Information Technology Capital Plan

Department IT Capital Plan

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

Department Name
Public Utilities Commission

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:	Carolyn Lawson	
Information Security Officer		**Date Signed**
Printed name:	Patrick McDermott	
Budget Officer		**Date Signed**
Printed name:	Mike Cooper	
Department Director		**Date Signed**
Printed name:	Paul Clanon	

DEPARTMENT IT CAPITAL PLAN

Department Name and Org Code:	Plan Year:
Public Utilities Commission 8660	2009-10 through 2013-14

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

The California Public Utilities Commission serves the public interest by protecting consumers and ensuring the provision of safe, reliable utility service and infrastructure at reasonable rates, with a commitment to environmental enhancement and a healthy California economy. We regulate utility services, stimulate innovation, and promote competitive markets, where possible, in the communications, energy, transportation, and water industries.

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

a. Annual CPUC Computers & Laptop Refresh Policy
    a. 3-year Replacement Cycles
        i. Each year 1/3 of the computers and laptops are replaced based on a recurring schedule. That amounts to approximately 400 replaced devices per year.
        ii. Replacement activities are completed by May 1 of each year.

b. Annual CPUC Server Refresh Policy
    a. 3-year Replacement Cycle – for high-use production servers.
        i. Each year 1/3 of the servers is replaced based on age and organizational importance.

    b. 5-year Replacement Cycle – for all other servers.
        i. Each year a small number of servers are selected for replacement by using the servers that are retired from the production servers on the 3-year cycle.

    c. Server replacement activities are completed by May 1 of each year.

c. Annual CPUC Peripheral Refresh Policy

2.2. Software

a. Possible Microsoft Office Suite Upgrade
    i. 2009-10 Timeframe.

b. Document Management System Upgrade

Timeline yet to be determined

2.3. Network

c. New Site Connectivity for San Francisco and Sacramento
    i. 2009-10 Timeframe.

d. Existing Network Switch Equipment Refresh
    i. Timeframe to be determined.

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 0 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
Consumer Information Management System	**$3,872,997**	**8660- 43**	**11/2008**
AB1182 Implementation Expansion of E-Filing	**$656,675**	**8660- 45**	**3/2010**

***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

Proposed IT Project	Priority Ranking	FSR Submission Date	Estimated Total Cost
Rail Safety	**1**	**7/15/08**	**$4,274,733**
Expansion of E-Filing SPR	**2**	**Estimated March 2009**	**$814,600**

PROPOSED IT PROJECTS **-** Rail Safety and Security Information Management System (RSSIMS)

Complete this IT Project Proposal Form (questions 0 though 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:

4.1. Proposal name and priority ranking:

Rail Safety and Security Information Management System (RSSIMS)
Priority 1

4.2. Description of the proposed IT project:

Develop an integrated database system to manage and utilize California's rail safety and security data in the Commission's Consumer Protection and Safety Division

4.3. Which of your department's business goals and objectives does this project support, and how?

The proposed project is consistent with the following goals in the "Consumer Protection and Safety - Rail Safety" section of CPUC's *3 - 5 Year Plans* (October 30, 2007):

Within 3 to 5 years we will achieve lateral integration of key aspects of the railroad operations, rail transit and rail crossings safety programs by developing interdisciplinary teams and a shared rail safety database.

Within 3 years we will significantly improve the collection and analysis of safety inspection and accident investigation data, and the dissemination of safety improvement strategies, by developing a centralized, multidisciplinary, electronic data collection and filing database.

RSSIMS will resolve the problems of CPUC's current rail information systems

4.4. What are the expected business outcomes or benefits of the proposal as they relate to your organization's business goals and objectives?

Improve Rail Safety and Security. RSSIMS will enable CPUC management to identify trends in accidents and inspection data, and to respond proactively. Also, RSSIMS will permit management to track the status of corrective actions much more effectively and comprehensively.

Create an Automation Environment that Enhances Service and Efficiency. RSSIMS will give CPUC a tool for centralizing information and analyzing oversight activities. Specific objectives include:

- Provide a consolidated data repository
- Eliminate redundant data entry/storage.
- Support sophisticated queries and trend analysis.
- Eliminate the need to compare and reconcile databases.
- Provide a platform that supports simultaneous informational access to multiple users statewide.
- Eliminate the need for hard-copy storage.
- Provide mechanisms that prompt for the timely accomplishment of time-sensitive activities.

