FAMIS PROCEDURES MANUAL

VOLUME I - USERS MANUAL

CHAPTER II

FAMIS SYSTEM OVERVIEW
The Hawaii Financial Accounting and Management Information System (FAMIS) is a comprehensive and flexible system that has been designed to meet the accounting and reporting requirements of the State. The overall system scope encompasses the information needs of the Department of Accounting and General Services (DAGS) central accounting as well as the State's operating agencies.

FAMIS can be viewed from three different perspectives—central accounting capabilities, data processing functions and agency accounting capabilities. A description of each viewpoint of the system will assist those individuals, who have an indepth knowledge in one area, to better understand the implications of their operations in the other areas. The purpose of this chapter is to provide an overview of the central accounting, data processing and agency accounting capabilities.

**CENTRAL ACCOUNTING OVERVIEW**

This section provides an overview of the processing capabilities of FAMIS in each of the functional accounting areas. These functional areas include:

- appropriation accounting;
- allotment accounting;
- encumbrance accounting;
- expenditure/disseusenment accounting;
- revenue/receipt accounting;
- receivable accounting;
- payroll accounting; and
- general ledger accounting.
Appropriation Accounting

Appropriation accounting encompasses controlling the financial activity of the State to those levels and for those purposes specified in the biennial budget. The budget or appropriation act passed by the legislature and signed by the Governor establishes the legal spending ceiling and means of financing for all agency activities.

The primary objective of appropriation accounting is to guard against spending in excess of the legal limitations specified in the appropriation act and other authorizing legislation. If disbursement requests by an agency would cause an appropriation to be over-expended, the DAGS central accounting branch will reject the expenditure request and return the related documentation to the requesting agency. The features in FAMIS that address the appropriation accounting functions are:

- monitoring the status of each appropriation control amount;
- identifying/rejecting transactions which exceed appropriation control amounts; and
- separately tracking appropriation adjustments.

These features are discussed in the following paragraphs.

Monitoring the Status of Each Appropriation Control Amount

FAMIS can uniquely identify and track the status of each appropriation. Each approved appropriation is uniquely identified in FAMIS by department, fund, fiscal year and appropriation account number. These classification elements are contained on each appropriation, allotment, expenditure, encumbrance or any other type of transaction that affects an appropriation. This unique combination of data elements can also be used internally in FAMIS to reference the authorizing legislation, function, program levels and other descriptive data associated with the appropriation.
Identifying Transactions That Exceed Appropriation Control Amounts

Through FAMIS, DAGS central accounting performs a number of funds control checks to ensure that appropriations are not over-expended or over-allotted. The two key appropriation control edits are:

- encumbrances plus expenditures must not exceed the appropriation amount; and
- allotments must not exceed the appropriation amount.

Those transactions which cause an appropriation to be over-expended or over-allotted can be separately identified and reported. Additionally, DAGS may specify if the transactions should be allowed to post to the FAMIS master files and reported with a warning message or be rejected entirely from the update process and reported with a fatal error message. The type of editing performed may be varied from one appropriation account to another.

Tracking Appropriation Adjustments

Over the life of an appropriation, various types of adjustments may be made to invest, restrict, transfer or lapse an appropriation balance. FAMIS has the ability to separately track the original appropriation balance, investments, restrictions, transfers and lapsed appropriations. As a result, FAMIS provides for the complete reporting of appropriation activity from its initial authorization to its final disposition.

Allotment Accounting

Before any appropriated funds can be spent, they must first be allotted by the Department of Budget and Finance (DB&F). Allotments are recorded in FAMIS based upon an approved Request for Allotment received from DB&F or an Allotment Advice.
Allotments represent a further refinement of the approved appropriations. Within an appropriation account, allotments may be recorded for personnel services (allotment category 10) or other expenditures (allotment category 20). Further, these allotments may be recorded on a quarterly or annual basis. The FAMIS allotment accounting capabilities are briefly summarized in the following paragraphs.

**Separately Identify Each Allotment**

Each allotment recorded in FAMIS is uniquely identified by department, fund, fiscal year, appropriation account number and allotment category. These data elements must be coded or referenced on each allotment, expenditure, encumbrance or other transaction posted in FAMIS that require an authorized allotment balance.

**Identify Transactions That Exceed Allotment Control Amounts**

FAMIS edits each expenditure and encumbrance transaction against the approved allotments to ensure there is a sufficient allotment balance available. Those transactions which cause an allotment account to become over-expended can be separately identified and reported. Again, DAGS may specify if the transactions should be allowed to post to the FAMIS master files and reported with a warning message or rejected entirely from the update process and reported with a fatal error message.

