

Department of Mental Health
Information Technology Capital Plan
September 3, 2008



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

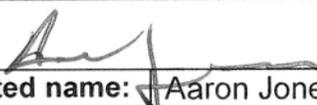
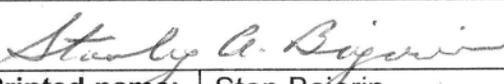
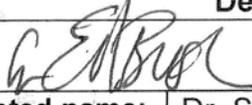
Department of Mental Health

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
		9/5/08
Printed name:	Denise Blair	
Information Security Officer		Date Signed
		9/8/08
Printed name:	Aaron Jones	
Budget Officer		Date Signed
		9.5.08
Printed name:	Stan Bajorin	
Department Director		Date Signed
		9/5/08
Printed name:	Dr. Stephen Mayberg	

DEPARTMENT IT CAPITAL PLAN

Department Name and Org Code:

Department of Mental Health - 4440

Plan Year:

2009-10 through 2013-14

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

The following business goals and objectives are defined in the Department of Mental Health Strategic Business Plan for fiscal year 1998-1999. The goals are as follows:

- Goal 1: Integrated Mental Health System
- To promote an integrated mental health service system which is cost effective, consumer driven, consistent with public safety, coordinated with other interagency services, responsive and has positive outcomes.
- Goal 2: Leadership
- Continue role as recognized state and national leaders on issues affecting persons with mental illness.
- Goal 3: Employee Empowerment
- Provide an environment that respects, involves, provides appropriate training, and creates opportunities for all employees.
- Goal 4: Consumer Empowerment
- Provide an environment that respects and recognizes the importance of involving current and former consumers, and their families to contribute to the development and implementation of mental health programs, services and policies.
- Goal 5: Educate the Public
- To increase public awareness of mental illness, its personal and public impact, treatment strategies and availability of services.

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

The Department of Mental Health (DMH) developed a plan to consolidate its Information Technology infrastructure with the goals of leveraging economies of scale, eliminating redundancy, and reducing costs through standardization. Beginning in fiscal year 2008-2009, all hardware purchases will support these goals through server consolidation, virtualization and shared storage.

2.2. Software

The DMH Information Technology Division (IT Division) is establishing enterprise-wide software development and acquisition standards and processes through adoption of information technology industry "Best Practices". These standards and processes are based on the Project Management Book of Knowledge (PMBOK), the Information Technology Infrastructure Library (ITIL), and state and nationwide interoperability standards as appropriate. As part of this effort, the IT Division is updating the department's IT Strategic Plan (ITSP). The ITSP will be the guideline for future phases of implementing these standards and processes. In addition, the IT Division is developing Enterprise Architecture (EA) standards utilizing Service Oriented Architecture (SOA) principles to maximize reuse of existing software products and infrastructure. DMH Headquarters leads collaborative efforts with its five State Hospitals and two Psychiatric Programs to ensure standards are developed and vetted across the entire enterprise.

The first phase of implementing these standards and processes is underway by standardizing the planning, programming, testing and releasing documentation and procedures for the Software Development Life Cycle (SDLC). Currently, the department is developing a standardized application that will, for the first time, integrate the five State Hospitals, each with different populations, different clinical demands and different infrastructure configurations. These standards will be used by all future software development projects.

Regarding DMH's current development efforts, examples of specific standards the IT Division is using includes: the Dot Net Standards Guide, IEEE Std 829-1998 Software Testing Documentation Standard, Usability Standards for database naming and usage, and IEEE Std 1016-1998 Software Design Descriptions.

The IT Division is also establishing an IT Governance structure to create a standard process for identifying, prioritizing and approving new project proposals and system change requests. The IT Governance will include the appropriate levels of business and technical staff to maintain the alignment of IT projects with business direction in an effort to appropriately assign IT resources and reduce business risk.

2.3. Network

- 2.3.1. Upgrade Wide Area Network to 10 Mb/s OPT-E-MAN
 - Sites Complete: Headquarters, Metropolitan, Napa and Patton
 - Remaining Sites Planned for FY 2008-2009: Atascadero, Coalinga, Salinas and Vacaville
- 2.3.2. Upgrade Core Switches and Distribution Switches
 - Fiscal Year 2008-2009: A plan for replacing network switches and associated equipment is being developed for each DMH site. Purchases will follow as resources are made available.
- 2.3.3. Move Production Servers to Department of Technology Services (DTS)

- Complete: Servers supporting Wellness and Recovery Model Systems Support (WaRMSS), Sexual Offender Commitment Program (SOCP) and Hospital Clinical Operations (HCO).
- Fiscal Year 2008-2009: A plan is in place to move all production servers for Headquarters, Salinas and Vacaville to DTS. The project will begin when resources are made available.
- Fiscal Year 2009-2010: Develop plan for moving remaining production servers to DTS. Sites include: Atascadero, Coalinga, Metropolitan, Napa and Patton.

