Merging Excel Spreadsheet Data with Business Objects Data: Adding Monthly budget amounts to the FM Budget versus Actual report.

The Budget & Control Board uses an excel spreadsheet for their budget preparation and reporting process throughout the year. Each Division of the Board has separate spreadsheets and the budget amounts are tracked by Major Commitment Item areas. The goal of this presentation is to show how to take this spreadsheet data and add it to SCEIS Business Objects reporting to be used to prepare a Budget versus Actual report.

Below is a snapshot of the Budget spreadsheet used by the Board:

A	U	V	W	X	Y	Z	AA	AB	AC
		FY 2014 - Actual				**FY 2015 - Projection**			
		State	**Other**	**Total**		**State**	**Other**	**Total**	
Current Income and Expense									
Income:									
Recurring Appropriation/FY13 Request		15,204,059		15,204,059		15,265,445		15,265,445	
BPI / Health Insurance Allocation		61,386		61,386		120,454		120,454	
Agency Implementation Funds			1,228,000	1,228,000			300,000	300,000	
DEW CO Funds									
PBF Higer Ed. Licenses/Maintenance			40,800	40,800			18,850	18,850	
Agency Implementation Funds (DHEC)				-				-	
Other / Non-Recurring				-				-	
Total Income		15,265,445	1,268,800	16,534,245		15,385,899	318,850	15,704,749	
Expense:									
Salaries		4,305,395		4,305,395		4,608,431		4,608,431	
Fringe		1,360,720		1,360,720		1,475,000		1,475,000	
Contractual		9,381,444		9,381,444		9,137,401	150,000	9,287,401	
Supplies		19,951		19,951		20,000		20,000	
Fixed Charges		205,625		205,625		232,428		232,428	
Travel		9,481		9,481		10,000		10,000	
Equipment		45,772		45,772				-	
Principal/Interest Repayment		-		-				-	
Electricity/Gas		9,687		9,687		9,687		9,687	
Boardwide Allocation				-		129,978		129,978	
Total Expense		15,338,075	-	15,338,075		15,622,925	150,000	15,772,925	
Current Income Less Expense		(72,630)	1,268,800	1,196,170		(237,026)	168,850	(68,176)	

The highlighted area is the expense items that we will use to build the budget data. It is important to format the data elements in the spreadsheet to match those in SCEIS, especially where you plan to merge the elements. In this presentation, we are merging on Posting Period, Fund Key and Major Commitment Item Key.

Each Major Commitment Item area is copied to another sheet and then spread monthly. The Salaries and Fringe items are spread based on the number of payrolls in a month, while the other areas are divided by 12.

							Salaries	4608431
							Fringe	1475000
							Contractua	9617401
							Supplies	20000
							Fixed Char	232428
							Travel	10000
							Electricity	9687
							Contractua	1474058
								17447005
								15972947

Posting Pe	Funds		Major CI	Major CI N	Amount			
1	State	SC01/1000	501000	Salaries	384036			
2	State	SC01/1000	501000	Salaries	576053.9			
3	State	SC01/1000	501000	Salaries	192018			
4	State	SC01/1000	501000	Salaries	576053.9			
5	State	SC01/1000	501000	Salaries	192018			
6	State	SC01/1000	501000	Salaries	384036			
7	State	SC01/1000	501000	Salaries	576053.9			
8	State	SC01/1000	501000	Salaries	384036			
9	State	SC01/1000	501000	Salaries	192018			
10	State	SC01/1000	501000	Salaries	384036			
11	State	SC01/1000	501000	Salaries	384036			
12	State	SC01/1000	501000	Salaries	384036			
1	State	SC01/1000	502000	Contractua	801450.1			
2	State	SC01/1000	502000	Contractua	801450.1			
3	State	SC01/1000	502000	Contractua	801450.1			
4	State	SC01/1000	502000	Contractua	801450.1			
5	State	SC01/1000	502000	Contractua	801450.1			
6	State	SC01/1000	502000	Contractua	801450.1			
7	State	SC01/1000	502000	Contractua	801450.1			
8	State	SC01/1000	502000	Contractua	801450.1			
9	State	SC01/1000	502000	Contractua	801450.1			
10	State	SC01/1000	502000	Contractua	801450.1			
11	State	SC01/1000	502000	Contractua	801450.1			
12	State	SC01/1000	502000	Contractua	801450.1			

Once these items are calculated, the sheet is copied to another sheet as values.

Posting Period	Funds	Fund Key	Major CI	Major CI Name	Amount
1	State	SC01/10000000	501000	Salaries	$384,035.96
2	State	SC01/10000000	501000	Salaries	$576,053.94
3	State	SC01/10000000	501000	Salaries	$192,017.98
4	State	SC01/10000000	501000	Salaries	$576,053.94
5	State	SC01/10000000	501000	Salaries	$192,017.98
6	State	SC01/10000000	501000	Salaries	$384,035.96
7	State	SC01/10000000	501000	Salaries	$576,053.94
8	State	SC01/10000000	501000	Salaries	$384,035.96
9	State	SC01/10000000	501000	Salaries	$192,017.98
10	State	SC01/10000000	501000	Salaries	$384,035.96
11	State	SC01/10000000	501000	Salaries	$384,035.96
12	State	SC01/10000000	501000	Salaries	$384,035.96
1	State	SC01/10000000	502000	Contractual Services	$801,450.08
2	State	SC01/10000000	502000	Contractual Services	$801,450.08
3	State	SC01/10000000	502000	Contractual Services	$801,450.08
4	State	SC01/10000000	502000	Contractual Services	$801,450.08
5	State	SC01/10000000	502000	Contractual Services	$801,450.08
6	State	SC01/10000000	502000	Contractual Services	$801,450.08
7	State	SC01/10000000	502000	Contractual Services	$801,450.08
8	State	SC01/10000000	502000	Contractual Services	$801,450.08
9	State	SC01/10000000	502000	Contractual Services	$801,450.08
10	State	SC01/10000000	502000	Contractual Services	$801,450.08
11	State	SC01/10000000	502000	Contractual Services	$801,450.08
12	State	SC01/10000000	502000	Contractual Services	$801,450.08

Now the data can be loaded into Business Objects. Once we are logged into Business Objects, we go to the Documents tab and select New/Local Document
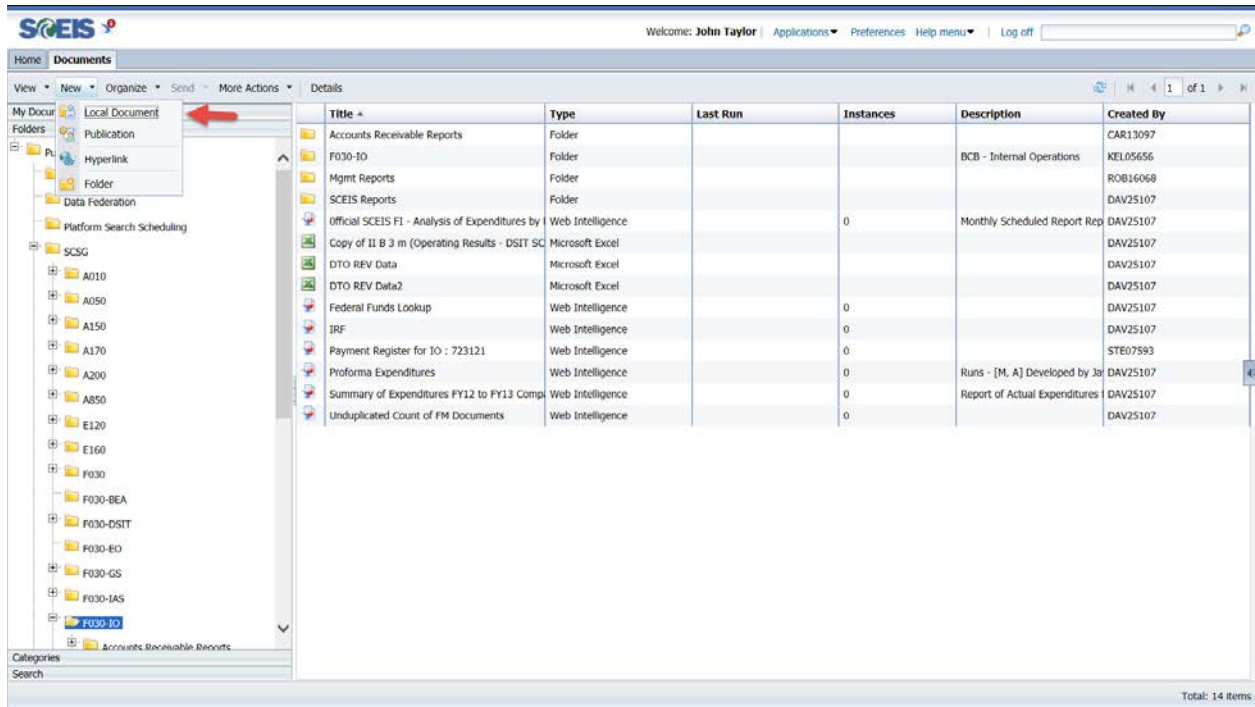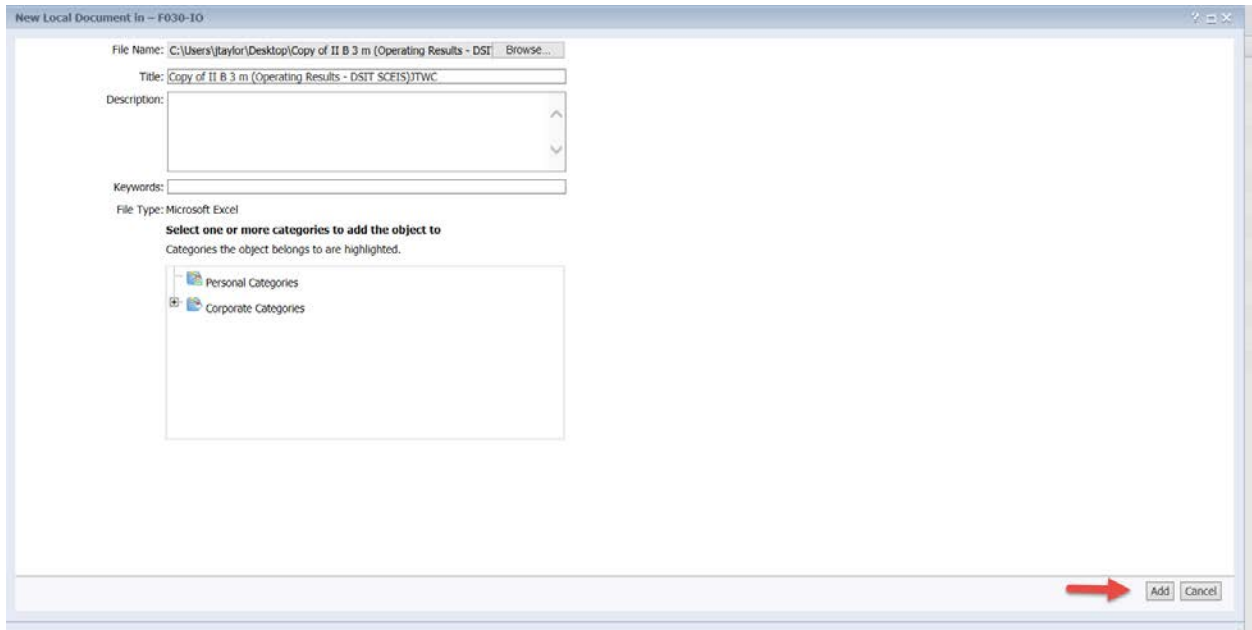