**Tracking Allotment Adjustments**

FAMIS provides for the tracking of each type of allotment and any allotment adjustments. Separate balances are maintained for:
• allotments - 1st quarter;
• allotments - 2nd quarter;
• allotments - 3rd quarter;
• allotments - 4th quarter;
• allotments - other;
• allotment transfers;
• allotment reversions;
• allotment investments; and
• allotment restrictions.

These balances can be summarized into a "net allotment" account or displayed separately on financial reports.

**Encumbrance Accounting**

Encumbrance accounting involves the recognition of commitments made by State agencies that will subsequently be converted into expenditures. Recording these encumbrances in addition to actual expenditures helps ensure that allotment and appropriation balances are not exceeded. These encumbrances are represented by purchase orders, contracts or other similar documents evidencing that a purchase agreement has been approved by authorized officials of the State.

DAGS central accounting will post all contract and purchase order encumbrances in FAMIS. By recording the estimated cost of purchase orders and contracts as conditional liabilities and reporting this data, fiscal managers are constantly aware of the potential future impact of past actions on their appropriation and allotment balances. FAMIS supports the encumbrance accounting process in three important ways:

• provides item-by-item accountability of each encumbrance document;
safeguards against the over-commitment of funds; and
tracks the status of each document by recording all related actions against it.

Each of these is discussed below.

Provide Item-by-Item Accountability

To properly account for each purchase order or contract in FAMIS, each must be identified by a unique document number. All subsequent activity against the encumbrance must reference that document number. In addition to the financial data, FAMIS maintains other data related to the encumbrance such as the create date, last processing date and vendor name and number. In addition, each encumbrance can be recorded in FAMIS using the full range of accounting classification data elements.

Safeguard Against the Over-Commitment of Funds

The second capability of FAMIS in the encumbrance accounting area is intended to provide a safeguard against incurring expenditures that exceed spending authority. This is accomplished by posting encumbrance amounts against the appropriation and allotment accounts they affect.

Prior to the encumbrance being posted by the system, the appropriation and allotment balances are checked to determine if the processing of the encumbrance would over-commit the control amount. If the appropriation or allotment balance is insufficient to cover the encumbrance amount, then the transaction may be rejected and reported with a fund control error message or it may be posted and reported with a warning message.
Track the Status of Each Document

The third capability deals with the need to appropriately report on all actions taken for each encumbrance document. Typically, an agency may process several partial payments against an encumbrance before the final payment is made. When processing a partial payment, FAMIS liquidates only that portion or amount of the encumbrance being paid. The remaining balance of the encumbrance is maintained in the records and is reflected on subsequent reports. Upon processing of a final payment, the entire encumbrance balance is liquidated. As a result, the expenditure amount and the encumbrance liquidation amount on a final payment transaction may be different.

Outstanding encumbrance balances are reported on appropriation, allotment, and project status reports. Additionally, a document level report can be produced which identifies the status of each encumbrance document. Financial balances are displayed for the original document amount, adjustments, expenditures, retentions and the unliquidated balance.

Expenditure/Disbursement Accounting

Expenditures are recorded in FAMIS based on properly completed, audited and approved vouchers. The expenditure transactions may be entered into FAMIS through an automated interface (e.g., payroll transactions) or they may be manually keyed directly from the source documents for system processing.

Expenditures posted in FAMIS may be previously encumbered or they may be direct expenditures. Expenditures previously encumbered must reference the encumbrance document number. FAMIS will automatically look up the referenced document, retrieve the appropriate classification data, liquidate the encumbrance, and post the expenditure. If desired, classification data can be coded on the expenditure to override the encumbrance classification data.
Direct expenditure transactions must contain the appropriate classification data on input.

Expenditure transactions that successfully pass the FAMIS edit criteria and post to the master files are also posted to a warrant writing file. These transactions are summarized by department, batch, fund and vendor code and passed to the warrant writing system for warrant preparation. Once warrants have been produced, the warrant numbers are appended to the appropriate disbursement transactions on the FAMIS History File. In addition, summary level transactions are generated to record the issuance of the warrants. These transactions are input to the subsequent FAMIS processing cycle. This then, completes the expenditure/disbursement cycle.

Revenue/Receipt Accounting

Receipt accounting encompasses the collection, classification and recording of all cash received by the State. Receipt accounting also includes the recording of revenue estimates and the recognition of accrued revenue. Receipts consist of revenue items (such as general excise and income taxes) and non-revenue items (such as borrowing and investment sale proceeds).

