation
program is to realize efficiencies and to ensure that systems critical to the
operation of government are housed in a secure, tier III data center, and we keep
that in mind when making decisions on when and how to move forward with
consolidation activities. Rather than arbitrarily require a data center to be closed,

we work collaboratively with departments and agencies to determine the most effective and efficient way to achieve these targets.

We have created the "Federated Data Center" (FDC) housed within the Gold Camp data center facility operated by the Office of Technology Services. CDCR, the Receiver's Office and HHSA are already participants within the FDC, and other state and local government agencies are in the planning process to utilize this facility. As these moves happen, we will achieve the reduction goals for data center space.

The consolidation of networks is also well underway, with over 99% of CSGNet network circuits having begun the process of transitioning to one unified state network.

Collaboration and Governance
Implementing a consolidation program of this size necessitates a great deal of coordination. While the program has been successful thus far, I plan to step up our interactions with departments and Agencies to support them in their efforts to meet these targets. I am also meeting with each Agency, with many individual departments and with the leadership teams of many of the state's IT projects so I can better understand how the Technology Agency can help them meet their business needs, thereby allowing them to focus on their core missions. Additionally, I am working with a variety of parties to review the governance/communication structure we currently use to collaborate among the IT community. I want to ensure that not only does the Technology Agency remain up-to-date on statewide efforts, but also that departments and Agencies have the opportunities they need to help us guide the statewide direction for IT.

Specific to the consolidation program, we have established working groups, led by agency and department CIOs, specific to each consolidation project. These workgroups define goals, action items, training and career development requirements; process and technology requirements; anticipated benefits and ensure collaboration of the IT community.

Your staff also asked about coordination with IT managers and staff in other departments in general. I am currently working directly with each of the Agency Information Officers to determine how to best foster a collaborative relationship with our Agency. As previously mentioned, we have several forums to foster interaction throughout the IT community. The IT Council and IT Executive Council are two of our primary methods for maintaining open lines of communication. These entities bring together the Agency Chief Information Officers and the department CIO's to discuss statewide issues. The Technology

Services Board serves as a means for open discussions regarding the Office of Technology Services and the services they offer.

Additionally, our Public Safety Communications Office coordinates the 911 Advisory Board, providing statewide direction to the 911 program. And our Health IT Director is an active member of multiple interagency groups including the California Telehealth Network Board, and Cal eConnect Technical Advisory Group. By serving an active roll in the issue areas we work in, the Technology Agency is able to effectively collaborate with a wide variety of stakeholders and help develop statewide direction.

Use of data

In 2009, our Agency's Web Services Section established data.ca.gov as California's primary data website. At the time, California was one of only three state-level entities nationwide to have such a site. Since that time, this site has undergone improvements and now indexes over 100,000 data records that are available to the public for review, download and use. This access to state data is considered the core of California's transparency effort and enables collaborative efforts like last year's "Apps for California" (http://www.ca.gov/appsforcalifornians/), a collaborative web application development contest, meant to further enhance government transparency and services.

Additionally, the Technology Agency currently hosts the Transparency in Government website (www.transparency.ca.gov). The site is intended to increase government transparency by making information regarding Statements of Economic Interest (form 700), travel expense claim forms, state audits, and contract information readily available to the public.

California's state web portal has received "Sunny Awards" in 2010 and 2011, which rates state sites on the availability of information regarding budgets, contracts, public records, and a variety of other information. California ranks in the top 100 of the more than 6,000 state and local website analyzed by the Sunshine Review's Transparency Checklist.

In addition, there are also some specific projects underway to more effectively use data. The Franchise Tax Board is currently expanding their data capture of

tax documents, enhancing their electronic validation of tax returns, and building a system that will help them compare and better utilize that data to increase the collection of tax revenues.

The Department of Health Care Services has implemented their Management Information System/Decision Support System (MIS/DSS), which is their Medicaid data warehouse. It contains over 3 billion records, and is used as a tool in managing and monitoring the future of the Medi-Cal program. It can be used to look at trend analysis, to analyze service utilization, billing irregularities, and potential impacts of changes in services to name a few.

Finally, The Technology Agency is in the process of populating the State's first statewide web analytics solution. The data gathered by this system enables each participating organization to analyze web traffic patterns used to make decisions regarding website enhancements, consolidations and improvements to speed access to services. As more organizations join this statewide service, an overall look at California's web presence can be gained and used to support future planning and improvement.

Project Management
One of the largest improvements we've seen, organizationally, is the Program Management Office (PMO) within the Technology Agency, which provides primary support for program and project planning, investment analysis, project management, and executive level management and guidance. The Office also ensures the coordination and collaboration of enterprise and other multi-departmental IT efforts, and ensures standardization in project management processes and project performance metrics in order to maximize the management of major projects and allow for uniform project performance assessments. The primary goals of the PMO are to ensure high value IT investments are made and that approved projects are set up to succeed.

