CALSTARS

Development Plan

California State
Accounting and
Reporting System

DEPARTMENT OF FINANCE
CALIFORNIA

Preface

The CALSTARS Development Plan presents and describes the needed direction of CALSTARS over the next three to five years. The CALSTARS planning process is a dynamic process. We identify and revise our needed strategies and projects on an as needed basis to respond to client agencies' needs and requirements as they evolve and to adapt to the rapidly changing technological and business environments of today and in the future. This planning document is updated periodically to reflect changes to strategies, projects, and implementation plans. It was last updated July 2004.

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Executive Summary

The California State Accounting and Reporting System (CALSTARS) was originally developed to provide agencies of the state with an automated organization and program cost accounting system to accurately account for all revenue, expenditures, receipts, disbursements, and property of the state. It was also specifically intended and designed to improve the accuracy and timeliness of financial information, standardize the accounting and reporting within and across the state agencies, and expand each agency's accounting and reporting capabilities.

CALSTARS must continue its basic mission (**"modern and complete accounting system," Government Code Section 13300**) as a statewide accounting system consistent with statewide accounting policy and procedure.

However, agencies are faced with increasing demands for program performance within limited resources, and there is an increased importance on fiscal information as a strategic resource for the effective execution, monitoring, and evaluation of program operations. This Development Planning Document must transcend the original goals and objectives for CALSTARS and recognize the strategic position of CALSTARS within each client agency. It must provide the direction to keep pace with the administrative and technological advances to assure the placement of CALSTARS within the business strategies and information infrastructure of the client agencies to serve as an information system useful to the business decision makers of those agencies.

The purpose of this continuing planning process is to present and describe the needed direction of CALSTARS over the next three to five years. In support of the basic mission of CALSTARS, the major goals for CALSTARS are:

★ Sustain the original goals and objectives established for CALSTARS.

★ Operate and maintain a value-added, cost effective accounting system for its client agencies.

★ Maintain an efficient and cost effective technology base and infrastructure of CALSTARS.

★ Respond to the business needs and demands for timely and accurate fiscal information and financial reporting.

★ Exploit the uses of existing and emerging technologies to re-engineer the state accounting process.

Several significant projects listed below were completed since the previous update to the plan in July 2001:

★ **Automated YE Statements to SCO—**Agencies now can submit year-end financial data for governmental cost funds electronically to the SCO. This process replaces the manual preparation and submission of Reports 1, 2, 3, 5, and 15. CALSTARS client agencies and the SCO will greatly benefit from this new process through reduced workload and increased report accuracy. CALSTARS will explore with the SCO the electronic submission of the remaining year-end reports that continue to be submitted in hard copy. (See Project A.2.)

★ **Electronic System Documentation—**Efficient administration and accurate operation of CALSTARS in all of the client agencies throughout the state requires extensive documentation and communication through a procedures manual, operations memos, training materials, operational tools, and immediate communication concerning system operations. All of this is now accomplished electronically. An on-line NEWS screen has been in-place for several years to provide up to the minute information on system status and any changes or modifications to the system. The CALSTARS Procedures Manual (CPM), CALSTARS Operations Memos (COMs), training materials, operational tools, and other information are provided through the CALSTARS website. The CPM can be used directly from the CALSTARS website or it can be downloaded for use on an individual's PC or agency's LAN. Notification of CPM updates and of COM issuances is provided via an e-mail subscription service.

★ **Electronic Imaging and Archival of CALSTARS Reports—**The handling and storage of reports in both paper and microfiche is a significant workload and cost item for most CALSTARS agencies. An option is now available to store and retrieve reports electronically. Through the normal report request process, agencies can request reports for electronic storage. The reports are available for printing or downloading for six years. Many agencies will be able to significantly reduce their need for paper and microfiche reports and thus reduce costs and workload related to the

handling and storage of these reports. Opportunities for further refinement of this process will be investigated. (See Project C.1.)

★ **Electronic Transfer of SCO Payroll Tape—**The receipt of monthly payroll data from the SCO needed for the CALSTARS automated labor distribution process is now obtained through the electronic transfer of data files. Previously, the payroll data was copied to physical tapes that CALSTARS staff needed to pick up and deliver to HHSDC for processing. The electronic transfer of the data reduces workload and eliminates the occasional delay of the CALSTARS labor distribution process due to defective tapes.

★ **On-line Access to Data—**For a number of years, CALSTARS client agencies have been able to obtain their data from the CALSTARS financial and table files electronically in datasets at HHSDC created through the CALSTARS File Copy process. An additional process is now available providing agencies direct access to their data in the CALSTARS files. Agencies can access their data through the Enterprise Data Access (EDA) software using an ODBC compliant product of their choice such as Access or Esperant.

★ **Record Retention—**State law and other regulations require all state agencies to securely retain the business records (reports and source documents) of the state. These business records are retained for scheduled periods of time for audit, administrative, legal, and historical (archival) purposes. Chapter XX was recently added to Volume I of the CALSTARS Procedures Manual to address the retention of CALSTARS reports. The chapter lists specific CALSTARS reports that should be included in agencies' retention schedules and it includes references to authoritative sources for requirements and guidelines on fiscal record retention. In addition, CALSTARS now provides a process for the electronic archival of CALSTARS reports as discussed above.

★ **Electronic Commerce/Electronic Data Interchange—**This project is to develop and document a generic process(es) to electronically receive vendor supplied invoice information and append the necessary accounting coding information for transaction entry into CALSTARS. Obtaining vendor invoices electronically and automating the preparation of accounting transactions and the preparation of claim schedules for the payment of the invoices will significantly reduce agency workload for these activities. This process was recently implemented for Department of

General Services Invoices. Other vendors will be added to this process in phases. (See Project E.2.)

★ **Automated TEC Payment Process—**The SCO is implementing the California Automated Travel Expense Reimbursement System (CalATERS) to automate the current processes to reimburse employees for travel and business related expenses. Reimbursement payments to employees made through CalATERS must also be recorded in agencies' accounting systems. Interfaces between CalATERS and CALSTARS have been developed to electronically transfer data between the two systems related to travel advances and travel expense reimbursements. These interfaces automate the necessary accounting postings and further reduce costs and workload associated with reimbursing employees for travel costs.

Several other projects are in various stages of development and their purpose are identified below. The timelines for these projects are shown on page 27. A complete description and identification of all proposed projects is included in the Implementation Plan, pages 17-26.

★ **On-line Table Maintenance Relational Edits and Updates—**Relational edits are performed to verify that data element values used in one table have been properly defined in another table. Currently, CALSTARS performs on-line relational edits and updates on the Labor Tables only. All other relational edits for all other tables are performed during the nightly batch processing. This project will rewrite the table maintenance programs to perform the relational edits and table updates on-line. This will prevent table maintenance relational edit input errors, thereby eliminating the need to re-key error transactions the following day. (See Project B.4.)

★ **Labor Distribution Modifications—**Agencies have requested that the Labor Distribution Subsystem be modified to improve functionality and efficiency and to meet the reporting demands for payroll related information. The first phase of this project is streamlining the time sheet adjustment process to eliminate cumbersome and labor intensive processing. (See Project B.6.)

★ **Claim Schedule Module Revision—**The Claim Schedule Module is very difficult to maintain or modify. A project effort to redesign and reprogram the module will streamline processing and eliminate current system inconsistencies in Fund Detail and Project General Ledger accounting.

Also, it will be easier and less costly to add future enhancements such as income tax withholding. (See Project B.7.)

★ **On-line Vendor Payment File Search—**We are continuing efforts to improve the on-line access to most financial files of CALSTARS. An On-line History File Search/Find capability is currently available. We are developing a similar search capability for the Vendor Payment File. Similar capabilities are planned for most financial files of CALSTARS. (See Project D.3.)

★ **Information Confidentiality—**New report and report ordering options have been developed to help agencies maintain the confidentiality of information, particularly employees' social security numbers. In addition, the timesheet input process will be modified to enable processing the timesheet without requiring the presence of the employees' social security number on the timesheet document. We will continue to explore what, if any, additional system modifications may be necessary to enable agencies to protect confidential information. (See Project D.5.)