The receipt accounting process begins with the recording of estimated revenues based on the official DB&F estimates at the time the legislature authorizes appropriations for the fiscal biennial or supplemental budget period. These estimates may be recorded in FAMIS at the lowest level of detail provided in the accounting classification structure. As conditions change throughout the year, transactions may be entered into FAMIS to adjust these estimates.
Actual receipts are posted in FAMIS based upon a completed Treasury Deposit Receipt (TDR). The TDR will identify the appropriate classification data and transaction code to be used to record the actual receipt. Reports can be produced from FAMIS displaying estimated and actual revenues at the desired level of classification detail.

Receivable Accounting

Receivables constitute specific amounts owed to the State by specific entities or individuals. These amounts are maintained for a variety of reasons, including:

- billing for specific services provided by the State;
- reimbursements (either Federal, inter-agency or inter-fund); and
- billed taxes.

Generally accepted accounting principles require that the accrual or modified accrual basis of accounting be used by governmental units in connection with revenues and receivables. However, the State records only the receivable (not the revenue) on the accrual basis. This policy implies the recognition and maintenance of receivable balances for amounts owed the State until the cash is received. When the cash is received, revenue is recognized. The receivable balance appears on the fund's trial balance in summary form. It is also necessary to record, monitor and control the status of each specific type of receivable to provide detailed support for the summary level totals presented on the balance sheet.

FAMIS' accounting for receivables includes the maintenance of both general ledger control and detailed subsidiary information for each type of receivable. The subsidiary information may include the name of the entity who owes the receivable. The general ledger control account maintains information
on receivables by fund and department. As receivables are entered into the system, the appropriate accounting entries are recorded in both the subsidiary and control accounts as the result of processing a single transaction. Frequent updating of the accounts receivable ledger aids the financial decision making process and provides information for complete and timely reporting.

**Payroll Accounting**

Payroll data is passed to FAMIS semi-monthly via the payroll interface using data from the statewide Payroll System. The payroll interface extracts payroll data from the payroll tape based on unique record types and reformats the data into the standard FAMIS input record. Specifically, the interface module performs the following functions:

- generates detailed accounting transactions by employee and accounting classification to record payroll costs;

- summarizes these detailed accounting transactions with like classification elements to reduce the number of payroll transactions that will be processed by FAMIS;

- creates the appropriate batch header records; and

- produces the interface control report that lists the summarized transactions and provides control totals by department.

The purpose of the payroll interface is to pass each department's payroll expenditure data to FAMIS for posting against the Appropriation and Allotment Files for funds control checking and the Operating File for detailed cost tracking. As such, departments that choose to use FAMIS for detailed cost tracking can also distribute payroll data by cost center, activity and project. These detailed classification elements will be captured in the payroll system through the modified change schedule process.
General Ledger Accounting

Due to the diverse nature of governmental operations and the need to comply with legal provisions, the financial transactions and balances of governmental units are recorded and summarized as separate accounting entities. These separate accounting entities are represented by funds. General ledger accounting involves the process of maintaining control accounts to reflect the status and activities of each separate fund.

For each fund, FAMIS maintains separate general ledger accounts to indicate the balances of the various types of assets (e.g., cash and accounts receivable), liabilities (e.g., accounts payable) and the nominal accounts (e.g., appropriations and expenditures). These general ledger control totals are supported by numerous detailed or subsidiary records. A general ledger account for encumbrances, for example, is supported by the individual encumbrance documents posted to the Document File.

There are two major functions of general ledger accounting:

- maintaining control over detailed subsidiary records; and
- ensuring that valid financial information is available to prepare financial statements and reports as required.

General ledger accounting provides control over the accounting records in two ways. First, since both general ledger debit and credit accounts are posted simultaneously, each fund will always be in balance. In addition to fund, general ledger activity is also maintained by department, fund detail, GAAP fund and subfund, and project.

The general ledger also maintains control through the reconciliation of general ledger control totals to detailed subsidiary ledger totals. The simultaneous posting of each accounting transaction to both the general ledger and the appropriate subsidiary ledgers ensures that accounting events are properly reflected throughout the system.
In addition to maintaining control over subsidiary ledgers, the general ledger also provides a ready source of information for assessing the status of any fund. The general ledger file contains current balance information of each asset, liability, receipt, expenditure and fund balance account for each accounting entity. This information can be used to prepare trial balance and financial statement reports.

