1 Overview of the New Payroll Encumbrance module

1.1 Background

In April of 2003, SAGO Business Computing Services began the task of creating an on-line automated form 500 system. The system was to provide for on-line entry of a form 500 document and the electronic routing and approval of those documents.

One of the requirements of the system was to be able to track and view payroll encumbrances by BPP PIN. The system was also to update and maintain these encumbrances in real time as each form 500 was created.

After initial preliminary analysis was conducted on these requirements, it became clear that the entire payroll encumbrance process needed to be rebuilt from the ground up. As the project progressed, it also became clear that the payroll encumbrance project could not be completed and implemented at the same time and in the same gradual manner that the EPA system is being implemented.

1.2 Implementation Plans

In February of 2004, the EPA system went live at TAMU, and several departments are now using the system. In March of 2004, the user committee for payroll encumbrances met and determined that TAMUS should target a September 2004 implementation for the new payroll encumbrance module.

At that time, all parts of TAMUS using FAMIS will be converted to use the new payroll encumbrance module.

The purpose of this document is to provide an understanding and guide for the new payroll encumbrance module.

2 Summary of Changes

The new payroll encumbrance system will impact all TAMUS agencies using FAMIS that encumber payroll expenditures – including longevity, employee benefits, and wage employees.

2.1 Payroll Encumbrances now kept at PIN level, and can be viewed on new FAMIS screens.

The new payroll encumbrance module contains new database tables that keep track of the balance and activity on payroll encumbrances PIN by PIN. A new series of screen in FAMIS (screens 752 through 759) were developed for inquiry and update access into these screens. These encumbrances are kept at the PIN and SL-SA account level.

Summary payroll encumbrances are also still tracked on the open commitment table (screen 21, 61, etc.). The system will keep the summary encumbrances (SAL0001, WAG0001, and BEN0001) in sync with the detail payroll encumbrances.

*Note: Every transaction that impacts the payroll encumbrance module will also create a transaction that updates the open commitment table and will appear on the regular transaction screens (e.g. screen 23). For payroll liquidations, and the initial budget load, these transactions will be summarized into a single screen 23 entry per SL-SA account, and encumbrance type (salary, wage, benefits, longevity).*
2.2 Benefits and Longevity are now encumbered.

The new payroll encumbrance database table provides for the encumbering of employee benefits and also the encumbering of longevity. These types of encumbrances will automatically be created with the payroll encumbrance and will be calculated using data from the BPP employee database.

2.3 Retroactive payroll changes no longer encumbered.

Due to the complexities and the timing problems that have long been associated with the encumbering of retroactive payroll expenditures, the system will now no longer attempt to encumber amounts for expenditure corrections.

The balance of each payroll encumbrance should be the amount remaining to pay the employee regular payroll for the remainder of the calendar year.

2.4 Wage Encumbrances can be kept at a detail or summary “blanket” level.

The new system also allows for the encumbering and liquidation of payroll on wage positions. Due to varying requirements among department and agencies, it was determined that in some cases wages need to be encumbered to the person level. However, for many large departments, this was not viable, so they will be allowed to create a blanket wage encumbrance.

As payroll is posted, the system will first look for a specific wage encumbrance. If one is found, that encumbrance will be liquidated. If one is not found, the system will search for a blanket wage encumbrance and post a liquidation to that encumbrance.

2.5 If using the EPA, encumbrances are made in FAMIS in real time.

Currently the summary payroll encumbrances in FAMIS are adjusted each day by the daily form 500 process. A file is obtained from BPP and the changes to encumbrances are posted to FAMIS each day. The system runs a day behind, so that, for example, Tuesdays adjustments do not appear until Thursday morning.

For those agencies that choose to use the new on-line EPA system, payroll encumbrances will be posted to FAMIS as soon as the document is closed.

If a form 500 is still created and posted directly into BPP, the daily process will continue to remain in effect.

2.6 Salary savings process adjusts detail payroll encumbrances

Currently the end of month salary savings process posts encumbrance and budget transfers based on the salary savings calculation performed by BPP. For the most part, this process will remain unchanged. However, the transactions that are now posted to FAMIS, will post through the new payroll encumbrance module and will be tracked in detail on the new screens.

2.7 Encumbrance liquidations are separate transactions.

Currently payroll liquidations are incorporated into the transaction that posts the payroll expenses to FAMIS. The picture below shows a payroll expense transaction. The amounts circled in red show the transaction amount and also the liquidation amount.
Screen 90 has been used to track the encumbrance activity by PIN. This screen will be replaced by the new screen 755. See the new screen section of this manual for detail information on screen 755.