★ **CALSTARS On-line Screens Redesign—**The NATURAL programming language offers several capabilities to eliminate existing on-line screen limitations and provide for more efficient data entry. The financial transaction input screens and report request screens have been revised for new design standards and screen functionality. The table screens will be updated in the next phase of this project to provide on-line access to the statewide tables, individual screens for each Descriptor Table, and on-line updating of the tables. (See Project E.1.)

★ **Electronic Commerce/Electronic Data Interchange—**As discussed above, an automated process is now available to record the payment of Department of General Services invoices. Payment of agencies' consolidated telephone invoices through this process is now being developed. (See Project E.2.)

This Development Planning Document represents our continuing commitment to all client agencies to provide and operate a system that:

★ Ensures compliance with statewide fiscal policies and procedures;

★ Minimizes workload associated with daily, month-end, and year-end accounting processes;

- ★ Complements the technological infrastructure of its client agencies; and,
- ★ Serves as an integral part of the management information infrastructure of each agency.

Background

Under the provisions of Government Code Section 13300, the California State Accounting and Reporting System (CALSTARS) was developed to provide all agencies of the state with an automated organization and program cost accounting system to accurately and systematically account for all revenue, expenditures, receipts, disbursements, and property of the state. CALSTARS was specifically designed to improve the timeliness and accuracy of financial information, standardize the accounting and reporting functions within and across the state agencies, and expand each agency's accounting and reporting capabilities.

CALSTARS was also part of larger statewide goals of providing program cost information and achieving uniformity between the state's budgeting and accounting processes. CALSTARS was designed to conform to Generally Accepted Accounting Principles (GAAP) and to satisfy Government Code, State Administrative Manual (SAM), and other state accounting requirements. The system design also incorporated the state's Uniform Codes Manual (UCM) to provide for consistency and uniformity between the budgeting and accounting processes of the state and between the state agencies.

The system was originally developed in 1980/1981 and implemented on July 1, 1981 in 27 state agencies. Today, 90 accounting offices throughout the state are using CALSTARS to perform the accounting function for 187 agencies, departments, institutions, boards, and commissions.

CALSTARS currently operates on the computer systems at the Health and Human Services Agency Data Center (HHSDC). Agencies and institutions utilize CALSTARS primarily through personal computers, terminals and printers located on site at those agencies. Department of Finance data processing staff execute the daily computer processing, maintain the automated system, and assist agencies with installation and operation of their terminals and printers (Exhibit 1).

Finance provides extensive support, guidance, and training to agencies during implementation of the system. After implementation, Finance provides on-going, on-site support and consultation as needed. Finance also provides routine support to all users through a telephone HOTLINE, daily on-line news facility, regularly scheduled classroom training sessions, and maintenance of the CAL-

STARS Procedures Manual and other documentation (Exhibit 2).

CALSTARS has achieved its original goals by standardizing the accounting and reporting functions within state agencies and by improving the timeliness and accuracy of financial information.

Mission Statement

The Department of Finance's mission is:

★ To serve as the Governor's chief fiscal policy advisor,

★ Promote responsible resource allocation through the State's annual financial plan,

★ Ensure the financial integrity of the State.

The Department impacts on the fiscal activities of other state departments through the general authority and power of supervision granted in Government Code Section 13070. This section provides Finance with authority over all financial and business policies of the State. There are also many other code sections that direct the operations of the Department.

Consistent with the mission of the Department, CALSTARS was originally developed under the provisions of Government Code Section 13300. The provisions of that Section remain today as the basic mission of the CALSTARS program, as follows:

"The department shall devise, install, supervise, and, at its discretion, revise and modify, a modern and complete accounting system for each agency of the state…to the end that all revenue, expenditures, receipts, disbursements, resources, obligations, and property of the state be properly, accurately, and systematically accounted for and that there shall be obtained accurate and comparable records, reports, and statements of all the financial affairs of the state.

"This system shall…permit a comparison of budgeted expenditures, actual expenditures and encumbrances and payables… and estimated revenue to actual revenue, which is compatible with a budget coding system….

"This system shall include a cost accounting system which accounts for expenditures by line item, government unit and fund source. The system shall also be capable of performing program cost accounting as required. The system and the accounts maintained by the several agencies of the state shall be coordinated with the central accounts maintained by the Controller…."

The Mission

> The specific continuing mission of CALSTARS, and the emphasis of the Development Plan, is to insure that the system is a "…modern and complete accounting system for each agency of the state…" and that the system remain a cost effective and value-added service to fully support the business functions of each client agency.

While the current system design and operation of CALSTARS satisfies the basic provisions outlined in the Government Code, CALSTARS must continue to grow and adapt to the changing business and fiscal information needs of state government. In order for CALSTARS to be "modern and complete" and continue as a viable accounting and information system into the future, it must go further….

CALSTARS must recognize its strategic position within the state's fiscal processes and its critical placement within the financial management structure of client agencies. Although CALSTARS has been developed as the State's accounting system, we envision that:

The Vision

> CALSTARS is the financial management system of choice of its client agencies.

Internal/External Assessment

The following represents an internal/external assessment of the current functionality, performance, problems, and potential of CALSTARS. This assessment reflects the thoughts of CALSTARS staff as well as thoughts and comments from client agencies through a variety of sources: Suggestions formally submitted through the CALSTARS Suggestion Form (CALSTARS 106); comments received through a formal CALSTARS project or survey; and, formal/informal system change requests from agencies implementing or currently operating CALSTARS.

A. CALSTARS currently processes under multiple technologies. Data is stored in an ADABAS database and in VSAM/QSAM (sequential) files and supported by several operating systems and technologies. For maximum benefit from these technologies, we must continue to examine all parts of the system to insure that the overall effectiveness and efficiency of the system continues to improve.

B. New lower cost technologies continue to emerge to improve system processing, provide appropriate and sufficient data storage, reduce operational costs, provide improved access to data, and deliver data and reports of the system. These various technologies must be explored and implemented whenever possible to ensure that CALSTARS remains a cost effective solution to the client agencies. A recent example of such an implementation is the process to archive and retrieve Standard Reports on-line thus reducing the need for microfiche.

C. Agencies should be able to access the CALSTARS system and files in a manner which best fits their individual needs. New alternatives for end-user query tools must be investigated and made available to agencies.

D. The mainframe 'Look and Feel' image and 'Legacy System' label on CALSTARS creates the inaccurate impression of an antiquated and outdated system. This perception underrates the overall cost effectiveness and efficiency of CALSTARS. Graphical User Interface (GUI) and/or web enabling technologies will be evaluated and may be implemented in the area of management information reports.

E. Electronic Commerce/Electronic Data Interchange (EC/EDI) has become a widely accepted method of transacting business electronically. Enhancements are needed to incorporate these capabilities into CALSTARS. These capabilities would significantly reduce the paperwork and manual workload for agencies by automating the manual transmission and processing of large volume transactions such as billing/invoice data from common sources such as utility and telephone companies. This has been done with the completed DGS Auto Payables project and is being pursued with telephone billing data.

F. Agency data needs to be more accessible to clients for on-line search and inquiry, development of special reports, analyses, etc. We need to continue our efforts to provide more functionality for data search and retrieval.

G. Many current management standard reports are complex and difficult to read and understand by agency executive and program management staff.

H. Client agencies want ownership of their data and the tools for working with information within their local environment. We must empower the client agencies with their information assets while maintaining control and security over that data.

I. Several statewide accounting processes should be further automated to eliminate existing manual workload, e.g., improve automated appropriation reconciliation by identifying and tracking reconciling items on-line, expand the automated year-end financial statement process to include non-governmental funds, automated cash remittance, automated bank reconciliation, etc.

J. CALSTARS must continue to expand its range of functionality. Opportunities exist to further integrate CALSTARS with the state's budget development processes and procurement processes.

K. The claim schedule subsystem must be re-engineered and reprogrammed to more fully perform its function. The subsystem needs to more fully support some accounting capabilities elsewhere in the system.

L. The labor subsystem needs to be enhanced to improve current functionality and provide more flexibility in meeting detail labor information needs.

M. The CALSTARS system does not fully support a decentralized accounting operation. This limits the ability of some client agencies to decentralize their accounting operation when decentralization would otherwise meet desired organizational or informational needs.

N. Agencies encounter problems due to vacancies, turnover, lack of experience and/or training, changes and complexities in the state's fiscal processes, etc. Client agencies continue to need assistance and support to avoid or resolve those problems that usually result in late, incomplete, or incorrect financial data and/or financial reporting.

