2012-2013 Reports

1. 2012-13 Strategic Plan Update
2. 2012-13 Annual IT Performance Metrics Report (GC 11545(d))
3. Annual Department of Finance Cost Savings and Avoidance Report (GC 11545 (d)4)

Executive Summary

This packet provides 3 individual documents required of the California Technology Agency (Technology Agency) by statute. These documents are:

- 2012-13 Annual Strategic Plan Update
- 2012-13 Annual Information Technology Performance Metrics Report
- Annual Department of Finance Cost Savings and Avoidance Report

While these reports are not linked, the Technology Agency has brought them together in this consolidated report for this year.

The Annual Strategic Plan update is attached here-in, but can also be found on our website at www.cio.ca.gov.

2012-13 Annual IT Performance Report (Government Code 11545(d))

In 2009, the Office of the State Chief Information Officer (OCIO) developed a performance framework of Information Technology metrics to measure progress statewide. The Technology Agency has worked to put an infrastructure in place that will yield consistency in how metrics are reported and used, but some of the metrics do require some context.

Project Management: Project Management data shows a relatively stable percentage of projects delivered on time and within budget, while showing significant improvement in the percent of projects completed within budget, and a modest improvement for the percentage of projects delivered on time. As noted in the report, this data is very volatile as it is based on a very small subset of projects that finish in a given calendar year. One or two projects can cause significant swings in the data.

The Technology Agency has under-taken considerable efforts to ensure project success. While the Technology Agency does not manage actual Information Technology projects, it provides oversight over a majority of the State's large technology projects run by state agencies and departments. These projects are required to obtain approval from the Technology Agency at key points during initiation of the project and the life of the project.

The Technology Agency has implemented reforms intended to reduce the risk of project failure, including:

- Undertaking a first of its kind review of the project approval process for IT projects. This is intended to streamline the approval process while also ensuring projects are properly planned.
- Technology Agency staff are embedded within projects to provide direct oversight, input and feedback on the project's progress.
- Procurements:
    - Focusing greater attention on larger projects to review and assist with procurement document development. Procurement documents set the stage for the rest of project implementation.
- Schedules:
    - During review and approval of Feasibility Study Reports (FSR), the Technology Agency reviews proposed schedules to ensure estimates are in line with realistic expectations. This should greatly improve the ability of the State and project vendors to meet estimated timelines.
    - During project implementation, the Technology Agency monitors projects to hold them accountable to the proposed project schedule and budget.
- Increased sponsor and project management training.
- Increased communications with project directors and vendors on large projects.

While we have seen some immediate results from these initiatives (better trained project staff, improved processes, etc.), a majority of projects being implemented or completed now, were started several years ago. The Technology Agency will monitor the impact of these efforts as projects are developed through the improved system.

Information Security: Information Security metrics have varied greatly over the years. The variance can be attributed to a greater emphasis on accurate and timely reporting by the Office of Information Security. As the Office of Information Security continually improves the statewide governance around Information Technology Security, more incidents are reported. This reflects more accurate data, not an actual increase in incidents in many cases.

The Office of Information Security has under-taken the following initiatives to enhance the security of California's technology resources:

1) Adopted policy to require the encryption of mainframe and server tapes that contain personal, sensitive or confidential information. Other portable devices and media containing personal, sensitive or confidential information were already required to be encrypted.
2) Updated incident response instructions for security incidents involving a breach of personal information.
3) Updated the online Risk Assessment Toolkit with an enhanced basic risk assessment tool and provided training on its use to agencies and departments.

Based on the National Association of State Chief Information Officer (NASCIO) 2012 Cyber Security Study results, the number one recommended call to action for all states to mitigate risk and mature their information security programs is the adoption of a uniform security framework, such as the Federal Information Processing Standards (FIPS) and National Institute of Standards and Technology (NIST) Standards.

California formally adopted use of the FIPS and NIST standards in 1985 (SAM Section 5100), and is currently in the process of updating security policies to reflect the latest standards. This allows California to utilize a uniform framework across agencies, thereby enabling better communication and collaboration.