Summary of Central Accounting Capabilities

As has been discussed in the preceding paragraphs, FAMIS has been designed to encompass a variety of functional accounting capabilities to satisfy the complex needs of DAGS central accounting. These accounting capabilities have been designed to allow DAGS to account for and exercise control over the financial resources of the State.

DATA PROCESSING OVERVIEW

This section provides an overview of the five principal processing modules that comprise the FAMIS system. These four modules are:

- **Table Maintenance** which maintains all of the FAMIS tables;
- **Input, Edit, and Update** which processes all financial data and maintains the FAMIS master files;
- **Preliminary Edit** which performs a preliminary edit of expenditure transactions, produces a summary warrant voucher for submission to central accounting and creates the department shadow files;
- **Reporting** which produces the financial reports required by system users; and
- **On-Line Processing** which is used for data entry, file inquiry and shadow file posting.

Each of these modules has been designed to satisfy a specific series of processing requirements. While each module is an integral part of the total FAMIS system structure, each can be viewed as an independent subsystem.
Segregating the major processing functions into these separate modules has several important benefits. For example, since each module is independent, program development and modification can be isolated to avoid unnecessary problems for other subsystems. This independence also allows the subsystems to be operated on different cycles. For example, the Input Edit and Update module can be executed multiple times without processing any data through the other subsystems. The following paragraphs provide an overview of each of these modules.

Table Maintenance

FAMIS provides maximum flexibility to its users because it is a "table-driven" system. This means that the specific accounting structure and processing logic is controlled through the system tables. It is through the maintenance of these tables and not through special program logic that the system responds to new and changing information requirements. These system tables include the:

- Descriptor Table;
- Appropriation Account Table;
- Cost Center Table;
- Department Activity Table;
- Vendor Edit Table;
- Project Control Table;
- Contract Ledger Table;
- Transaction Code Decision Table; and
- Relationship Edit Table.

The table maintenance module performs all maintenance functions against these tables. The purpose of these tables are to:

- identify all codes used in the system for transaction editing;
- provide descriptive information (account title) to be used in reporting;
- maintain constant data which provides an input coding reduction capability; and
- maintain all file posting and edit rules for each transaction code.

The table maintenance module will normally be executed as a single job stream. The data maintained in the system tables is accessed by all the other subsystems. The general function of each of the system tables is described below.

**Descriptor Table**

The Descriptor Table contains all of the codes that are valid for use in FAMIS. The Descriptor Table is accessed to edit the input data elements contained on other table maintenance transactions as well as accounting transactions. In certain cases, data is retrieved from the Descriptor Table and appended to the accounting transaction for further system processing. In addition, the table contains descriptive information associated with each code for reporting purposes.

The Descriptor Table is actually a series of subtables (i.e., a unique table is identified for general ledger accounts, object codes, function codes, etc.). Each record in a subtable is identified by its table entry key which looks up the related descriptive information.

**Appropriation Account Table**

Traditionally, the need to multiclassify accounting information for reporting purposes has required rather complex coding schemes. In FAMIS, this potential problem has been avoided through the development of certain coding reduction techniques. Some of the coding reduction is made possible through the entry of predefined classification data into the Appropriation Account...
Table. Each appropriation account is uniquely identified by department, fund, fiscal year and appropriation account number. When transactions enter FAMIS, this information is used to retrieve additional classification and descriptive information (e.g., program levels, means of financing and appropriation title) which is used for editing, posting and reporting purposes.

This table is created and controlled by DAGS central accounting. It will normally be created at the time the budget is approved and should require only minor modification throughout the year.

Cost Center Table

The FAMIS classification structure provides user agencies with four levels of organizational classification that can be tailored to meet the unique needs of each user. Rather than requiring agency personnel to code all four levels of classification on an input transaction, that data is stored in the Cost Center Table and assigned a four-digit cost center code. When coded on an input transaction, the cost center code is used to look up the expanded classification data for editing, posting and reporting purposes. The Cost Center Table also contains project and location data and a series of indicators that control the level at which data is posted. The Cost Center Table is created and controlled by user agency personnel.

Department Activity Table

The FAMIS classification structure also provides user agencies with seven levels of activity classification. These activity classification elements are stored in the Department Activity Table and referenced by a three-digit activity code entered on input accounting transactions. During processing, the activity classification elements are retrieved from the table, appended to
the input transaction and used for editing, posting and reporting. The Department Activity Table is created and controlled by user agency personnel.

**Vendor Edit Table**

The Vendor Edit Table contains the vendor name and address associated with each vendor code and suffix. This information is used to eliminate the need to manually input name and address information on each encumbrance or disbursement transaction. This information is also used for special reporting purposes.