O. Not all accounting professionals are experienced in the use of available tools, techniques, and processes for electronic transfer/download of data/information to their local processing environment. The use of these needed tools and techniques require additional training and support that is generally not available from within the client agencies.

P. Most client agencies require support to connect their personal computers into their CALSTARS network or their CALSTARS equipment into their local communications network. With continued changes in technology, we must continue to expand our training and expertise to provide this needed support to our client agencies.

Q. Many executive and program management staff of client agencies are not fully aware of the difficulties, complexities, and requirements of the state's fiscal accounting processes.

R. Many program management and accounting staff are not fully aware of the range of CALSTARS capabilities.

S. CALSTARS provides information to and/or communicates with client agencies through a variety of means: CALSTARS Development Plan and Annual Report, CALSTARS Procedures Manual, CALSTARS Operations Memos (COMs), Internet, interdepartmental memos, daily system News Screen messages, training sessions, HOTLINE, Operations Help Desk, and individual contacts with agencies. Exploring and implementing new techniques and processes to sufficiently communicate with client agency staff at all levels remains an on-going challenge.

T. CALSTARS must provide agencies with the system processes and/or reporting options to safeguard the confidentiality of certain data within the system.

U. CALSTARS must maintain an awareness of automation initiatives and efforts of other control agencies to promote/insure statewide coordination and cooperation.

V. CALSTARS client agency management staff needs and deserves more detailed information on the cost components of their CALSTARS operation.

W. The CALSTARS Billing System needs further enhancement and refinement to provide agencies with more detailed billing information and to better segregate the cost components of certain capabilities so they are more appropriately direct billed only to the agencies using those capabilities.

X. CALSTARS performs table edits to ensure the validity of individual codes such as Index, Program Cost Account (PCA), Object Detail, etc. However, CALSTARS does not provide edits of an incorrect combination of valid codes entered in transactions. For example, agencies can enter incorrect combinations of valid Indexes and PCAs, or PCAs and Object Codes, or PCAs and General Ledger codes, etc. These undetected errors are later discovered through reports review at which time the transaction entries must be reversed and re-entered. Many client agencies are requesting front-end relational edits performed at the time of data entry to reduce incompatible data errors and manual correction efforts.

Y. Currently, microfiche of reports are stored in the fiscal office of the CALSTARS agencies or at the State Records Center. Newer long-term storage technologies must be evaluated and implemented to reduce storage costs, provide report availability through electronic access, provide search capabilities for data within larger reports, eliminate the physical storage space requirements, and increase usability of reports by integrating report retrieval capabilities with existing desktop applications.

Z. The cost allocation capabilities of CALSTARS need to be expanded to provide greater flexibility, improve functionality, and to accommodate the wider variety of allocation needs throughout the state. Possible enhancements include expanding the Index, PCA, and Object Detail ranges, increasing the number of fixed percentage splits, including Project Work Phase in the credit segment of the allocation, moving the PCA method to the individual cost allocation tables, and providing additional PCA methods.

Goals

Departments are increasingly relying on automated systems and telecommunication networks for their day-to-day program operations and management decision-making. CALSTARS must continue its basic mission as a statewide accounting system consistent with statewide accounting policy and procedure, but it must also assure its place within the business strategies and information infrastructure of the client agencies by ensuring that it also serves as an information system useful to the business decision makers of those agencies.

Goals

A. **Sustain the original goals and objectives established for CALSTARS.** It must continue its goals of uniformity and consistency of the state's fiscal processes. Maintain a close liaison with the State Controller's Office, State Treasurer's Office, and Department of General Services to further integration with other systems and processes of those offices. Shared cost of continued enhancement and expansion of the common system functionality will provide every client agency with a more complete system solution at the lowest cost possible.

B. **Operate and maintain a value-added, cost effective accounting system** that satisfies the business needs of its client agencies and the accounting and reporting requirements of the state and federal government. The system must be reliable, auditable, secure and have long-term durability. (Exhibit 3) Continue to provide a small cadre of superior, experienced staff to support the system and its operation.

C. **Maintain a cost effective technology base and infrastructure of CALSTARS** that complements and supports the internal information technology infrastructures and future needs of CALSTARS client agencies. This will avoid duplicative costs of hardware, software, and communication devices within that infrastructure.

D. **Respond to the business needs and demands for timely and accurate fiscal information and financial reporting.** Fiscal information is an important ingredient to the decision making process of client agencies. CALSTARS must provide the reporting tools, techniques, and processes as

needed by the agencies in a timely fashion to assist that decision making process. It must empower its client agency users while maintaining control and security over that agency's information assets.

E. **Exploit the uses of existing and emerging technologies to re-engineer the state accounting process** and minimize or eliminate labor-intensive workloads of departmental accounting operations. Workload savings will allow client agencies to better utilize their limited resources for analyses of data and information produced by the system.

This Development Planning Document must and will be shared widely with all CALSTARS agencies so that development of their own Strategic Plans can be completed in full consideration and concert with the long-term direction for the overall CALSTARS system and its operation.

Stakeholders

The Stakeholders in our Mission Statement are those individuals and/or agencies that are directly or indirectly affected by the level of success in accomplishing our mission. The following identifies those stakeholders, to whom we are accountable, and the area(s) in which they may be mostly concerned:

Stakeholder	Standard Functionality	Fiscal Reporting	Information	Support	Cost
Agency Fiscal Mgt./Staff	X	X	X	X	X
Agency Exec/Prog. Mgt.		X	X		X
State Audit Groups	X	X	X		
Control Agencies		X	X	X	X
Legislature	X	X			
Other Govt. Agencies		X	X	X	X
HHSDC	X				X
CALSTARS Staff	X	X	X		X
Public	X	X	X		

Implementation Plan

The CALSTARS planning process is a dynamic and evolutionary process. No longer are our strategies and projects based on a singular periodic review of client requirements. Instead, we identify and revise our needed strategies and projects on an as needed basis to respond to the client agencies' needs and requirements as they evolve and to adapt to the rapidly changing technological and business environments of today and in the future.

The CALSTARS planning process is designed to facilitate continuous dialogue and input for the identification of direction to meet CALSTARS product and service requirements. The following general principle is incorporated within the planning process:

★ Planning and priority setting is a joint responsibility for CALSTARS and its client agencies. Planning does not come from program management alone. Effective project thinking and planning is widely dispersed throughout the CALSTARS organization, including its client base.

The following is a listing of:

★ Projects completed since the previous update of the plan. These are included to reflect an accountability of those projects proposed and committed to in previous updates of the plan.

★ Projects currently in progress.

★ Projects planned for the future.

- A -
Sustain the original goals and objectives established for CALSTARS.

A.1. Automated Monthly SCO Reconciliation—Agencies are required to reconcile their accounting records to the SCO's accounts. CALSTARS has a series of reports that assist agencies in the matching of individual entries in their records to SCO reports. Using these reports, significant staff time is required to verify matching entries and to manually combine financial

data from various reports onto a Reconciliation Worksheet (CALSTARS Form 33). An automated process is now available to perform most of the tedious steps of matching accounts and transactions. This process includes the electronic transfer and distribution of the SCO Agency and Fund Reconciliation Reports through the CALSTARS network, the matching of accounts between CALSTARS and SCO using the CALSTARS Appropriation Symbol Table, the matching of detailed transactions on the a SCO/CALSTARS Monthly Detail Reconciliation Report (H02), and the combining of SCO and CALSTARS account data on the SCO/CALSTARS Monthly Reconciliation Report (DB2) to reflect the status of the account reconciliation. The last phase of this project is the development of an input screen presentation of the DB2 Report for on-line reconciliation completion.

A.2. Automated YE Statements to SCO—Agencies now can submit year-end financial data for governmental cost funds electronically to the SCO. This process replaces the manual preparation and submission of Reports 1, 2, 3, 5, and 15. CALSTARS client agencies and the SCO will greatly benefit from this new process through reduced workload and increased report accuracy. However, hard copy submission of some other reports for the governmental funds and of reports for non-governmental funds is still required. CALSTARS will explore with the SCO the electronic submission of these remaining year-end reports to eliminate as much of the hard copy submission as possible.

