2.0 Appendix B – Enhancement Functional Design

ADML ID	**1834**
ADML Description	**Treasury Interest Allocation View**
ADML Tech #	**1834**

2.1 Background

2.1.1 Functional Requirements

Several allocations are needed by the Treasury for the calculation and recording of (i) interest income due to various funds and external parties, and (ii) investment administration fees due from those funds and parties. These allocations must calculate the amount of interest income due *to* and administration fee due *from* each investor, and create the necessary accounting entries on the books of the Treasury business unit and affected agency business units.

In the first – and most complex – allocation, the amount to be allocated (the 'pool') is the balance in the 'Interest Due to Participants' account within the Treasury business unit. This amount is allocated across various Account/Fund combinations on the basis of the balances in various Treasury liability accounts (the 'basis accounts'), with the ChartField values in the resulting accounting entries being dependent upon the particular Account/Fund combination relating to the allocated interest amount(s). The following table illustrates this concept: (*ChartField values shown are for illustration purposes only – actual values may be different*)

Pool Account	ChartField values used on allocation accounting entry		
	Account	Fund Affiliate	Agency ChartField1
PA1	TA1	< none >	< from the investment liability balance >
PA2	TA2	1000001	< none >
PA3	TA2	1000001	< none >
PA4	TA2	1000001	< none >
PA5	TA2	1000001	< none >
PA6	TA3	< from the investment liability balance >	< none >

Some of the ChartField values used to determine the pool and basis amounts in these allocations may change over time. It is important that a nontechnical user be able to easily configure the new ChartField values without having to be familiar

with the maintenance of allocation definitions. Therefore, this design relies on the extensive use of *ChartField Attributes* to designate the ChartField values (primarily Accounts) used by the allocations.

2.1.2 Delivered Functionality

The delivered allocation functionality allows the ChartField values used on the allocation generated accounting entries to be specified in one of three ways:

- From the balance(s) used as the allocation's *Pool*
- From the balance(s) used as the allocation's *Basis*
- Stored within the allocation definition itself (constants)

In addition, when using a Ledger as the source of the pool or basis amounts used by an allocation, the ChartField criteria must be entered directly into the allocation definition.

2.1.3 Gap Description

Because the ChartField values needed on the allocation accounting entries vary according to the ChartField values used in the Basis, none of the three delivered mechanisms described above for specifying ChartField values can work for this allocation if a Ledger is used for the Pool and Basis.

2.2 Description of New Functionality

2.2.1 New SQL Views

To deal with the gaps described above, several new SQL views are needed. These views will be designed in such a way that they return the same fields as does a Ledger, but with special logic to (i) limit the rows returned to those having the desired characteristics (usually specified Accounts), and (ii) replace certain fields from the underlying Ledgers with different fields and/or calculated values.

The seven views needed are listed below, including in which allocation each will be used and in what capacity:

Ref	Allocation	Usage
1	Allocation of Treasury interest earned to investing funds and entities	Basis
2	Allocation of investment interest from the 'CRA' balance to individual CRA participants	Basis
3	Record investment interest as (1) an increase in invested principal, and (2) interest revenue on the books of the investing business units	Basis
4	Record investment interest as (1) an increase in invested principal, and (2) interest revenue on the books of the investing business units	Pool
5	Allocate all of General Revenue related investment interest to the Dept. of Financial Services	Pool
6	Give the Dept. of Financial Services credit for the investment administration fees due relating to the SPIA participants.	Pool
7	Charges investing agencies for Treasury's investment administration fees, and gives the related revenue to the Dept. of Financial Services	Pool

The details of each of the seven views is described in the matrix below. The 'Special Field Mapping' columns indicate when a view should, for a certain field, return something *other than* the same field in the underlying table.