The PMO also provides expert project oversight, procurement, expenditure management and long range planning and policy. The PMO embeds staff in critical IT projects for onsite independent oversight. This unit provides procurement expertise for policy and acquisition oversight activities.

The state lacked policies, standards and methodologies that could lead to consistent project success. Departments were heavily dependent on vendor staff to support their efforts.

Now the PMO has developed a project management infrastructure to deliver consistently successful projects.

They have developed a "California Project Management Methodology", based on industry best standards that all departments and agencies are required to follow, including project manager training. As of June 2010, the State has trained 1,111 executives, IT project sponsors, and staff. In addition to providing guidance and consistency to project management by departments, the PMO also needed to create internal consistency. To ensure we set the standard for organizational performance, the PMO worked hard to achieve a CMMI Level 3 certification, a highly recognized standard that is very difficult to achieve. This certifies that the PMO has a standard set of defined and documented processes used across the organization, which are subject to continuous analysis and improvement. This rating demonstrates the PMO's commitment to quality, consistency, and the delivery of measurable business benefits to California. The PMO is now one of very few (perhaps the only) state government entity in the nation to earn this distinction.

In addition to better defined processes, the PMO also wanted to ensure that their own staff were properly trained to provide the highest quality service. All PMO staff have either completed or are in the progress of completing their "PMP training", a nationally recognized certification for project managers, demonstrating the recipients experience, education, and ability to successfully lead and direct projects.

Further, the PMO wanted to ensure that they not only provided oversight to projects, but also a useful feedback loop. Project information used to be disparate and siloed, limiting the ability to extract useful information. To alleviate this issue and provide greater transparency for the PMO staff, the departments, and the public, we adopted a management tool that has allowed data to be stored in one location, in similar formats allowing comparisons and easier generation of reports. This enables the constantly updated status of projects through our project tracking website. This also helps ensure that policymakers are working with up-to-date information.

So what does this really do for the state?

Collectively, the new and improved PMO has reduced the need to re-baseline projects by 15%, meaning more projects are staying within budget and schedule without the need to re-review the project.

Additionally, there has been a 46% reduction in the number of projects, signifying that the state is doing a better job prioritizing projects and ensuring that the right projects are being pursued with the state's limited resources.

The PMO has also just kicked off an effort to examine the entire project life cycle process in order to reduce time to decisions, time to market for systems, and further improve initial estimates and project completion success trending. This introspective effort is using input from stakeholders throughout the process including: Departments and Agencies, Finance, DGS, and the LAO. The PMO expects to be able to reduce project review time from and average of 90 days down to 30 as one of the goals of the effort.

Finally, I'm proud to say, that as further evidence of all these improvements, the PMO was recently awarded a Best of California award by the Center for Digital Government for their work in collaboration.

In addition, just last month the PMO was announced as one of 7 semi-finalists in the PM Solutions annual PMO of the year award. This is particularly significant because this competition is worldwide and the primary competition is with private entities. In the past 5 years, only 2 public entities have been finalists, and neither were statewide entities. Winners have included IBM, Accident Fund Insurance, and Norton Healthcare. Being selected as a finalist establishes our PMO unit as one of the premier project management operations in the world, including public and private operations. Finalists will be announced in September.

Conclusion

The Technology Agency has brought the state a long way towards getting a handle on its IT portfolio. However, we have still a ways to go. All of our staff at the Technology Agency, including myself, are very excited to be a part of this endeavor and are looking forward to continuing to move our efforts forward. I will be happy to address any additional questions you may have at the hearing on August 25th.

Thank you again for the opportunity to address the Commission.

Appendix A

FY 2010-11 IT Performance Metrics Update

Infrastructure Rationalization	FY 2009	FY 2010
Number of Servers	10,000	8,129
Data Center sq. feet	364,000	262,500
Number of Wide Area Networks	70+	50
Number of e-mail boxes in "E-hub"	0	163,360

Reliability	FY 2009	FY 2010
Percent of state agencies with current IT disaster recovery plans (per year)	85%	89%
System availability	99.00%	99.90%
Network availability	92.70%	99.95%

Service	FY 2009	FY 2010
Public satisfaction with online services	80%	90%
Service level agreements met	75%	88%

Resource Consumption	FY 2009	FY 2010
Energy used (MWh/year)	170,000	140,426
Carbon dioxide emissions (Metric Tons)	85,000	70,213