A.3. Budget Development System—Suspended. Finance is developing a new Budget Information System. The new system will likely result in changes to the content and format of current budget reports that agencies must submit to Finance. Since a departmental budget development system must produce the data and reports required by Finance for preparation of the Governor's Budget, this project will be re-evaluated when requirements of the new Budget Information System are known.

A.4. Accounts Receivable (A/R) Billing Systems—CALSTARS capabilities allow agencies to establish A/R documents, post accounting transactions and review their activity on document file reports. Agencies now create A/R invoices and late notices using manual methods, PCs, mainframe systems and in-house systems. Agencies then manually enter the accounting transactions into CALSTARS. An automated accounts receivable subsystem that creates tailored invoices and late notices, generates accounting transactions, assesses late payment penalties, provides on-line inquiry information and includes cash receipts and cashiering

functions will eliminate the cumbersome manual processing and the duplicate DP effort agencies incur while developing their own internal receivable processes. As a fully integrated part of CALSTARS, the A/R subsystem will ensure a uniform, streamlined and standardized process and provide expanded and refined capabilities to our clients.

A.5. Proprietary/Fiduciary Accounting—CALSTARS was primarily designed to account for Governmental Funds consistent with statewide accounting policy and procedure. However, the state's funding structure also includes Proprietary and Fiduciary fund categories in conformance with Generally Accepted Accounting Principles (GAAP). CALSTARS does not fully support the accounting requirements for agencies with Proprietary and/or Fiduciary funds to submit Comprehensive Annual Financial Reports (CAFR) in conformance with GAAP and statements of the Governmental Accounting Standards Board (GASB). CALSTARS needs to develop procedures, processes, and reports to display Proprietary and Fiduciary fund accounting activity to meet these Governmental reporting requirements.

A.6. Modification for Withholding—This project would add new transactions, reports, and file postings to simplify the withholding, reporting, and remittance of withheld taxes. Few payments currently require withholding. However, this is likely to change in the near future. Reporting of amounts withheld will automatically be included within the 1099 reporting process thus eliminating separate manual processes and forms currently needed to satisfy FTB and IRS requirements.

- B -
Operate and maintain a value-added, cost effective accounting system.

B.1. Automated Bank Reconciliation Process—Automation of the agency bank reconciliation process completes the cash cycle that starts at the agency by writing checks or depositing cash. Checks are redeemed by member banks and forwarded to the State Treasurer for processing. The State Treasurer electronically transmits daily files of cleared checks to the State Controller. The SCO merges the daily files with deposit and adjustment data received from the agencies and produces the monthly Bank Statement. CALSTARS will receive the electronic data, perform an automated matching of checks and deposits, produce the Bank Reconciliation Statement, and compare the cash balances per the bank statement

with the cash general ledger balances in CALSTARS. This process will save agencies valuable human resource time and improve the accuracy of the agencies' records.

B.2. Electronic System Documentation—Completed.

B.3. Project Accounting Training Module—Several suggestions from CALSTARS agencies request a new training class on Project Accounting. This class will cover use of the project classification structure within CALSTARS, with an emphasis on federal grant accounting. The class content will include tables, files, transactions, reports, year-end processes, SCO accounts, and reconciliation processes.

B.4. On-line Table Maintenance Relational Edits and Updates—Relational edits are performed to verify that data element values used in one table have been properly defined in another table. Currently, CALSTARS performs on-line relational edits and updates on the Labor Tables only. All other relational edits for all other tables are performed during the nightly batch processing. This project will rewrite the table maintenance programs to perform the relational edits and table updates on-line. This will prevent table maintenance relational edit input errors, thereby eliminating the need to re-key error transactions the following day.

B.5. ORF Enhancements—Modify the Office Revolving Fund (ORF) sub-system to simplify posting of accounting transactions and capture Reportable Payment information when payment is made, rather than when ORF is reimbursed. This process would create the reimbursement transactions at the time of payment to eliminate additional steps necessary in the current process.

B.6. Labor Distribution Modifications—Agencies have requested that the Labor Distribution Subsystem be modified to improve functionality and efficiency and meet the reporting demands for payroll related information. The first phase of this project will streamline the time sheet adjustment process to eliminate cumbersome and labor intensive processing. Some other suggestions of desired improvements are: Allow different costing methods such as time sheets and home base accounts on the Employee Master Table (EM) to cost out supplemental or undistributed labor; provide detailed employee information when group EMs are used; increase the keys to the EMs to include any part of the full position number as a key; process labor more frequently than once a month to provide agency information for more accurate projections; eliminate the

redundant processing of generating two additional transaction codes for each labor accounting event; and add additional data elements (position information) to facilitate completion of Schedule 7As.

B.7. Claim Schedule Module Revision—The Claim Schedule Module is very difficult to maintain or modify. A project effort to redesign and reprogram the module will streamline processing and eliminate current system inconsistencies in Fund Detail and Project General Ledger accounting. Also, it will be easier and less costly to add future enhancements such as income tax withholding.

B.8. CALSTARS Transaction Posting Guide—The Posting Guide must be updated and made available to CALSTARS agencies through a variety of output media. The Guide must be revised to reflect the new on-line input screen layouts and new fields or transaction requirements. Agencies need to be able to access the Guide electronically, as well as by conventional methods, for new agency implementations and staff training purposes. The new on-line Help feature may be expanded to include Transaction Posting Guide references.

B.9. CALSTARS Billing System Modifications—The CALSTARS Billing System was custom built for CALSTARS by HHSDC staff. Changes to that system are now desirable due to new CALSTARS functions that have been implemented over the past several years. For example, more billing detail is needed to provide better cost control information to CALSTARS client agencies.

B.99. Other Projects in Process—CALSTARS maintains a CALSTARS Assignment Tracking System (CATS) for the identification, assignment, and monitoring of system change requests. These change requests originate through changes in statewide accounting requirements, suggestions from CALSTARS agencies, agency surveys, recommendations from CALSTARS analysts, etc. In addition to the more significant projects contained in this plan, CATS contains a multitude of other miscellaneous change requests which are completed in priority order as resources become available.

- C -
Maintain a cost effective technology base and infrastructure of CALSTARS.

C.1. Electronic Imaging and Archival of CALSTARS Reports—Report output production, handling, and storage, in both paper and microfiche, continues to be a significant cost for CALSTARS agencies. Several alternatives will be explored to further reduce these costs.

a. Monarch ES Project—Canceled. Monarch Enterprise Solution (ES) is a report archival and retrieval software that fully integrates with Monarch as its report viewer. Monarch ES provides an indexing and report warehousing capability to significantly reduce the cost and time of access to large reports. This product was evaluated in a pilot project with eight CALSTARS agencies. Unfortunately, several technical issues with the administration and maintenance of the Monarch ES report database in the CALSTARS report production environment could not be resolved and the pilot was canceled.

b. Report Archival/Retrieval at HHSDC—With the suspension of the Monarch ES pilot project and the current economic situation, an internal process was developed for the administration of a basic archival and retrieval process. By implementing this new process with currently available software, we fulfilled the primary objective of providing agencies a means to electronically archive and retrieve monthly and annual reports.

c. It's our intent to provide a more robust report archival and retrieval process than that described above. We will continue to search for a viable product that will satisfy the goals of easy, online access to reports and that can be administered and maintained within the CALSTARS report production environment.

C.2. On-line HELP function—The NATURAL programming language includes a number of on-line HELP capabilities. Due to priority constraints, help features were not developed and incorporated into the on-line screens as part of the ADABAS/NATURAL Conversion project. However, some help functionality such as popup text boxes for help text or lookup of input values have been incorporated into many screens as part of the On-line Screens Redesign project. This project will investigate opportunities for incorporating additional help features in the on-line screens such as

directly accessing instructions and explanations in the CALSTARS Procedures Manual applicable to the particular screen being used or field being coded.

C.3. Graphical User Interface—Canceled. The CALSTARS On-line Screens Redesign Project will resolve many of the restrictions and problems with the existing screens and will also incorporate a number of new features provided by the Natural programming language. However, a few agencies desire a capability to customize the on-line screens to better match their specific input needs. CALSTARS researched software products that will translate mainframe character based screens to graphical user interface (GUI) screens. CALSTARS will not be pursuing installation of such software at this time due to the level-of-effort required to install and maintain such a capability.

C.4. Electronic Transfer of SCO Payroll Tape—Completed.

