

Department of Technology Services
Information Technology Capital Plan



Information Technology Capital Plan Plan Year 2009-10 through 2013-14 Executive Approval Transmittal

Department Name

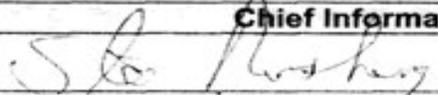
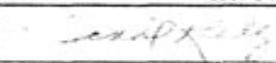
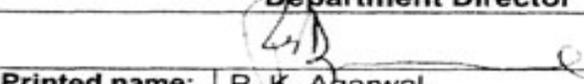
Department of Technology Services

APPROVAL SIGNATURES

I am submitting the attached Information Technology Capital Plan as required by the State Administrative Manual Section 4904.

I certify that the IT Capital Plan was prepared in accordance with State Information Management Manual section 57 and that the proposed IT projects are consistent with our business strategies and information technology strategy.

I have reviewed and agree with the information in the attached Information Technology Capital Plan.

Chief Information Officer	Date Signed
 Printed name: Steve Rushing	8/1/08
Information Security Officer	Date Signed
 Printed name: Carol Kelly	8/1/08
Budget Officer	Date Signed
 Printed name: Robert Illa	8/1/08
Department Director	Date Signed
 Printed name: P. K. Agarwal	8/1/08

DEPARTMENT IT CAPITAL PLAN

Department Name and Org Code:

Department of Technology Services (DTS) - 1955

Plan Year:

2009-10 through 2013-14

1. Summarize your organization's business goals and objectives below:

Goal 1 - CUSTOMER SATISFACTION

Deliver the best service experience in California state government.

Strategy: The DTS will collaborate with customers and vendors to deliver services and solutions that support customer business needs and exceed their expectations.

- Objective 1.1 Ensure that services are continuously operational.
- Objective 1.2 Align service levels with customer requirements.
- Objective 1.3 Partner with customers and vendors to implement customer IT solutions.
- Objective 1.4 Provide self-service access to the DTS.
- Objective 1.5 Improve customer care.

Goal 2 – EMPLOYEE INVESTMENT

Invest in our employees to create value for our customers.

Strategy: The DTS will provide staff the knowledge and tools needed to excel.

- Objective 2.1 Recruit, retain, and develop a highly skilled workforce.
- Objective 2.2 Implement succession strategies.
- Objective 2.3 Implement organizational development strategies that will positively impact the work environment.

Goal 3 - FINANCIAL VIABILITY

Offer the best value to our customers.

Strategy: The DTS will reduce operating expenses and better align our rates with the cost to deliver products and services.

- Objective 3.1 Lower costs while maintaining service quality.
- Objective 3.2 Align rates with the service technology lifecycle.
- Objective 3.3 Enhance financial planning and forecasting methodology.
- Objective 3.4 Standardize architecture and technology to achieve financial efficiencies.
- Objective 3.5 Transform from component-based to usage-based measurements, where appropriate.

Goal 4 - PROCESS IMPROVEMENT

Optimize business processes to enhance service management and reduce costs.

Strategy: The DTS will adopt service management best practices to standardize and streamline internal and external processes. We will eliminate process redundancies and ensure processes are repeatable, measurable, and reportable.

DTS Goals and Objectives continued

- Objective 4.1 Modernize the DTS legacy systems.
- Objective 4.2 Standardize and consolidate internal processes.
- Objective 4.3 Integrate performance measurement into business processes.

Goal 5 - ENABLING INVESTMENTS

Invest in tools and technology to deliver solutions that provide value for our customers.

Strategy: The DTS will make well-timed technology investments to ensure that services provided to customers are secure and reliable.

- Objective 5.1 Invest in new shared services that provide value to the customers.
- Objective 5.2 Secure and protect State IT assets.
- Objective 5.3 Align capacity management with technology lifecycles.
- Objective 5.4 Align infrastructure refresh and growth with business needs, service levels, and technology lifecycles. (The DTS Tier 7 projects include hardware and software refresh projects for internal systems and customer program systems, as well as capacity projects for their existing system growth)

Goal 6 - STATEWIDE LEADERSHIP

Provide statewide IT leadership.

Strategy: The DTS will provide technology leadership by implementing standards and best practices for the responsible and effective use of IT resources.

- Objective 6.1 Position the State for the efficient adoption of new technologies.
- Objective 6.2 Implement enterprise architectural standards.
- Objective 6.3 Be the technology voice on statewide and federal issues for the State.
- Objective 6.4 Adopt business practices that reduce the use of consumable resources.