We can then load the Excel spreadsheet by locating it from Browse
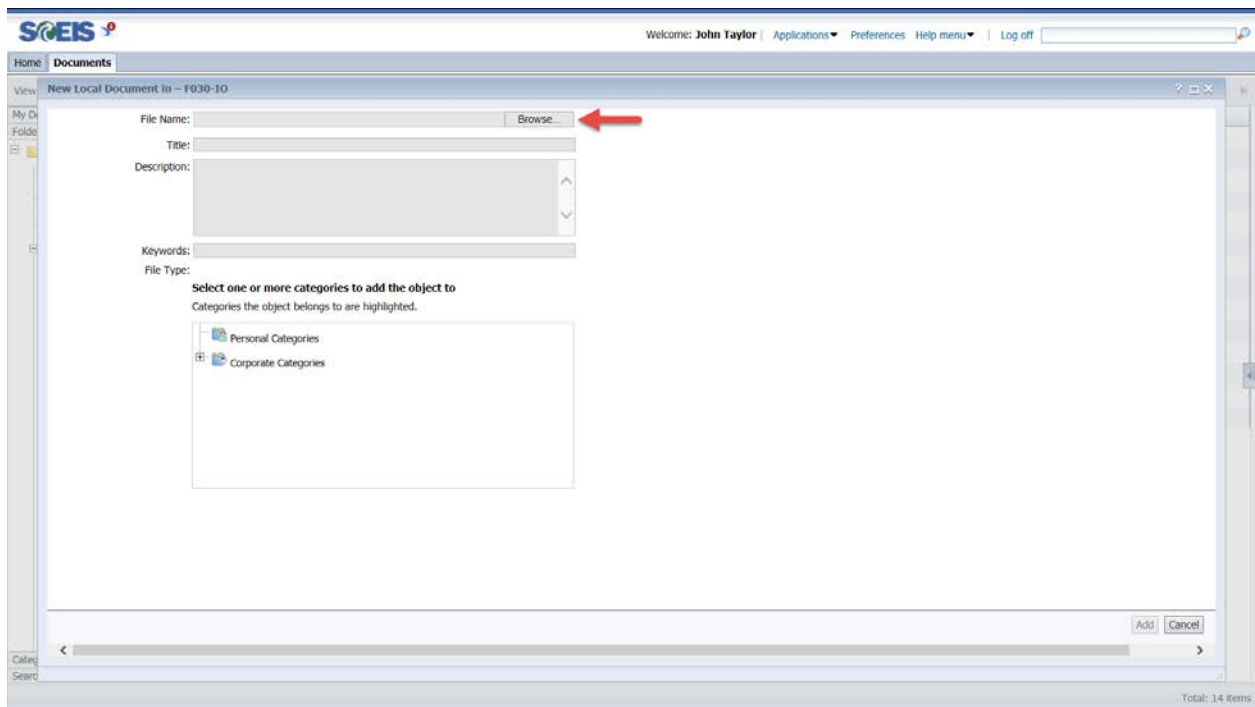
Looking it up from the directory it is located in, here it is the Desktop, and then selecting open
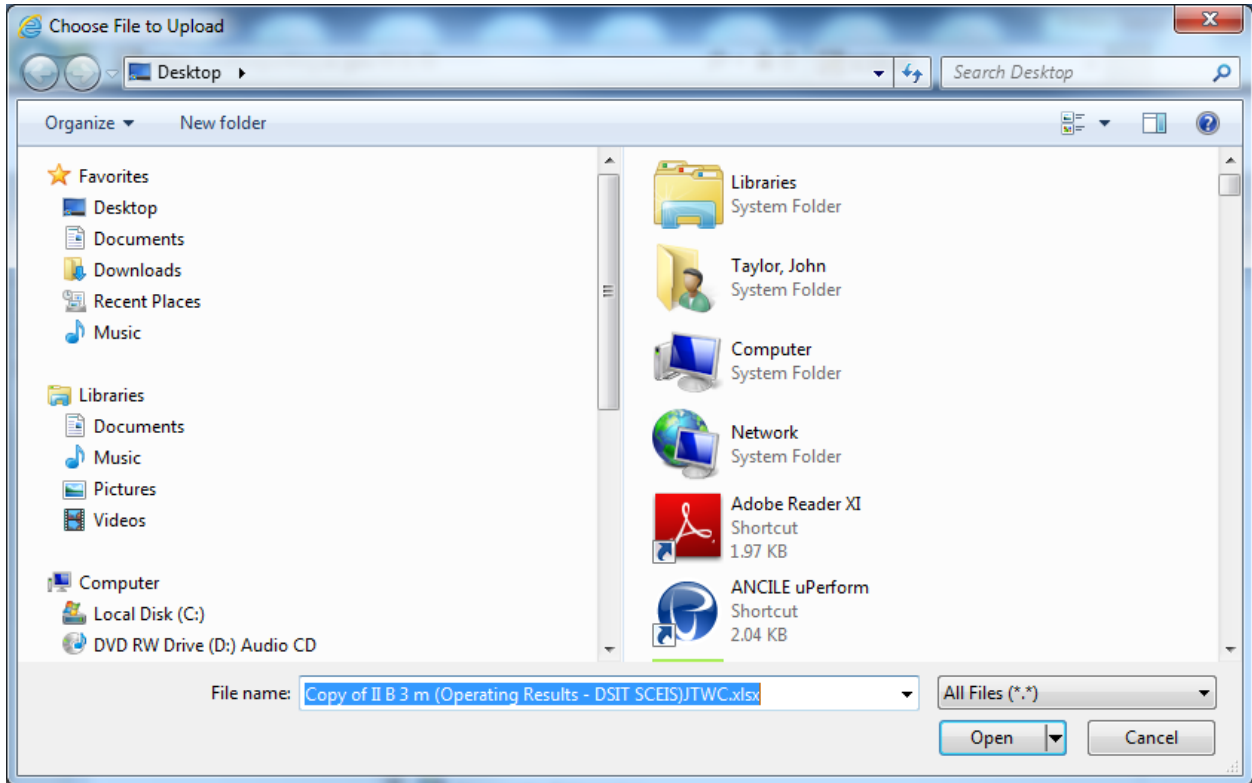
We can add other information about the file; change its name or other things if we chose. When ready, we click add

We then see it is loaded to our folder. Note that this loaded to my default Public folder. If I had wanted it to load to another folder, I need to be in that folder before I started the loading process. I can always move the file later if I so chose.

Now that the Excel data is Business Object, we can use it in a report. We can build a report just using this data, but the biggest advantage is to merge the data with SCEIS data coming out of ECC into the Business Warehouse.