C.5. Operational Recovery Plan Update—Canceled. HHSDC and the Teale data centers are working together to implement a mutual aid process to provide backup and recovery services for each other. When this process is implemented, backup and recovery services will automatically be provided for all data center customers. Previous to the mutual aid effort, CALSTARS had been involved in HHSDC's Operational Recovery Planning project. The primary focus of the project at that time was to establish a "hot site", essentially a backup data center, which would have been used in the event HHSDC was not available.

C.6 Internet Security—Completed. CALSTARS security processes have been modified to enable the use of TCP/IP communication protocol to access CALSTARS at HHSDC, in addition to SNA communication architecture. At this time, no further changes to CALSTARS security processes or procedures are planned. However, depending on the results of Project D.2, Internet Access, further modifications to CALSTARS security processes could be needed in the future.

- D -

Respond to the business needs and demands for timely and accurate fiscal information and financial reporting.

D.1. On-line Access to Data—Completed. CALSTARS conducted a pilot project to test the viability of Esperant, a PC-based query and report-

ing tool that directly accesses CALSTARS data files at HHSDC using the Enterprise Data Access (EDA) software. Since EDA enables access to CALSTARS data using any number of ODBC compliant products, CALSTARS is not recommending a particular product. Agencies can select a product that best serves their needs.

D.2. **Internet Access** - The Internet, and its variations of Intranet and Extranet, offers opportunity to extend access to the input processes and output reports of CALSTARS at a lower cost of investment than the existing communication links. In January 2001, CALSTARS joined a project team initiated by HHSDC to identify and acquire software that will web-enable the CALSTARS system. We have evaluated several web-enabling software products. In each case, we could not overcome technical issues concerning maintaining the functionality of the current input screens. As a result, the objective of this project has changed. We are investigating developing a process to provide access to the fiscal data (program, organization, object, project, etc.) in the CALSTARS files via the Internet.

D.3. **On-line Vendor Payment File Search**—In our continuing efforts to improve the on-line access to most financial files of CALSTARS, we are developing a search capability for the Vendor Payment File similar to the On-line History File Search/Find capability. Similar capabilities are planned for most financial files of CALSTARS.

D.4. **Record Retention**—Completed.

D.5. **Information Confidentiality** - New report and report ordering options have been developed to help agencies maintain the confidentiality of information, particularly employees' social security numbers. Labor reports L01 and L02 were developed to provide agencies with reports that excluded social security numbers. New request options for the X01 allow agencies to obtain vendor number listings that do not include employees or their social security numbers. The next phase of this project is to modify the timesheet input process to enable entering timesheets without requiring the presence of the employees' social security number on the timesheet document. We will continue to explore what, if any, additional system modifications may be necessary to enable agencies to protect confidential information.

- E -
Exploit the uses of existing and emerging technologies to re-engineer the state accounting process.

E.1. CALSTARS On-line Screens Redesign—The NATURAL programming language offers several capabilities to eliminate existing on-line screen limitations and provide for more efficient data entry. Updated screen standards have been established around these capabilities to improve screen navigation and data entry. The financial transaction input screens and the report request screens have been revised to incorporate current screen standards and to improve screen functionality including easier navigation between screens and help features to lookup table codes.

Listed below are the remaining screens that will be updated for the new screen standards including brief descriptions of anticipated added functionality.

a. CALSTARS Table Screens: Provide on-line access to the Statewide Tables; individual screens for each Descriptor Table; and, on-line updating of the CALSTARS tables.

b. CALSTARS File Inquiry Screens: Add additional search keys to improve file Inquiry capabilities.

c. Other/Miscellaneous CALSTARS screens to incorporate established standards defined in previous phases of this project.

E.2. Electronic Commerce/Electronic Data Interchange—This project is to develop and document a generic process(es) to electronically receive vendor supplied invoice information and append the necessary accounting coding information for transaction entry into CALSTARS. Obtaining the invoice information electronically from vendors and automating the creation of the accounting transactions will significantly reduce the amount of manual workload of processing vendor invoices for payment.

This process is now available for Department of General Services invoices. Additional vendor invoices will be added to this process in phases.

a. Combined Telephone Bill (MCI/Pac Bell)

b. Voyager Gasoline Credit Card Invoices

c. Office Depot Invoices

d. Other

E.3. Automated TEC Payment Process—Completed.

E.4. CAL-Buy/CALSTARS Electronic Data Interchange—Suspended. The Department of General Services, Procurement Division, has implemented the CAL-Buy system to provide state agencies with a web portal for on-line purchases of goods and services from the Statewide Commodity Contracts, Master Agreements, and California Multiple Award Schedules (CMAS). An electronic interface between CAL-Buy and CALSTARS could provide automated data entry of these transactions into CALSTARS. However, resources and funding are not available at this time to develop such an interface. It is possible CALSTARS and DGS will pursue this interface in the future.

Project Schedule

The following page presents the proposed implementation schedule for the projects identified in this plan. The schedule shows the estimated development and implementation time line for projects currently underway. Other projects are listed in the anticipated order they will be undertaken as resources become available. In general, the projects are scheduled in priority order considering statewide requirements, needs of the client agencies, resource requirements, etc.

Project Schedule

#	PROJECT	FY 2004-05		FY 2005-06		FY 2006-07	
B.4	On-line Table Maintenance Relational Edits and Updates						
E.1a	CALSTARS On-line Screens Redesign – Table Screens						
E.2a	Electronic Commerce/Electronic Data Interchange – Combined Telephone Bill						
B.6	Labor Distribution Modifications – Timesheet Adjustment Process						
D.3	On-line Vendor Payment File Search						
D.5	Information Confidentiality – Timesheet entry process						
B.1	Automated Bank Reconciliation Process						
B.7	Claim Schedule Module Revision						
A.1	Automated Monthly SCO Reconciliation – On-line DB2 process						
B.5	ORF Enhancements						
B.99	Other Misc. Projects in Process:						
	Produce error reports during CA/FS runs in addition to during IEUP						
	Work with SCO on processes to:						
	Remit cash without preparing agency check						
	Reimburse ORF without issuing warrant						
	Process external data from agencies to reconcile outstanding checks						
	Modify daily ADABAS data unload processes to improve efficiency by approx. 50%						
	Develop two new files to track and report Late Payment Penalty and Use Tax payments						
	Develop new online process to store, track, and report table maintenance activity						
Development/implementation schedules will be determined for the following projects when other projects currently underway are completed and resources become available:							
A.2	Automated YE Statements to SCO – add remaining reports to current process						
C.1c	Electronic Imaging and Archival of CALSTARS Reports – improve process						
C.2	On-line Help function						
D.2	Internet Access						
B.3	Project Accounting Training Module						
B.8	CALSTARS Transaction Posting Guide						
A.5	Proprietary/Fiduciary Accounting						
B.9	CALSTARS Billing System Modifications						
A.6	Modification for Withholding						
A.4	Accounts Receivable (A/R) Billing System						

Conclusion

As a result of the processes that were included in the development of this planning document, we believe it is a consensus reflection of the necessary strategic direction for CALSTARS during the next 3 to 5 year period. This does not mean, however, that the plan will remain unchanged during that period. This Development Planning Document will be updated to reflect any changes to the strategies, projects, and implementation plans as necessary. As a result of periodic review, the plan will be updated for changes resulting from the addition of new issues, problems, challenges, and opportunities and any resulting strategies and projects and implementation plans to address those items. These actions will insure that the plan remains a dynamic planning document to continually address future needs.

In addition, it should be noted that an increased level of CALSTARS client participation is anticipated to successfully implement the projects shown. Client staff will be asked to participate during the needs and requirements definition and system design activities of the major system modification/enhancement projects.

Current System Functionality

CALSTARS, an automated statewide accounting system, is an enterprise solution that provides both statewide uniformity and individual agency uniqueness. CALSTARS was designed and developed to provide individual state agencies with a comprehensive automated departmental accounting and reporting system.