Ref	Source Ledger	Selection Criteria		Special Field Mapping	
		ChartField	Criteria	Source	Output Field
1	ADB_MTD	Account	Has values for the attributes 'INT_ALLOC_ACCT' and 'INT_ALLOC_FUND'	INT_ALLOC_ACCT attribute value	Account
				INT_ALLOC_FUND attribute value	Fund
2	ADB_MTD	Account	Has a value for the 'CR_INV_PRINCPL' attribute	None	
		ChartField1	Has a value with a length of 4 bytes that is not equal to '9999' or '9998'		
3	ADB_MTD	Account	Has a value for the 'TF_INV_PRINCPL' attribute	AFFILIATE_INTRA2 (Budget Entity Affiliate)	Budget Entity
				AFFILIATE_INTRA1 (Fund Affiliate)	Fund
				<blank>	Budget

Ref	Source Ledger	Selection Criteria		Special Field Mapping	
		ChartField	Criteria	Source	Output Field
					Entity Affiliate
				<blank>	Fund Affiliate
4	ACTUALS	Account	Has a value for the 'TF_INV_INTEREST' attribute	AFFILIATE_INTRA2 (Budget Entity Affiliate)	Budget Entity
				AFFILIATE_INTRA1 (Fund Affiliate)	Fund
				<blank>	Budget Entity Affiliate
				<blank>	Fund Affiliate
5	ACTUALS	Account	Has a value for the 'GR_INV_INTEREST' attribute	AFFILIATE_INTRA2 (Budget Entity Affiliate)	Budget Entity
				AFFILIATE_INTRA1 (Fund Affiliate)	Fund
				<blank>	Budget Entity Affiliate
				<blank>	Fund Affiliate
6	ACTUALS	Account	Has a value for the 'SP_INV_PRINCPL' attribute	AFFILIATE_INTRA2 (Budget Entity Affiliate)	Budget Entity
				AFFILIATE_INTRA1 (Fund Affiliate)	Fund
				<blank>	Budget Entity Affiliate
				<blank>	Fund Affiliate
7	ACTUALS	Account	Has a value for the 'TF_INV_PRINCPL' attribute.	AFFILIATE_INTRA2 (Budget Entity Affiliate)	Budget Entity
				AFFILIATE_INTRA1 (Fund Affiliate)	Fund
				<blank>	Budget Entity Affiliate
				<blank>	Fund Affiliate

2.3 Setup/Control Data

2.3.1 Account Attributes

As described above, additional configuration of selected Account values is needed to identify Accounts which are used as criteria for the Treasury allocations. This additional configuration takes the form of linking one or more Attributes with each of the designated Accounts according to the desired usage of those Accounts:

Attribute	Attribute Value	Assign To
INT_ALLOC_ACCT	00321018	Treasury Accounts whose balances earn interest that is payable to the General Revenue Fund.
	00321021	Treasury Accounts whose balances earn

		interest that is payable to the investing Fund.
	00321024	Treasury Accounts whose balances earn interest that is payable to SPIA participants.
INT_ALLOC_FUND	GENERAL_REVENUE	Treasury Accounts whose balances earn interest that is payable to the General Revenue Fund.
	INVESTOR	Treasury Accounts whose balances earn interest that is payable to the investing Fund.
SP_INV_PRINCPL	Y	Treasury Accounts that contain investment principal balances due to SPIA participants..
TF_INV_PRINCPL	Y	Treasury Accounts that contain investment principal balances due to trust funds.
CR_INV_PRINCPL	Y	Treasury Accounts that contain investment principal balances due to CRA participants.
TF_INV_INTEREST	Y	Treasury Accounts that contain investment interest payable balances due to trust funds.
GR_INV_INTEREST	Y	Treasury Accounts that contain investment interest payable balances due to the General Revenue Fund.