So we need to go Home (not literally, but in Business Object) and the select the crescent moon and ball object on the right

Next we select the blank document icon
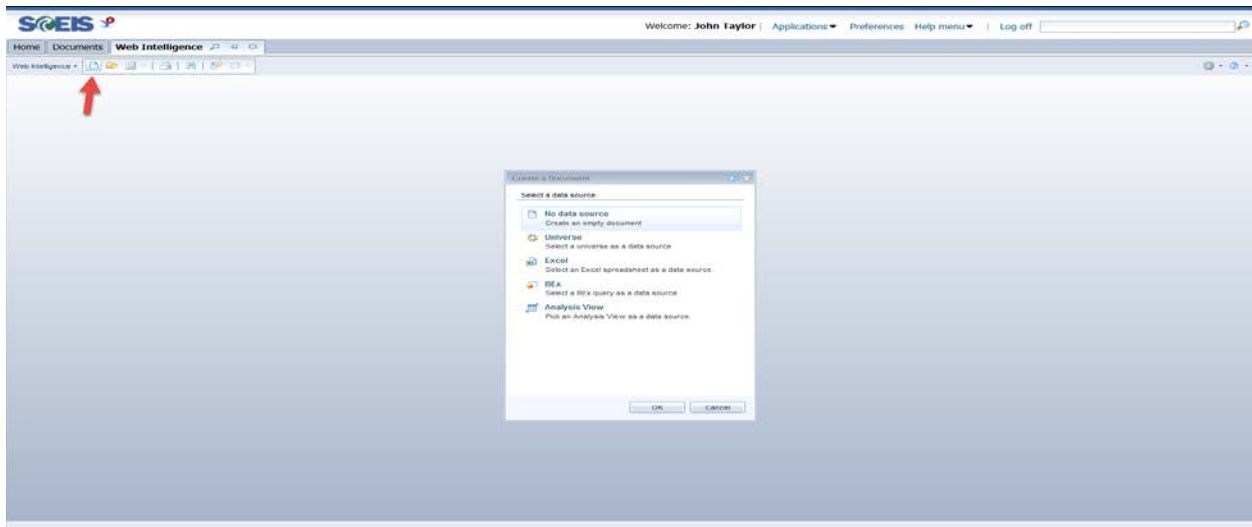
Our data source to select is Excel
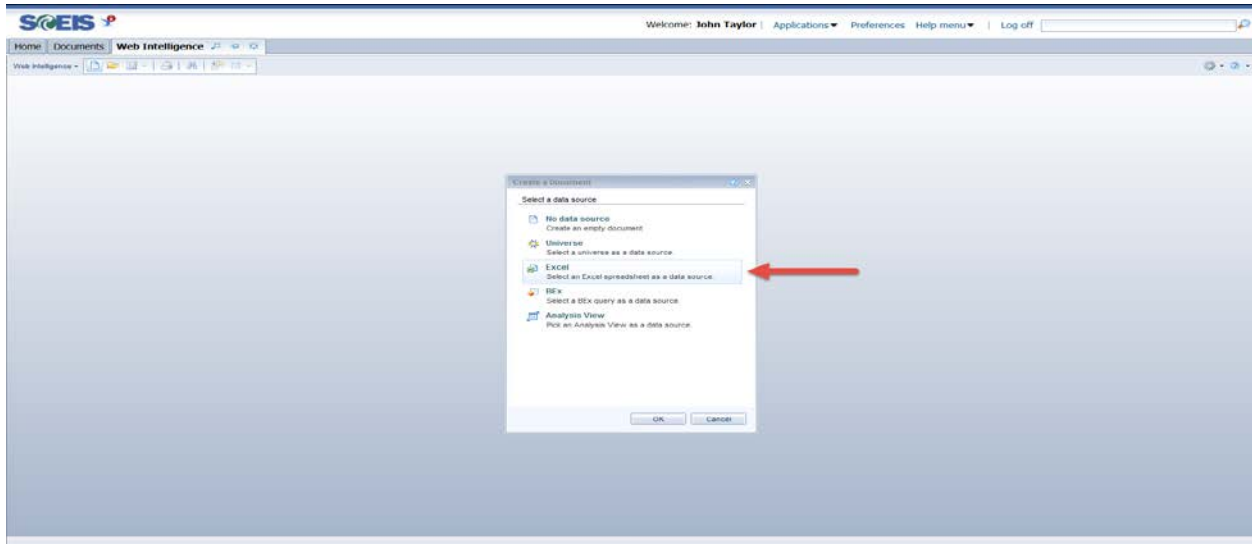
We now find the Excel spreadsheet we loaded in Business Objects
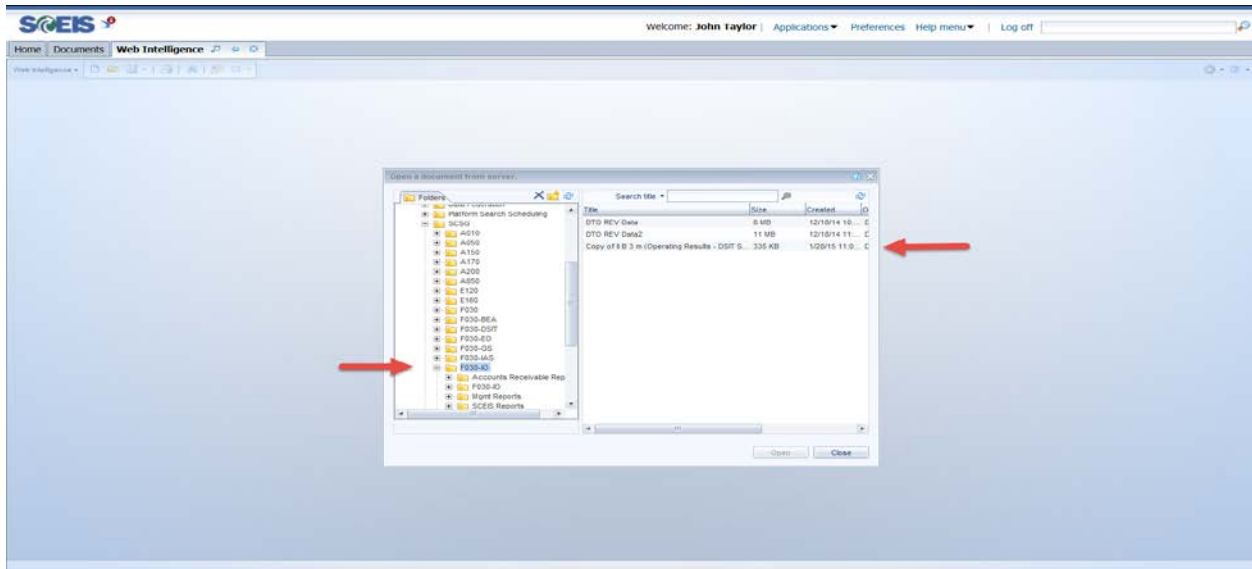
If the spreadsheet has multiple sheets in it, we need to select the sheet with our data. In this case it is the last sheet, Sheet 2
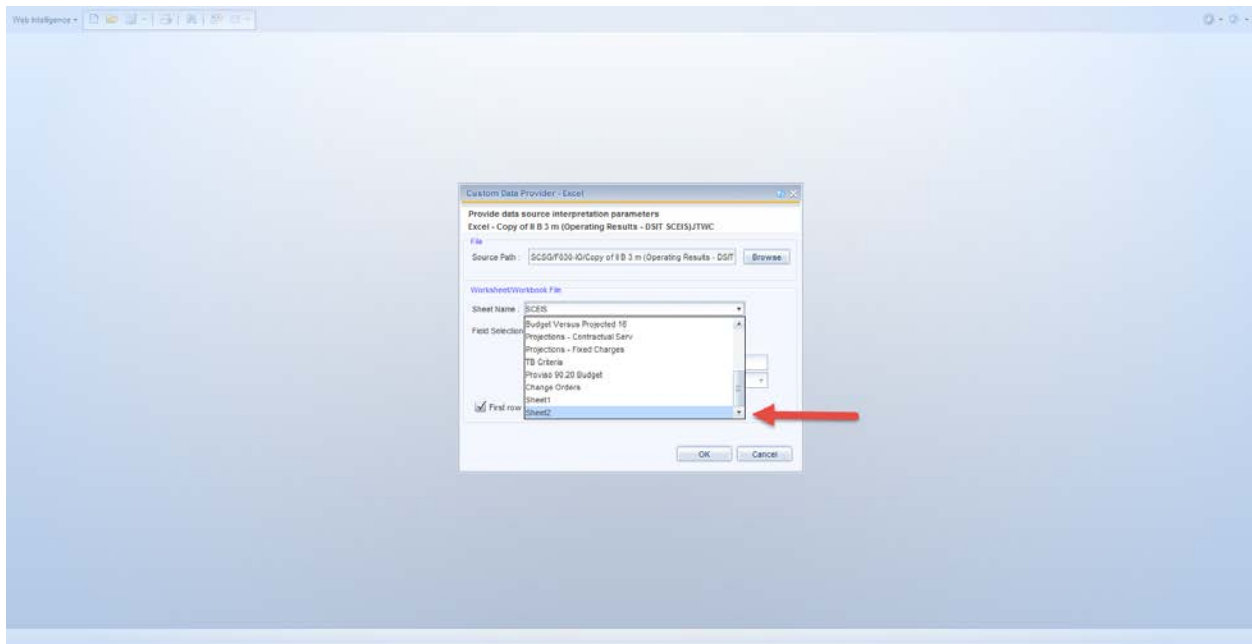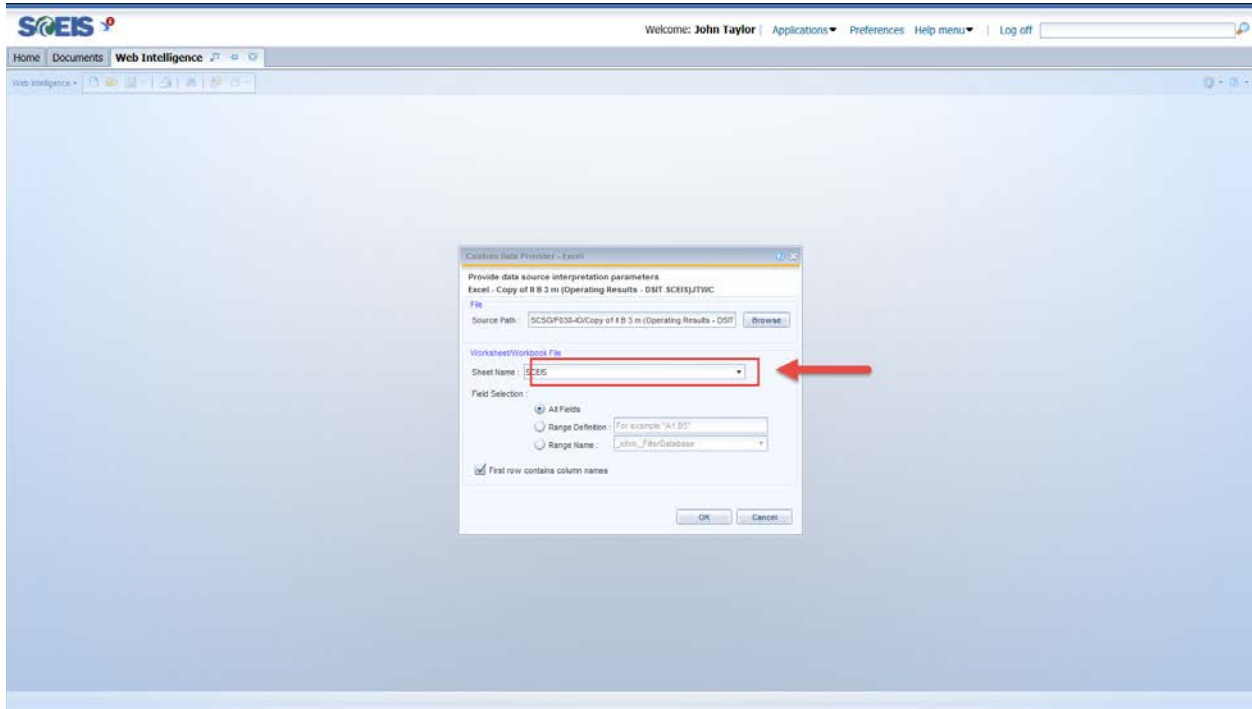