**Project Control Table**

The Project Control Table is the focal point for editing project related transactions. The Project Control Table contains the department code in the control key to enable each user agency to define its own project accounting structure. Informational elements contained in the table provide additional data with respect to a particular grant or project as well as several indicators which control the level of posting in the FAMIS master files. The Project Control Table is created and controlled by user agency personnel.

**Contract Ledger Table**

The Contract Ledger Table contains the basic contract descriptive information for each contract (as identified by a contract number). This information includes: contract description, special notes and instructions; federal, state or other funding; total contract amount; retainage percentage; purge indicator; contingency indicator; federal indicator; contract category indicator; the vendor (contractor) number; the different contract suffixes to identify the assignee number, levy number (if any), and the contract amount.
associated with each funding source (fund, year, appropriation, department); and the contract date, start date, end date, revised end date, and stop date. This information is looked up by FAMIS when a contract number is entered on an input accounting transaction.

The Contract Ledger Table is created and controlled by DAGS central accounting. Entries will normally be created at the time a contract is signed and should only require minor modifications throughout the year.

Transaction Code Decision Table

Much of the system processing performed in the Input, Edit and Update Module is controlled by the data contained in the Transaction Code Decision Table. Data contained in the table includes the following:

- the general ledger accounts to be effected by the transaction;
- the edits to be performed against the transaction;
- the files to be updated by the transaction; and
- indicators which control the reporting of the transaction on the various registers.

Every accounting transaction that enters FAMIS must contain a three-digit transaction code that uniquely identifies the accounting event. One of the first steps in system processing is to edit the transaction code against the decision table and retrieve the indicators identified above to control the system processing of the transaction.

The accounting events recorded in FAMIS are defined and controlled by DAGS central accounting. Therefore, FAMIS contains a single statewide decision table. New or changing accounting requirements can easily be accommodated in FAMIS through the preparation of Transaction Code Decision Table maintenance transactions.
Relationship Edit Table

The Relationship Edit Table is used in FAMIS to edit combinations of departmental classification codes entered on input accounting transactions. By detecting invalid combinations, departmental personnel can correct these errors and prevent the erroneous posting of these transactions.

This table contains seven ranges of cost center, activity, and project/project phase against which match methods indicated by the D53 subtable of the Descriptor Table will be performed. Departments are able to establish and control unique pre-defined departmental classification relationships in the table. The D53 subtable also contains on-line and batch switch indicators. The update of the D53 relationship edit indicators is controlled by the D54 subtable.

Input, Edit and Update

The Input, Edit, and Update Subsystem is the focal point for all financial data entering the system. This subsystem performs the following basic processes:

- data input and classification;
- error correction;
- edit; and
- file update.

An overview of each of these processes is contained in the following paragraphs.

Data Input and Classification

Input into FAMIS may be received from CADES data entry, on-line data entry or through an automated interface (e.g., payroll). Three types of transactions may be entered into this subsystem:
o accounting transactions (i.e., accounting data such as encumbrances and disbursements);

o error correction transactions (i.e., those transactions containing data for purposes of modifying accounting data that had been previously submitted but which were placed on an Error Suspense File because editing would not permit them to be posted to the financial files); and

o table maintenance transactions (i.e., transactions submitted to update a system table that is used to look up classification data and reduce input coding requirements).

Any other input transactions entered into the Input, Edit and Update Subsystem will be rejected.

The first step in subsystem processing is the acceptance of all input transactions. This program separates the various types of input transactions and routes them to the proper program for further system processing. Error correction transactions are passed to the error correction program where they are applied to transactions on the Error File. Accounting transactions received by the data input and classification program are passed directly to the edit program. Finally, the System Management File is maintained by this program.

**Error Correction**

Transactions found to be in error by FAMIS are not rejected from the system, but instead are placed on an Error Suspense File. Accounting personnel may then enter error correction transactions to correct the specific field(s) in error. These corrections are applied by the error correction program which may then release individual transactions, or batches of transactions, to the edit program.
Edit

The edit program receives the corrected transactions from the error correction process and the standard input from the data input and classification program and performs several key functions. First, it retrieves constant data stored in the Descriptor Table, Cost Center Table, Appropriation Account Table, Vendor Edit Table, Contract Ledger Table, Department Activity Table and Project Control Table. Next, the general ledger accounts, transaction edit indicators and file posting rules associated with each transaction code are retrieved from the Transaction Code Decision Table and appended onto the transaction. Additionally, the relationship edit indicators from the D53 Descriptor subtable are also retrieved and appended onto the transaction. The transactions are then edited in accordance with the edit rules. If the accounting transactions pass the required edit tests, they are forwarded to the update module. If they fail any of the required edits, the transactions are flagged as errors before being passed to the update processing cycle.