Although CALSTARS is centrally operated, a series of tables allows all client agencies to tailor the system to their unique accounting and reporting requirements. Through statewide tables, the system controls code structures and insures conformance with the Uniform Codes Manual. Other tables are established and maintained by individual agencies so they can define their internal needs for levels of organization, program, object of expenditure, cost allocation, fund distribution, appropriation control, etc. Tables also allow for the 'single transaction' input concept in CALSTARS. Each individual transaction is automatically appended with information from a variety of tables. This eliminates redundant coding while providing for complete fund, appropriation, allotment, encumbrance, organization, program, project, revenue, expenditure, cost allocation, and general ledger accountability. For accountability, CALSTARS maintains master files that satisfy the requirements for audit trails and records retention in accordance with the State Administrative Manual. Major features of CALSTARS are discussed below:

★ The automated preparation of claim schedule face sheets and remittance advices. This allows the preparer to review and adjust claim schedules before final print at the agency's location and provides several reports which assist each agency in their detailed accounting activities. Sample reports include Report H11 - Transaction Analysis Report for Equipment, which is used to reconcile equipment expenditures to the Property Ledger.

★ An automated cost allocation capability that allows indirect costs and administrative overhead to be allocated to programs, projects, and/or organizational units of an agency. Costs may be allocated through any of several audit proven methodologies depending on the internal needs of the agency and/or their Federal cognizant agency, as documented in their Cost Allocation Plan.

★ A comprehensive labor distribution capability that permits the distribution of personal services and staff benefits costs through master tables or timesheets by individual and/or employee group. Costs may be charged based on the actual earnings as recorded in the SCO payroll system or based on standard rates. Detailed reports by individual employee are requestable in hardcopy, microfiche, or report file form. A file of the detailed labor transactions can also be requested.

★ Automated processes for year-end accounting and reporting activities to assist agencies with year-end closing and financial statement preparation. This includes:

An automated process that allows agencies to electronically transmit year-end financial data to SCO in lieu of preparing Reports 1, 2, 3, 5, and 15 for Governmental Cost Funds.

Automated financial statements for Non-Governmental Cost Funds.

Automated reclassification of documents for reverting appropriations.

Automated reversing of standard year-end transactions in the new fiscal year.

★ An automated payables function that provides an automated entry option for creating and recording high volume payment transactions for specific state organizations and large companies. The Department of General Services is the first vendor participating in this process.

★ A standard reporting module that contains over 100 different reports. Agencies request reports through the on-line report request table and specify various data sorts, levels of detail, and time periods. These combinations of report specifications provide a vast selection of report options. In addition, several reports were specifically designed to span fiscal periods to match appropriation availability that spans fiscal years.

In addition, the standard reporting module provides for reports that can be requested:

☆ On a variety of paper sizes to accommodate character, line, or laser printers in the agencies;

☆ With a choice of microfiche or electronic storage format for audit trail

and archival purposes;

- ☆ From one location and directed to print at another location within the department throughout the state;
- ☆ For immediate production before the nightly file update process or for printing the following day after the nightly file update process;
- ☆ For immediate or overnight production in report file form in lieu of hard copy. These report files are then available for downloading to the agency's local processing environment for use in their internal processes.
- ☆ In multiple versions, copies and types of output (paper, report file, microfiche, electronic storage, etc.) from a single report request or by agency defined group requests.

★ A document tracking capability for accounting and reporting individual accounts receivable, accounts payable, and encumbrances (e.g. contracts, purchase orders, etc.).

★ An external report distribution system for electronic transfer and print of reports and information from sources external to CALSTARS, e.g., SCO and DGS.

★ Electronic transmission of CALSTARS data to external agencies, e.g., reportable payment information to FTB and IRS for 1099 reporting and independent contractor reporting to EDD.

★ Electronic interface of CalATERS (California Automated Travel Reimbursement System) data between SCO and CALSTARS for creating automated expenditure, travel advance and liquidation transactions. Check related information is electronically transmitted back to CalATERS.

★ An ability for CALSTARS client agencies to establish automated upload processes to feed accounting transactions into the system on a daily, weekly, monthly or annual basis.

★ The centralized structure of CALSTARS operations facilitates and encourages the electronic interface of data from the SCO. CALSTARS currently receives monthly payroll and CD102's for automated posting in CALSTARS as well as appropriation data for report generation.

- ★ A File Copy process that allows agencies to receive copies of their files and/or tables at the HHSDC or TDC. Agencies are then able to execute special report routines against those files or 'download' the files to their local environment for internal reporting processes.

- ★ An Office Revolving Fund for the payment and accounting of advances, expenses, and vendor discount invoices. This capability provides for a tracking and aging of all disbursements in the Vendor Payment File and Document File.

- ★ An on-line Check Writer Subsystem to write and print General Cash and Office Revolving Fund checks. An on-line check reconciliation capability is also available.

- ★ An on-line inquiry capability to access the Document File and the Vendor Payment File to track and monitor encumbrances, contracts, and payments to vendors, etc. Other on-line inquiry capabilities allow agencies to track and monitor appropriations, allotments, cash balances in funds, etc.

- ★ An on-line History File search/inquiry capability providing access to all transactions entered during the current and prior fiscal years. Transactions can be searched on an extensive set of search criteria. Once transactions have been retrieved, they are available for viewing on-line or in hardcopy or report file form.

- ★ On-line help screens and edit capabilities that allow for inputting and editing all types of transactions prior to file update.

- ★ An automated process to reconcile CALSTARS appropriation accounts to SCO appropriation accounts. This process involves electronically comparing SCO monthly account balances and activity to that in CALSTARS and providing agencies with reports on balanced and unbalanced accounts including listings of matched and unmatched transaction activity.

- ★ Automated processes for past-year Schedule 10 and Schedule 10R reporting as required for development of the Governor's Budget. The CALSTARS Schedule 10 Subsystem integrates data from agency CALSTARS transactions and the Department of Finance Budget Preparation System to produce reports in Schedule 10 and Schedule 10R format. The subsystem identifies special handling of transfers between different fund classes and loan repayments from external entities to meet specific

budget reporting criteria. In the future, agencies may be able to submit CALSTARS reports in lieu of pre-printed Schedule 10's.

★ CALSTARS web pages containing system Procedures Manual, Operations Memos, Forms, Training Schedules, Development Plans, Annual Reports, and other operational tools and training aids. In addition, there are hot links to other web pages containing state and federal fiscal related information.

AND . . .

CALSTARS client agencies receive the benefit of a shared system concept without the need for direct resources that would otherwise be necessary for the following functions and services provided by Department of Finance CALSTARS staff:

★ Daily transaction processing, production operation, and reports production and distribution;

★ On-going programming maintenance and development of the system programs and files;

★ Coordination with Finance, SCO, and other state and federal agencies for statewide accounting and reporting procedures, requirements, and system changes;

★ Coordination with HHSDC for system and data security management, system backups, disaster planning, and operational recovery planning;

★ CALSTARS equipment planning, site planning and preparation, procurement, installation, and training;

★ CALSTARS communication line planning and ordering;

★ Telephone HOTLINE assistance, problem solving, and Quality Implementation Checks (QIC);

★ On-going training sessions for all levels of clerical, technical, and professional staff consisting of:

☆ Standard track classes covering tables, daily operations, labor dis-

tribution, SCO reconciliation and month-end close, office revolving fund and check writer, CALSTARS reporting, etc.;

- ☆ Year-end training sessions and seminars covering year-end planning and statement preparation;
- ☆ Specialized training using Monarch software, a data access and analysis tool that allows CALSTARS clients to view, query, and analyze CALSTARS reports downloaded to the PC.

★ Extended processing services and HOTLINE hours during year-end for year-end closing activities and preparation of financial statements;

★ Development and maintenance of operational support tools, CALSTARS Procedures Manual, Operations Memos, Transactions Guide, input forms, etc. available through CALSTARS web pages;

★ NEWS screens for system status, system change notices, and recruitment bulletins.

Current System Technology

A. Overview

CALSTARS provides an automated accounting system for 90 state offices that perform the accounting function for approximately 190 agencies. These accounting offices access the central CALSTARS system through a telecommunications network which supports approximately 1,350 input devices, consisting of terminals and PCs, and 244 printers located throughout the state. There are approximately 600 PCs currently in use in the accounting operations of CALSTARS agencies. Approximately, 2,500 agency staff are currently authorized to use the on-line CALSTARS system.