Once we have selected the correct sheet, the data will be ready to load. Now it is important to make sure the format of the fields is correct, especially on those we want to merge to the SCEIS data. I this example posting period and Major CI are defaulting to Measures and numbers, and we will want to change them to Dimensions and Strings
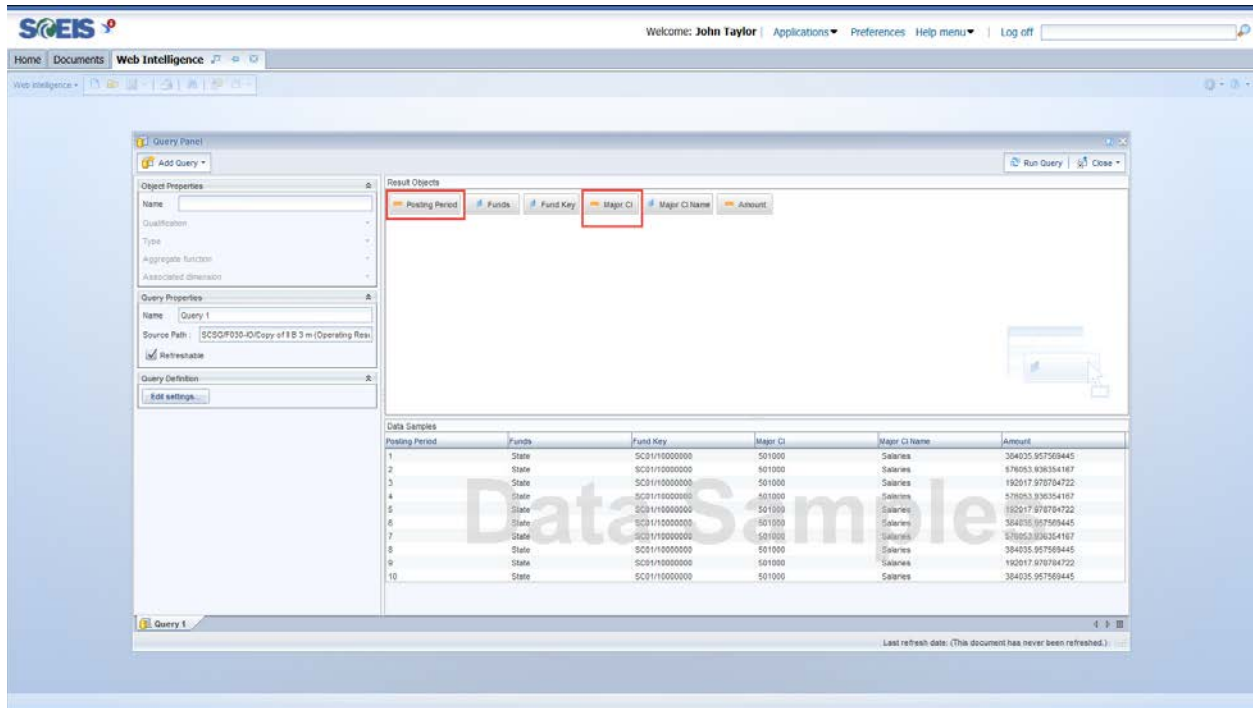
We need to the field to be changed and change the measure to Dimension and the number to String. We can not merge in Business Objects unless these are selected correctly. If the data is loaded and these are not correct, we can always edit the query to change them later.