- Make complaint information readily available to staff statewide as needed.
- Link grade crossing diagnostic data together to improve end-user capabilities.
- Permit the analysis and display of trends geographically, using GIS.

Manage Increasing Workload. Presently, CPUC's rail units are struggling to meet the demands of the overall rail program, and must develop more efficient means to accommodate the increasing demands of rail-related legislation. Some areas where increased efficiency will be critical are:

- Evaluating railroad companies' updates to FRA's National Crossing Inventory.
- Tracking functional and/or maintenance problems at at-grade crossings.
- Cohesive data representation that will allow safety issues to be studied and valid conclusions drawn.
- Tracking compliance of railroad operators with safety requirements.
- Tracking safety violations.

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?

FSR was submitted on 7/15/08

4.9. What is the estimated project start date (mm/yyyy) if the FSR is approved?

01/2009

4.10. What is the duration of the proposed project?

29 months

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:

CPSD databases no longer meet the needs of the Commission's rail units. These databases are duplicative, uncoordinated, and unlinked, and restrict staff cabapilities to manage and analyze data; lower the ability of management to efficiently allocate inspector and other staff resources; and, in general, reduce the Commission's ability to exercise its oversight responsibilities. These problems potentially affect the safety and security of rail systems, railway employees, the general public, and the environment. Without a thorough revamping of its rail information management system, CPUC will be unable to carry out its rail safety and security responsibilities effectively.

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* 0042, 0046, 0461, dept is sole user of the funds	2,237,958	1,458,853	321,978	255,945		4,274,733
Total						

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

Complete this IT Project Proposal Form (questions 0 though 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:

4.1 Proposal name and priority ranking:

Expansion of E-filing
Priority 2

4.2 Description of the proposed IT project:

Expand current Informal Filing project (AB1182 Implementation Expansion of E-Filing) to encompass informal filings and extend the current formal filing system in the spirit of SB 312 which was passed by the Senate but vetoed by the Governor.

4.3 Which of your department's business goals and objectives does this project support, and how?

This project supports the Information Technology and Management Services Division goal of:

Systems – develop, acquire, and implement technology systems to support and improve the delivery of services.

This implementation will provide better public access to Commission documents and encourage the public to participate in the decision making process of the PUC.

4.4 What are the expected business outcomes or benefits of the proposal as they relate to your organization's business goals and objectives?

It is good public policy to ensure that all documents associated with formal proceedings and informal filings be made available on the Commission's website, including testimony, exhibits, large documents, advice letters, and tariffs. This implementation will ensure information is transparent and readily available to the public, and encourage and facilitate public participation in the decision making process of the CPUC.

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?

Special Project Report estimated to be submitted 03/2009

4.9 What is the estimated project start date (mm/yyyy) if the FSR is approved?

Project already in progress, expansion items estimated to start 05/2009

4.10 What is the duration of the proposed project?

Estimated 14 months

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:

This SPR will be submitted to augment FSR 8660 - 45 to encompass the expanded implementation.

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

Some of the Commission's documents associated with formal and informal filings would not be readily available to the public. This will make the Commission's decision making process less transparent and public participation would be more difficult.

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*	498,000	158,300	158,300			814,600
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**

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.

Weekly meetings with unit leads are held for status updates and proposals and their impacts. In the Information Systems Branch (ISB), a Change Manager administers the formal change management process.

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

☐ **Yes**
☒ **No**

Name: _____

Classification: _____

Telephone Number: _____ **E-Mail:** _____

Information Security

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

The information Security Officer is involved in the review cycle of the Feasibility Study Report (FSR) and the proposed solution related to security.

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?

- Role based data access control
- Partnership between network security and the Information Security Officer to enforce access and security policies
- Annual security training
- A designated asset manager to track IT equipment
- Mobile devices encryption policy

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

☐ **Yes**
☐ **No**

If no, please explain.

☒ **Not applicable.** The CPUC does not exchange data that is not public information.

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

The software developers and programmers enforce standards and best practices thru design reviews and standard and security testing.

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: Patrick McDermott

Classification: Labor Relations Specialist

Telephone Number: 415-703-4372, E-Mail: mcd@cpuc.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.

Vendors work side by side with staff in a mentoring capacity. There is also staff to staff mentoring and access to training such as Government Technology Conference (GTC) and Oracle World.

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)**

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.

Vendors work side by side with staff in a mentoring capacity. There is also staff to staff mentoring and access to training such as Government Technology Conference (GTC) and Oracle World.