2.4 Application Changes

2.4.1 Records

For each of the new views described above, a new PeopleTools record definition is needed:

Ref	Record Name	SQL
1	FL_INT_ALLOC_VW	SELECT ADB.BUSINESS_UNIT , ADB.LEDGER , ATTR_ACCT.CF_ATTRIB_VALUE AS ACCOUNT , ADB.ALTACCT , ADB.DEPTID , ADB.OPERATING_UNIT , ADB.PRODUCT , ADB.FUND_CODE , ADB.CLASS_FLD , ADB.PROGRAM_CODE , ADB.BUDGET_REF , DECODE(ATTR_FUND.CF_ATTRIB_VALUE, 'GENERAL_REVENUE', '43000', ADB.AFFILIATE) AS AFFILIATE , DECODE(ATTR_FUND.CF_ATTRIB_VALUE, 'GENERAL_REVENUE', '1000001', 'INVESTOR', ADB.AFFILIATE_INTRA1, ' ') AS AFFILIATE_INTRA1 , DECODE(ATTR_FUND.CF_ATTRIB_VALUE, 'GENERAL_REVENUE', '43100300', 'INVESTOR', ADB.AFFILIATE_INTRA2, ' ') AS AFFILIATE_INTRA2 , ADB.CHARTFIELD1 , ADB.CHARTFIELD2 , ADB.CHARTFIELD3 , DECODE(ATTR_FUND.CF_ATTRIB_VALUE, 'GENERAL_REVENUE',' ', ADB.PROJECT_ID) AS PROJECT_ID , ADB.CURRENCY_CD , ADB.FISCAL_YEAR

Ref	Record Name	SQL
		, ADB.ACCOUNTING_PERIOD , ADB.PERIOD_SEQUENCE , ADB.POSTED_TOTAL_AMT , ADB.POSTED_TOTAL_EBAL , ADB.POSTED_TOTAL_AGGR , ADB.NUMBER_OF_PERIODS , ADB.PROCESS_INSTANCE FROM PS_LEDGER_ADB_MTD ADB , PS_CF_ATTRIB_TBL ATTR_ACCT , PS_CF_ATTRIB_TBL ATTR_FUND , PS_SET_CNTRL_REC SCR WHERE ADB.LEDGER = 'ADB_MTD' AND ADB.BASE_CURRENCY = ADB.CURRENCY_CD AND ADB.ACCOUNT = ATTR_ACCT.CHARTFIELD_VALUE AND ADB.ACCOUNT = ATTR_FUND.CHARTFIELD_VALUE AND ADB.BUSINESS_UNIT = SCR.SETCNTRLVALUE AND SCR.RECNAME = 'ATTRIBUTE_TBL' AND SCR.SETID = ATTR_ACCT.SETID AND SCR.SETID = ATTR_FUND.SETID AND ATTR_ACCT.FIELDNAME = 'ACCOUNT' AND ATTR_FUND.FIELDNAME = 'ACCOUNT' AND ATTR_ACCT.CF_ATTRIBUTE = 'INT_ALLOC_ACCT' AND ATTR_FUND.CF_ATTRIBUTE = 'INT_ALLOC_FUND' AND %EffdtCheck(CF_ATTRIB_TBL, ATTR_ACCT, %CURRENTDATEIN) AND %EffdtCheck(CF_ATTRIB_TBL, ATTR_FUND, %CURRENTDATEIN)
2	FL_ALLC_ADB1_VW	SELECT ADB.BUSINESS_UNIT , ADB.LEDGER , ADB.ACCOUNT , ADB.ALTACCT , ADB.DEPTID , ADB.OPERATING_UNIT , ADB.PRODUCT , ADB.FUND_CODE , ADB.CLASS_FLD , ADB.PROGRAM_CODE , ADB.BUDGET_REF , ADB.AFFILIATE , ADB.AFFILIATE_INTRA1 , ADB.AFFILIATE_INTRA2 , ADB.CHARTFIELD1 , ADB.CHARTFIELD2 , ADB.CHARTFIELD3 , ADB.PROJECT_ID , ADB.CURRENCY_CD , ADB.FISCAL_YEAR , ADB.ACCOUNTING_PERIOD , ADB.PERIOD_SEQUENCE , ADB.POSTED_TOTAL_AMT , ADB.POSTED_TOTAL_EBAL , ADB.POSTED_TOTAL_AGGR , ADB.NUMBER_OF_PERIODS , ADB.PROCESS_INSTANCE FROM PS_LEDGER_ADB_MTD ADB , PS_CF_ATTRIB_TBL ATTR , PS_SET_CNTRL_REC SCR WHERE ADB.LEDGER = 'ADB_MTD' AND ADB.BUSINESS_UNIT = 'TREAS' AND ADB.BASE_CURRENCY = ADB.CURRENCY_CD AND ADB.ACCOUNT = ATTR.CHARTFIELD_VALUE AND ADB.BUSINESS_UNIT = SCR.SETCNTRLVALUE AND SCR.RECNAME = 'ATTRIBUTE_TBL' AND SCR.SETID = ATTR.SETID AND ATTR.FIELDNAME = 'ACCOUNT' AND ATTR.CF_ATTRIBUTE = 'CR_INV_PRINCPL' AND LENGTH(ADB.CHARTFIELD1) = 4 AND ADB.CHARTFIELD1 not in (‘9998’,’9999’)