B. Operating Environment

CALSTARS production operation and system development work is performed by

Department of Finance CALSTARS staff and processed at the HHSDC on the 'Shared System' which has the following characteristics:

★ Two Mainframe computers, which have the appearance of one to CALSTARS

customers. Specific hardware models are:

IBM 2064 Model 1C6

IBM 2064 Model 1C7

★ Operating System:

Z/OS 1.4

ESP (Execution Scheduling Process) Job Scheduler

★ Access to System:

JES2 (Job Entry Subsystem)

VTAM (Virtual Telecommunications Access Method)
TSO/SPF (Time Sharing Option/System Productivity Facility)

CICS (Customer Information Control System)

C. Files and File Structures

CALSTARS currently uses 17 financial master files and 25 table files. Each of these files has auxiliary files, such as transaction or posting files, shadow files for on-line data entry and inquiry, and special copies for producing reports.

The system financial audit trail is maintained through a History file, which is retained for seven years. In addition, there are other files and tables used to support system processes.

The various versions of these files and tables are stored and accessed using one of three methods:

★ ADABAS (Adaptable Data Base) is used for all files of the on-line system and the primary files of the batch system.

★ VSAM (Virtual Storage Access Method) is used for standard reporting and some tables processing.

★ QSAM (Queued Sequential Access Method) is used for the Transaction History file, backup copies of files and for other purposes not requiring the random or direct access ability provided by VSAM.

D. Programming Languages

The programming languages used in the current system are:

★ Natural and COBOL, which are the primary programming languages used in the CALSTARS system. Natural is used for the on-line system and some batch processing and COBOL is used in the reporting system and some batch processing. In all, there are approximately 1200 Natural objects and 350 COBOL programs in the CALSTARS application system.

★ DYL 280, which is used for production processing and for special reporting and processing by CALSTARS staff.

E. Support Software

The following software is used to support the CALSTARS application system:

★ ROPES (Remote On-line Print Executive System) is a software package used to distribute CALSTARS reports to agency local printers for viewing and printing. The use of ROPES is controlled by COBOL application programs that issue ROPES commands (on-line and batch).

★ IAM (Innovation Access Method) was installed in May 1992. This product significantly reduces run times and costs for production jobs using VSAM files.

★ PREDICT is the Software AG Data Dictionary. It contains information about data structures and serves as a bridge between ADABAS and Natural.

★ FTP (File Transfer Protocol) is used to receive external transactions (not entered on-line) from CALSTARS agencies. It is also used to receive the monthly payroll file from SCO.

★ RLD (Remote LAN Dialup) and VPN (Virtual Private Network) are technologies that allow CALSTARS employees to access HHSDC from outside DOF. These technologies are available to users needing non-standard access to the CALSTARS application.

F. CALSTARS Web Site

The CALSTARS web site provides access to both static and dynamic systems documentation, references other system related documents, and links to other web sites important to the state budgeting and accounting processes. All documentation is standardized in Hypertext Markup Language (html) or Portable Document Format (pdf).

The entire CALSTARS Procedures Manual is available over the Internet.

G. Department of Finance CALSTARS Local Area Network (Exhibit 4)

In addition to the CALSTARS specific technology above, Finance CALSTARS staff are connected to the HHSDC (through Teale Data Center). See Exhibit 4 for a display of the various Personal Computer communications, software, and hardware currently used by the CALSTARS support staff.

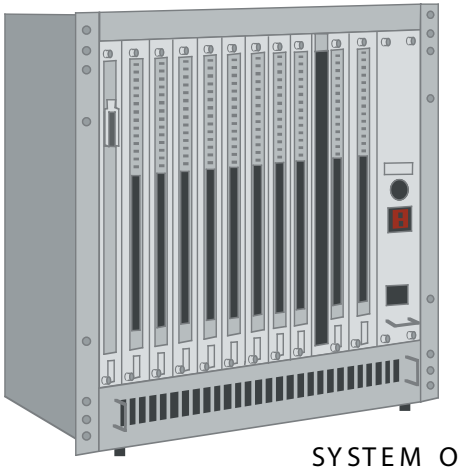
This information is presented so that CALSTARS client agencies have an understanding of the technological environment through which we operate and test and evaluate PC products that could/should interface with mainframe CALSTARS.

CALSTARS SYSTEM PROCESS

HEALTH AND HUMAN SERVICES AGENCY
DATA CENTER

CLIENT AGENCIES

TRANSACTIONS
INPUT



CALSTARS

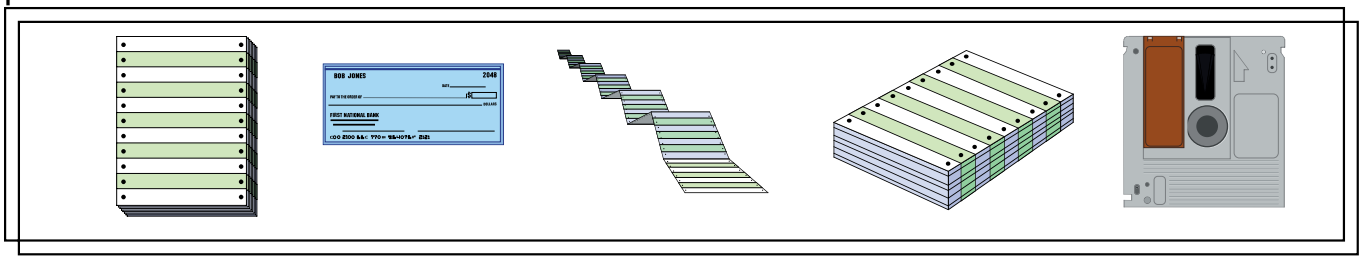
NIGHTLY SYSTEM
PROCESSING

SYSTEM OUTPUTS FROM REQUESTS
DURING THE DAY

- Agency Checks
- Listings of transactions to be processed
- Standard and Other Types of Reports (paper or datasets)
- File copies

SYSTEM OUTPUTS FROM NIGHTLY PROCESS

- System processing reports
- Transaction reports
- Claim Schedules
- Standard Reports (paper, microfiche, or datasets)



DEPARTMENT OF FINANCE
CALSTARS

SUPPORT SERVICES

- Perform a variety of special office and administrative support duties for the CALSTARS System and staff.

CALSTARS SYSTEM SUPPORT/ INFORMATION COORDINATION

SYSTEM SUPPORT

- Identify requirements and develop general specifications for necessary/desirable system changes, enhancements, new reports.
- Interact with other Control agencies on new/revised statewide accounting policy and or procedural issues, coding structures, UCM.
- Monitor/maintain system processing status.
- Provide technical assistance/ consultation to CALSTARS analysts, CALSTARS client agency staff.
- Develop and present the CALSTARS/Monarch training classes. Provide support for on-going CALSTARS/Monarch operations in agencies.

INFORMATION COORDINATION

- Maintain the CALSTARS Procedures Manual.
- Issue CALSTARS Operations Memos (COM).
- Issue CALSTARS NEWScreen messages/items.

CALSTARS TECHNOLOGY SUPPORT

DEVELOPMENT CONTROL

- Develop/test program code for system modifications and/or enhancements.
- Develop/implement system program modifications for efficiency/cost effectiveness.
- Insure the security/integrity of CALSTARS system and data.
- Maintain liaison with HHSDC and CALSTARS staff for problem resolution.
- Test/evaluate/install new hardware and/or software alternatives.
- Provide technical assistance to CALSTARS client agencies.
- Provide support for the CALSTARS Billing system.

