Project Titan

User Group Design Review
April 27, 2010

Document Purpose

- Present updated view of the Project Titan solution design
- This document incorporates feedback gathered from the user group during the desing review meeting held on 04/20

Contents

- Terminology
- Overall Application Architecture
- Income Statement Planning
- Balance Sheet Planning
- Detailed Salary Planning
- Funding Model
- Funding Allocations & Transfers

Terminology

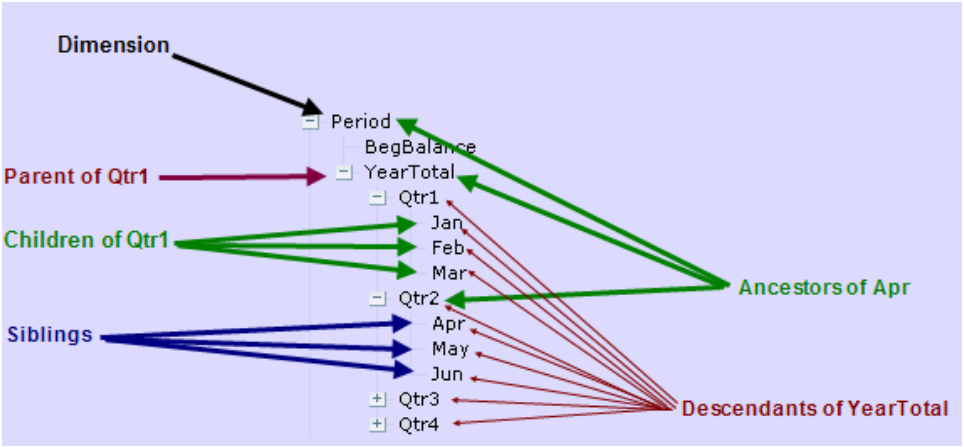
- Planning Application – A collection of related Plan Types used to meet a set of Planning needs. Plan Types within a Planning Application share certain dimensions, and the security assigned to those dimensions.
- Plan Type – A distinct set of dimensions within a Planning Application. Equates to a database in Essbase.
- Essbase – The multi-dimensional database engine at the foundation of Hyperion Planning. Hyperion Planning data is stored in Essbase.
- Workspace – The Web interface used to access Planning Applications and Reporting content built on these applications
- Dimension – A data category used to organize business data for storage and retrieval. Dimensions contain hierarchies of related members. Examples of dimensions include: Account, Department, Program and Project Grant.

Terminology

- Members – The discrete components within a dimension.
- Member Name – Typically based on a code or numeric value that represents a member. Examples might include a Department number (e.g. 160400), Account number (e.g. 640001), etc. To ensure uniqueness in member names, it is often necessary to prepend the numeric value with an alpha character representing the dimension that contains the member. (e.g. D160400).
- Member Alias – A member alias is typically a textual description of a member. The alias is generally what is displayed on a report. Commonly, the alias will include the member name in order to ensure uniqueness in member aliases. Within a Planning Application, all member names and aliases must be unique. Examples include "Wood Science – 160400" or "Office Supplies – 640001".

Terminology

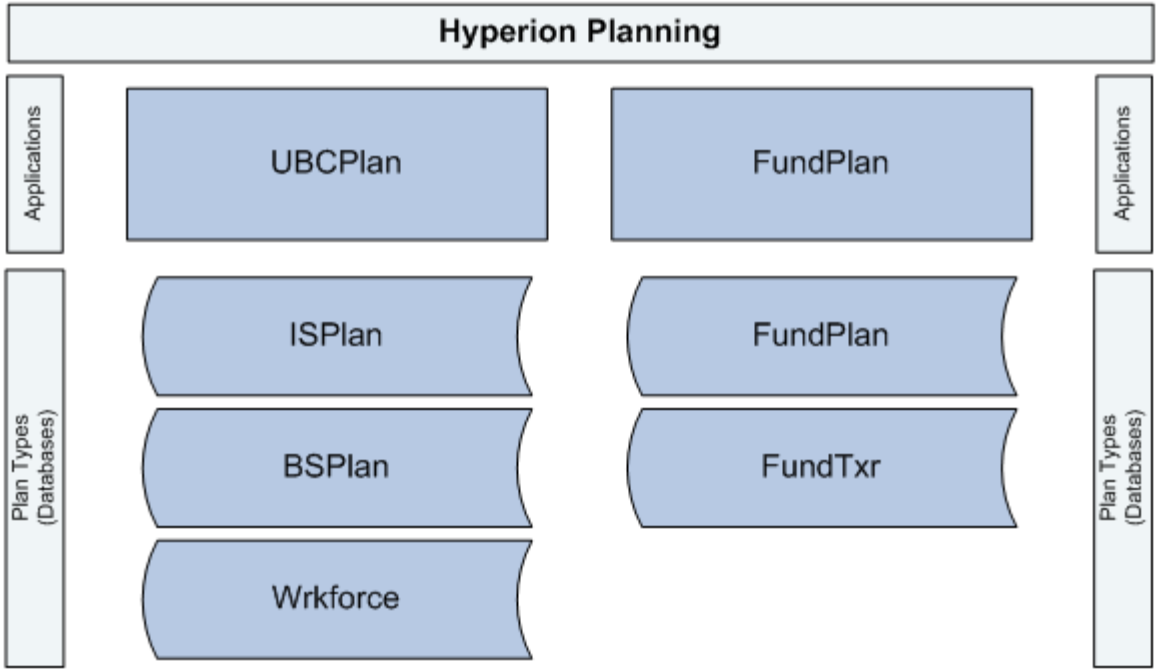
- Hierarchical Terms
  - Parent – Any member that has a child below it
  - Child – Any member that has a parent above it
  - Sibling – Members which have the same parent
  - Descendants – All members that appear below a member (at every level)
  - Ancestors – All members that appear above a member (at every level)



Overall Application Architecture

- The envisioned design includes two Hyperion Planning Applications:
  - UBCPlan – Income Statement and Balance Sheet Planning; Detailed Salary Planning by Employee and Position
  - FundPlan – New Budget Model; Funding allocations and Funding Transfers

Overall Application Architecture



Income Statement Planning

- Income Statement Planning will occur in the ISPlan Plan Type in the UBCPlan application
- Funding data will be fed from the FundPlan application
- Salary Expense data will be fed from the Wrkforce Plan Type