2. What are your organization's plans to upgrade or replace your IT infrastructure for the following? When responding, please indicate the timeframes of your intended upgrade or replacement efforts.

- 2.1. Hardware** – During fiscal year 2008/09 DTS will expend about \$56,417,000 for hardware such as IBM Mainframe upgrades, Windows servers, Sun UNIX servers, IBM UNIX servers, and disk and tape storage devices. These equipment purchases follow a four year refresh cycle and include customer driven purchases for new hosting services and increased capacity.
- 2.2. Software** - During fiscal year 2008/09 DTS will expend about \$61,685,000 on software for operating systems, maintenance and support agreements, security and antivirus programs, backup and maintenance utilities, and email related products including intrusion protection software
- 2.3. Network** - During fiscal year 2008/09 DTS will expend about \$28,741,000 on networks including routers, switches and other infrastructure that provide services to the DTS CSGnet.

3. Existing Approved Reportable IT Projects

Provide the following information regarding your existing approved reportable IT projects on Table 1 on the following page:

- **Existing IT Project;**
- **Approved Project Cost;**
- **Project Number; and**
- **Implementation Date**

4. Proposed IT Projects

After each proposed IT project has been documented by answering questions 4.1 through 4.15 of the attached IT Project Proposal Form, provide the following information on Table 2 on the following page:

- **The name of each proposed IT project;**
- **The priority ranking;**
- **The FSR submission date; and**
- **The estimated cost**

Table 1-Existing Approved Reportable IT Projects Summary by Department

Existing IT Project	Approved Project Cost*	Project Number	Implementation Date
Service Continuity Mainframe Services	\$20,102,679	1955-3	6/30/09

***Note:** If a Special Project Report (SPR) was submitted for review in July 2008 that includes project costs that differ from the last approved project document, enter both the last approved project cost and the revised project cost from the SPR under review.

Table 2-Proposed IT Project Summary

DTS does not have any proposed reportable IT projects. Due to the nature of our business DTS uses a somewhat different approval process for infrastructure expenditures. Prior to consolidation of the Stephen P. Teale Data Center and the Health and Human Services Data Center in 2005, each data center was allowed to use a single document when requesting expenditure authority for infrastructure capacity growth. Since the data center consolidation in July of 2005, DTS has included purchases of infrastructure necessary to support customer projects as part of this modified process. For IT projects not related to capacity growth or customer projects DTS uses the Feasibility Study Report process as prescribed under the State Administrative Manual.

Our planned expenditures for FY 2008/09 and 2009/10 are as follows:

	<u>2008/09</u>	<u>2009/10</u>
Hardware	\$56,417,000	\$56,417,000
Software	61,685,000	61,685,000
Network	28,741,000	33,857,000

PROPOSED IT PROJECTS

Complete this IT Project Proposal Form (questions 4.1 through 4.15 below) for each proposed IT project that meets the definition of a reportable project as defined in the State Administrative Manual Section 4819.37:

The DTS has no proposed reportable IT Projects.

- 4.1. **Proposal name and priority ranking:**
- 4.2. **Description of the proposed IT project:**
- 4.3. **Which of your department's business goals and objectives does this project support, and how?**
- 4.4. **What are the expected business outcomes or benefits of the proposal as they relate to your organization's business goals and objectives?**
- 4.5. **The following are from the State's IT strategic plan. Check the appropriate box(es) to identify the goals this proposal supports:**
- Supporting and enhancing services for Californians and businesses**
 - Enhancing information and IT security**
 - Reducing state operational costs (leveraging, consolidation, new technology, etc.)**
 - Improving the reliability and performance of IT infrastructure**
 - Enhancing human capital management**
 - Supporting state and agency priorities and business direction**
- 4.6. **Is the proposal consistent with your organization's Enterprise Architecture?**
- Yes**
 - No**
- If no, please explain why the deviation from the organization's Enterprise Architecture is necessary.**
- 4.7. **Will the proposed system collect, store, transmit, or exchange confidential or sensitive information?**
- Yes**
 - No**
- 4.8. **If this proposal is conceptually approved, what is the estimated date (mm/yyyy) the FSR will be submitted?**
- 4.9. **What is the estimated project start date (mm/yyyy) if the FSR is approved?**
- 4.10. **What is the duration of the proposed project?**

PROPOSED IT PROJECTS continued

The DTS has no proposed reportable IT Projects.

4.11. Will the proposed project utilize the existing infrastructure?

- Yes
- No

If no, please explain.