Once we have loaded our Excel data into the new Report we are building we now want the SCEIS data. We will Add Query/From Universe

Then we will find the FM Budget vs Actual
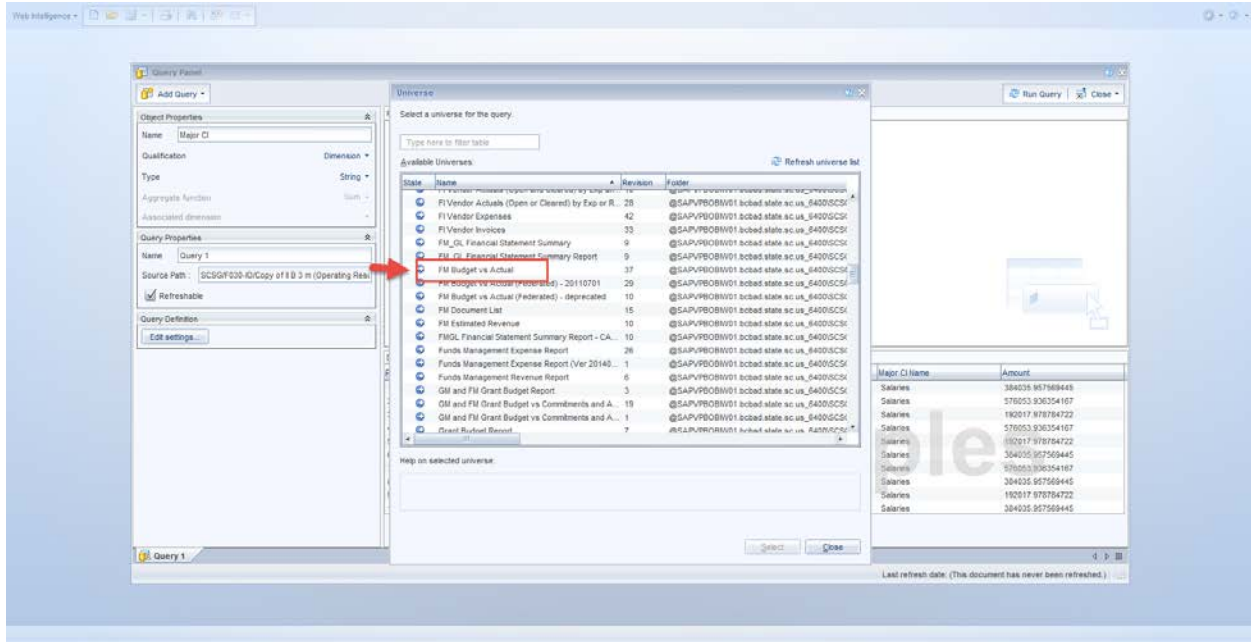
Now we can add the field we want. This example uses Posting Period Key, Fund Key, Fund Name, Commitment Items Key, Commitment Items Name, Major CI Key, Major CI Name, MTD Actual Expense and YTD Actual Expense. Since I am using on the Budget for SCEIS and it is only one Functional Area, I also am using a query filter just for this one functional area.
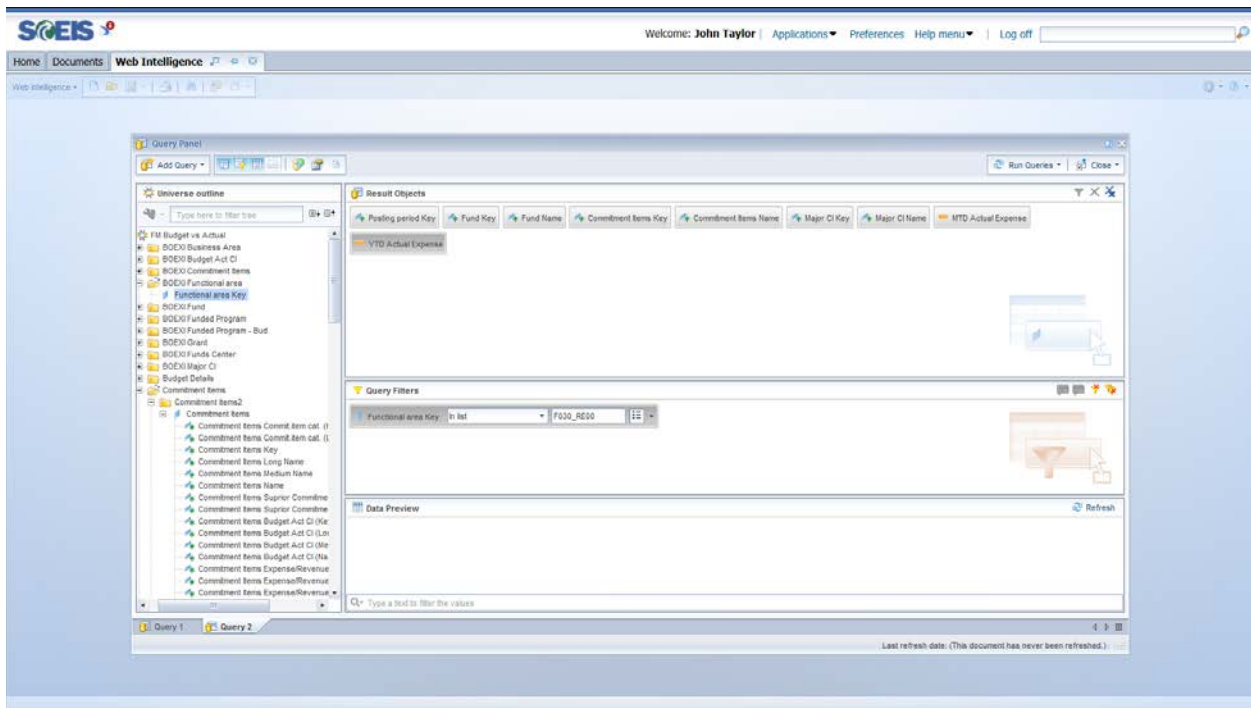
Now we can run the query. I selected the Board as the Business area, FY 2015 and period 16.
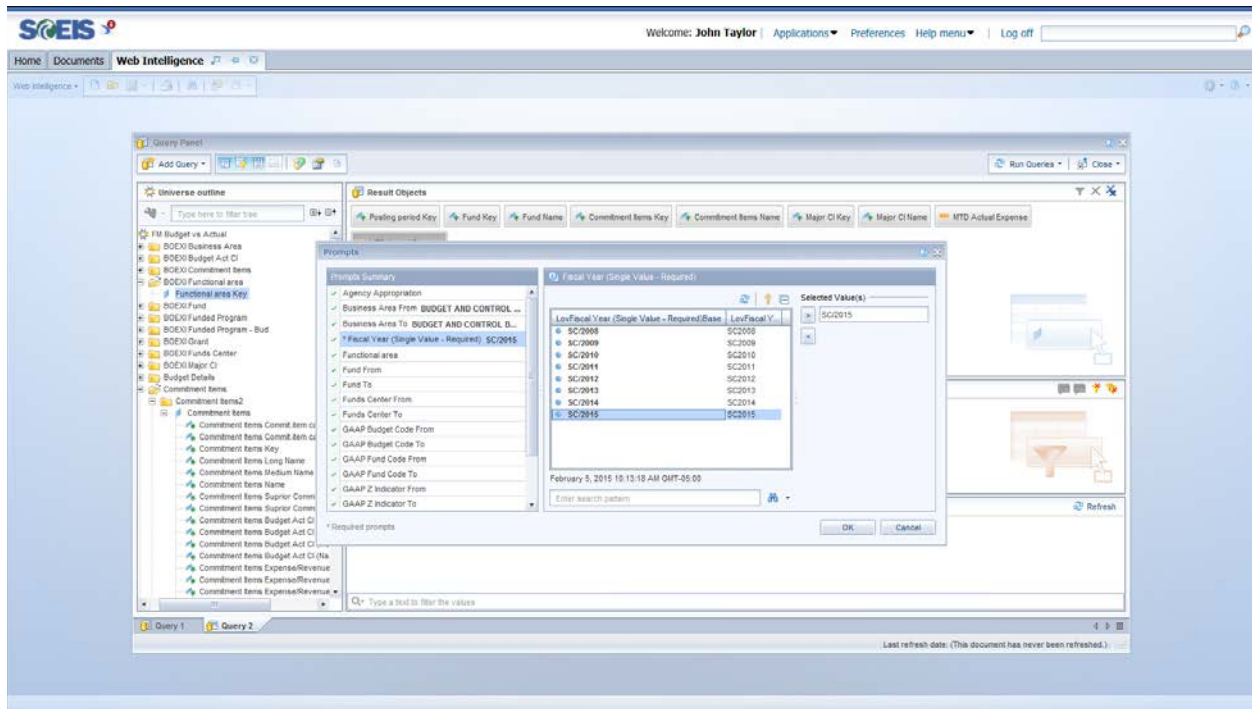
Now we have the report to edit
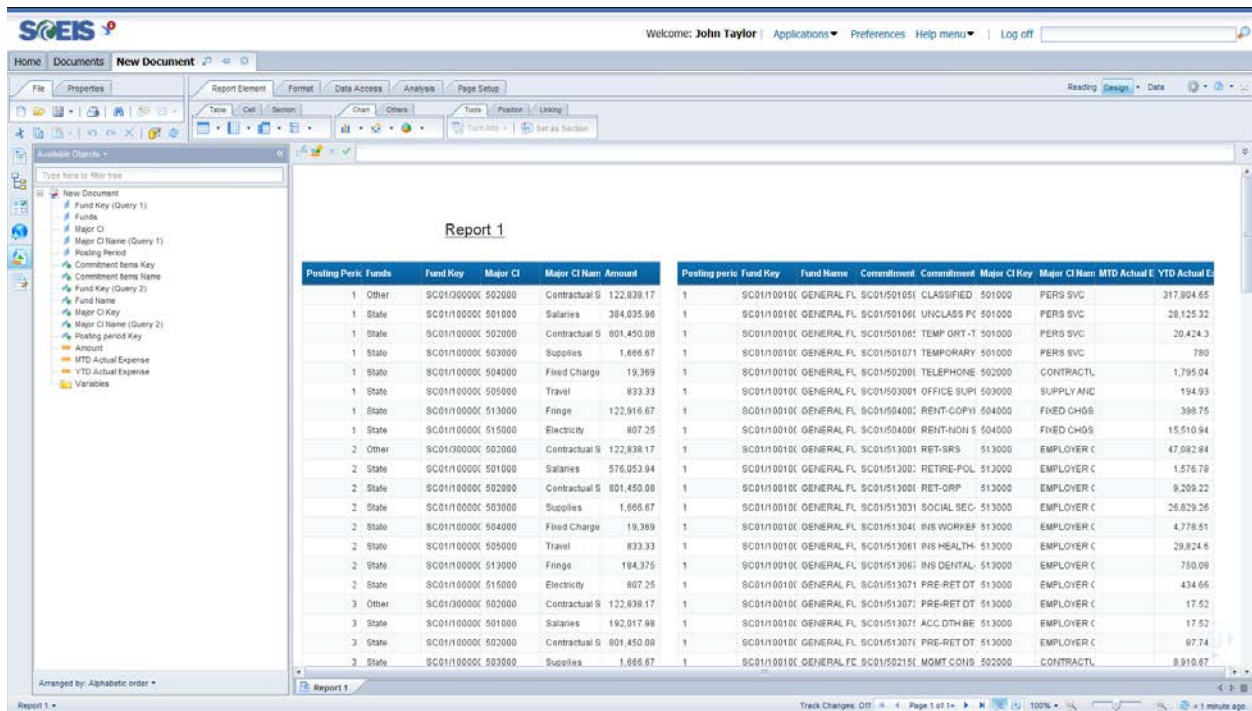
First we need to merge the fields we wanted to merge. We click one of the fields and, holding the control key down, we click the field to merge it with. Once both fields are highlighted we can right click and see merge as an option. If the merge is greyed out or not available, you may not have formatted the field correctly. It may not be a dimension and a string. This can be corrected by editing the data provider

Once the fields are merged, you will see them connected in the data list

Now let's actually build our report. You could delete the tables that came we first ran the report, but we will just add a new report to this document
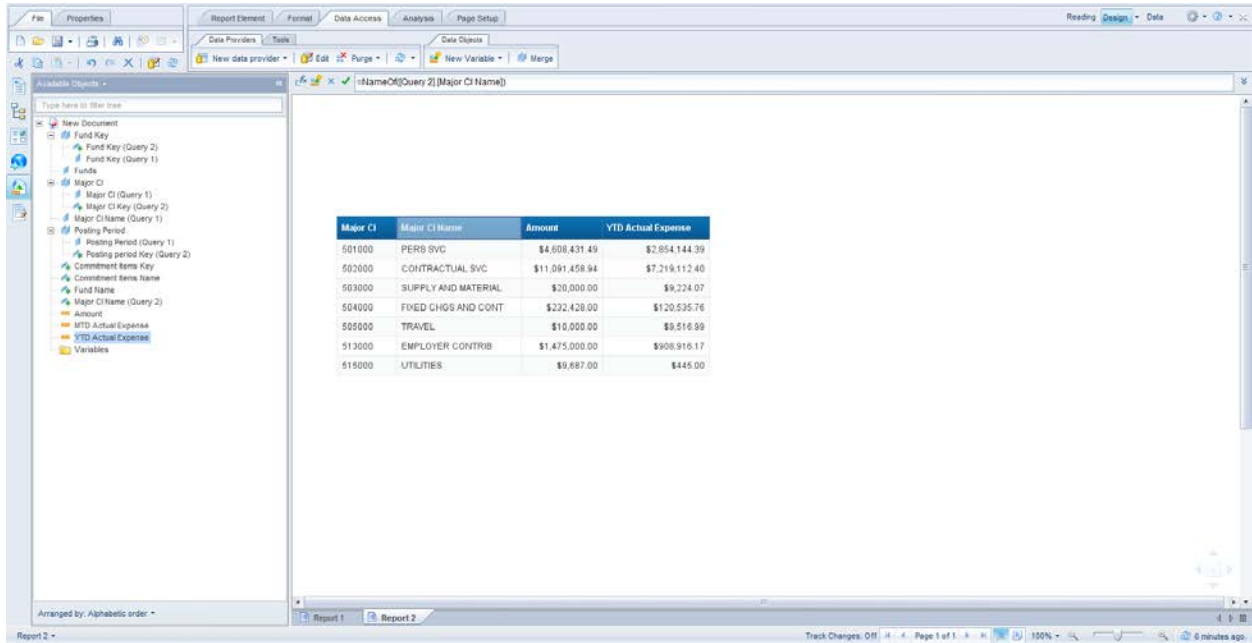

Then we will drag the Major CI Dimension, Major CI Name, Amount and YTD Expense into our report.

