

The Encumbrance Process

HRMS encumbers payments the evening that transaction was entered. As changes occur throughout the year, encumbered amounts change and move money in and out of the encumbered balance using the accounts and sourcing instructions on the Sources page.

The following payments are encumbered:

- Certain earnings, such as regular pay, additional pay, academic year pay, etc, are encumbered for all monthly employees and those bi-weekly employees who have standard hours over zero. Appendix A is attached which shows for each earnings code whether it is encumbered.
- In addition, annuity, social security, other fringe, and dependent tuition are calculated and encumbered for those earnings codes designated as being encumbered.

Departmental funds (non-grant) are calculated as follows:

- The compensation rate on Job and amounts on Additional Pay are calculated for each unpaid payroll, starting with the current pay period and ending on the last pay period of the fiscal year. Amounts are prorated for new people hired or added mid-pay period, salary changes, and when new secondary jobs are created mid-pay period. Appendix B shows an example of pro-ration for a salary change.
- Earnings for each pay period are then applied to the sources in effect for that pay period. Sources using flat amounts are encumbered first in priority sequence. Any remaining amount is then distributed to sources that specify percentages. For a source to be in effect for a pay period, the source start date must precede the pay period end date, and the funding end date must come after the pay period beginning date.

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- Note that changes to the sourcing page made effective mid-pay period do prorate. Appendix C for a mid period sourcing explanation.
- Annuity, social security, other fringe and dependent tuition fringe are calculated for each pay period and are distributed to the accounts in the same proportion as the earnings for which these apply.
- Amounts are then totaled for each account by fiscal year. Encumbrance totals for each account are then compared to the amounts encumbered on the previous run. Differences are sent to FIS as encumbrance changes.

Calculations for encumbered amounts are different for grants in that:

- Encumbrances for grants can cross fiscal years. Grants are encumbered through the fund or source end date, or up to 12 months (26 pay periods for bi-weekly) from the begin date of the earliest pay period encumbered, whichever comes first. (Non-grants are encumbered through the end of the fiscal year.)
- The fund end date limits a grant encumbrance. The encumbered amount will automatically be extended if the fund end date is extended on the FIS account profile. (Non-grants are limited by the end of the fiscal year and are encumbered separately for each fiscal year.) If the fund end date is not extended, users must enter new source prior to distribution to properly distribute pay for that pay period. Encumbrances will stop based on the current Fund End Date. Encumbrances will then recalculate based on the new sourcing entered.

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This section summarizes the Business rules used in the calculation of encumbered amounts:

- Only earnings codes that are flagged for encumbrance are included in the calculation.
- If a source has a fund end date (grant), the pay periods are encumbered to the fund end date or a maximum of 1 year. Source end dates which precede the fund end date or end of the fiscal year will limit the encumbrance to pay periods up to that end date.
- If a source has no fund end date (non-grant), pay periods encumbered are limited to the end of the fiscal year.
- Jobs with a bi-weekly pay group and with zero standard hours are not encumbered.
- Encumbered bi-weekly earnings are prorated at year end, when only a portion of the bi-weekly pay period falls in the current fiscal year. This is how an encumbered amount is adjusted when this happens:
 - Pay Period Begin Date: 06/22/2003
 - Pay Period End Date: 07/05/2003
 - End of Fiscal Year: 06/30/2003
 - # of Work Days in Pay Period: 10
 - # of Work Days till Fiscal Year End: 6
 - Per Pay Period Earnings: \$1,000
 - Calculation: $6 \text{ days} / 10 \text{ days} = .60 \times \$1,000 = \$600$ encumbered in Fiscal Year 04

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- Monthly and bi-weekly employees sourced to grants that end mid-pay period will encumber through that fund end date using the number of workdays completed to fund end date (See Appendix D for an example of this pro-ration calculation). However, if the department changes the sources to be effective the beginning of the pay period, HRMS will assume that the new sources have been correctly specified and no pro-ration will take place even if the end date is within that pay-period unless new sources are entered to replace the ones ending within the pay-period. The new encumbered amount will be calculated through the new funding end date **only** if it is after the end of the pay-period.
- If a person's payment is changed during the pay period, the new and old payment amounts are prorated based on the number of workdays each was in effect (See Appendix B for an example of this type of pro-ration calculation).
- Annuity, social security, other fringe and dependent tuition are calculated only for earnings codes to which they apply.
- The Social Security earnings calculation applies the FICA limit and reduces earnings where before tax items (such as annuity and parking deductions) exist.

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This section describes when the encumbrance process runs:

- Each night to recalculate encumbrances for any individual with a change in job, additional pay or sources. Changes to encumbered amounts will then hit FIS on the next business day.
- When the next workday is payday, all encumbrances for the pay group affected are recalculated to remove the data from that pay period for that pay date. The result is a reduction in encumbrance for that pay period which will be processed into FIS just ahead of the distribution module containing all of the charges for that pay date. The final effect in FIS is to reduce encumbrance and increase free balance; the distribution process then reduces free balance and increases actual expenses. (You will only see the final results from all these processes.)
- On the evening of the last day of the fiscal year, to zero out all non-grant encumbrances.