4.12. Is the proposal related to another proposal or to an existing project?

- Yes
- No

If yes, describe the related proposal or project and how it is related:

4.13. Describe the consequences of not doing this proposed project at the planned timeframe:

4.14. Check the appropriate box(es) to identify the proposal's funding strategy:

- Augmentation needed
- Redirection of existing funds
- Other (describe):

4.15. What are the estimated cost and funding source(s) by fiscal year through implementation (information should be provided in the following format):

Fund Source	2009-10	2010-11	2011-12	2012-13	2013-14 and future	Total
General Fund						
Federal Fund						
Special Fund*						
Total						

*** Note: Identify the fund source and if the department is the sole user of the fund.**

Enterprise Architecture

A.1. Does your organization have documented Enterprise Architecture principles, strategies, or standards to guide decisions on technology projects?

- Yes
- No

There are two individuals devoted to this function currently. Kathy Saito, Deputy Director, Engineering Division is responsible for the current Technical Reference Model (TRM) component of our enterprise architecture. Carol Kelly, Deputy Director Security Management Division is our interim Enterprise Architect and responsible for the governance processes and determining the resource requirements needed within DTS for the overall EA function. We are beginning the process of establishing a permanent Enterprise Architecture function at DTS.

A.2. Indicate on Table A-1 below, the completion status of the component Reference Models of your formal Enterprise Architecture efforts. If available, please submit a copy of your Enterprise Architecture document.

Table A-1, Enterprise Architecture Completion Status

Component Reference Model	Status			
	Implemented	Implementation in Progress	Planned or Planning in Progress	Not Implemented and Not Planned
Business				X
Service			X	
Technical		X		
Data				X

A.3. Describe the governance structure your organization uses to review and approve the Enterprise Architecture and any subsequent changes.

DTS is currently in the process of establishing its EA governance structure. As an executive branch service provider, DTS is engaging customer stakeholders, the OCIO, and various EA teams throughout the state in the design and deployment of its governance processes.

A.4 Does your organization have an Enterprise Architect? (if yes, provide their name, telephone number, and e-mail address below)

- Yes
- No

There are two individuals devoted to this function currently. Kathy Saito, Deputy Director Engineering Division is responsible for the current TRM efforts. Carol Kelly, Deputy Director Security Management Division is responsible for the governance processes and determining the resource requirements needed within DTS for the overall EA function.

Enterprise Architecture

DTS Enterprise Architects:

Name: Kathy Saito
Classification: Deputy Director
Telephone Number: (916) 464-3961
E-Mail: Kathy.saito@dts.ca.gov

Name: Carol Kelly
Classification: Deputy Director
Telephone Number: (916) 739-7697
E-Mail: carol.kelly@dts.ca.gov

Information Security

B.1. How is your Information Security Officer involved in proposed project development efforts?

Projects designated as strategic include Project Charters that require the Chief Information Security Officer's review and signature. Projects designated as tactical are reviewed by the Information Security Office via a Service Request to ensure appropriate risk management processes are included. Customer service requests are reviewed by the Information Security Office to ensure appropriate risk management processes are included. In all cases as projects progress through the Change Management process, the Information Security Office reviews and approves changes that have a security related impact.

B.2. What are your department's core business principles, policies and standards related to information integrity, confidentiality, and availability and the protection of information assets?

DTS' five information security policies are: asset protection; vulnerability management; threat management; acceptable use; and, security awareness, training and education. DTS has additional standards specifying administrative and technological control requirements. These principles, policies and standards ensure the appropriate risk management processes are undertaken in the delivery of services to customers and compliance with federal and state mandates.

B.3. If data within your department is shared with external entities, does your department implement data exchange agreements with these entities?

- Yes**
 No

DTS is a custodian of data for customers. As such the customers define data exchange agreements where the data is shared with external entities. Where DTS data is shared, exchange agreements are defined in the contract terms or defined by state mandate (such as law enforcement information requests).

If no, please explain.

- Not applicable**

B.4. How does your department ensure that software developers and programmers follow standards and best practices for Web, application, and system development?

The DTS uses best practices for web, application and system development standards. These practices start with basic project management steps such as using standard project templates to document the project, gathering business requirements in a structured manner, and obtaining customer approval of these requirements prior to coding. We follow standard coding conventions, using standard documentation guidelines including required documentation updates when application changes are made. In addition, the DTS follows standard practices such as password encryption

Information Security

and the use of stored procedures to improve application access security along with employing software tools such as WebInspect. Exception handling routines are also standardized. Applications are tested, both at the time of development and after modification, using standard test scripts. The DTS employs the practice of code peer reviews and standard deployment methods. Formal change request procedures are also in place.