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

☐ **Yes**
☒ **No.** There is no IT succession plan because CPUC human resources has concerns that this type of planning may appear to be pre-selection. Opportunities for training and mentoring as described above help ensure staff skills are kept up to date and staff qualified for positions and promotions. Special attention is paid to the functions of staff who at or near retirement age. Those skills unique to any one staff are cross trained within the unit. .

If yes, briefly describe it.

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
Staff Information Systems Analyst (Specialist)	15	3	CEA Level 2	1	1
Staff Programmer Analyst (Specialist)	3	2	Senior Information Systems Analyst (Supervisor)	2	
Associate Information Systems Analyst (Specialist)	9	5	Staff Information Systems Analyst (Supervisor)	1	
Associate Programmer Analyst (Specialist)	2	1	Senior Programmer Analyst (Supervisor)	1	1
Assistant Information Systems Analyst (Specialist)	3	1			
Information Systems Technician	1	1			
Computer Operator	2	2			
Telecommunication Systems Analyst I	1	1			

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.

The Chief Information office (CIO) and OPE partnership.

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

☐ **Implemented (Please describe)**

☐ **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.

MS Sharepoint and MS Project Server.

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

☐ **Implemented (Please describe)**

☒ **Implementation in progress (Please describe)**

Work has begun on the Project Technology Implementation Project (PTIP) that will result in a project technology environment that supports CPUC projects and a defined support framework for adequate maintenance and operations. The project approach adheres to the State Chief Information Officer (OCIO) and Department of Finance (DOF) Project Management Oversight Framework. CPUC is implementing a project technology infrastructure in accordance with the State Administrative Manual (SAM) and the State Information Management Manual (SIMM) Sections 45 and 200. The CPUC is also in process of defining and developing a project framework for use by CPUC project managers that will adhere to state project management requirements (SIMM Sections 45 & 200) as well as be consistent with the Project Management Institute's (PMI's) Project Management Book of Knowledge (PMBOK) 3rd Edition.

Project Management, Portfolio Management and IT Governance

The CPUC would like to use project management technology to contribute to measurable improvements in project collaboration, team performance, and data accuracy. The technology will help CPUC Project Managers track and manage a project's scope, schedule and resources more efficiently and effectively. When used in coordination with established and accepted project management processes, the project technology assists in minimizing project risk by tracking key project indicators (business, case, goals, objectives, expected outcomes, scope, schedule, resources, etc.) and improve the likelihood of project success.

x☐ **Planned or planning in progress**
☐ **Not implemented and not planned**

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)**

Basic Project Management class designed by the OPE based on PMI criteria and the CPUC Project Management Lifecycle framework. This training goes beyond the IT organization. To date nearly 100 program staff have been trained on the practices and principles of Project Management through this voluntary coursework.

☐ **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)**
- – MS Project Server
- –
- –

☐ **Project Performance Management (e.g., Earned Value Management)**
☐ **Business Process Analysis**
☐ **Requirements Traceability**
☐ **Procurement/Contracts Management**
☐ **Other (identify below)**
- –
- –
- –

☐ **None**

Project Management, Portfolio Management and IT Governance

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

- Issue, risk, and change management within the project management life cycle framework.
- Identify level of highest severity and brought to the decision making group including the project sponsor and key stakeholders.

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

☒ **Yes (Please describe)**

The final phase of every project is the Completion phase. The Completion phase is the partner to the Initiation phase. The phases are mirrors of each other in many ways. The Initiation phase describes intended accomplishments and the Completion phase records actual accomplishments. The Completion phase offers a comparison of planned vs. actual and provides a high-level description of results and lessons learned. The purpose of the phase is to transition the project outcomes into normal business operations, acknowledge the project's conclusion, celebrate successes, and identify ways to improve future projects.

The tools used in the Completion phase are:

- The Project Management Plan (PMP)
- Microsoft Project & Project Server
- The original Project Charter and Business Functional Requirements (BFR)
- The Electronic Project Library
- The Project Binder
- The Project Completion Report
- Time and Status Reporting Tools

The responsibilities of the Project Manager for the Completion phase are:

- Transition the project to Maintenance and Operations (M&O)
- Close all remaining issues and prepare the final project completion report per the PMP
- Perform a final review of project tasks for completeness
- Facilitate team meetings, status reporting and stakeholder updates
- Document lessons learned
- Prepare phase completion materials
- Archive all project material (electronic and hard copy)

☐ **No**

Project Management, Portfolio Management and IT Governance