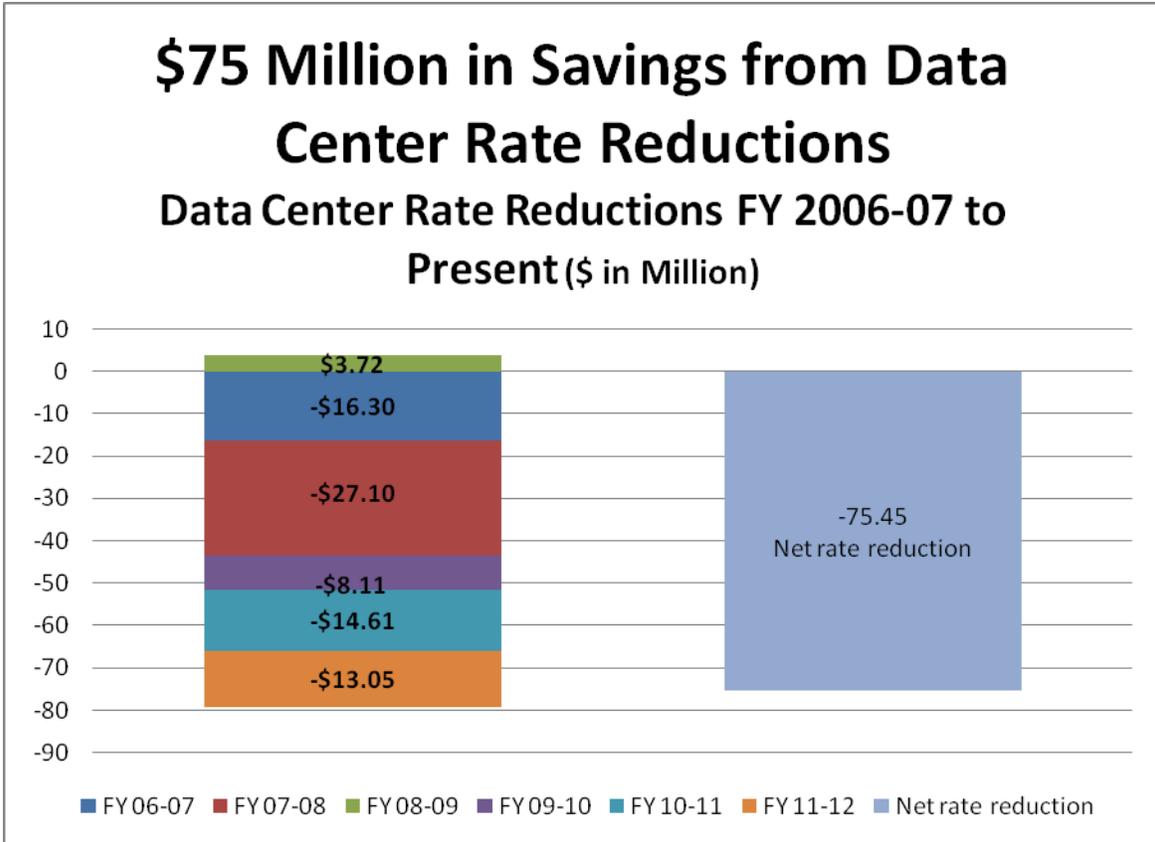| Project Management	FY 2009	FY 2010
Percent of projects delivered on time and within budget	58%	70%
Percent of projects completed within budget	75%	75%
Percent of projects delivered on time	68%	75%