B.5. Does your organization have an Information Security Officer? (if yes, provide their name, telephone number, and e-mail address below)

- Yes**
 No

Name: Carol Kelly

Classification: Career Executive Assignment

Telephone Number: (916) 739-7697

E-Mail: carol.kelly@dts.ca.gov

Workforce Development, Workforce Planning and Succession Planning

C.1. Does your organization have a workforce development plan for IT staff?

- Yes
 No

If yes, briefly describe it.

- We allow and encourage employees to complete Training and Development assignments in which they learn new skills outside of their current classification, the intent being to assist them in being eligible for promotional opportunities at the assignment's conclusion.
- With the greater ease and availability of online exams, this assists our employees in becoming list eligible for promotional opportunities. We are assisting employees to prepare for civil service examinations or for career path changes by providing information sessions.
- We offer cross-training opportunities for our staff both within their current division as well as within other divisions in order to enhance their promotional ability.
- We offer a variety of training classes to assist our existing and new employees in the areas of technology, writing skills, and interpersonal skills. Specifically, in addressing the needs of our Gen X and Y employees, we are developing in-house technical training for these individuals on various platform subjects and will expend significant fiscal resources in their technical development.
- We currently have a strong student assistant program which provides competitive wages and an excellent opportunity for students to gain hands-on skills related to their career path. Many of these students go on to find employment with the state after they graduate.
- Additionally, DTS is in the process of developing a pilot internship program within our Engineering Division which is separate from our student assistant program. The goal of this program will be to introduce students to provide a unique group of individuals with the specialized skills and knowledge that will enable them to take over when many of our Baby Boomers retire. We are in the process of marketing this program to the local CSU, community, and vocational colleges.
- We are developing knowledge transfer strategies to capture the knowledge of experienced employees before they leave the department.

C.2. Check the appropriate box(es) to identify which workforce development tools, if any, your organization is using for IT classifications:

- Training
 Upward Mobility
 Mentoring
 Career Assessments
 Knowledge transfer program
 Performance Evaluations
 Other (please list) - Currently the Engineering Division is developing an Internship Program for college students to obtain work experience, develop specific skills and abilities to become competitive in taking State IT examinations.

Workforce Development, Workforce Planning and Succession Planning

C.3. Does your organization have a workforce plan for IT staff (i.e., for Rank and File)?

- Yes**
- No**

If yes, briefly describe it.

DTS actions include:

- Conducting a base line analysis focused on identifying organizational essential functions, competencies, analyzing staff demographics, and identifying employment trends.
- Identify positions with critical succession issues and develop a plan for addressing the specific functional and skill set requirements of the position.
- Conducting a skill and competency assessment that identifies the skills, knowledge, abilities, and personal attributes that, taken together, are critical to successful work accomplishment on an organizational, team and individual basis.
- Conducting a demand analysis to identify future activities and workloads, and describing the competency set needed by the workforce of the future taking into account workforce changes driven by changing work, workload and processes.
- Conducting a gap analysis that compares information between the supply analysis and demand analysis to identify the differences or “gaps” between the current organizational competencies and the competency set needed in the future workforce.
- Developing strategies for closing gaps through recruitment, training and workforce development tools listed above in “C.2.”
- Developing a framework for conducting periodic and systematic review of the workforce plan.

C.4. Does your organization have a succession plan for IT staff (i.e., for Management)?

- Yes**
- No**

If yes, briefly describe it.

- We have created our own Supervisory Academy aimed at addressing many of the most challenging aspects of management for both new and seasoned supervisors. Some of the tracks we offer include successful communication strategies and styles, performance management and review, how to manage a multi-generational workforce, as well as how to foster a successful team environment.
- We are developing training and staff development programs in alignment with the respective needs of each generation. For example, we are implementing adult learning techniques in our classroom training and are exploring e-learning in order to appeal to the learning styles and needs of Generations’ X and Y.

Workforce Development, Workforce Planning and Succession Planning

C.5. IT Staffing

Provide the following information in table C-1 on the following page:

- **The name of each IT classification currently in the organization.**
- **The number of staff in each IT classification in the organization.**
- **The number of staff in each IT classification eligible to retire in the next five years.**
- **The percentage of each IT classification eligible to retire in the next five years.**