3 Concepts

3.1 Payroll Encumbrance Table

The payroll encumbrance system contains a database table that contains one record for each PIN and SL-SA account combination.

Screen 755 can be used to view the Payroll encumbrance table by PIN. In this example below the PIN S20000 has funds encumbered on two accounts.

You can also see that each record in the database table contains an amount for Salary/Wages, an amount for Longevity, and an amount for Benefits.
The encumbrances can also be viewed by Account number. On screen 757 you may enter the SL-SA account and then view all payroll encumbrances for that account.

3.2 Payroll Encumbrance transactions.

Each time the payroll encumbrance amount is changed, a payroll encumbrance transaction will be added to the database. The new system keeps a record of each change to the payroll encumbrance system in the detail payroll encumbrance database table.

Payroll encumbrance history can be viewed for a particular PIN on screen 756. Following is an example:
### 3.2.1 Payroll Encumbrance Type

Payroll encumbrance transactions originate from different sources and each source has its how type. These types will be used to determine the source of the payroll encumbrance adjustment. Following are the payroll encumbrance types:

<table>
<thead>
<tr>
<th>Type Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN</td>
<td>Encumbrance adjustment from an EPA document</td>
</tr>
<tr>
<td>F5</td>
<td>These adjustments come in batch from Form 500s entered directly into BPP</td>
</tr>
<tr>
<td>AA</td>
<td>Automated adjustment. These transactions originate from the part of the system that automatically keeps the payroll encumbrances in balance with BPP.</td>
</tr>
<tr>
<td>IN</td>
<td>Initial Load. These transactions occur at the beginning of the year and originate from the initial budgeted salary amount</td>
</tr>
<tr>
<td>MA</td>
<td>MA – Manual Adjustment. These are manual adjustments that are created from the on-line screens.</td>
</tr>
<tr>
<td>PL</td>
<td>Payroll Liquidations – these transactions are posted with each payroll posting, and reflect the reduction in encumbrance due to corresponding expenses</td>
</tr>
<tr>
<td>SS</td>
<td>Salary Savings. These transactions come from the salary savings process that is run at the end of each month</td>
</tr>
</tbody>
</table>

### 3.3 Computation of benefits and longevity

Benefits and Longevity are encumbered automatically only for Budgeted Positions.

The system automatically computes the benefits and longevity amounts for each position as it maintains the salary encumbrance with each form 500.

Benefits are computed based on a monthly amount for *Group Insurance and Longevity*. Each Funding account, based on percent effort, is assigned a percent of each monthly amount for the time period it covers.
All other benefit types are computed based on a percentage of the covered earnings.

### 3.4 Wage encumbrances

Departments have the option of encumbering benefits at the SL-SA account level, or for each wage position within the account.

Wages encumbrances are entered on screen 754. See the documentation for screen 754 for additional information.

### 3.5 Blanket encumbrances

Wage encumbrances can also be encumbered as a “blanket” encumbrance. This encumbrance is not for a specific position, but covers all positions.

Blanket encumbrances can also be used to encumber benefits for state accounts (when the benefits are charged to central consolidated accounts).

### 3.6 Net funding calculation

When a form 500 or EPA is created, the change between the funding as of the prior iteration, and the funding as of this new iteration is referred to as the Net Funding. This change in net funding is computed account by account (SL-SA).

It is this change in net funding that is used to perform budget entries and also to adjust the payroll encumbrance. This is best understood by example.

The following table demonstrates the net funding concept. The first four lines, from iteration “01”, are the funding prior to the EPA document. The lines noted with iteration “02” are the funding after this document.
The lines at the bottom of the chart are the change in funding, or the “net funding” amounts the occurred from this action.

Account 02-430018 had no obligation on iteration 01, but it now is obligated to pay $12,000 to fund 50% of this person’s salary from 3/1 to 8/31.

Another example of net funding can be seen in the screen capture from the EPA system shown in section 3.7.

### 3.7 Retroactive payroll encumbrances

When the EPA document (form 500) is effective on a date prior to the next pay date that has been processed by BPP, the EPA document is considered to be retroactive. In other words, the document is indicating a need to change past payroll as well as future payroll.

When this situation occurs, the net funding amounts are split into two columns. One column contains the amount for payroll that has already been processed, the other column contains the amount of payroll yet to be paid.