For year end processing:

- On non-grant accounts, the encumbrance process automatically begins encumbrance calculations for the new fiscal year on May 1. (This means that non-grant encumbrances are calculated and kept separately by fiscal year in both HRMS and FIS. The “old” fiscal year budget is also carried forward into the new fiscal year so that “old” year encumbrances continue but do not affect the new fiscal year’s free balance amounts.)

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- Calculations for the current fiscal year continue until July 1 for both grants and non-grant accounts. July 1 is the last day that encumbrance changes affect the old fiscal year.
- Non-grant encumbrances are reduced to zero for the old fiscal year on July 1 (the morning of the 1st workday of the new fiscal year.)

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This section describes how various changes on HRMS pages affect encumbrance:

Additional Pay

- Using end dates on additional pay affects encumbrances. The system will pro-rate and encumber payments based on the date in the End Date field. If users also enter a Source End Date on the Sources page that is mid-pay period (or there is a mid-pay period Fund End Date), the system will pro-rate the encumbered amount again and the person will be “under-encumbered.” To avoid this, enter another set of sources beginning the day after the Fund End Date.
- When no end date is entered on Additional Pay, the amount will be encumbered through the end of the fiscal year, or through the Source End or Fund End dates on the Sources page, whichever is earlier.

Changes on Job

- The actions of “Hire”, “Add a Non-employee”, “Transfer”, “Add Concurrent Job”, or “Data Change/Pay Group Change” set the source date on Sources to match the effective date on Job. These actions cause encumbrances to pro-rate using the accounts and sourcing instructions on the Sources **page**.
- Changes to Job Code, where Role and Type change, affect sources. Role and Type changes control which budget/object codes can be sourced in the pay period in which the change occurs.
- Changes to Compensation or Additional Pay will affect encumbered amounts.

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The following transactions in HRMS also affect encumbered amounts.

- **If there is more money encumbered than you expect, check for these actions:**
 - Employees reaching the 2 year eligibility for University 403(b) contribution
 - New people in the department (payroll activity)
 - Changes in who is sourced to an account
 - Sourcing changes affect account or change End Dates
 - Additional Pay set up
 - Compensation increases on Job
 - Changes in Health Insurance coverage
 - Returns from SWB
 - PCT's that move money to an account

- **If there is less money encumbered than you expect, check for these actions:**
 - Someone leaves the department via Transfer, Termination, Completion
 - Compensation decreases on Job
 - Changes in who is sourced to an account
 - Sourcing changes affect accounts or change End Dates
 - Additional Pay stops
 - Changes in Health Insurance coverage
 - Someone went out on SWB
 - PCT's that take money from an account

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Appendix A

Listed below are current earnings codes with “Y” to indicate encumbered or “N” to indicate not encumbered.

<u>ERNCD</u>	<u>DESCR</u>	<u>Encumbered?</u>
4BT	DefComp457 (b) – TIAA (-)	N
4BV	DefComp457 (b) – VANG (-)	N
4FT	DefComp457 (f) – TIAA (-)	N
4FV	DefComp457 (f) – VANG (-)	N
ACA	Academic Pay Adjustment	N
BLD	Blood/Other Donation	N
CNV	Conversion Only (No Earn Prog)	N
DBL	Double Time	N
DBS	457 Bonus Deferral to Scudder	N
DBT	457 Bonus Deferral to TIAA (-)	N
DCT	TIAA Deferred Com (-)	N
DFS	457 Deferral to Scudder (-)	N
DFT	457 Deferral to TIAA (-)	N
DSS	457 Distribution from Scudder	N
DST	457 Distribution from TIAA	N
DSS	457 Distribution from Scudder	N
DST	457 Distribution from TIAA	N
EAH	ER Asstd Housing – Txbl Value	N
ENP	Earned Not Paid – Academic Year	N
LUM	Lump Sum in Lieu of Raise	N
MIS	Miscellaneous Other (In PARS)	N

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NPD	Non-WU Salary (Nonpaid)	N
ONC	On-Call/Beeper Pay	N
OTR	Overtime at Regular Rate	N
OVT	Overtime at Time & a Half	N
PRI	Prize/Award – Cash Payment	N
PRZ	Prize/Award – Txbl Val – No Pay	N
RLN	Relocation – Nontxbl Val Only	N
RLT	Relocation – Txbl Reimb	N
RLV	Relocation – Txbl Val Only	N

Appendix A - Continued

<u>ERNCD</u>	<u>DESCR</u>	<u>Encumbered?</u>
RSS	Research Subject	N
SEV	Severance Pay (Non Ben Elig)	N
SRN	SRNA Loan	N
TAX	Reduce FICA Taxable	N
TER	Payment in Lieu of Notice	N
TUN	Tuition – Non Txbl Reimbursement	N
TUR	Tuition – Txbl Reimbursement	N
TUV	Tuition – Txbl Value Only	N
UCT	Univ Contribution Nonwage – Txbl	N
VAS	VA Salary (Non-Paid)	N
VCA	Vacation Accrual Transfer	N
100	Shift Differential \$1.00	Y
104	Shift Differential \$1.04	Y
125	Shift Differential \$1.25	Y
200	Shift Differential \$2.00	Y