ISPlan - Dimensions

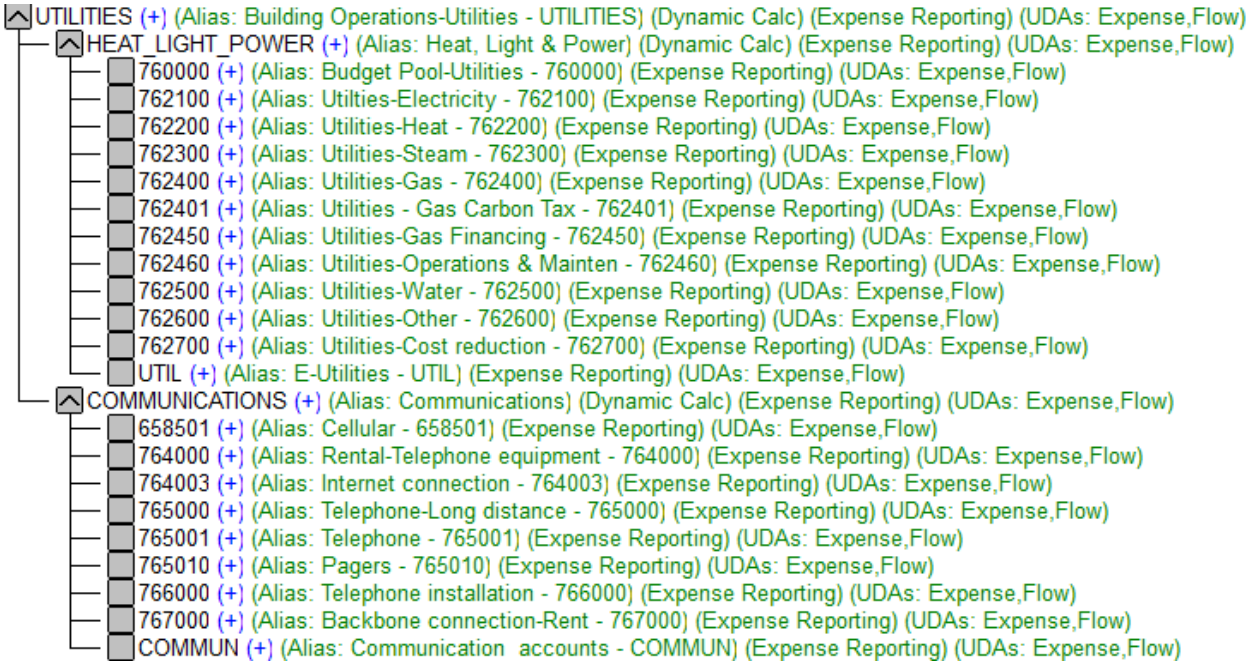
- The following dimensions will be included in the ISPlan Plan Type:
  - Account
  - Period
  - Fund
  - Department
  - Program Code
  - Project Grant
  - Fiscal Year
  - Scenario
  - Version

ISPlan – Account

- The screen shot below shows a high level representation of the expected structure of the Account dimension in this Plan Type:

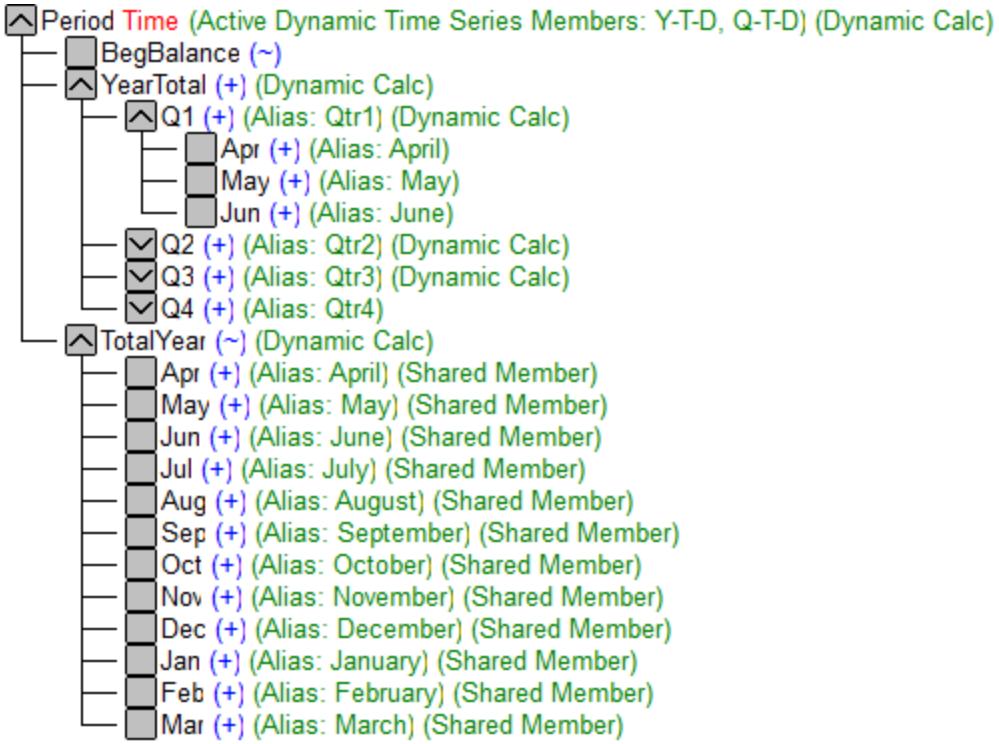
ISPlan – Account

- The "UTILITIES" segment of the hierarchy is shown below as an example of the naming conventions to be used in the hierarchy:



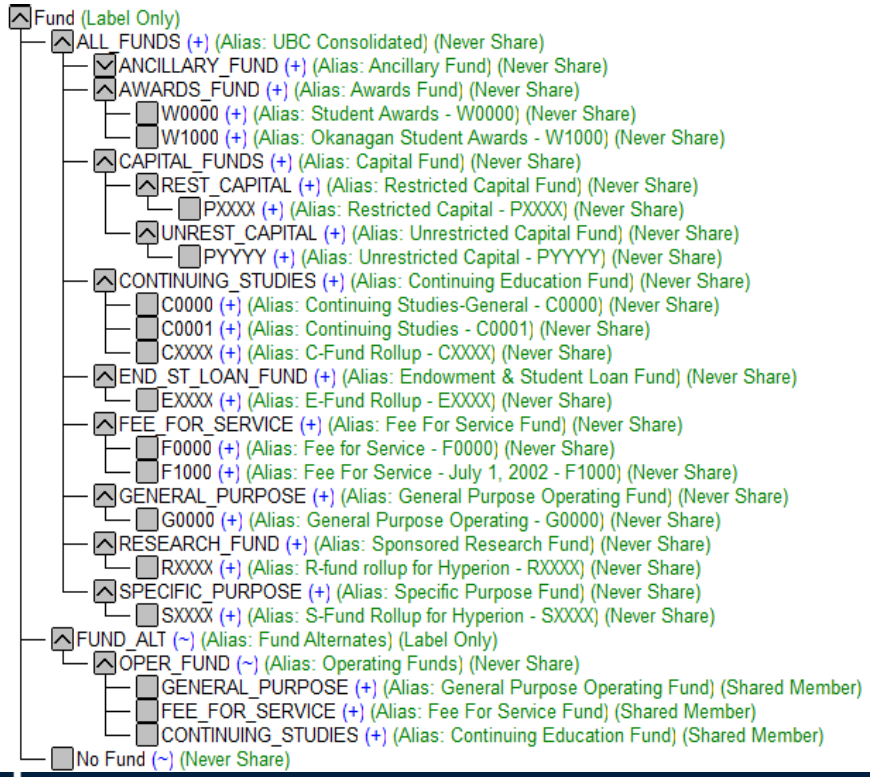
ISPlan – Period

- The screen shot below shows a high level representation of the expected structure of the Period dimension in this Plan Type:



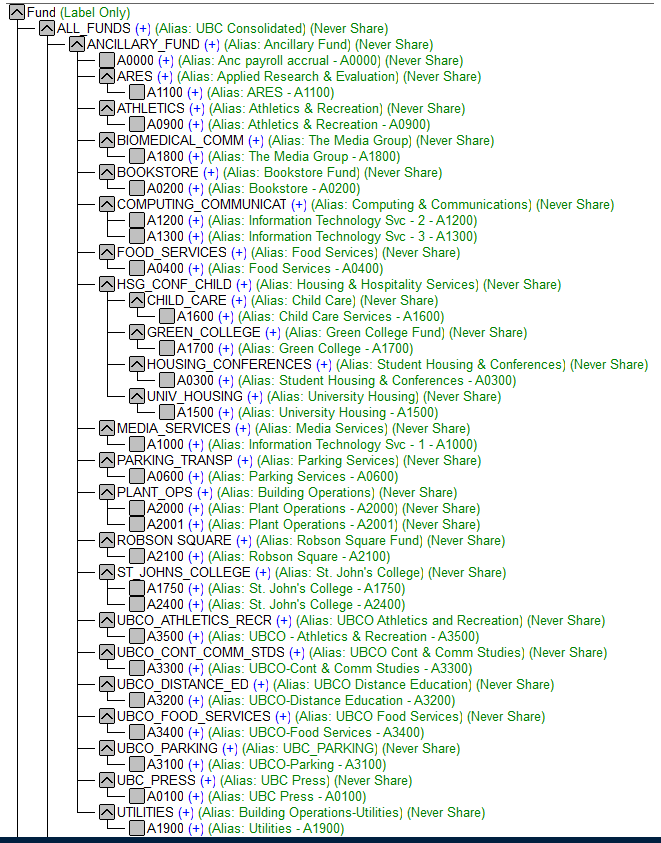
ISPlan – Fund

- The screen shot below shows a high level representation of the expected structure of the Fund dimension in this Plan Type:



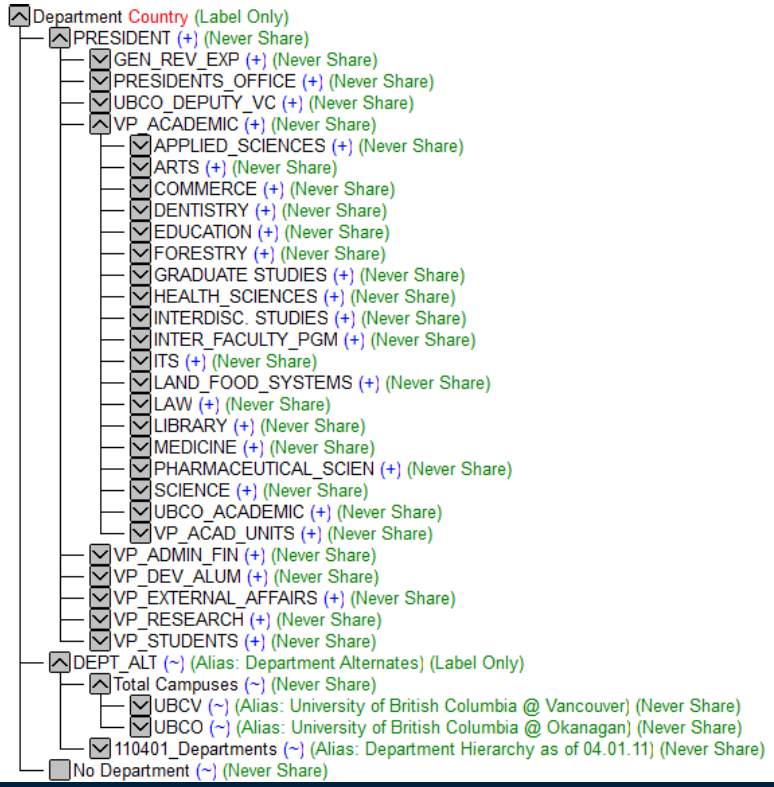
ISPlan – Fund

- While most funds will be summarized, all Ancillary Funds will be included:



ISPlan – Department

- The screen shot below shows a high level representation of the expected structure of the Department dimension in this Plan Type:

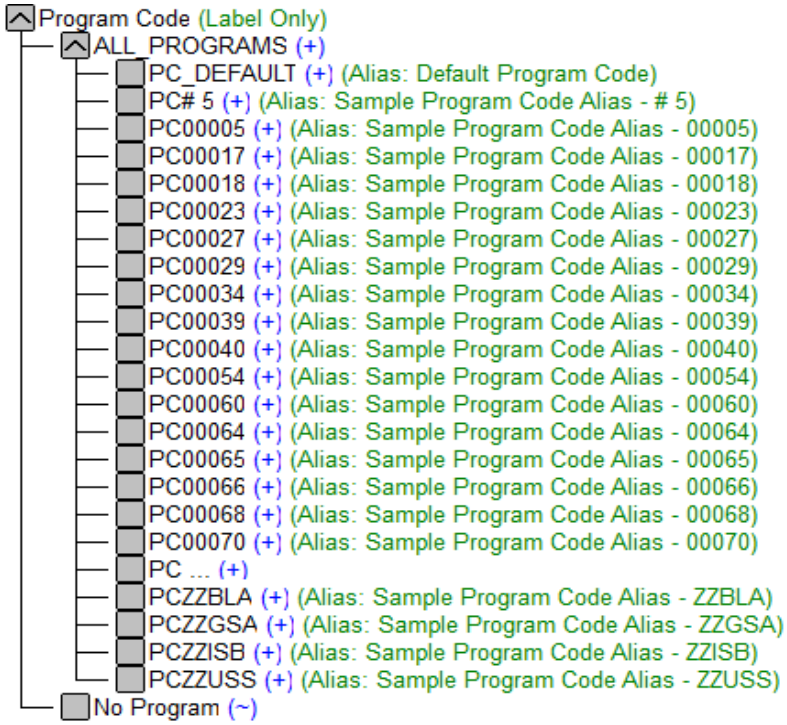


ISPlan – Department

- The "COMMERCE" segment of the hierarchy is shown below as an example of the naming conventions to be used in the hierarchy:

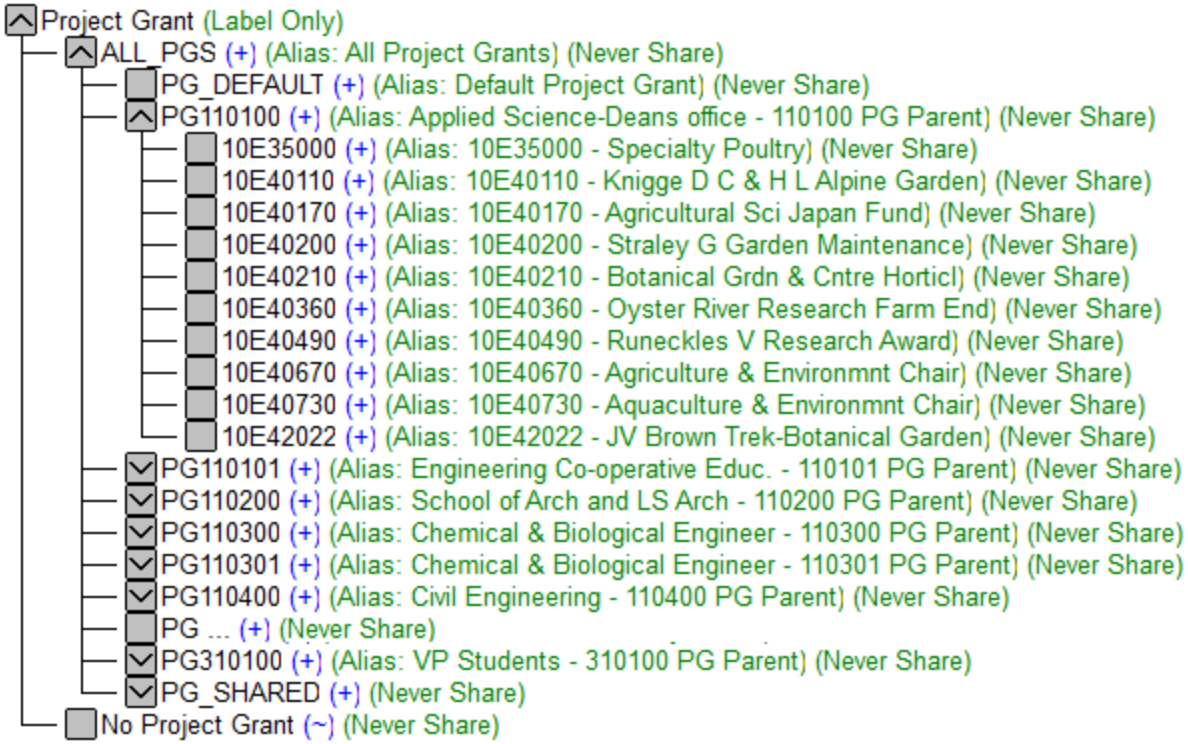
ISPlan – Program Code

- The screen shot below shows a high level representation of the expected structure of the Program Code dimension in this Plan Type:



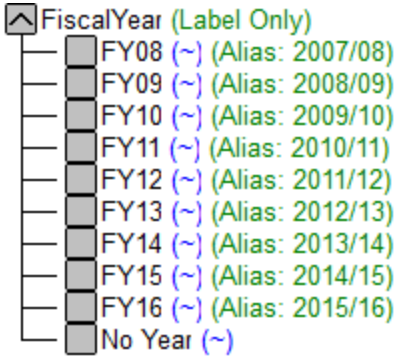
ISPlan – Project Grant

- The screen shot below shows a high level representation of the expected structure of the Project Grant dimension in this Plan Type:



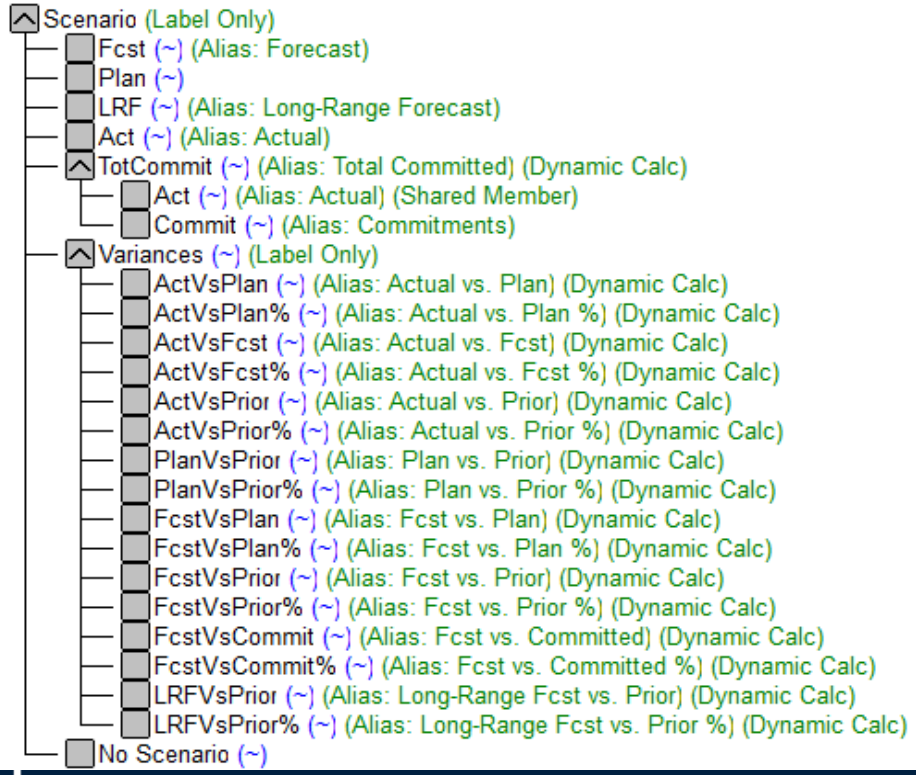
ISPlan – FiscalYear

- Historical Actual data will be loaded for 2007/08 forward
- The application will be built to support a 5 year Long Range Forecast
- The screen shot below shows the expected structure of the FiscalYear dimension in this Plan Type:



ISPlan – Scenario

- The screen shot below shows the expected structure of the Scenario dimension in this Plan Type:



ISPlan – Version

- The Version dimension will store different Versions of the planning Scenarios (Forecast, Plan and Long Range Forecast)
- Users will generally work in the Working Version and will use the Draft1 and Draft2 Versions for What-If type analyses
- The screen shot below shows the expected structure of the Version dimension in this Plan Type:

ISPlan – External Data Sources

- Actual data from the PeopleSoft General Ledger will be loaded on a nightly basis
- Historical Actual data from 2007/08 forward will be loaded prior to go-live
- Historical Budget data for 2010/11 will be loaded prior to go-live
- Commitments data from the PeopleSoft Commitment Control Ledger will be loaded on a monthly basis

ISPlan – Planning Input Forms

- General Expense Input
- Account Input (with History)
- Project Grants & Programs by Department, Account & Fund
- Consolidated Income Statement Review
- Research Grant Review
- Below the line items
- Investment Income Revenue
- Sales and Service
- Related Organizations Input
- Consolidation Review (Capital)
- Depreciation
- Amortization of Deferred Capital Contributions
- Endowment Expenditures

ISPlan – Form Sample

- The screen shot below shows a sample of the design for the General Expense Input form for the Forecast Scenario:

Select Department	Select Fund	Select Project Grant	Select Program Code

	Approved Plan	Working Forecast						Working Fcst vs. Plan	Working Total Committed	Working Fcst vs. Committed
	TotalYear	April	May	June	...	March	- TotalYear	TotalYear	TotalYear	TotalYear
Field trips-Public carrier - 611000	50	5	4	7	5	5	61	(11)	19	(42)
Travel expenses - 620000	90	7	8	7	8	8	94	(4)	34	(60)
Relocation & moving - 634000	30	4	3	3	3	3	37	(7)	7	(30)
E-Travel - TRAVL	60	5	5	5	5	5	60		30	(30)
Travel	230	21	20	22	21	21	252	(22)	90	(162)

ISPlan – Key User Calculations

- Apply Historical Average
  - A Rule will be created to allow users to set plan or forecast values based on other data in the database.

    This Rule will:
    - Allow users to select the Account, Department, Fund, Project Grant and Program Code to modify
    - Allow users to select the range of Periods within a FiscalYear to modify
    - Select a Scenario, Version, FiscalYear and range of Periods & FiscalYears to base the average on
    - Select whether to apply historical seasonality or set all values equal to a single average
    - Input an adjustment % to be applied to the average
- Apply Historical Seasonality
  - A Rule will be created to allow users to apply historical seasonality to the values that they have planned or forecast, without changing the total value planned.

    This Rule will:
    - Allow users to select the Account, Department, Fund, Project Grant and Program Code to modify
    - Allow users to select the range of Periods within a FiscalYear to modify
    - Select a Scenario, Version and FiscalYear to spread based on
- User Aggregation
  - A Rule will be used to allow users to select the areas in the database (to which they have access) and aggregate the database for those areas.

ISPlan – Key User Calculations

- Spreadback
  - A Rule will be created to allow users to spread an input value across all PGs and Program Codes for a Level 0 Department, Account and Fund. Users will have the ability to spread based on the values in any Account and any Scenario->Version->FiscalYear->Period combination.
- Generate Forecast
  - A Rule will be created to allow users to automatically update the Forecast based on YTD Actuals, System Commitments and set the Forecast equal to the Final Plan.

    This Rule will:
    - Import Actual data into the selected Version of the Forecast
    - Import updated System Commitments into the selected Version of the Forecast
    - Calculate the variance versus the Final Plan or any other stored Scenario and Version
    - Eliminate the Variance by setting the appropriate values in the "Uncommitted" member to force the Total Year to match the selected Scenario and Version
    - The user will have the option to spread the calculated variance evenly or proportionately, or to plug the variance into one Period
    - The user will also have the option to allow or disallow negative values (if negative values are disallowed, variances will remain)

Balance Sheet Planning

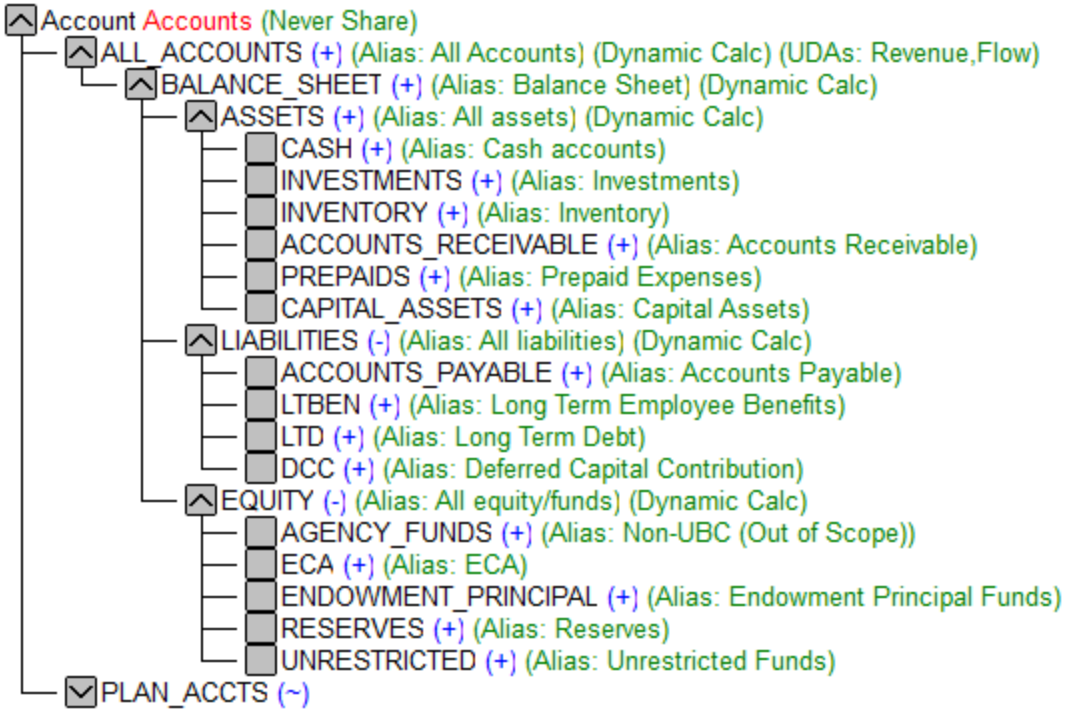
- Balance Sheet Planning will occur in the BSPlan Plan Type in the UBCPlan application
- When planning the Balance Sheet, users will enter balances rather than activity

BSPlan - Dimensions

- The following dimensions will be included in the BSPlan Plan Type:
  - Account
  - Period (Same as ISPlan)
  - Fund (Same as ISPlan)
  - Department (Same as ISPlan)
  - Fiscal Year (Same as ISPlan)
  - Scenario (Same as ISPlan)
  - Version (Same as ISPlan)

BSPlan – Account

- The screen shot below shows the expected structure of the Account dimension in this Plan Type:



BSPlan – External Data Sources

- Actual data from the PeopleSoft General Ledger will be loaded on a nightly basis
- Historical Actual data from 2007/08 forward will be loaded prior to go-live
- Historical Budget data for 2010/11 will be loaded prior to go-live

BSPlan – Planning Input Forms

- Balance Sheet Input

BSPlan – Form Sample

- The screen shot below shows a sample of the Balance Sheet Input form for the Forecast Scenario:

Select Department | Select Fund | Select Version

	April	May	June	...	December	- TotalYear
Cash accounts	1,322,752	1,272,371	1,270,225	1,225,110	1,199,224	1,199,224
Investments	387,073	394,814	402,710	398,683	406,657	406,657
Inventory	21,845	21,627	22,060	21,839	22,276	22,276
Accounts Receivable	874	891	882	900	918	918
Prepaid Expenses	1,748	1,731	1,766	1,784	1,766	1,766
Capital Assets	1,121,858	1,133,077	1,155,739	1,190,411	1,214,219	1,214,219
All assets	2,856,150	2,824,511	2,853,382	2,838,727	2,845,060	2,845,060
Accounts Payable	4,370	4,455	4,410	4,500	4,590	4,590
Long Term Employee Benefits	14,858	14,709	15,003	14,853	15,150	15,150
Long Term Debt	560,929	549,710	538,716	527,942	517,383	517,383
Deferred Capital Contribution	29,716	29,419	29,125	29,708	29,411	29,411
All liabilities	609,873	598,293	587,254	577,003	566,534	566,534
Non-UBC	20,450	20,450	20,450	20,450	20,450	20,450
ECA	6,509	6,639	6,573	6,704	6,838	6,838
Endowment Principal Funds	1,234,044	1,221,704	1,246,138	1,233,677	1,258,351	1,258,351
Reserves	200,342	200,342	200,342	200,342	200,342	200,342
Unrestricted Funds	784,932	777,083	792,625	800,551	792,545	792,545
All equity/funds	2,246,277	2,226,218	2,266,128	2,261,724	2,278,526	2,278,526
Balance Sheet						

Detailed Salary Planning

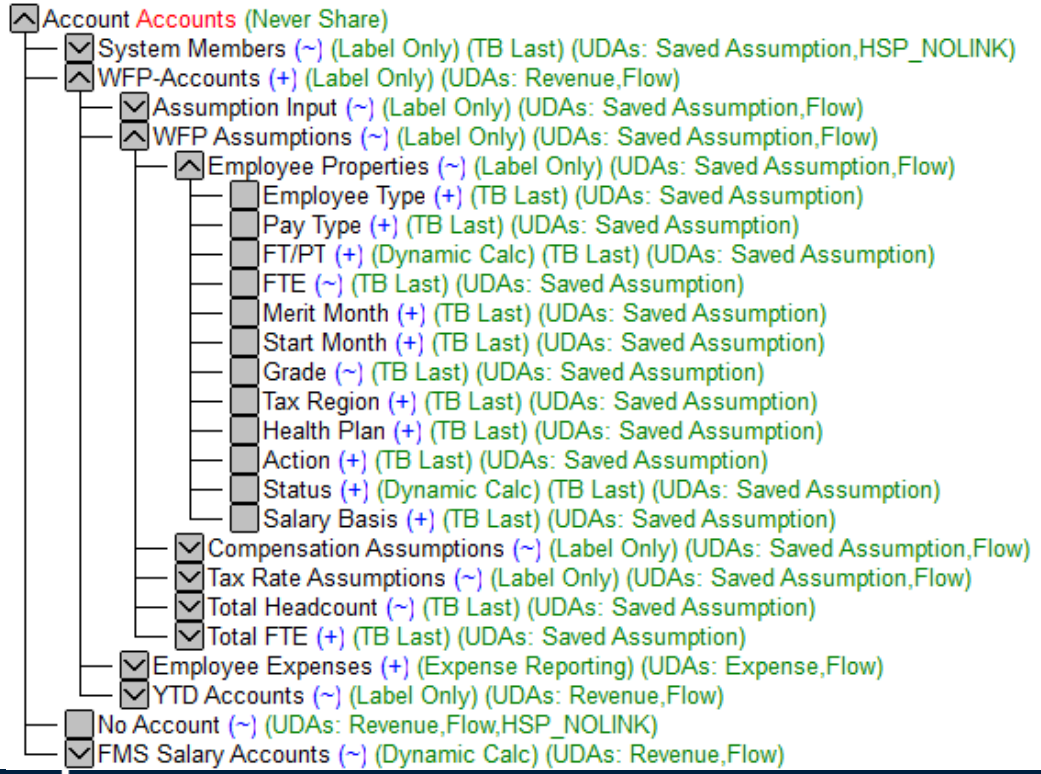
- Detailed Salary Planning will occur in the Wrkforce Plan Type in the UBCPlan application
- Summarized Salary Expense data calculated in this Plan Type will be fed to the ISPlan Plan Type
- Wrkforce is a pre-packaged module that will be further configured for UBC

Wrkforce - Dimensions

- The following dimensions will be included in the Wrkforce Plan Type:
  - Account
  - Period (Same as ISPlan)
  - Fund (Same as ISPlan)
  - Department (Same as ISPlan)
  - Position
  - Employee
  - Project Grant (Same as ISPlan)
  - Fiscal Year (Same as ISPlan)
  - Scenario (Same as ISPlan)
  - Version (Same as ISPlan)