PRODUCTION CONTROL

- Conduct and monitor successful completion of the daily CALSTARS processing cycle.
- Provide daily breakdown and delivery of printed reports and microfiche.
- Prepare equipment site plans; install/test equipment and communication lines; train agencies on use of equipment.
- Maintain HOTLINE for resolution of equipment and communication line problems.
- Prepare/submit HHSDC Service Requests for equipment and communication line acquisition, replacement or consolidation.
- Maintain RACF Security System.
- Write/maintain JCL/ procedures and system flow diagrams.
- Support/Review production reports on System Archive and Retrieval (SAR)

CALSTARS CLIENT SUPPORT/TRAINING

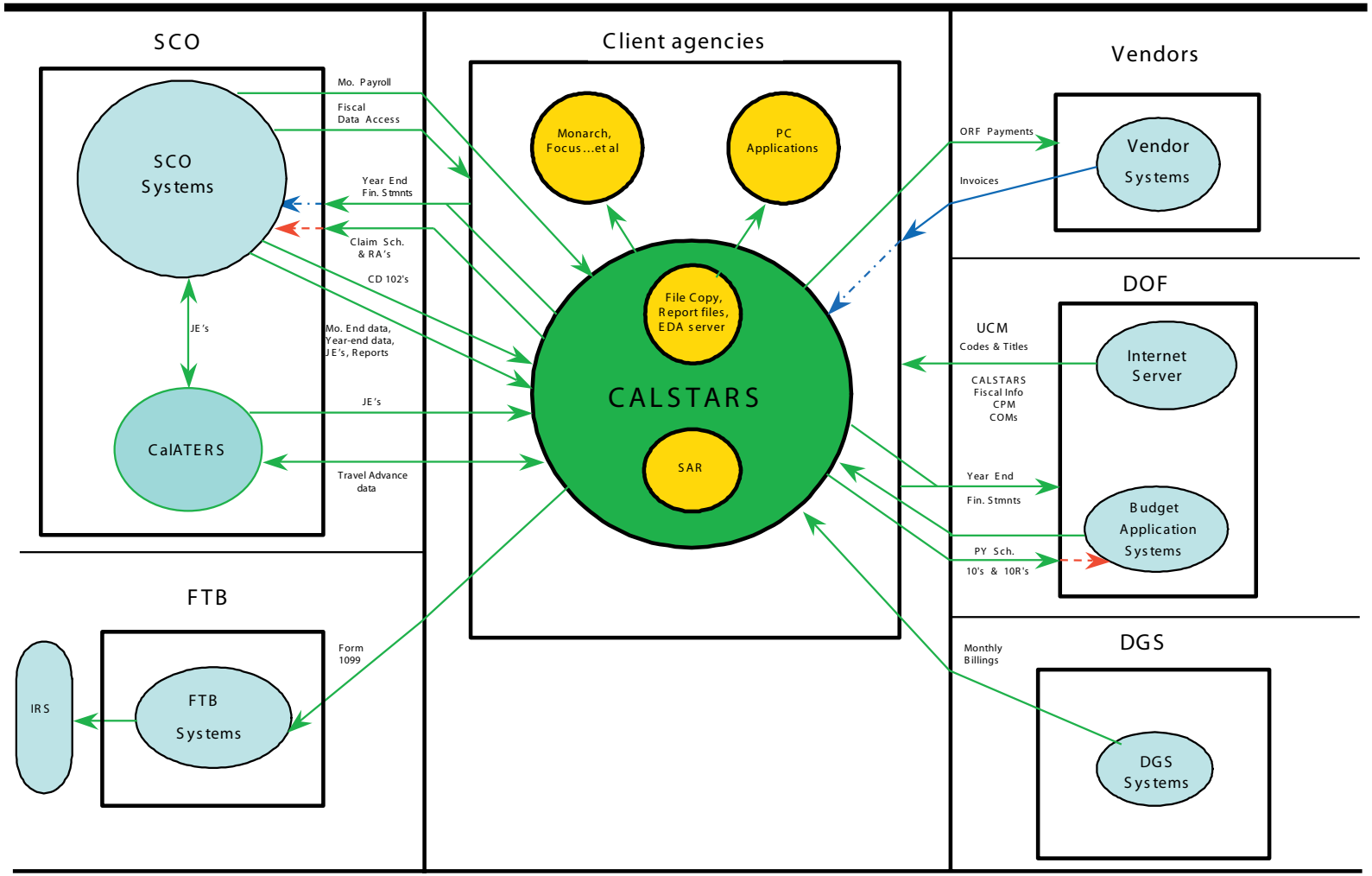
CLIENT SUPPORT

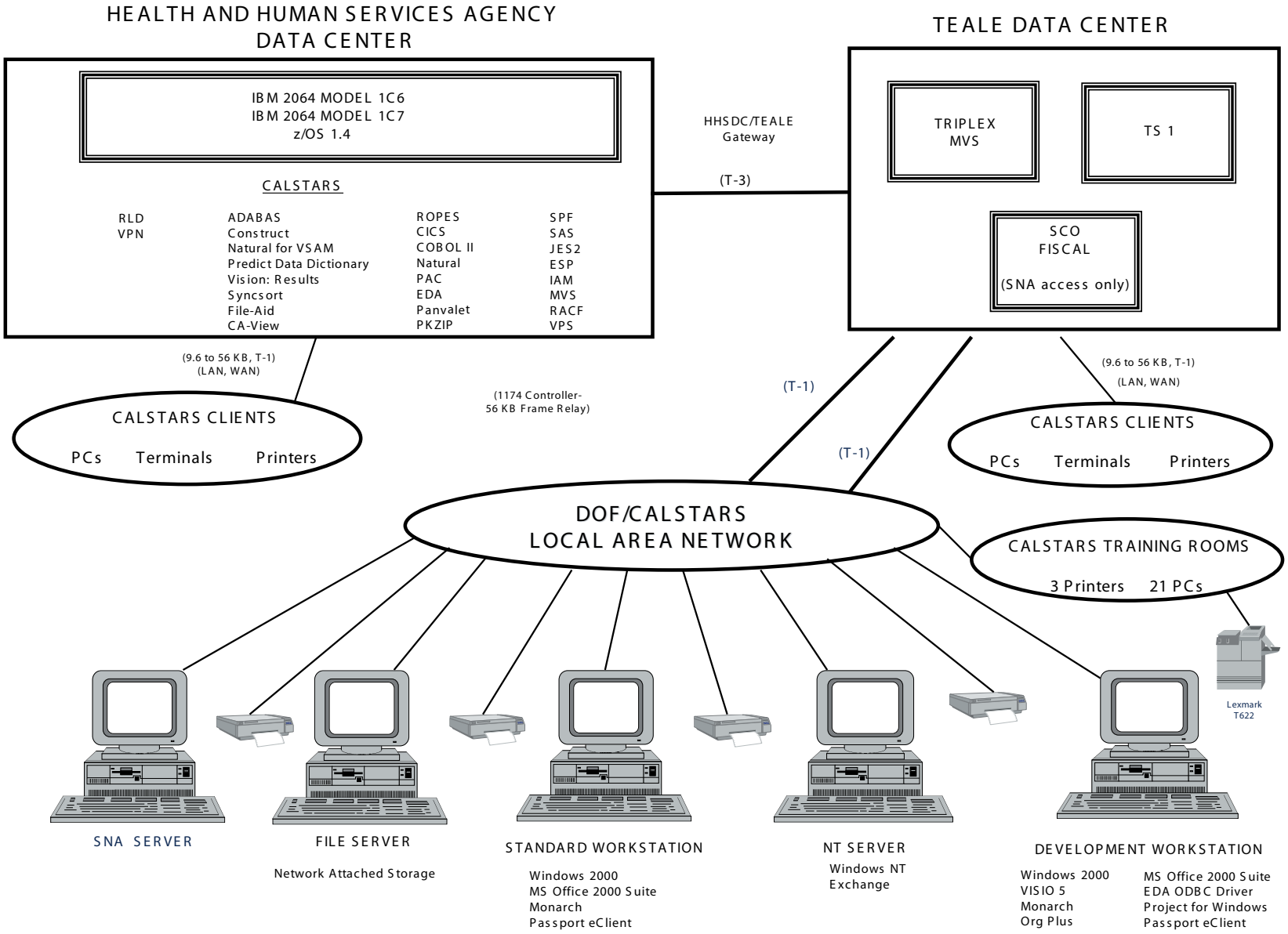
- Provide on-site guidance and consultation to resolve operational, technical, organizational problems.
- Provide HOTLINE support to assist agencies with problem resolution, policy/procedure guidance.
- Interact with Control agencies on new/revised statewide accounting policy and/or procedural issues.
- Provide consultation, support to agencies during initial implementation of CALSTARS.
- Provide support/assistance to agencies for CALSTARS reports/reporting processes.
- Provide liaison between System Support Unit and agencies for necessary or required system changes, enhancements.
- Maintain liaison with HHSDC for the CALSTARS Billing/Invoicing System and Service Requests.

TRAINING

- Develop and present the CALSTARS On-going, Implementation, and Year-End Closing training classes.

CALSTARS Accounting Architecture



Legend: Now ——— In Progress -·-·-·- Proposed – – – – –

CALSTARS Hardware/Software Architecture