Ref	Record Name	SQL
		AND %EffdtCheck(CF_ATTRIB_TBL, ATTR, %CURRENTDATEIN)
3	FL_ALLOC_ADB_VW	SELECT ADB.BUSINESS_UNIT , ADB.LEDGER , ADB.ACCOUNT , ADB.ALTACCT , ADB.DEPTID , ADB.AFFILIATE_INTRA2 AS OPERATING_UNIT , ADB.PRODUCT , ADB.AFFILIATE_INTRA1 AS FUND_CODE , ADB.CLASS_FLD , ADB.PROGRAM_CODE , ADB.BUDGET_REF , ADB.AFFILIATE , ' ' AS AFFILIATE_INTRA1 , ' ' AS AFFILIATE_INTRA2 , ADB.CHARTFIELD1 , ADB.CHARTFIELD2 , ADB.CHARTFIELD3 , ADB.PROJECT_ID , ADB.CURRENCY_CD , ADB.FISCAL_YEAR , ADB.ACCOUNTING_PERIOD , ADB.PERIOD_SEQUENCE , ADB.POSTED_TOTAL_AMT , ADB.POSTED_TOTAL_EBAL , ADB.POSTED_TOTAL_AGGR , ADB.NUMBER_OF_PERIODS , ADB.PROCESS_INSTANCE FROM PS_LEDGER_ADB_MTD ADB , PS_CF_ATTRIB_TBL ATTR , PS_SET_CNTRL_REC SCR WHERE ADB.LEDGER = 'ADB_MTD' AND ADB.BUSINESS_UNIT = 'TREAS' AND ADB.BASE_CURRENCY = ADB.CURRENCY_CD AND ADB.ACCOUNT = ATTR.CHARTFIELD_VALUE AND ADB.BUSINESS_UNIT = SCR.SETCNTRLVALUE AND SCR.RECNAME = 'ATTRIBUTE_TBL' AND SCR.SETID = ATTR.SETID AND ATTR.FIELDNAME = 'ACCOUNT' AND ATTR.CF_ATTRIBUTE = 'TF_INV_PRINCPL' AND %EffdtCheck(CF_ATTRIB_TBL, ATTR, %CURRENTDATEIN)
4	FL_ALLOC_LED_VW	SELECT LED.BUSINESS_UNIT , LED.LEDGER , LED.ACCOUNT , LED.ALTACCT , LED.DEPTID , LED.AFFILIATE_INTRA2 AS OPERATING_UNIT , LED.PRODUCT , LED.AFFILIATE_INTRA1 AS FUND_CODE , LED.CLASS_FLD , LED.PROGRAM_CODE , LED.BUDGET_REF , LED.AFFILIATE , ' ' AS AFFILIATE_INTRA1 , ' ' AS AFFILIATE_INTRA2 , LED.CHARTFIELD1 , LED.CHARTFIELD2 , LED.CHARTFIELD3 , LED.PROJECT_ID , LED.BOOK_CODE , LED.GL_ADJUST_TYPE , LED.CURRENCY_CD , LED.STATISTICS_CODE , LED.FISCAL_YEAR , LED.ACCOUNTING_PERIOD , LED.POSTED_TOTAL_AMT , LED.POSTED_BASE_AMT