Following are the facts from the example screen shot from the EPA system below:

- The employee earns $1000 a month
- The employee originally was paid 100% on account AB-237237
- In April (after payroll paid May 1) has been run, the department determines they want to pay this employee 50% from account AB-300090 and 50% from the original account (AB-237237).
The effects of this change are:

- Annually, account AB-300090 is now going to fund an additional $6000.00.
- Annually, account AB-237237 is going to fund $6000.00 less of this employee pay for the year.
- Based on an effective date of this form 500 on 9/1, the full annual amount is equal to the amount based on the effective date.
- Of the $6000.00, only $2500.00 pertains to payroll yet to be paid. $3500.00 pertains to payroll that has already been processed (this is reflected in the “Past/Corr Net Amt” Column).
- If the department wishes to move the expense for payroll that has already been processed, they will need to submit payroll correction in the amount of $3500.00 to do so.

Impact to Encumbrances

With this new payroll encumbrance system, encumbrances will only be adjusted for payroll that is yet to occur. In this example, no encumbrances will be put on the accounts for the $3500.00. When the payroll expense correction is processed in FAMIS, these transactions will not adjust or liquidate the encumbrance.

3.8 Automated Adjustments

The premise behind the automated adjustment system, is that whatever the current status of the position in BPP should be reflected in the remaining encumbrance in FAMIS. If for any reason, the FAMIS payroll encumbrance system has an amount that is greater than the amount reflected in the BPP system, the amounts in FAMIS should be automatically adjusted.
The automated adjustment process will be run once a month. Changes to the encumbrances will be reflected on screens 755 and 756. The batch program FBPR945 runs this process.

4 Processes
The new payroll encumbrance system will impact all TAMUS agencies using FAMIS that encumber payroll expenditures – including longevity, employee benefits, and wage employees.

4.1 Daily Form 500 processing
The current daily process that performs encumbrance and budget entries will be updated in the following ways:

- New iterations in the BPP budget created by the EPA module will not be processed in the daily form 500 program. These actions will now take place online as the EPA is approved.
- Screen 90 will no longer be updated. It will be replaced by screens 755 through 758.
- The new programs / processes will be named FBPR910 and FBPR915.
- Net funding will also be visible in Canopy on the PIN display page

4.2 Online posting from the EPA system.
- Iterations in BPP created by the EPA system will be posted to FAMIS by the EPA system as each document posts.
- They will be visible immediately on screens 755 through 758
- Note - during the start of the fiscal year, before the Initial budget is loaded, the encumbrances will not post to FAMIS in real time. Once the initial budget is loaded, the transactions will be caught up by production control at that time.

4.3 Initial Budget load.
- The Salary Encumbrances will initially be loaded by new FAMIS program FBYR905. This program will initialize screen 755 for each PIN.
- Salary encumbrances will be loaded in summary to the FAMIS system.

4.4 Salary Savings
- The change to the salary savings process will very slight.
- In addition to posting encumbrance adjustment to screen 21, the system will post the salary encumbrance adjustment to the new tables viewed by screens 755-758.

4.5 Adjustments.
- Departments (if authorized) will be able to manage encumbrances for wage positions (or blanket wage encumbrances) on screen 754 in FAMIS.
If the operator wants to maintain encumbrances at the PIN level, the user will enter the wage PIN number and the FAMIS account number at the top of the screen.

If the operator wants to encumber benefits at the blanket level, the operator will place a “Y” in the blanket field.

The operator simply enters the amount they want to adjust the encumbrance by, and then presses PF5 to post the transaction.

5 On-line Screens

5.1 Screen 755 – Payroll encumbrances by PIN

This screen allows the operator to inquire into the current balances of encumbrances for a PIN. It will display the encumbrance across all campus codes. Simply enter the PIN number at the top of the screen, and the balances will be displayed.

To view the blanket encumbrances:

- For Wages enter X999999999 (where X is the work station code)
- For Budgeted blanket encumbrances enter X999999 (where X is the work station).

Selection of a row on this screen will transfer you to screen 756 to view the detail activity on this PIN and account.
5.2 Screen 756 – Payroll encumbrances transactions by PIN

This screen allows the operator to view all the detail activity for this PIN for the selected account. If the amounts are positive, the encumbrance was increased. Reductions of encumbrances are reflected with negative amounts. The description will normally display the occupant at the time of the action.

At the top of the screen both the PIN and the account number are required.

Section 3.2.1. provides a description of the transaction types.

5.3 Screen 757 – Payroll encumbrances by PIN.

*** Press ENTER To View More Encumbrances ***
Screen 757 is the inverse view of screen 755. At the top of the screen you simply enter an account, and this screen will display all PIN’s with current encumbrances on that account.

Blanket and wage encumbrances will be included in the display.

Select of a particular PIN will transfer control to screen 756 to display activity for that particular PIN and account.

6 Security

Security requirement for the new online screens detailed in a separate document available from FAMIS.