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
Accounting System Automation Project (ASAP)	\$2,592,000	FSR 4440-49	April 2009
Administrative Information Management (AIM - MHSA)	\$3,597,000	FSR 4440-48	June 2009
Health Insurance Portability and Accountability Act (HIPAA)	\$9,602,000	SPR 4440-39	April 2007
Sexual Offender Commitment Program (SOCP)	\$1,708,000	FSR 4440-47	August 2008
Wellness and Recovery Model Support System (WaRMSS)	\$14,393,000	FSR 4440-41	June 2009

***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
No reportable projects are formally being proposed at this time.			

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:

4.1. Proposal name and priority ranking:

No reportable projects are formally being proposed at this time.

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?

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

Documents include: Desktop and Mobile Computing Policy, standard build document and security check list. In addition staff reference the guidelines documented on the State Chief Information Officer web site.

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.

Currently, DMH does not have an Enterprise Architecture governance structure in place to review and approve the enterprise architecture; however, efforts to develop an Enterprise Architecture implementation plan are underway. DMH is directly working with California Health and Human Services (CHHS) to leverage Agency Enterprise Architecture developments and Office of Systems Integration (OSI) enterprise architecture best practices. DMH plans to establish a Department Enterprise Architecture Steering Committee with a cross section of IT representatives and business partners that includes the Chief Deputy, Program Deputies and the Information Security Officer (ISO). The DMH Enterprise Architecture Steering Committee will be responsible for department-level governance review and recommend approval of IT investments, policy, procedure, guiding principles, and reference models in accordance with the departments' business strategy.

This structure follows the projected CHHS Agency Enterprise Architecture strategy, with the Chief Information Officer (CIO) at the head of the department's decision-making structure, and department workgroups, in subordinate roles, actively evaluating enterprise-wide operational policies and procedures to be forwarded to the CIO for approval.

Enterprise Architecture

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

- Yes
- No

Name: Dan Dansby

Classification: Systems Software Specialist III

Telephone Number: 916-651-3953 E-Mail: Dan.Dansby@dmh.ca.gov

Information Security

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

The Information Security Officer (ISO) is involved in the proposal and review phases of all Information Technology related projects. All Feasibility Study Reports (FSR) require ISO approval.

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?

DMH is entrusted with the leadership of the California mental health system and is dedicated to quality improvement. DMH is enhancing its information security program to better integrate the principals of least privilege, integrated security, and compliance into department core business processes.

DMH currently has 21 Information Security related policies, and is actively working to create the following additional policies: Technology Upgrade; Security Patch and Security Upgrade; Firewall Configuration; Server Configuration; Server Hardening; Software Management and Software Licensing. DMH is also actively developing baseline security standards and accreditation processes to better ensure the security of department's systems and the confidentiality, integrity, and availability of the department's data.

Current Security Policies:

- 600 Employee-Owned Computers
- 601 Electronic Mail Usage
- 602 Internet Usage
- 603 Information Security Officials
- 604 Information Security Incident
- 605 Privacy and Information Security Training
- 606 Workstation Use and Security
- 607 Remote Access
- 608 Protection from Malicious Software (Viruses)
- 609 Device and Media Controls
- 610 Data Backup and Storage
- 611 Password Management
- 612 Transmission Security
- 613 Person or Entity Authentication
- 614 Information Access Management
- 615 Workstation Automatic Logoff/Logout
- 616 Login Monitoring
- 617 Facility Access Controls
- 618 Information Security Evaluation
- 619 Information Security Management Plan
- 620 Operational Recovery Plan

Information Security

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

Yes –

There is a formal agreement with DHCS. In addition, DMH has data confidentiality, safeguard and incident reporting requirements in its county contract language.

No

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?

DMH Development Standards

DMH has developed programming and documentation standards for its systems development as stated in 2.2 of this document. The standards are documented and available to staff in paper and soft copy.

DMH recognizes that both coding and documentation standards offer significant value to systems development. Documented standards provide a baseline to automate error prevention practices; close the feedback loop between errors, and showcase what can be done to prevent future errors from reoccurring.

DMH has established peer code review teams to ensure uniform coding practices and reduce oversight errors. In addition, DMH developers and programming staff create and maintain traceability matrices, develop prototype models for customer review, use established standards for security, and provide required documentation. These standards ensure that the code produced by contractors, when used, meet all quality guidelines mandated by the client company.

Objectives of DMH programming standards:

- Ensure that design, coding, and testing are accomplished in a manner which complies with State, DMH and industry best practices.
- Establish terminology that allows for production of a well-structured, modular software design that is traceable to, and will satisfy, the system requirements.
- Establish appropriate uniformity of format and program annotation for ease of maintainability.
- Establish coding standards which minimize interface problems and maximize the effectiveness of the programs developed.