Once these are in the report, we will expand the columns and format the numbers. You can do a lot more to the format of the report later, but we will keep it pretty basic here.

This table is showing all Budget compared to YTD Actual expenses through yesterday. While that is good, we want to look at the data differently. We are going to look at a monthly budget, a cumulative YTD budget and an YTD expenses compared to Full year budget. To do this we will copy the table twice, making three tables in our report. This is done by selecting the table, right clicking copy and then pasting twice.

New data provider ▾ | Edit | Purge ▾ | New Variable ▾ | Merge

Available Objects ▾

Type here to filter tree

- New Document
  - Fund Key
    - Fund Key (Query 2)
    - Fund Key (Query 1)
  - Funds
  - Major CI
    - Major CI (Query 1)
    - Major CI Key (Query 2)
    - Major CI Name (Query 1)
  - Posting Period
    - Posting Period (Query 1)
    - Posting period Key (Query 2)
  - Commitment Items Key
  - Commitment Items Name
  - Fund Name
  - Major CI Name (Query 2)
  - Amount
  - MTD Actual Expense
  - YTD Actual Expense
  - Variables

Major CI	Major CI Name	Amount	YTD Actual Expense
501000	PERS SVC	$4,608,431.49	$2,854,144.39
502000	CONTRACTUAL SVC	$11,091,458.94	$7,219,112.40
503000	SUPPLY AND MATERIAL	$20,000.00	$9,224.07
504000	FIXED CHGS AND CONT	$232,428.00	$120,535.76
505000	TRAVEL	$10,000.00	$9,516.99
513000	EMPLOYER CONTRIB	$1,475,000.00	$908,916.17
515000	UTILITIES	$9,687.00	$445.00

Context menu:

- Cut — Ctrl+X
- Copy — Ctrl+C
- Paste — Ctrl+V
- Paste Special... — Ctrl+Alt+V
- Insert ▸
- Refresh All — Ctrl+R
- Show Structure — Ctrl+3
- Show Results — Ctrl+2
- Start Drill
- Filter ▸

Arranged by: Alphabetic order ▾

Report 1

Report 2 ▾ | Track Changes: Off | Page 1 of 1 | 100% | 7 minutes ago

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New data provider ▾ | Edit | Purge ▾ | New Variable ▾ | Merge

Available Objects ▾

Type here to filter tree

- New Document
  - Fund Key
    - Fund Key (Query 2)
    - Fund Key (Query 1)
  - Funds
  - Major CI
    - Major CI (Query 1)
    - Major CI Key (Query 2)
    - Major CI Name (Query 1)
  - Posting Period
    - Posting Period Key (Query 1)
    - Posting period Key (Query 2)
  - Commitment Items Key
  - Commitment Items Name
  - Fund Name
  - Major CI Name (Query 2)
  - Amount
  - MTD Actual Expense
  - YTD Actual Expense
  - Variables

Major CI	Major CI Name	Amount	YTD Actual Expense
501000	PERS SVC	$4,608,431.49	$2,854,144.39
502000	CONTRACTUAL SVC	$11,091,458.94	$7,219,112.40
503000	SUPPLY AND MATERIAL	$20,000.00	$9,224.07
504000	FIXED CHGS AND CONT	$232,428.00	$120,535.76
505000	TRAVEL	$10,000.00	$9,516.99
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502000	CONTRACTUAL SVC	$11,091,458.94	$7,219,112.40
503000	SUPPLY AND MATERIAL	$20,000.00	$9,224.07

Arranged by: Alphabetic order ▾

Report 1 | Report 2

Report 2 ▾ | Track Changes: Off | Page 1 of 1 | 100% | 0 minutes ago

Now we will put filters on two of the tables for posting periods. For the Monthly one, we will select only the month we want to see. We co to the Analysis tab, select filter and see the three blocks in the report.
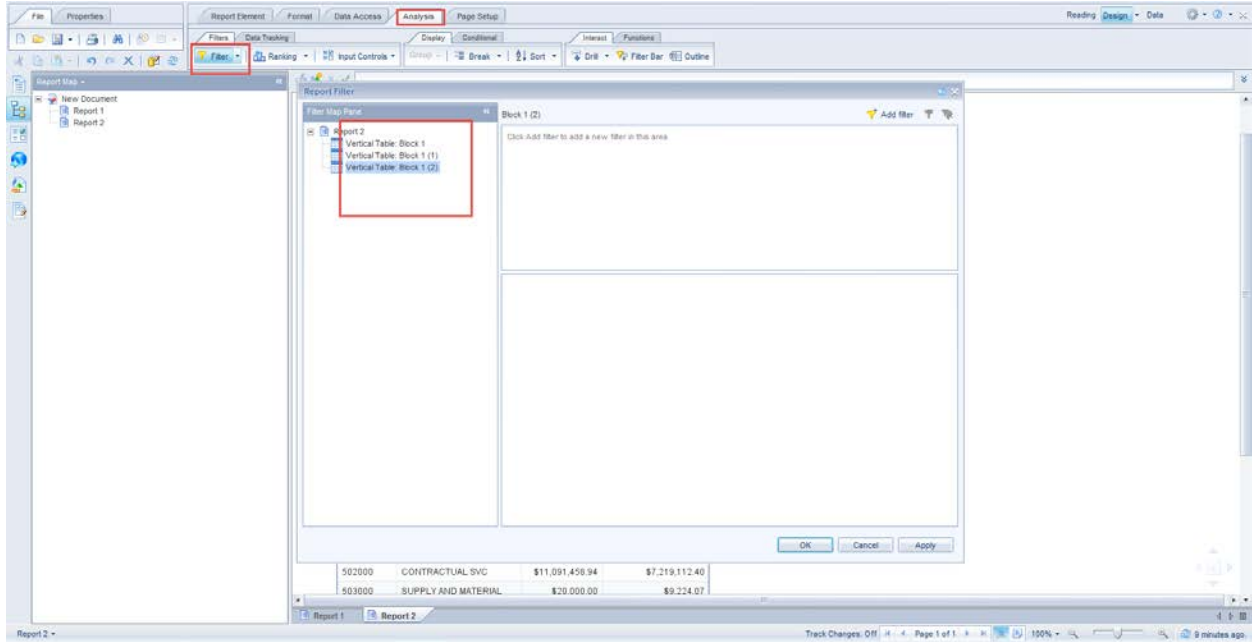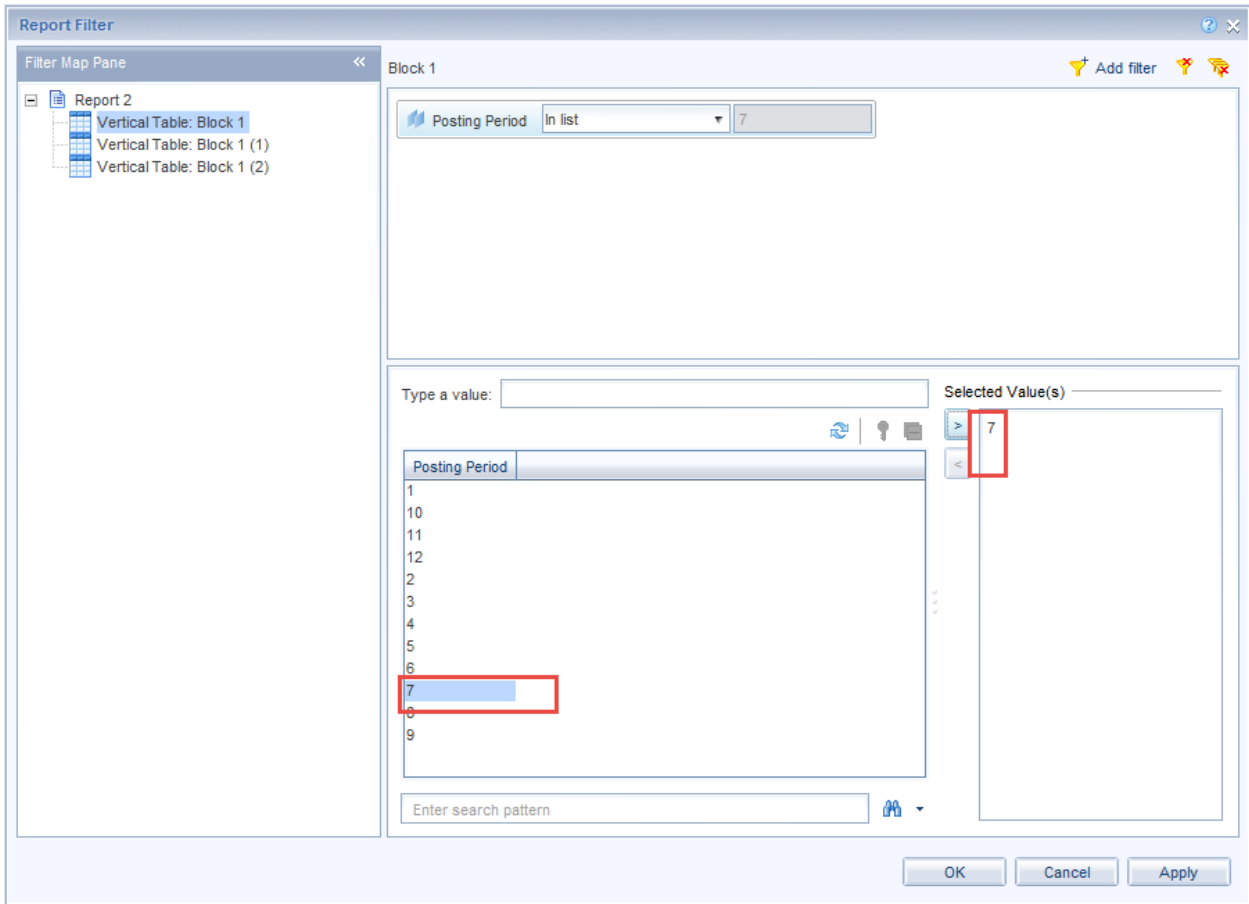