Table C-1 — IT Staffing

IT Rank and File Staff Classification	Number of IT Rank and File Staff in Classification	Number of IT Rank and File Staff in Classification Eligible to Retire in Next 5 Years	IT Management Staff Classification	Number of IT Management Staff in Classification	Number of IT Management Staff in Classification Eligible to Retire in Next 5 Years
Assoc Information Systems Analyst (ISA) (Spec)	88	37 (42%)	Data Processing Mgr I	8	0
Assoc System Software Specialist (SSS)	12	0	Data Processing Mgr II	19	7 (36%)
Assoc Programmer Analyst (PA) (Spec)	4	0	Data Processing Mgr III	22	14 (63%)
Computer Operator	4	0	Data Processing Mgr IV	5	2 (40%)
Comp Operations Spec I	12	8 (66%)	Assoc ISA (Sup)	5	0
Comp Operations Spec II	3	1 (33%)	Staff ISA (Sup)	4	0
Information Systems Tech (IST)	7	2 (28%)	Senior ISA (Sup)	4	0
IST (Spec) I	4	0	Senior PA (Sup)	2	0
IST (Spec) II	3	0	Comp Operations Sup II	8	4 (50%)
Senior ISA (Spec)	52	24 (46%)	SSS II (Sup)	2	0
Senior PA (Spec)	8	0	SSS III (Sup)	26	0
Staff ISA (Spec)	93	44 (47%)			
Staff PA (Spec)	10	0			
SSS I	45	0			
SSS II (Tech)	105	37 (35%)			
SSS III (Tech)	78	51 (68%)			

Project Management, Portfolio Management and IT Governance

D.1. Does your organization have a process for improving the alignment of business and technology?

- Yes
 No

If yes, briefly describe it.

At every level of management, the DTS meets on a regular basis to improve the alignment of business and technology. Business and technology goals are discussed weekly at the executive, manager and supervisor levels to communicate and align the organizational goals. The DTS Strategic Plan includes actionable plans for both the business and technology. All projects require executive or management level approval via project charters, which maintains the alignment of business and technology.

D.2. What is the status of implementing a formal portfolio management methodology for technology projects within your organization?

- Implemented (Please describe)

The DTS manages its portfolio of technology projects consistent with PMI and ITIL best practices. Technology projects are prioritized by the executive Project Sponsors on a regular basis. The projects are classified in eight tiers to manage scope, resources and dependencies. Project scope is managed at the executive level using a common executive level project steering meetings. Project resources are managed across the organization on a quarterly basis. Project dependencies are managed using a variety of project management methodologies based on PMBOK (Project Management Body of Knowledge).

- Implementation in progress (Please describe)
 Planned or planning in progress
 Not implemented and not planned

D.3. List any automated tools being used for portfolio management. Enter "None" if no automated tools are being used.

The DTS uses Microsoft SharePoint to manage the project portfolio.

D.4. What is the status of implementing a standard project management methodology for technology projects in your organization?

- Implemented (Please describe)

The DTS maintains a rigor of using a complete toolbox of project management methodologies based on PMBOK (Project Management Body of Knowledge). This includes Project Management methodologies for scope management, schedule management, resource management, budget management, project change management, risk management, issue management, task management and communication management.

- Implementation in progress (Please describe)
 Planned or planning in progress
 Not implemented and not planned

Project Management, Portfolio Management and IT Governance

D.5. Does the organization require its project managers to be certified, either through a professional organization (e.g., PMI, ITIL) and/or through completion of specified project management coursework:

- Yes
- PMI
- ITIL
- Agency-specified project management coursework (identify below)

The DTS requires all executives and managers to complete the ITIL Foundation Course. Project Directors and Project Managers are provided career development guidance that includes PMI certification.

No

D.6. Select from the list other areas of training your organization requires of its project managers:

- Fundamental Project Management
- Systems Development Life Cycle
- Scheduling tool (identify below)
- Project Performance Management (e.g., Earned Value Management)
- Business Process Analysis
- Requirements Traceability
- Procurement/Contracts Management
- Other (identify below)

Scheduling tool is Microsoft Project

None

D.7. Describe project-level governance practices, including change management, issue resolution, and problem escalation.

The DTS maintains a rigor of using a complete toolbox of project management methodologies based on PMBOK (Project Management Body of Knowledge). At the project level for change management, issue resolution and problem escalation, this includes regular project team meetings. Risks and issues are managed daily and discussed weekly. The executive level project steering committee meets weekly to manage escalations for resources, risks, issues, problems and project change.

D.8. Does the project management methodology include processes for documenting lessons-learned and applying these to future projects?

- Yes (Please describe)

The DTS maintains a rigor of using a lessons learned process. For executive level projects, there is a process to conduct a PIER (Post Implementation Evaluation Reports) review six months after implementation. For management level projects, there is a process for lessons learned. The PIER or lessons learned is accounted for in the project charters.

No