Information Security

Sample of Current Coding Standards

Indenting and Line Length	Control Structures
Function Calls	Class Definitions
Function Definitions	Comments
Including Code	Header Comment Blocks
Using CVS	Example URLs
Naming Conventions	File Formats
Error Handling Guidelines	

Current Standards Library

Standard	Title Version	Date
C#	C # Coding Standard – Guidelines and Best Practices	2008
.Net	.Net Standards - .Net Standards Taskforce	2006
SQL Server	SQL Naming conventions and Guidelines – DMH	2006
Usability Guidelines	DMH	2006
Accessibility Guidelines	DMH	2006
ADATABASE Natural	DMH	2000

Documentation Standards

DMH has developed and maintained documentation standards for systems development dating back to 1995. Systems development staff are required to develop using these standards. Management has committed to a formal review and evaluation and approval process for implementing best practices. In addition, DMH has moved forward to deliverable based contracts. All deliverables are reviewed and approved based on DMH standards. Procedures and areas documented include:

Change Control	On-Line Help
Standard Release	Trouble Shooting Guide
Backup	Batch Process
System Specification	Functional Narrative
Data Dictionary	Specifications
User Manual and Sample Reports	Diagram
Change Request File	

Information Security

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: Aaron Jones

Classification: System Software Specialist III

Telephone Number: 916-651-6776 E-Mail: Aaron.Jones@dmh.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.

The Workforce Development Plan Includes:

- Annual Individual Development Plan
- AdHoc Manager and Employee Discussions
- Bi-Monthly Leadership Meetings
- Bi-Weekly Direct Reports Meetings
- Semi-Annual Town hall
- Training Plan
- Mentoring
- Cross Training
- Backup Coverage

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.

The Workforce Plan Includes:

- Prioritized Project List
- Organization Chart by Function
- Staff are assigned to projects based on skill set and department need
- Staff are reassigned work based on business need and/or staff preference
- Cross Training
- Knowledge Transfer

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

- Yes**
- No**

Workforce Development, Workforce Planning and Succession Planning

If yes, briefly describe it.

DMH has recognized the need to adequately plan for succession in IT staff to ensure the leadership and support of the mission-critical systems. Over the past seven months, the IT Division's Chief Information Officer (CIO) and management staff have recruited many new employees based on aligning the department's business needs to perspective employees' competencies.

A formal succession plan is in the planning and will be developed within the next year.

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
Senior Word Processing Technician	1	1	Data Processing Manager III	3	1
Executive Assistant	1		Systems Software Specialist III (Sup)	1	
Senior Information Systems Analyst (Spec)	4	2	Data Processing Manager II	6	4
Systems Software Specialist III (Tech)	6	1	Staff Information Systems Analyst (Sup)	1	
Systems Software Specialist II (Tech)	7				
Senior Programmer Analyst (Spec)	12	4			
Staff Information Systems Analyst (Spec)	6	1			
Staff Programmer Analyst (Spec)	12	7			
Associate Information Systems Analyst (Spec)	3	1			
Systems Software Specialist I (Tech)	2				
Associate Programmer Analyst (Spec)	1				
Assistant Information Systems Analyst (Spec)	1				
Information Systems Technician	2	2			
Business Services Assistant (Spec)	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 IT Strategic Plan is aligned with the DMH Strategic Plan. IT follows the technology guidelines set forth by the State Chief Information Officer.

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)

The IT Division continues to work with other business divisions and deputies to create a consolidated and prioritized list of all IT activities including planned initiatives, projects, and ongoing IT services (such as application and help desk support) for the department.

DMH is establishing an IT Governance Council to develop a processes for: 1) strategically aligning IT projects to the department's business needs, 2) managing resources through effective and efficient allocation, and 3) measuring performance by putting structure around business metrics showing met objectives.

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 Project

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)

Currently, two high priority departmental Information Technology projects have followed the PMBOK guidance and standard effectively and successfully. This methodology is being implemented for all phases of departmental IT projects in order to standardize the initiation, planning, execution and closing phases of Project Management (PM).

Project Management, Portfolio Management and IT Governance

These guidelines and standards will be tailored based on the project type, unique characteristics and complexity. These guidance and standards will be used on all future DMH IT projects.

New project managers will be trained to follow the guidelines and standards to ensure that all IT system development, modification, and integration projects are implemented according to “good practices” across DMH.

DMH recognizes the need to use formal processes and methodologies to ensure quality in technology projects. This has led the department to adopt the Project Management Body of Knowledge (PMBOK) methodology as the department project management standard. Development within the last two years has actively followed these standards and methodologies with positive results.

- 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 (identified below in D.6)**
- No**

DMH strives to hire applicants with project management experience and related course work. DMH does not require staff to have a certification in project management, but encourages related training as part of its workforce development plan.

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
 -
 -
- 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.**

The project manager and technical staff meet regularly with system users, management and stake holders. The project sponsor is required to approve all changes and is notified when intervention is needed for issue resolution and/or problem escalation. Problems, issues and changes are documented and logged.

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

Yes (Please describe)

No

The 2008/09 DMH Information Technology Strategic Plan calls for the establishment of a Project Management Office (PMO). DMH IT is currently developing a formal Lessons Learned Document to be included in the project management methodology. The Lessons Learned documentation, templates, communication and administration will be coordinated through the PMO.

The Lessons Learned Document is designed to address lessons learned for all sizes and types of projects. The DMH CIO keeps abreast of each project throughout the entire life of the project in an effort to assess vital information that will improve the quality of the project management process.