We will select block one for the monthly comparison, click add filter and chose the posting period dimension
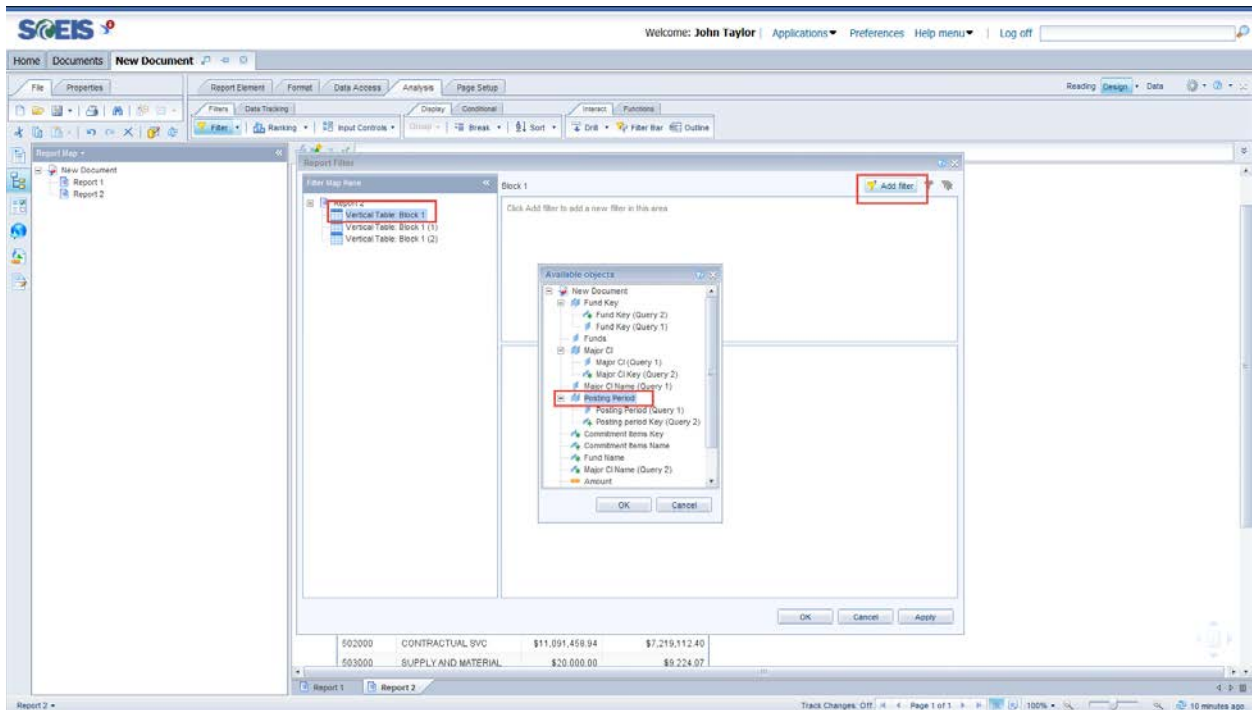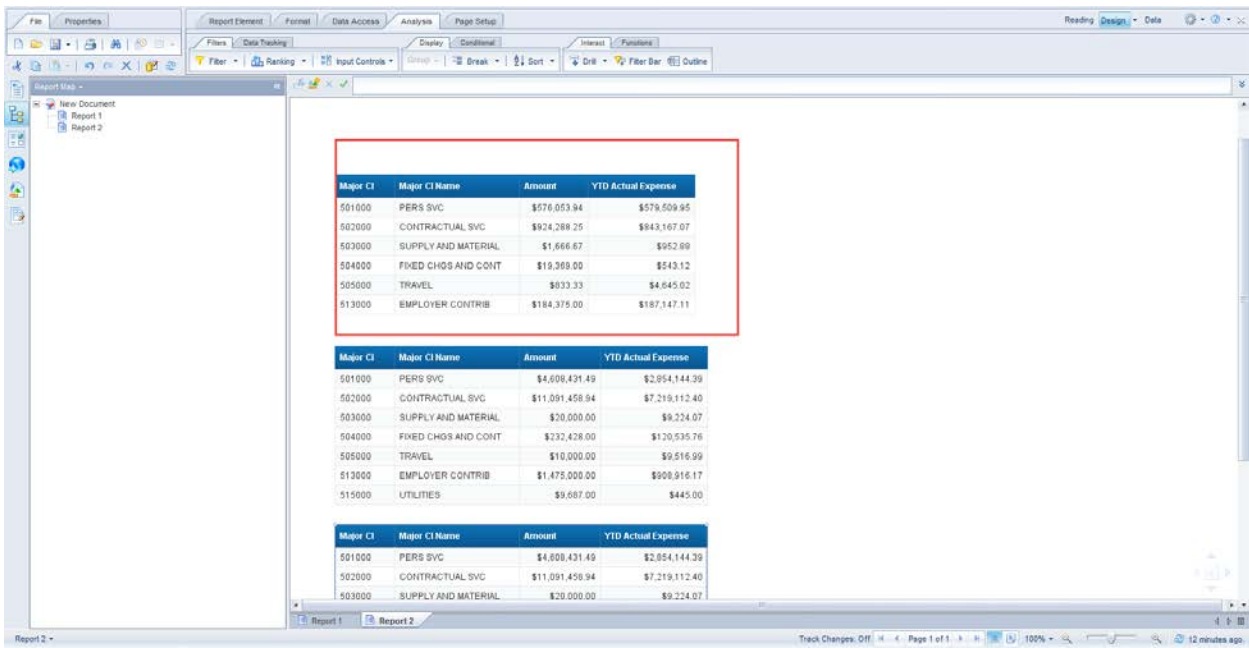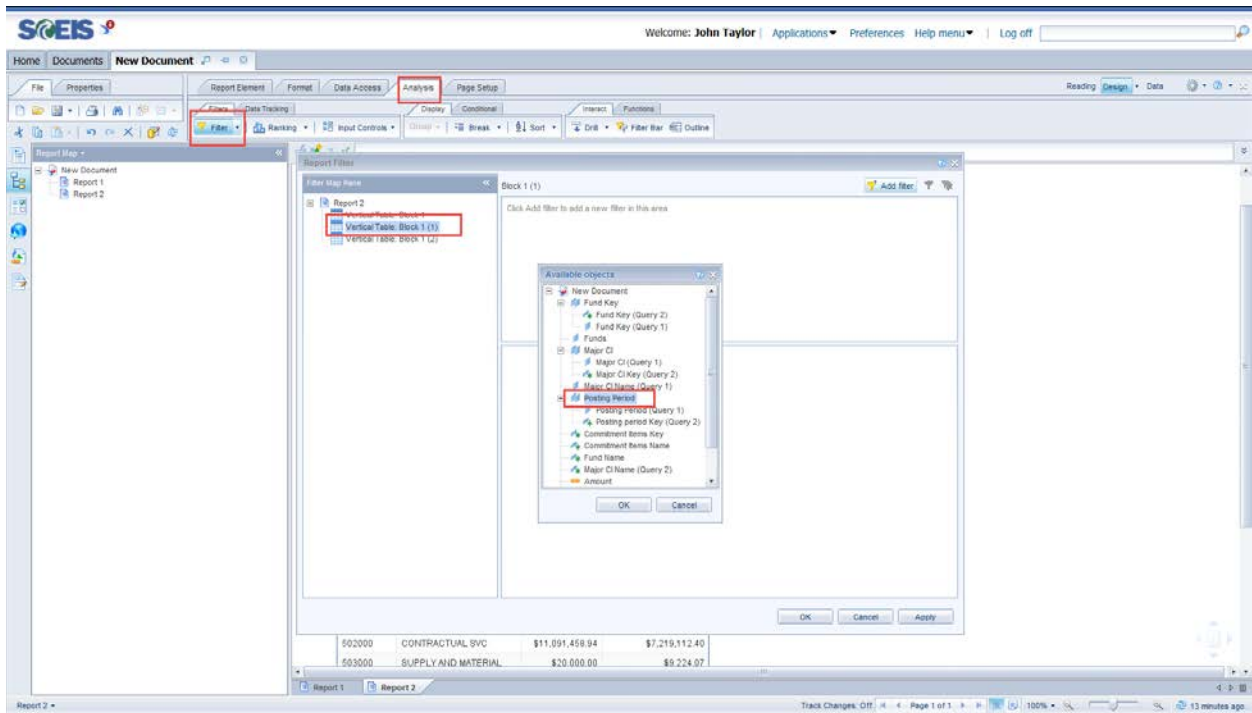
Although, it is month 8 now, we are only a few days into it, so we will select month 7.
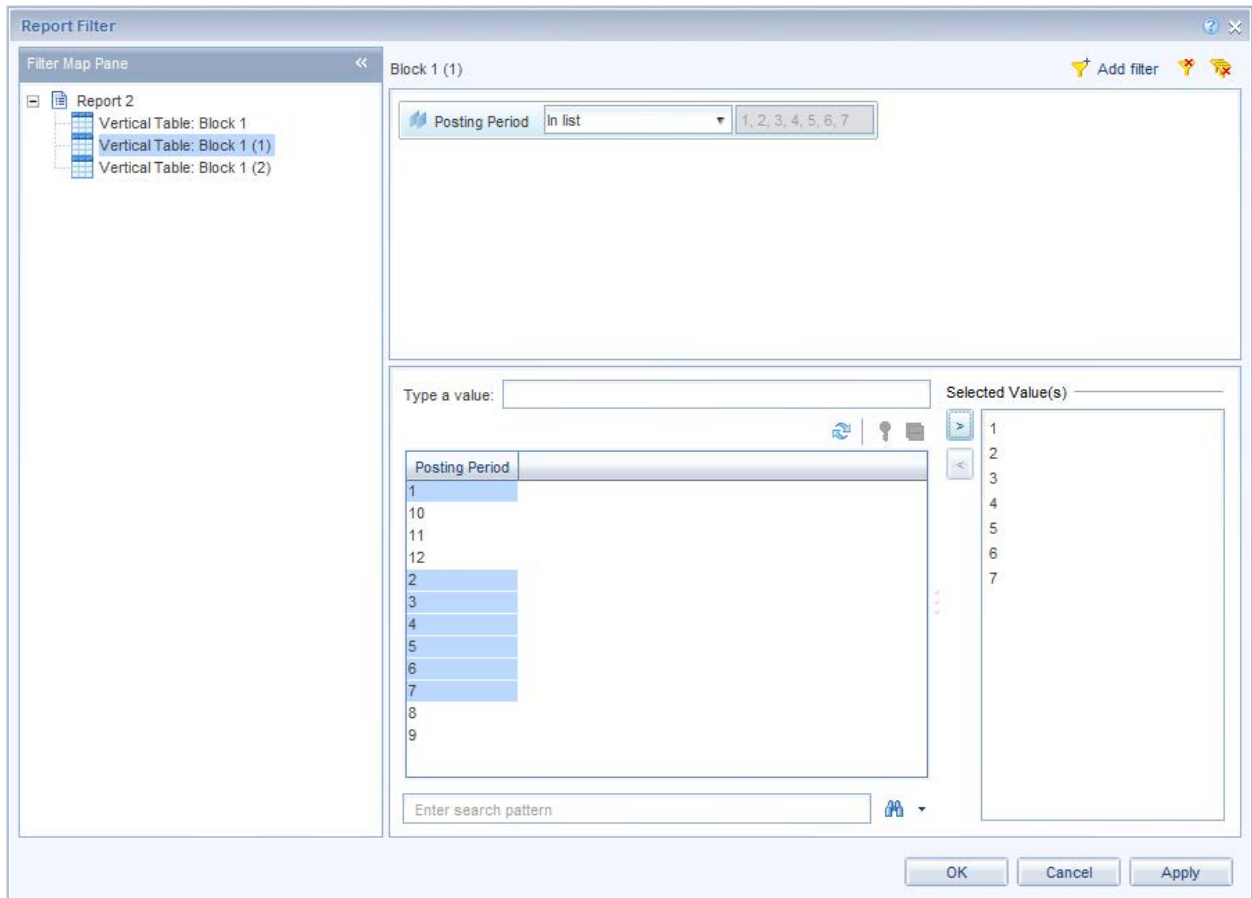

