

# **Appendix E**



**California State University, Chico  
Office of the Vice Provost for Information Resources**

## **Enterprise Technology Briefing Book 2007-2008**

## Enterprise Systems Budget

**Background:** In 2005 CSU, Chico completed its first phase of CMS implementations funded by annual contributions from Academic Affairs, Business Affairs, and Student Affairs. Although completion of the first phase was a huge milestone to be celebrated, the shift to an effective integrated enterprise systems environment was far from over. Not all modules were implemented fully and there was much to be done to leverage the completed baseline CMS implementation. We had also just begun to deal with the ripple effect CMS was having on other systems across campus. In the new CMS environment, all of these campus systems, as well as the basic finance, human resources, and student administration modules, needed to be coordinated with a new enterprise approach. It was clear that the continuation of information silos and uncoordinated development would reduce the advantages gained with the implementation of our integrated administrative systems.

Chico's success in moving away from silo data and processes was built upon a culture of collaboration that valued staff development and good project planning. It was also built upon a key strategic decision to create a consistent funding mechanism for CMS/enterprise systems. The steady funding, and the ability to roll over funds to cover peak spending years, allowed the campus to make effective planning decisions that maximized not only our capital expenditures, but our human resources as well. This enterprise planning process also provided a mechanism to focus existing staff resources from across the campus on common strategic goals.

Looking to the future with a renewed campus strategic plan supported by a new technology plan, it was time to revisit the scope and purpose of the CMS budget. The scope of the budget had gradually expanded to include the Learning Management System and in March 2005 cabinet approved the addition of security. On October 6, 2006 the cabinet explicitly approved redefining the CMS budget as the Enterprise Systems budget and delegated oversight of the budget to the CIO.

**Purpose:** The purpose of the Enterprise Systems budget is to support centralized planning, integration, and development of campus wide information systems.

**Scope:** The Enterprise Systems Budget primary function is to support learning and business processes through the development of campus wide information systems. Specifically the budget will fund:

- Core campus applications and associated processes (i.e. CMS/ PeopleSoft, the Learning Management System (BbVista)), and data warehousing).
- Campus portal which provides access to core services
- Identity management and security, the prerequisites for secure transactions and data.
- Significant projects with defined objectives and measurable outcomes that support/improve core business and learning processes.
- Server and storage resources to support the above services.

- Training to provide key technical/functional skills within the campus community that support core services.
- Other one time projects related to the campus technology infrastructure as approved by CIO.

### **Budget Management and Review**

The Enterprise Budget management and review process has the following components:

- Strategic Direction is set by the President, Cabinet, and CIO
- Annual budget report is prepared for the FAC and then is included in the annual report for the University Budget Committee
- Budget oversight is the responsibility of the CIO
- Budget and project management - CMS/Enterprise Project Planning Director
- Projects are recommended by the Chico Information Systems Committee (CISC).
- The Chico Information Systems Committee and the University Technology Advisory Committee provide advice on strategic directions and priorities.

## CMS v8.9 Upgrade

This year Human Resources teams are implementing the last two core modules, Benefits Administration and Leave Accounting which must be implemented before the 21<sup>st</sup> Century project scheduled for 2009. Benefits Admin went live in January 2008 and Absence Management is scheduled to roll out centrally in July 2008. Human Resources will also expand on the Time and Labor module by implementing an automated Student Timesheet function to improve student payroll processes scheduled for release in August 2008

	<b>Projected 2007/08</b>	<b>Actuals June 2008</b>
<b>CMS Implementation/Upgrades</b>	<b>\$144,048</b>	<b>\$158,089</b>
Functional Staffing	\$33,978	\$35,100
Training	\$67,821	\$80,045
Ad Astra Interface	\$13,000	\$16,250
Consulting	\$0	\$0
Add'l Development Costs	\$0	\$0
CO- Campus Mandated Costs	\$29,249	\$26,694

## Knowledge Management/Data Warehousing

The overall Knowledge Management strategy is to merge data from a variety of sources (e.g. Financials, Human Resources, Student Administration, Housing, Alumni, Foundation, etc.) in a logical warehouse model to enable ease of reporting from multiple sources, eliminate collection of redundant data, provide common data definitions, provide better security and auditing, etc. This year's projects include developing a Reporting Service to provide web-based Student, Human Resources, and Financial reports. In addition, The KM team, working with the Academic Affairs office, developed web-based reports for departments undergoing their Five-Year Annual Program Review. Chico provided tables and reports to CSU East Bay in their rapid development of an SA warehouse for reporting and is working with Sacramento State to support their rapid development SA warehouse effort. The campus is rolling out a one-stop shop website for reporting from all areas of campus.