Appendix B

Chart 1 – Data Center Rate Reductions

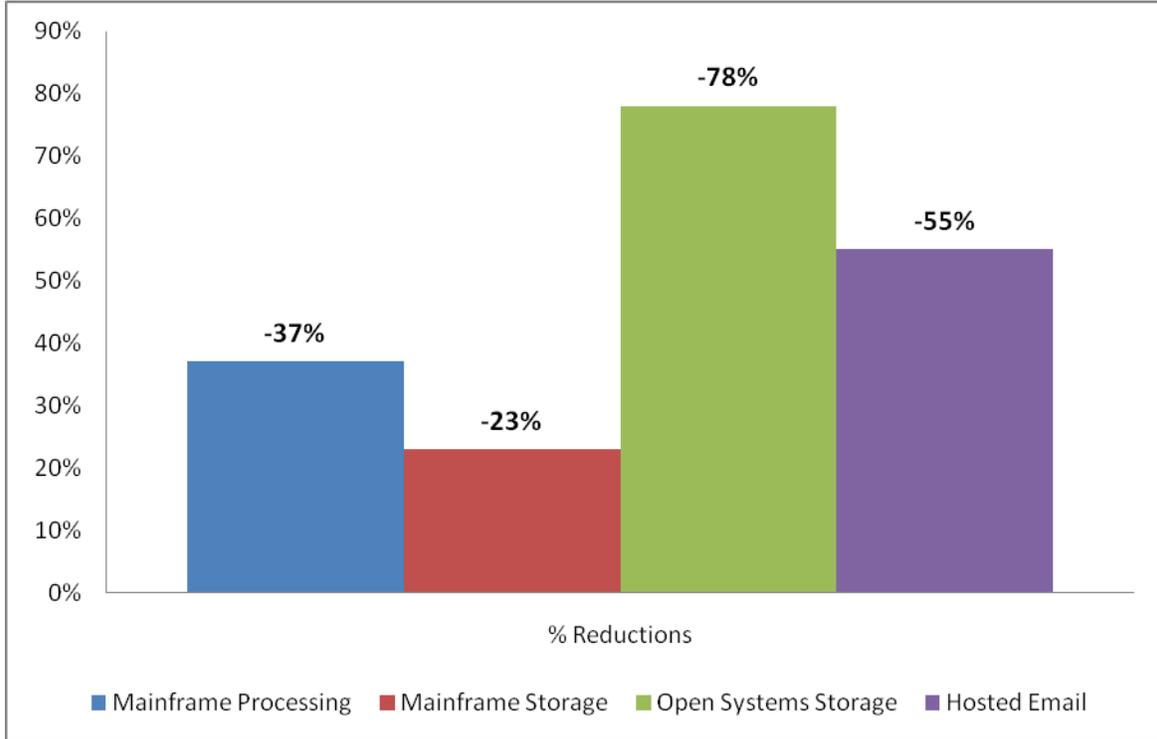## Chart 2 – Data Center Rate Reductions (2006-07 – current) by service area

Chart 3 - Data Center Rate Reductions for major OTech Customers
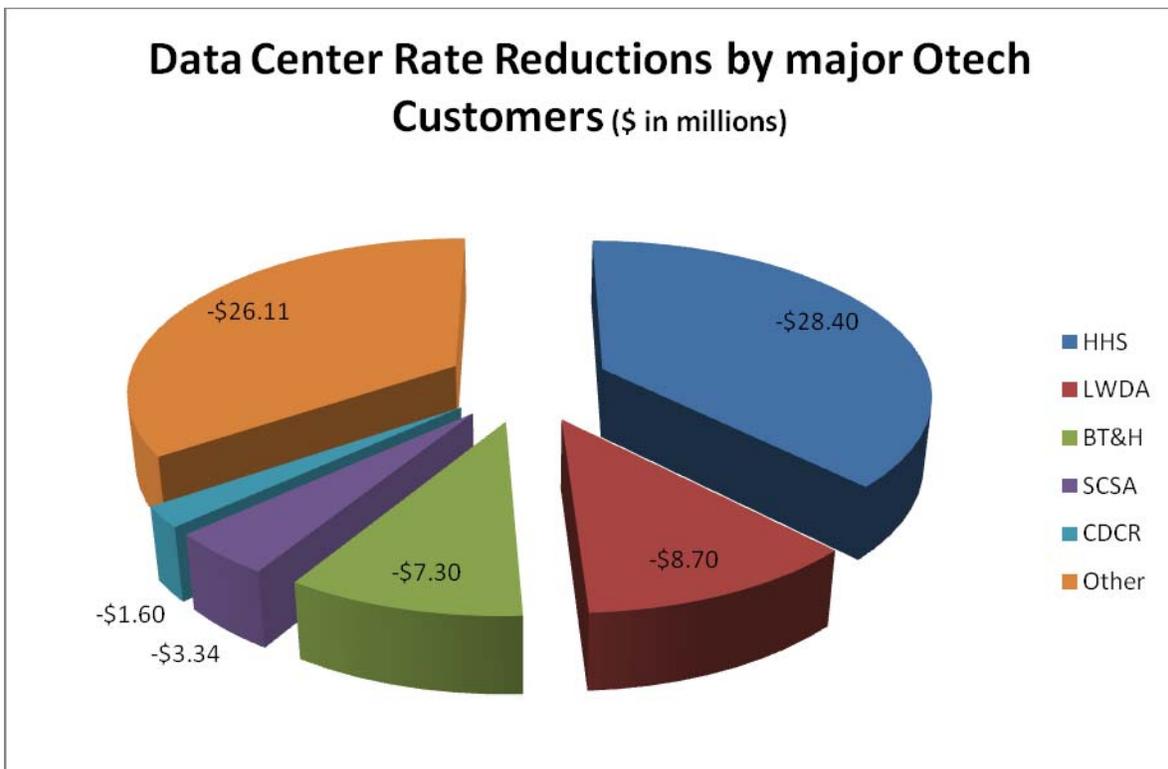

Data Center Rate Reductions by major Otech Customers ($ in millions)

Chart 4 – IT Energy Use
Reductions