File Update

File update processing begins with the execution of the primary master file update program. This program performs additional edits and then posts the valid transactions to the primary master files. These file updates are performed based on the posting indicators retrieved from the Transaction Code Decision Table. If a transaction fails certain types of edits, it is written to the Error Suspense File and not posted to any master file. Some edits may be established as warnings only, in which case the transactions will be allowed to post to the master files. Valid transactions are then passed to
the secondary master file update program where the remaining master files are updated. Finally, the invalid transactions are placed on the Error Suspense File.

**Interest Generation**

FAMIS can automatically calculate interest due on vendor payments made later than forty-five days after the receipt of the goods/services or the invoice. The system can also calculate a negative interest amount for vendor credit memos. The payment type indicator, a required element for all vendor payments, determines if the payment is subject to interest calculation.

The interest formula is:

$$\frac{1}{365} \times 12\% \times \text{days in excess of 45} \times \text{transaction amount}$$

All interest calculations resulting in non-zero amounts will create interest transactions using the classification elements from the original vendor payment transaction except for the following:

- transaction code "226" for positive interest amounts and "206" for negative interest amounts;
- object code "7300"; and
- those elements replaced by the department interest payment descriptor table.

The interest transactions are summarized within a department's summary warrant voucher by vendor name and vendor invoice. If the summarized amount is:

- zero or less, the related interest transactions are deleted;
- greater than zero but less than $5.00, the related interest transactions are posted to a cumulative interest transaction file, reflected in a daily interest report, and a notice of interest due from the state to the vendor is printed on the remittance advice; and
greater than or equal to $5.00, the related interest transactions are posted to a cumulative interest transaction file, reflected in a daily interest report, batched and entered in the preliminary edit process, and a notice of interest payment forthcoming from the state pending a departmental review is printed on the remittance advice.

The interest summary warrant voucher generated through the preliminary edit process uses a unique payment type indicator; departments cannot delete summary warrant vouchers with this special payment type indicator from the on-line hold file. In addition, FAMIS will produce reports reflecting generated interest summary warrant vouchers on the on-line hold file for more than fifteen days.

Aging of Vendor Payments

Although this feature is not currently being utilized, FAMIS can automatically age vendor payments. The system adds thirty days to the most current aging start date (the day goods/services or invoice was received) to calculate a scheduled payment date. The scheduled payment date becomes the date the transactions are released for warrant production. Specific payment type indicators (currently not in use) determine which batch of vendor payment transactions are to be aged.

Included in the vendor aging feature is a payment window edit to prevent a range of aging start dates that exceeds five days. This edit was included in the aging of vendor payment to preclude a batch of transactions remaining on hold until the most current vendor payment has aged thirty days while incurring interest for payments with aging start dates in excess of forty-five days.
**Interface/Batching**

The interface/batching program allows departments the option to:

- automatically rebatch a large set of expenditure transactions into smaller batches of expenditures which meet the current expenditure batching policies; and

- retrieve information from FAMIS files and tables to create the new expenditure batches.

To use the interface/batching program, expenditure batches are coded with a "B" department batch status. The program extracts these batches from the hold file and appends selected file and table looked-up information to the expenditure transactions. With the information entered and looked-up, the expenditure transactions are sorted according to the current batching policies and batching options previously selected by the departments on their batching descriptor tables. The final step is the creation of the new smaller batches with new department reference numbers. These newly created batches are subsequently released through the preliminary edit program for processing.

The interface/batching program also generates reconciliation reports listing the expenditure transactions with its original input department batch reference number and its new generated department batch reference number.

**Preliminary Edit**

The FAMIS preliminary edit module performs two important functions in the accounting cycle. These functions are:

- a preliminary edit of expenditures and printing summary warrant voucher reports; and

- posting of transactions used to produce the departmental shadow files.

Each of these functions are outlined below.
Preliminary Edit of Expenditures

Statewide accounting policy requires departmental personnel to code expenditure transactions on a special coding input form. This input form contains only those data elements necessary to post expenditures and has been designed to facilitate both the input coding and data entry processes. This input form is submitted directly to EDPD for keying and processing through the preliminary edit module.
As its name implies, the preliminary edit module performs a preliminary edit of all transactions submitted. The primary objective of this process is to provide departmental personnel with a preliminary list of any edit errors detected on their input transactions, so they can be corrected before they are submitted to central accounting. Corrections may be entered online by those departments with access to terminals, or they may be entered on the summary warrant voucher submitted to preaudit.