	<b>Projected 2007/08</b>	<b>Actuals June 2008</b>
<b>Knowledge Mgmt (Enterprise Warehouse Initiative)</b>	<b>\$299,498</b>	<b>\$244,657</b>

## Learning Management System Implementation (Blackboard Vista)

Vista implementation is essentially complete with all WebCT CE courses migrated to Blackboard Vista for the fall 2007 semester. Vista brings significant new functionality to faculty and students. The technical architecture (environment/hardware requirements) continues to be being reviewed, storage and back up issues are being resolved and training and development continues. Funding was approved to support personnel working with faculty to make the transition and for Vista licenses. The licenses were prepaid through fiscal year 07/08.

	<b>Projected 2007/08</b>	<b>Actuals June 2008</b>
<b>Learning Mgmt (Blackboard Vista)</b>	<b>\$104,000</b>	<b>\$78,093</b>

## Portal

The uPortal upgrade was implemented over the summer of 2007 with consulting help from Unicon. No replacement hardware was necessary as the application utilizes virtual servers. Additional Human Resources self service links were added during the spring to provide benefits and paycheck information.

	<b>Projected 2007/08</b>	<b>Actuals June 2008</b>
<b>Unified Web Presence/Portal</b>	<b>\$23,600</b>	<b>\$24,894</b>

## Security

Security projects continue to focus on identifying and securing systems and network resources, identifying and eliminating confidential data (SSN) on distributed computers, evaluating encryption solutions, vulnerability scanning for servers, secure storage solutions for confidential information used daily, and security training and awareness. CSU, Chico will be subject to a security audit of systems during June and July. The ISEC office is providing audit awareness and preparatory information about security expectations and standards.

	<b>Projected 2007/08</b>	<b>Actuals June 2008</b>
<b>Security</b> (Salaries currently in Enterprise Administration)	<b>\$59,220</b>	<b>\$28,321</b>

## Identity Management

IdM projects provide on-going support of Chico's current environment including the Wildcat LDAP Directory (student email, portal, modems, wireless, and library services) and the MS Active Directory (faculty/staff email). Development projects include implementing OpenLDAP, improved student self service account management, and participation in the CSU IAM Technical Architecture Group tasked with developing a proposed technical architecture for IdM within the CSU. Maintenance of the password management tools (Avatier/Password Station, student utility) is included in IdM category.

	<b>Projected 2007/08</b>	<b>Actuals June 2008</b>
Identity Mgmt	<b>\$88,172</b>	<b>\$63,857</b>

## Enterprise Hardware/Systems

Enterprise hardware and systems includes end of life hardware replacements, enterprise server operating systems licenses, data storage and backup, utilities for monitoring performance and logs, as well as training and maintenance costs. The new enterprise category is server virtualization technology. The server virtualization project primarily targets hardware consolidation by allowing replacement of physical servers with a virtual environment. Virtualization can provide a significant positive impact on improved availability, security, efficiency, and reduced operating costs.

	<b>Projected 2007/08</b>	<b>Actuals June 2008</b>
Enterprise Hardware/Systems	<b>\$343,662</b>	<b>\$197,601</b>

## Business Process Improvement Projects

**Campus Activities for Facilitating Graduation** – Chico is working with other CSU campuses in the design, testing, installation, and implementation of modifications to CMS-delivered processes which support degree progress and transfer credit. This two year implementation commitment has anticipated process improvements that include the elimination of some paper processes, less manual processing of transfer course information, better tracking of progress to degree, shorter turn around time for transfer admissions to improve transfer student yields, and increased staff expertise for ongoing advising support. This year's progress includes securing consulting services and hiring a staff resource.

**Enterprise Wiki Implementation and JIRA Issue Tracking Software** –The Chico State Wiki is a tool that provides the campus with a collaborative, web-based document sharing environment that can be used to create and maintain institutional knowledge. Currently, Blackboard/Vista, Data Warehouse, and User Services maintain public knowledge bases and there are other groups using the Wiki for projects, documentation, sharing of technical development work etc. JIRA is an issue tracking tool that is being used for the CMS upgrades, User Services projects, and Web Development projects among others. Both of these tools allow for and encourage collaboration across the campus.

	<b>Projected 2007/08</b>	<b>Actuals June 2008</b>
<b>Business Process Redesign/Improvement</b>	<b>\$175,000</b>	<b>\$187,159</b>

### Other Projects

Other projects that were funded in agreement with the CISC or Cabinet include Prospect –Hobson EMT Connect 2 project, and the Satori Address Verification project funded by CISC in 2006/07 (prepaid 07/08) for communication with students.