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400	Shift Differential \$4.00	Y
ADJ	Adjunct Pay	Y
ADV	Advisor Pay	Y
BON	Bonus/Incentive	Y
CON	Consultant Fees	Y
CRG	Regular Pay - - Academic Year	Y
ENP	Earned Not Paid – Academic Year	Y
HON	Honorarium	Y
INC	Incidental Other (Not in PARS)	Y
LEC	Lecture Fees	Y
MOO	Moonlighting	Y
OLD	Overload Pay	Y
PNE	Paid Not Earned – Academic Year	Y
PEN	Pension Pmnt (Grandfathered)	Y
PRO	Project Pay	Y
REG	Regular	Y
RES	Research – Incidental	Y

Appendix A - Continued

<u>ERNCD</u>	<u>DESCR</u>	<u>Encumbered?</u>
RGA	Regular – Add'l (Annuity Elig)	Y
S20	Shift Differential \$.20	Y
S25	Shift Differential \$.25	Y
S30	Shift Differential \$.30	Y
S35	Shift Differential \$.35	Y
S50	Shift Differential \$.50	Y

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S51	Shift Differential \$.51	Y
S53	Shift Differential \$.53	Y
S75	Shift Differential \$.75	Y
S76	Shift Differential \$.76	Y
S86	Shift Differential \$.86	Y
S88	Shift Differential \$.88	Y
SAL	Salary Continuance (Ben Elig)	Y
SHA	Stipend for Health Allowance	Y
SLE	Stipend for Living Expenses	Y
SLT	Stipend for LTD	Y
SOG	Student Organization	Y
SPO	Spousal Travel – Txbl Value	Y
SRR	Summer Research	Y
SRS	Summer School	Y
TEM	Temp Pay Adjustment	Y
UNC	University College	Y
VAP	Vacation Payout on Termination	Y

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Appendix B – Example Mid Pay-period Salary Changes for Calendar Year 2003

<u>Employee</u>	<u>Employee Type</u>	<u>Effective Payroll Date</u>	<u>Old Salary</u>	<u>New Salary</u>	<u>Effective Date New Salary</u>	<u>Calculation of Salary for Pay Period</u>	<u>Salary Encumbered</u>
Bob Smith	Monthly	February	1000	1000	Not changed	$20/20 * 1000 =$	\$1000.00
Bob Smith	Monthly	March	1000	1200	3/10/03	$(5/21 * 1000) + (16/21 * 1200) =$	\$1152.39
Bob Smith	Monthly	April	1200	1200	Not changed	$22/22 * 1200 =$	\$1200.00
Liz Clay	Bi-weekly	February 16 to March 1	1000	1000	Not changed	$10/10 * 1000 =$	\$1000.00
Liz Clay	Bi-weekly	March 2-15	1000	1200	3/5/03	$(2/10 * 1000) + (8/10 * 1200) =$	\$1160.00
Liz Clay	Bi-weekly	March 16-29	1200	1200	Not changed	$10/10 * 1200 =$	\$1200.00

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Appendix C – Mid Pay Period Sourcing Explanation

Source dates will now be allowed to be anytime during the pay period and future dates. Distribution, Encumbrance and Accruals will now prorate the compensation amount by using the source effective date to calculate the workdays in the pay period.

Formula for Prorating Mid Pay Period Sources:

Workdays for Source / # Workdays in the Pay Period * Pay Period Amount.

Examples:

Bi-Weekly Example for Pay Begin Date Feb 13, 2005. A person has source changes on Feb 20:

Job:

<u>Situation</u>	<u>Emplid</u>	<u>Effdt</u>	<u>Compensation</u>
Current Job	000001	07-01-04	1,000

Source Changes:

<u>Situation</u>	<u>Emplid</u>	<u>Effdt</u>	<u>Acct</u>	<u>Percent</u>
Existing Sources	000001	07-01-04	12-1000-0	100
Changed Accts	000001	02-20-05	12-1000-5	100

Bi-Weekly Distribution for Pay End Date of Feb. 26, 2005:

<u>Job Effdt</u>	<u>Job Rate</u>	<u>Source Effdt</u>	<u>Work Days</u>	<u>Amount</u>	<u>Acct</u>
07-01-04	1,000	07-01-04	5	500	12-1000-0
07-01-04	1,000	02-20-05	5	500	12-1000-5

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Appendix D – Grants Ending Mid-Pay Period for Calendar Year 2003

Employee	Employee Type	Effective Payroll Period	Salary	Effec Fund End Date	Calculation of Salary for Pay Period	Salary Encumbered
Bob Smith	Monthly	March	1000	3/10/03	$5/21 * 1000 =$	\$238.10
Liz Clay	Bi-Weekly	March 2-15	1000	3/05/03	$(2/10 * 1000) =$	\$200.00