Ref	Record Name	SQL
		, LED.POSTED_TRAN_AMT , LED.BASE_CURRENCY FROM PS_LEDGER LED , PS_CF_ATTRIB_TBL ATTR , PS_SET_CNTRL_REC SCR WHERE LED.LEDGER = 'ACTUALS' AND LED.BUSINESS_UNIT = 'TREAS' AND LED.BASE_CURRENCY = LED.CURRENCY_CD AND LED.ACCOUNT = ATTR.CHARTFIELD_VALUE AND LED.BUSINESS_UNIT = SCR.SETCNTRLVALUE AND SCR.RECNAME = 'ATTRIBUTE_TBL' AND SCR.SETID = ATTR.SETID AND ATTR.FIELDNAME = 'ACCOUNT' AND ATTR.CF_ATTRIBUTE = 'TF_INV_INTEREST' AND %EffdtCheck(CF_ATTRIB_TBL, ATTR, %CURRENTDATEIN)
5	FL_ALLC_LED1_VW	SELECT LED.BUSINESS_UNIT , LED.LEDGER , LED.ACCOUNT , LED.ALTACCT , LED.DEPTID , LED.AFFILIATE_INTRA2 AS OPERATING_UNIT , LED.PRODUCT , LED.AFFILIATE_INTRA1 AS FUND_CODE , LED.CLASS_FLD , LED.PROGRAM_CODE , LED.BUDGET_REF , LED.AFFILIATE , ' ' AS AFFILIATE_INTRA1 , ' ' AS AFFILIATE_INTRA2 , LED.CHARTFIELD1 , LED.CHARTFIELD2 , LED.CHARTFIELD3 , LED.PROJECT_ID , LED.BOOK_CODE , LED.GL_ADJUST_TYPE , LED.CURRENCY_CD , LED.STATISTICS_CODE , LED.FISCAL_YEAR , LED.ACCOUNTING_PERIOD , LED.POSTED_TOTAL_AMT , LED.POSTED_BASE_AMT , LED.POSTED_TRAN_AMT , LED.BASE_CURRENCY FROM PS_LEDGER LED , PS_CF_ATTRIB_TBL ATTR , PS_SET_CNTRL_REC SCR WHERE LED.LEDGER = 'ACTUALS' AND LED.BUSINESS_UNIT = 'TREAS' AND LED.BASE_CURRENCY = LED.CURRENCY_CD AND LED.ACCOUNT = ATTR.CHARTFIELD_VALUE AND LED.BUSINESS_UNIT = SCR.SETCNTRLVALUE AND SCR.RECNAME = 'ATTRIBUTE_TBL' AND SCR.SETID = ATTR.SETID AND ATTR.FIELDNAME = 'ACCOUNT' AND ATTR.CF_ATTRIBUTE = 'GR_INV_INTEREST' AND %EffdtCheck(CF_ATTRIB_TBL, ATTR, %CURRENTDATEIN)
6	FL_ALLC_LED2_VW	SELECT LED.BUSINESS_UNIT , LED.LEDGER , LED.ACCOUNT , LED.ALTACCT , LED.DEPTID , LED.AFFILIATE_INTRA2 AS OPERATING_UNIT , LED.PRODUCT , LED.AFFILIATE_INTRA1 AS FUND_CODE , LED.CLASS_FLD , LED.PROGRAM_CODE , LED.BUDGET_REF