The preliminary edit module will also produce summary warrant voucher reports for submission to preaudit. The summary warrant voucher report contains summarized disbursement data by vendor and accounting distribution information. A voucher batch submitted to preaudit must contain the summary warrant voucher and supporting documentation.

**Produce Departmental Shadow File**

Much of the information contained in the FAMIS data base is available online throughout the day to State fiscal personnel. Central accounting data is maintained separate from departmental data and access to each is controlled through a security sign-on table. The online shadow files provided for departmental use are created by the preliminary edit process.

The departmental shadow files will reflect all transactions submitted by each department, not just those that have been approved for processing by central accounting. As such, the departmental shadow files will reflect all transactions placed on hold, transactions released for preliminary edit processing and transactions from the error file. Of course, certain errors, such as an invalid department or fiscal month will preclude the posting of transactions from the error file.
Reporting

Financial reports can be produced from FAMIS at any time during a fiscal month. Reports can be produced for the current month, prior month, or in certain cases for any fiscal month during the year. Virtually all of the reports are developed from the fully updated master files rather than as by-products of the processing programs. Thus, it is not necessary to run the entire system to obtain a given report.

Each of the FAMIS reports have been designed to satisfy a specific information requirement. The following types of reports can be produced from the system:

- fund control reports (i.e., appropriation and allotment status);
- transaction listings;
- document reports;
- general ledger reports;
- detailed activity reports; and
- project/grant reports.

All FAMIS reports are printed centrally and distributed to DADS central accounting or agency users as appropriate.

Online Processing

To be fully responsive to each user's needs, many of the FAMIS processing functions can be performed online. The online functions available to user agencies are similar to the functions available to DADS central accounting. These functions include:

- data entry;
- table file inquiry; and
- shadow file posting.
The DAGS central accounting on-line functions are described in the following paragraphs. The agency on-line functions are described in the next section.

Data Entry

FAMIS provides for on-line data entry of all accounting, table maintenance and error correction transactions. Each of the data entry functions are controlled through a master menu and a series of prompts and messages that guide the user through the data entry process. Each of the daily input transactions are held in an on-line file for subsequent batch processing.

To facilitate the data entry of accounting transactions, five separate screen formats have been provided. Each screen format is structured around the general data entry requirements for the type of transaction involved. Separate screens are provided for:

- general purpose input screen (all transactions);
- encumbrance transactions;
- expenditure transactions;
- receipt transactions; and
- allotment transactions.

Each screen contains only those data elements required to post the referenced accounting event. Additionally, separate screen formats are provided for each type of table maintenance transaction and error correction transaction.

Table/File Inquiry

FAMIS provides DAGS central accounting with on-line inquiry against all of the statewide tables. In fact, the table inquiry is performed through the standard table maintenance input screen. Users need only enter the table entry key to recall a table record for viewing.
To provide users with a ready source of information, FAMIS provides on-line inquiry into the following shadow files:

- Appropriation/Cash File;
- Allotment File;
- Contract Ledger File;
- Document File;
- Vendor Payment File;
- Warrant Writing/Error Status File; and
- Contract Ledger Detail Transaction File.

Data contained in the shadow files is available for inquiry throughout the day.

**Shadow File Posting**

In addition to on-line data entry and inquiry, FAMIS also provides for on-line updating of the Vendor Edit Table and the Appropriation/Cash and Allotment Shadow Files. Transactions posted to the shadow files during the day are fully re-edited and posted to the batch master files each evening. Once all master files have been updated, new copies of the shadow files are created and made available for inquiry and posting during the day.

**AGENCY ACCOUNTING CAPABILITIES**

In addition to meeting the central accounting and reporting requirements of DAGS, FAMIS has also been designed to support the financial information needs of agency fiscal personnel. The agency accounting features are similar to the central accounting capabilities except that they provide for capturing and reporting data at a much lower level of classification detail.

As noted above, most of the agency accounting and processing capabilities represent extensions of the DAGS central accounting features. The major differences are summarized in the following paragraphs.
Budgetary Control

From an agency's perspective, one objective of budgetary accounting is to ensure that expenditures submitted to DAGS central accounting for payment do not cause an appropriation or allotment to become over-expended. To assist departments in detecting potential fund control errors earlier in the accounting process, FAMIS contains an online Department Appropriation File, an online and batch Department Allotment File and Project Files. The role of each of these files in the budgetary control process is described below.