Note now the first table shows only one month's data. Again, we can change headings and add titles to the table later to make the report more user friendly.

Now we will do the same for table two, but make it the cumulative report.

Here, instead of just posting period 7, we add 1 through 7.

Notice now we have a cumulative budget in Amount to compare to YTD.

Ta Da!! That's it!!

You can add totals, custom sort, add % consumed, remaining budget and all sorts of other things to this report. Next year when you have a new budget, you just need to change the excel spreadsheet and reload it into Business Objects. Or even during this year, if your budget changes or you want to recalculate the monthly spreads, you can just reload the spreadsheet.
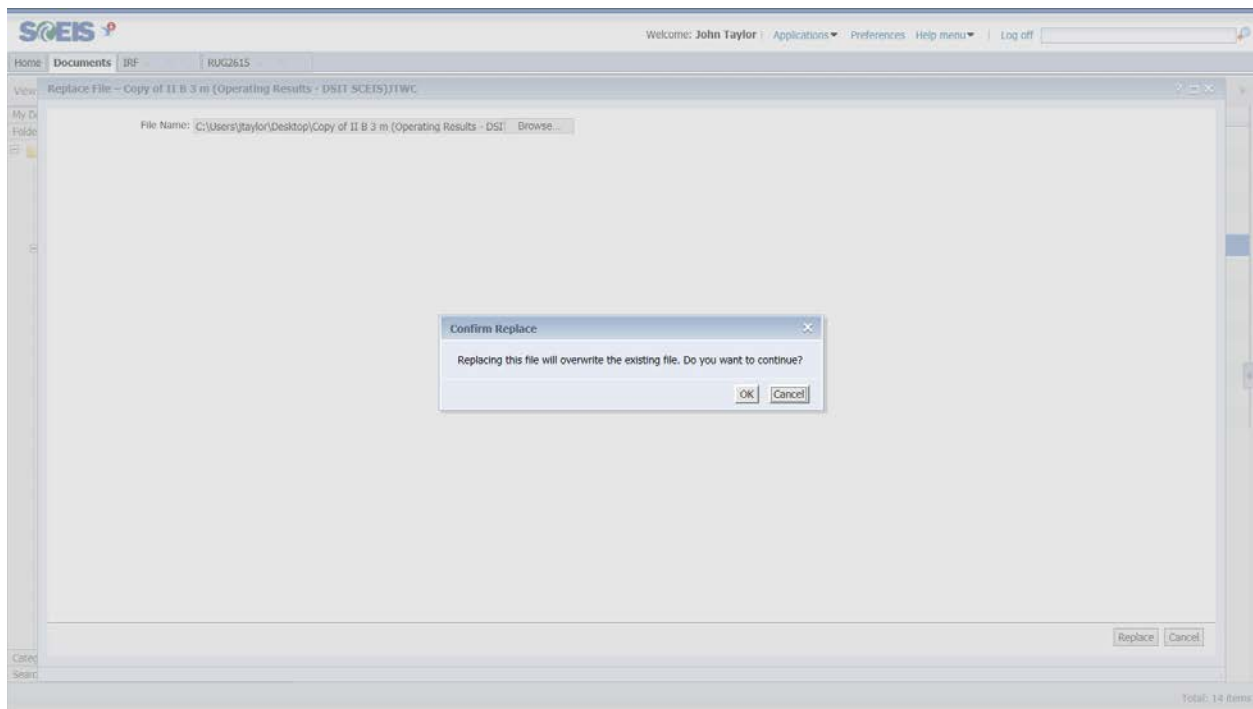
You then will see the same browse and find screens discussed earlier. Once you find the spreadsheet again, you will see instead of add, the option is now replace.
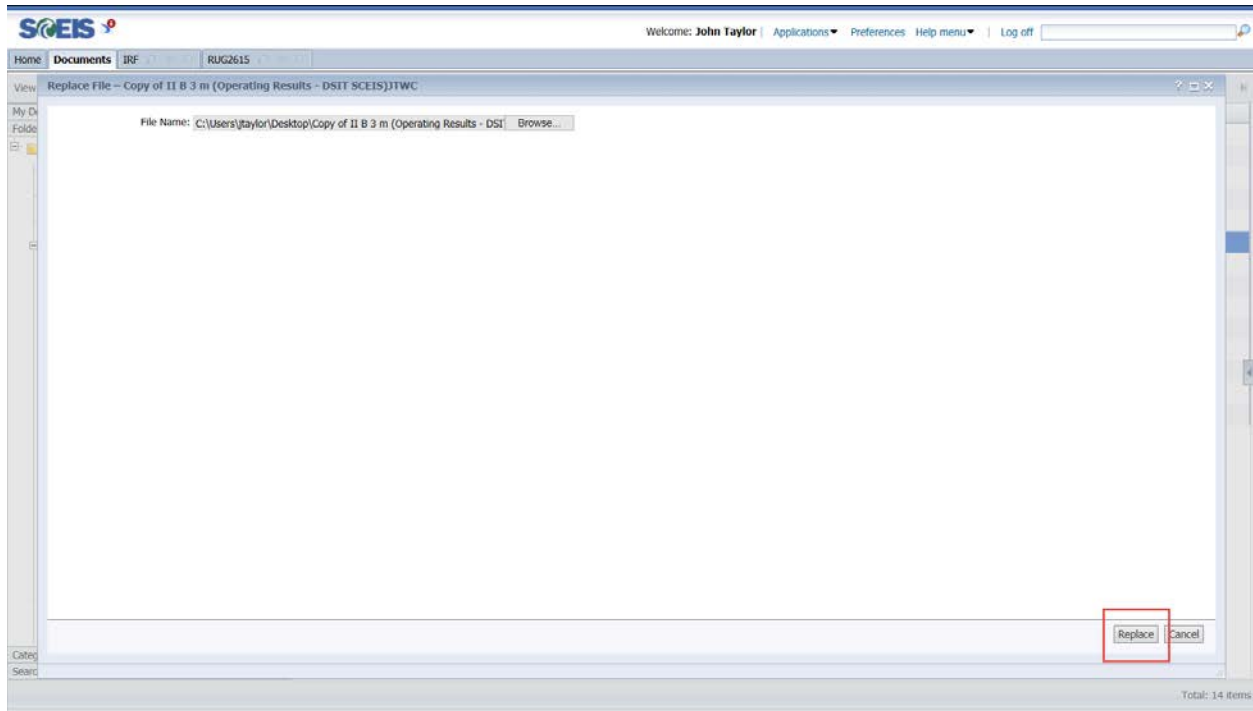
You are cautioned about replacing the fil, but once you hit ok, the updated data is loaded.

Thanks and have fun! This stuff is really cool!!