Ref	Record Name	SQL
		, LED.AFFILIATE , ' ' AS AFFILIATE_INTRA1 , ' ' AS AFFILIATE_INTRA2 , LED.CHARTFIELD1 , LED.CHARTFIELD2 , LED.CHARTFIELD3 , LED.PROJECT_ID , LED.BOOK_CODE , LED.GL_ADJUST_TYPE , LED.CURRENCY_CD , LED.STATISTICS_CODE , LED.FISCAL_YEAR , LED.ACCOUNTING_PERIOD , LED.POSTED_TOTAL_AMT , LED.POSTED_BASE_AMT , LED.POSTED_TRAN_AMT , LED.BASE_CURRENCY FROM PS_LEDGER LED , PS_CF_ATTRIB_TBL ATTR , PS_SET_CNTRL_REC SCR WHERE LED.LEDGER = 'ACTUALS' AND LED.BUSINESS_UNIT = 'TREAS' AND LED.BASE_CURRENCY = LED.CURRENCY_CD AND LED.ACCOUNT = ATTR.CHARTFIELD_VALUE AND LED.BUSINESS_UNIT = SCR.SETCNTRLVALUE AND SCR.RECNAME = 'ATTRIBUTE_TBL' AND SCR.SETID = ATTR.SETID AND ATTR.FIELDNAME = 'ACCOUNT' AND ATTR.CF_ATTRIBUTE = 'SP_INV_PRINCPL' AND %EffdtCheck(CF_ATTRIB_TBL, ATTR, %CURRENTDATEIN)
7	FL_ALLC_LED3_VW	SELECT LED.BUSINESS_UNIT , LED.LEDGER , LED.ACCOUNT , LED.ALTACCT , LED.DEPTID , LED.AFFILIATE_INTRA2 AS OPERATING_UNIT , LED.PRODUCT , LED.AFFILIATE_INTRA1 AS FUND_CODE , LED.CLASS_FLD , LED.PROGRAM_CODE , LED.BUDGET_REF , LED.AFFILIATE , ' ' AS AFFILIATE_INTRA1 , ' ' AS AFFILIATE_INTRA2 , LED.CHARTFIELD1 , LED.CHARTFIELD2 , LED.CHARTFIELD3 , LED.PROJECT_ID , LED.BOOK_CODE , LED.GL_ADJUST_TYPE , LED.CURRENCY_CD , LED.STATISTICS_CODE , LED.FISCAL_YEAR , LED.ACCOUNTING_PERIOD , LED.POSTED_TOTAL_AMT , LED.POSTED_BASE_AMT , LED.POSTED_TRAN_AMT , LED.BASE_CURRENCY FROM PS_LEDGER LED , PS_CF_ATTRIB_TBL ATTR , PS_SET_CNTRL_REC SCR WHERE LED.LEDGER = 'ACTUALS' AND LED.BUSINESS_UNIT = 'TREAS' AND LED.BASE_CURRENCY = LED.CURRENCY_CD AND LED.ACCOUNT = ATTR.CHARTFIELD_VALUE AND LED.BUSINESS_UNIT = SCR.SETCNTRLVALUE AND SCR.RECNAME = 'ATTRIBUTE_TBL' AND SCR.SETID = ATTR.SETID

Ref	Record Name	SQL
		AND ATTR.FIELDNAME = 'ACCOUNT' AND ATTR.CF_ATTRIBUTE = 'TF_INV_PRINCPL' AND %EffdtCheck(CF_ATTRIB_TBL, ATTR, %CURRENTDATEIN)

2.4.2 Pages

None needed.

2.4.3 PeopleCode

None needed.

2.4.4 Process Logic / Field Mapping

N/A

2.5 Unit Test Considerations

2.6 Miscellaneous

2.7 Assumptions / Dependencies

2.7.1 Account Attributes

As described earlier, this design is predicated upon the assignment of specific ChartField Attribute values to those (Treasury) accounts that are to be used in the allocations.