California Technology Agency 2012 – 2013 Annual IT Performance Report				
Infrastructure Rationalization				
Metric	**2009**	**2010**	**2011**	**2012**
# of servers	10,000	8,129	7,266	Data not available[1]
Data center capacity (sq. ft.)	364,000	262,500	181,324	50% reduction achieved
# of Wide Area Networks	70+	50	45	25
# of email boxes in E-Hub	0	163,630	166,949	99.5% complete
[1]This data is no longer collected as this was not an effective metric, and required significant workload to verify.				
Service				
Metric	**2009**	**2010**	**2011**	**2012**
Public satisfaction with online services	80%	90%	N/A[2]	N/A[2]
Service level objectives	75%	88%	100%	N/A[3]
[2]The public satisfaction survey was part of the 2007-2010 CA.Gov template but was eliminated because it did not yield usable data. [3]Service level objective data in past years was a factor of Network and System Availability. This data is presented under "Reliability" below, and is thus no longer reported separately.				
Project Management				
Metric	**2009**	**2010**	**2011**	**2012**
% of projects delivered on time and within budget[4]	58%	70%	43%	40%
% of projects completed within budget[4]	75%	75%	56%	80%
% of projects delivered on time [4]	68%	75%	29%	40%
[4]Data is based on projects completed in a given year. In 2012, data was available for only 7 completed projects. This small sample size makes the data volatile, where one or two projects can skew the percentages.				
Reliability				
Metric	**2009**	**2010**	**2011**	**2012**
% of state agencies with current IT disaster recovery plans (per year)[5]	85%	89%	73%	54%
System availability	99.0%	99.90%	99.99%	99.90%
Network availability	92.70%	99.91%	99.91%	99.95%
[5]Percentage represents state agencies that have submitted a full plan or certified that no changes were made in the past year that requires a new or updated plan.				
Sustainability				
Metric	**2009**	**2010**	**2011**	**2012**
Energy used (MWh/year)	170,000	140,426	107,028	33% reduction achieved
Carbon dioxide emissions (Metric Tons)	85,000	70,213	41,994	
Security				
Metric	**2009**	**2010**	**2011**	**2012**
# of electronic data breaches (per calendar year)[6]	90	268	81	96
# of breaches resulting in the loss of personally identifying information (PII)[7]	3	0	2	10
# of website compromises (per calendar year)[8]	70	11	7	9
[6]The number of data breaches during the calendar year that involved unencrypted data in an electronic format (e.g., unencrypted laptop, thumb drive, unauthorized access to database through hacking or network intrusion, etc.). [7] The number of breaches during the calendar year that involved unencrypted electronic devices and storage media lost or stolen containing PII. [8] Includes any successful exploit of a State Agency website vulnerability (e.g., defacement, SQL injection, etc.).				

Annual cost savings and avoidance report from the California Technology Agency to the Department of Finance

Below is the report on 2012-13 cost savings and avoidances achieved through improvements to the way the State acquires, develops, implements, manages and operates State technology assets, infrastructure and systems.

2012-13 Cost Savings/Avoidances

FY 2012-13 Office of Technology Services Rate Savings	$13,050,778
Renegotiation of California Technology Agency contracts – Cost Avoidance	$3,571,505
Data Center Energy Efficiency Improvements	$423,000
Total	**$17,045,283**

Office of Technology Services (OTech) Rate Savings

The rate reductions approved in April 2012 will achieve $13.1 million in savings for FY 2012-13. These savings were included within the $21.5 million in total savings reported last year for the April 2012 rate reduction. The savings were achieved in the following service categories:

- Mainframe CPU hourly rate reduced by 25%
  - Mainframe CPU is the largest service area of the data center and supports the mainframe processing of the largest and most complex customer applications. The Office of Technology Services (OTech) charges an hourly CPU rate for usage.

- Mainframe Disk Storage rates reduced by 59%
  - Mainframe Disk Storage is required to house and/or store customer data and datasets. OTech charges various rates for storage utilization depending on the type of data being stored.

- Mainframe Tape Storage rates reduced by 20%
  - Mainframe Tape Storage is a less costly alternative to storing customer data and datasets. Customers are charged for the type of tape media used as well as how often the tape is retrieved.

- AIX Application Hosting rates reduced by 20%
  - AIX Application Hosting is an IBM processing platform. Customers select their processing platform type based upon their application and business needs. OTech charges a per-server rate plus memory usage.

- Electronic Commerce Application Support rates reduced by 43%
  - The Electronic Commerce Application Support service is a suite of IBM software products customers request the data center to install, maintain, customize and upgrade. It includes software products such as WebSphere Application Server, WebSphere MQ, Tivoli Access Manager, etc. OTech charges a per server rate for each type of software product supported.
- Tenant Managed Services rates reduced by 41%
  - Tenant Managed Services provides customers with secure space in the OTech data center while maintaining full control over their computing environment. There is a schedule of various rates associated with how much floor space is used, how much power is consumed and how much support they require from OTech.

- Web Hosting rate reduced by 75%
  - Web Hosting is the design, configuration, installation and monitoring of customer websites. OTech charges a monthly rate for each Web Server hosted.

OTech is working on a subsequent Rate Package for FY 2012/13 and anticipates further rate reductions.

Renegotiation of California Technology Agency Contracts

Cost avoidances have been achieved in FY 2012/13 through the renegotiation and renewal of contracts:

- Vendor discounting for maintenance renewals
- Discounting as a result of multi-year contracting
- Discounting as a result of bulk purchasing or bundling of software licensing agreements
- Transitioning maintenance services on non-critical equipment to an insurance broker (Department of General Services leverage contract)

Data Center Energy Efficiency Improvements

The Office of Technology Services (OTech), in partnership with the Department of General Services, received $2.3 million of the Energy Efficient State Property Revolving Fund from the American Recovery and Reinvestment Act. The funding allowed OTech to install energy efficient computer room air conditioners, waterside economizer retrofit package on existing cooling towers, upgrade existing chillers with new Variable Frequency Drives and digital control panels and retrofit the entire facility with energy efficient light fixtures and occupancy control sensors. The energy improvements resulted in an estimated annual savings of over $423,000. OTech also received over $93,000 in incentives from the Sacramento Municipal Utility District (SMUD). Overall, in 2012, OTech reduced the total energy demand of the data center by 9%, a savings of 1.7 million kWh per year.