Department Appropriation File

Normally there will be a delay from the time agency personnel key an encumbrance or expenditure transaction until it is audited by DAGS pre-audit personnel, approved for processing and posted to the FAMIS master files. During that period of time, agency fiscal personnel have a need to know their appropriation status based on all transactions submitted to DAGS, not just those that have been audited and posted. To meet this information need, a separate online Department Appropriation File has been provided in FAMIS.

The structure of the online Department Appropriation File is the same as the (DAGS) Appropriation File. The key difference between the two is that the online Department Appropriation File is posted based on all transactions submitted by the department, while the (DAGS) Appropriation File reflects only those transactions that have passed the pre-audit process, and been approved for payment. From the department's perspective then, the online Department Appropriation File contains more current information than will be reflected in appropriation status reports received from DAGS. The Department Appropriation and the other online departmental files are created through the preliminary edit process.
Department Allotment File

There are two versions of Department Allotment File: an online version and a batch version. The online Department Allotment File is updated in a similar manner as the online Department Appropriation File. As a result, from the agency's perspective, the online Department Allotment File will also contain more current information than that provided on the allotment status reports received from DAGS. Both the online and batch Department Allotment Files, however, are structured differently from the (DAGS) Allotment File.

The control key of the (DAGS) Allotment File contains department, fiscal year, fund, appropriation account number and allotment category. The online and batch Department Allotment Files contain all of these data elements as well as major and minor object, project and department activity and organization classification elements. If desired, departmental users can establish and control their allotments at these lower levels of classification detail.

The project, organization and activity levels of classification are referenced in FAMIS through user defined tables. These tables also contain a series of indicators that allow each user to define the level at which allotments are posted and controlled. In this way, each department can establish their own internal classification structures and allotment control procedures that best meet their accounting, reporting, and funds control requirements.

Project File

FAMIS also provides each user agency with the ability to account for individual projects or grants. Individual projects or grants can be uniquely identified in FAMIS through the project code and work phase classification elements. Through the assignment of project codes and the creation of Project
Control Table entries, each user can tailor the project accounting features to meet their needs.

If desired, separate project appropriations and allotments can be posted in the Project File. Revenue, expenditure, encumbrance, and cash equity data can also be posted in FAMIS by project and (warning level) fund control edits exercised over the available budget balance.

**Detail Cost Tracking**

The FAMIS classification structure includes a number of data elements that allow departmental users to classify accounting data in accordance with internal program, project or organizational structures. These data elements can be coded on all types of input transactions and recorded in FAMIS along with the required DAGS central accounting data elements. Reports can then be produced from the system displaying allotments, encumbrances, expenditures and revenues at these low levels of classification detail. As a result, most departments should be able to use FAMIS to their internal accounting and reporting requirements.

The extent to which each department uses the expanded classification and reporting capabilities in FAMIS can be varied from one department to another. Through table maintenance activity, each agency may define its own cost accounting structure, fund control edits and posting rules.

**On-line Processing**

Most of the on-line processing capabilities available for use by DAGS central accounting are also available to each user department. The specific on-line entry, inquiry and posting features available to the department are summarized in the following paragraphs.
Data Entry

Departmental user personnel can enter accounting and departmental table maintenance transactions online through terminals located at each agency site. The accounting transaction input screens are the same as those used by DAGS central accounting. Accounting transactions entered online by department personnel are not processed against the DAGS central accounting files until they have been audited and/or logged and released for processing. They will, however, be posted to the Department Appropriation, Allotment and Project Files during the next update cycle so that more current information will be available to agency fiscal personnel.

Table/File Inquiry

Departmental fiscal personnel will be allowed to perform online inquiry against their departmental tables and the Department Appropriation, Allotment and Project Files. It should be noted that each department will only be allowed to access their own data. Internal system controls will preclude one department from viewing another department's tables or files.

Shadow File Posting

If desired, departmental fiscal personnel may choose to post the Department Appropriation, Allotment and Project Files online at the time of data entry. While the impact of transactions posted online will be reflected immediately in the departmental files, the DAGS central accounting files will still not be updated until the transactions have been audited and approved for processing.
Summary of Departmental Accounting Features

The FAMIS functional accounting capabilities, classification structure, and reporting features have been designed to support the accounting and reporting requirements of operating agency personnel. Sufficient flexibility has been built into the system structure to enable each department that uses FAMIS to satisfy their internal accounting requirements to independently determine which system features they will use.