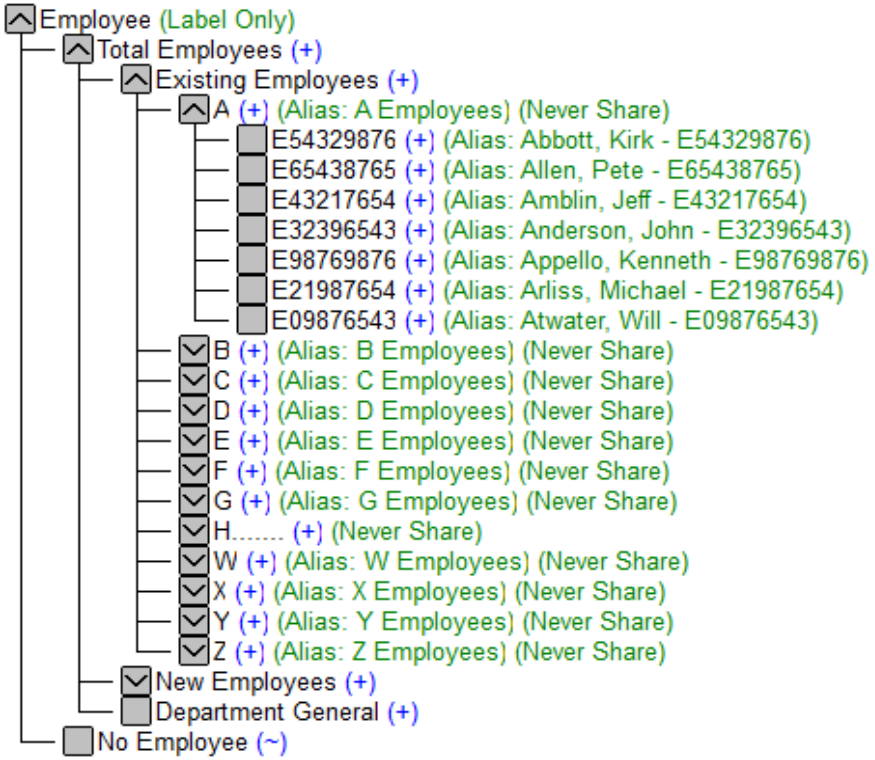
Wrkforce – Account

- The screen shot below shows a high level representation of the expected structure of the Account dimension in this Plan Type:



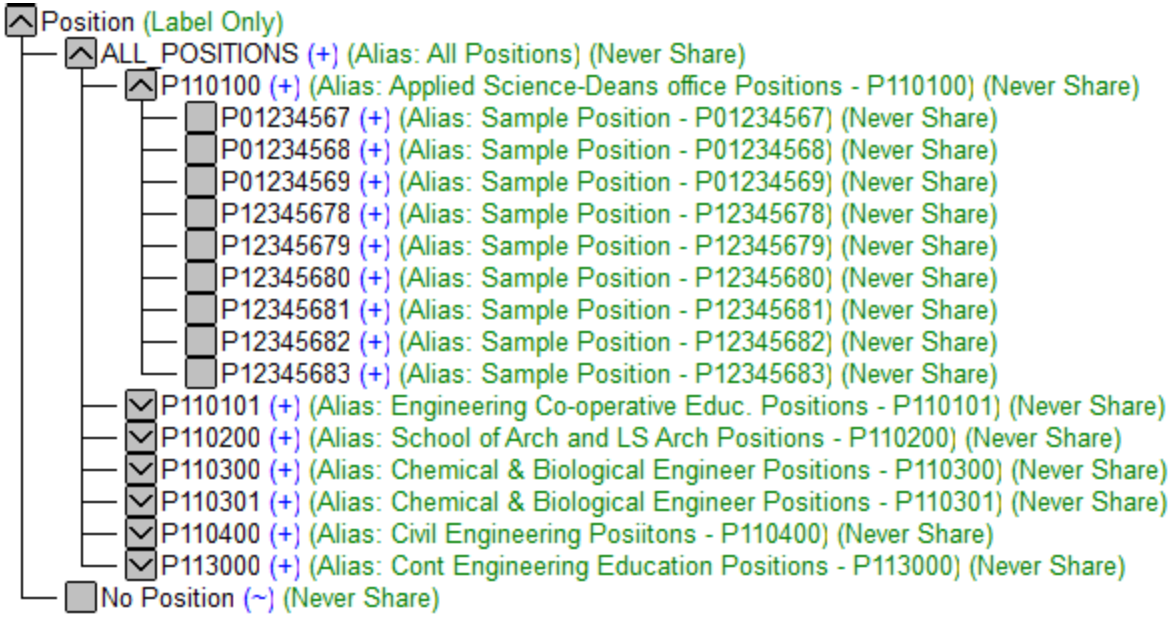
Wrkforce – Employee

- The screen shot below shows a high level representation of the expected structure of the Employee dimension in this Plan Type:



Wrkforce – Position

- The screen shot below shows a high level representation of the expected structure of the Position dimension in this Plan Type:



Wrkforce – External Data Sources

- Position Management data will be loaded into the Wrkforce Plan Type on a monthly basis
- Actual salary data from HRMS will be loaded on a monthly basis

Wrkforce – Planning Input Forms

- Manage Employee Status
- Existing Employee Summary
- Manage Existing Employees
- Manage New Hires
- Headcount/FTE

Wrkforce – Form Sample

- The screen shot below shows a sample of the Manage Existing Employees Input form for the Plan Scenario:

		Select Department	Select Fund	Select Project Grant	Select Version					
		FT/PT	H/S	FTE	Comp. Rate	Shift Diff.	Total Adj. %	Hire Date	Ending Salary	Employment Group
Sample Position - P01234567	Abbott, Kirk - E54329876	FT	Salary	1.00	62,000.00		3.00%	8/5/2003	63,860.00	Excluded M&P
Sample Position - P01234568	Allen, Pete - E65438765	FT	Salary	1.00	83,500.00		3.00%	3/8/1994	86,005.00	Faculty (Fac Assn)
Sample Position - P01234569	Amblin, Jeff - E43217654	PT	Hourly	0.50	16.50	2.00	4.00%	6/28/2009	20,009.60	CUPE 116(Service/Techs/Trades)
Sample Position - P12345678	Anderson, John - E32396543	FT	Salary	1.00	110,000.00		4.00%	6/3/2002	114,400.00	Excluded M&P
Sample Position - P12345679	Appello, Kenneth - E98769876	FT	Hourly	1.00	22.00		2.00%	2/10/2007	46,675.20	Other Staff