	<b>Projected 2007/08</b>	<b>Actuals June 2008</b>
<b>Other Projects (Sequitior, Satori, Wireless, TII)</b>	<b>\$0</b>	<b>\$0</b>

### Accessible Technology Initiative (ATI)

The Chancellor's Office has mandated a work plan and reporting deadlines for campuses to provide access to information resources and technologies to individuals with disabilities. As part of the Accessible Technology Initiative (ATI) work plan from the Chancellor's Office, Chico teams have developed guidelines, implementation strategies, tools, and resources to support these efforts. A Chico team has identified a Web Content Management system to standardize the campus web presence. This tool will be purchased during the spring for implementation over the next several years.

	<b>Projected 2007/08</b>	<b>Actuals June 2008</b>
<b>Accessible Technology Initiative (ATI)</b>	<b>\$69,101</b>	<b>\$60,214</b>

### Enterprise Administration

Enterprise Administration includes staffing and the supplies and services (O/E) associated with the projects funded through the CMS/Enterprise budget. The project support staff provides enterprise project planning, budgeting, purchasing, travel support, staffing support, CMS project management, Chancellor's Office coordination, project assessment, etc. Technical support staff consist of the enterprise DBA's who support all centrally managed Oracle databases on campus and the security support staff includes both the technical and functional security analysts.

	<b>Projected 2007/08</b>	<b>Actuals June 2008</b>
<b>Enterprise Administration</b>	<b>\$757,029</b>	<b>\$731,357</b>

### Training

As part of the Chico model for enterprise systems, training continues to be funded for technical and functional staff on the projects. This year the technical and functional staff are attending security trainings, PeopleSoft training, Oracle training, CMS workshops, ETL tool training, data warehouse training, and Linux training. Specific training is included in the costs associated with the projects.

### Oracle Support

Oracle licenses for the entire campus are funded through the Enterprise budget. These license costs are assigned to the campus by the Chancellor's Office is based on FTE calculation. While enrollment has increased at Chico, this years campus fees were allocated using the same formula as in prior years. The Chico fee was prepaid for three years in 2005. **The 2007/08 cost allocation is \$138,768.**

## Enterprise Budget 2007/2008

	<b>Projected 2007/08</b>	<b>Actuals 2007/08</b>
<b>Enterprise Support Costs</b>		
Project Support Staffing	\$342,858	\$342,858
Technical Support Staffing	\$225,204	\$225,204
Security Support Staffing	\$143,966	\$143,966
O/E	\$45,000	\$19,328
<b>Totals</b>	<b>\$757,029</b>	<b>\$731,357</b>
<b>Enterprise Systems Projects</b>		
CMS Implementation/Upgrades	\$144,048	\$158,089
Knowledge Mgmt (Enterprise Warehouse Initiative)	\$299,498	\$244,657
Learning Mgmt (WebCT Vista)	\$104,000	\$78,093
Portal	\$23,600	\$24,894
Security	\$59,220	\$28,321
Identity Mgmt	\$88,172	\$63,857
Enterprise Hardware/Systems	\$343,662	\$197,601
Oracle Support(campus licenses)	\$138,768	\$138,768
Other Enterprise Projects (Sequitor, Satori, Wireless, ITRP)	\$0	\$0
Add'l CMS modules (e.g. Budget, eProcurement, Grants&Cc	\$0	\$0
Business Process Redesign/Improvement (Web Presence)	\$175,000	\$187,159
Accessible Technology Initiative (ATI)	\$69,101	\$60,214
<b>Totals</b>	<b>\$1,445,070</b>	<b>\$1,181,654</b>
<b>EXPENDITURES</b>		
Campus Enterprise Costs	\$2,202,098	\$1,913,010
PeopleSoft Maintenance(Chancellor's Office Assessment)	\$468,000	\$468,000
PBX Loan(Trust Balance)		
<b>Total Expenditure</b>	<b>\$2,670,098</b>	<b>\$2,381,010</b>
<b>FUNDING</b>		
Campus Baseline Funding	\$1,919,212	\$1,919,212
Campus Trust Allocation	\$108,900	\$108,900
Off the Top Support	\$468,000	\$468,000
Repayment of PBX loan		
Compensation Adjustments		\$40,000
<b>Total Funding</b>	<b>\$2,496,112</b>	<b>\$2,536,112</b>
<b>Gen'l Fund Delta</b>	<b>(\$282,886)</b>	<b>\$46,202</b>

## CSU Chico Enterprise Technology Planning & Support 2007/2008 Expenditures