Funding Model

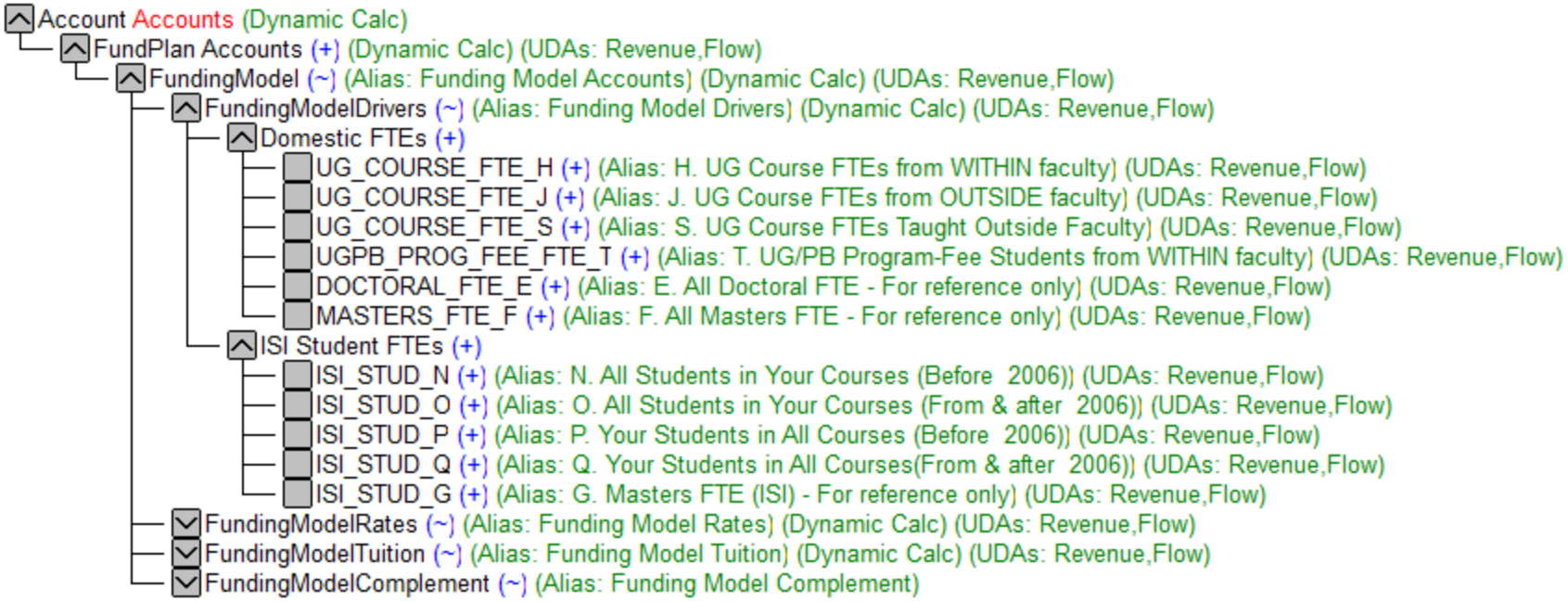
- The new funding model will be represented in the FundPlan Plan Type

FundPlan - Dimensions

- The following dimensions will be included in the FundPlan Plan Type:
  - Account
  - Period (Same as ISPlan)
  - Fund (Same as ISPlan)
  - Department (Same as ISPlan)
  - Project Grant (Same as ISPlan)
  - Fiscal Year (Same as ISPlan)
  - Scenario (Same as ISPlan)
  - Version (Same as ISPlan)

FundPlan – Account

- The screen shot below shows a high level representation of the expected structure of the Account dimension in this Plan Type:



FundPlan – External Data Sources

- Driver data will be loaded from the Student Information System (SIS)

FundPlan – Planning Input Forms

- Funding Model

FundPlan – Form Sample

- The screen shot below shows a sample of the Funding Model form:

Select Version

	APSC	NURS	SALA	APSC Total
Domestic FTEs	337	628	55	1,020
H. UG Course FTEs from WITHIN faculty	233	1	22	256
J. UG Course FTEs from OUTSIDE faculty	24	181		205
S. UG Course FTEs Taught Outside Faculty		158		158
T. UG/PB Program-Fee Students from WITHIN faculty				
E. All Doctoral FTE - For reference only	28	76	10	114
F. All Masters FTE - For reference only	52	212	24	288
Domestic Tution Rates				
H. UG Course FTEs from WITHIN faculty	4,518	4,518	4,518	
J. UG Course FTEs from OUTSIDE faculty	4,518	4,518		
S. UG Course FTEs Taught Outside Faculty				
T. UG/PB Program-Fee Students from WITHIN faculty				
ISI Student FTEs	43	466	3	512
N. All Students in Your Courses (Before 2006)	4	8		12
O. All Students in Your Courses (From & after 2006)	21	10	1	32
P. Your Students in All Courses (Before 2006)	1	24		25
Q. Your Students in All Courses(From & after 2006)	17	375	2	394
G. Masters FTE (ISI) - For reference only		49		49
International Tuition Rates				
N. All Students in Your Courses (Before 2006)	20,069	20,064		
O. All Students in Your Courses (From & after 2006)	20,640	20,700	20,697	
P. Your Students in All Courses (Before 2006)	20,064	20,115	20,064	
Q. Your Students in All Courses(From & after 2006)	20,697	20,115	20,697	

Funding Allocations & Transfers

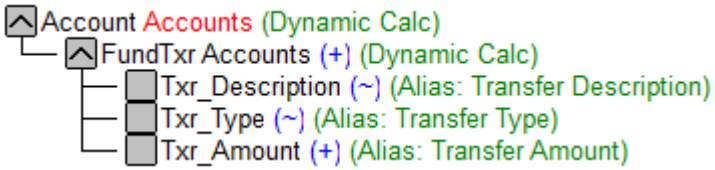
- Funding Allocations and Transfers will be executed in the FundTxr Plan Type
- Users will have the ability to execute a Transfer Out or request a Transfer In

FundTxr - Dimensions

- The following dimensions will be included in the FundTxr Plan Type:
  - Account
  - Period (Same as ISPlan)
  - Fund (Same as ISPlan)
  - Line_Item
  - Department (Same as ISPlan)
  - Txr_Dept
  - Project Grant (Same as ISPlan)
  - Fiscal Year (Same as ISPlan)
  - Scenario (Same as ISPlan)
  - Version (Same as ISPlan)

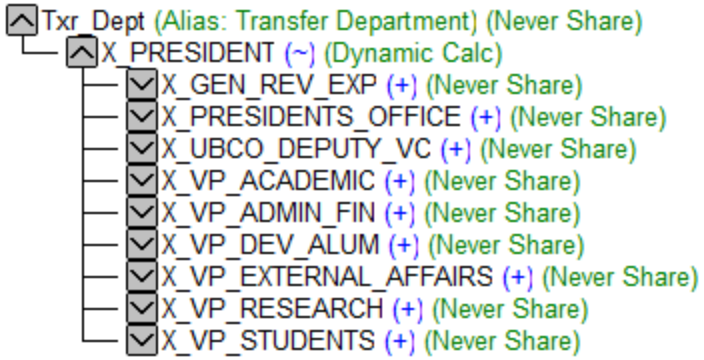
FundTxr – Account

- The screen shot below shows a high level representation of the expected structure of the Account dimension in this Plan Type:



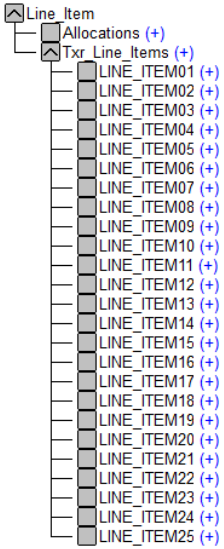
FundTxr – Txr_Dept

- The Txr_Dept dimension is a replica of the Department dimension, but each member will be prepended with an “X”
- The screen shot below shows a high level representation of the expected structure of the Txr_Dept dimension in this Plan Type:



FundTxr – Line_Item

- The Line_Item dimension will be used to store the transactional details of transfers
- The screen shot below shows a high level representation of the expected structure of the Line_Item dimension in this Plan Type:



Q&A