

Forecasting Tool Training Guide



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Preface

The Forecasting Tool (FT) was developed out of the need for administrators to have a means to accurately project the availability of funding on grant, program, and gift accounts as well as be able to save the calculations for later reference. At the time of the FT's development ASU's Workday financial system only had the capability of being a report generator and lacked the functionality of calculating expenditure projections. This required units across the university to utilize their own financial calculation tools that can lead to increased error, increased time reviewing financial figures, and a lack of standardization in financial management.

The FT is not meant to be a replacement for Workday. It is intended to be a complimentary tool to be used in conjunction with Workday. The FT is also not meant to be a monthly audit readiness reconciliation tool that is currently available in Workday. The FT is meant to be a tool for administrators, not faculty, and requires specialized training to effectively utilize. The FT contains a significant number of features that are not readily apparent and while the training is not necessarily intensive, it is required to become proficient in use. It is the purpose of this guide to encapsulate these trainings for FT beginners and for those needing later reference.

Basic Navigation

Forecasting Ribbon

The Forecasting Tool is an Excel based addon accessed through the Amazon BI Workspaces. Contact Steve Saunders at Stephen.R.Saunders@asu.edu for access to the Dropbox where the FT is located. This is due to ASU cyber encryption policies requiring that information such as that found in the FT be secure behind an adequate firewall. The FT is best navigated using the Forecasting Ribbon at the top of the application, see figure 1.

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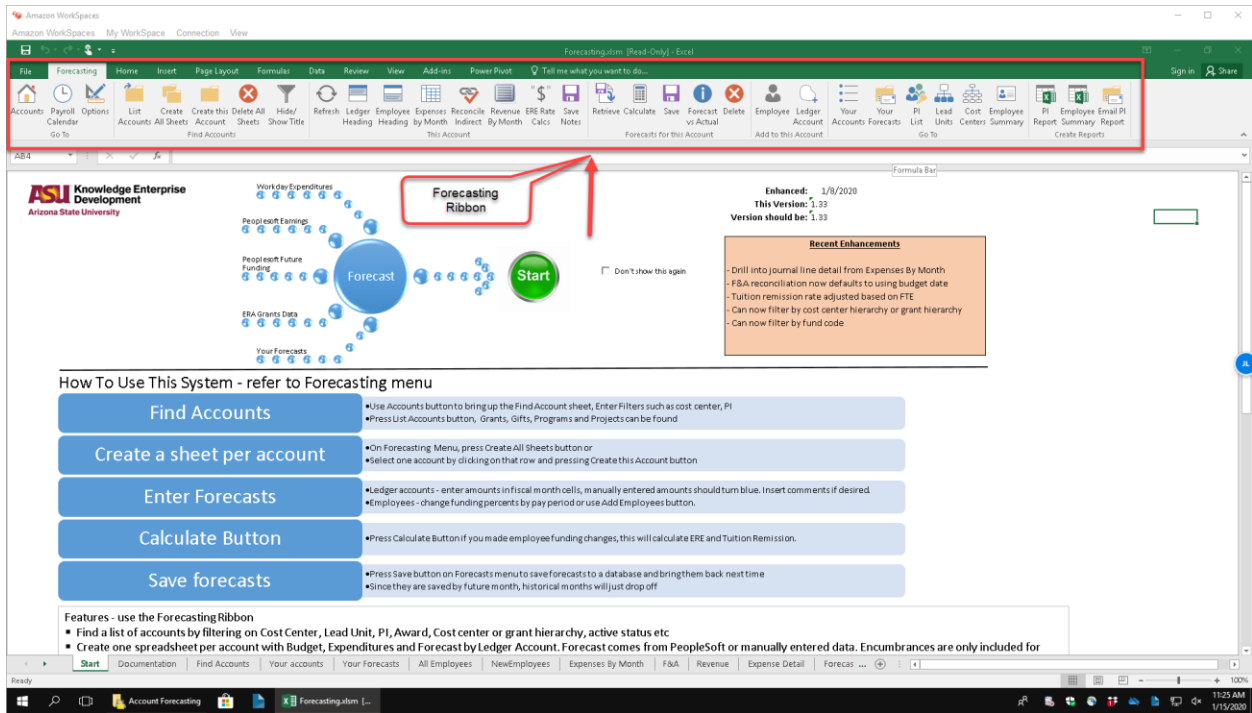


Figure 1.

The Forecasting Ribbon is divided into 7 sections and are functional based on what application of the FT is being used. These sections will be detailed later in the guide and are shown in figure 2.

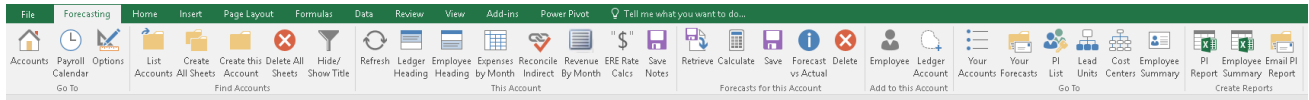


Figure 2.

Hovering over each of the Ribbon icons with the cursor will pop out a brief explanation of the function of each button.

Find Accounts

To begin using the FT, account information must first be pulled from the various data warehouses at ASU. To do this you can click on the Accounts button which is the first button in the Ribbon or alternatively you can click on the Find Accounts tab at the bottom of the spreadsheet. Use of the Ribbon is recommended as later more Excel tabs will be created and clicking through the tabs will become cumbersome. Clicking on the Accounts button will bring you to the screen in figure 3.

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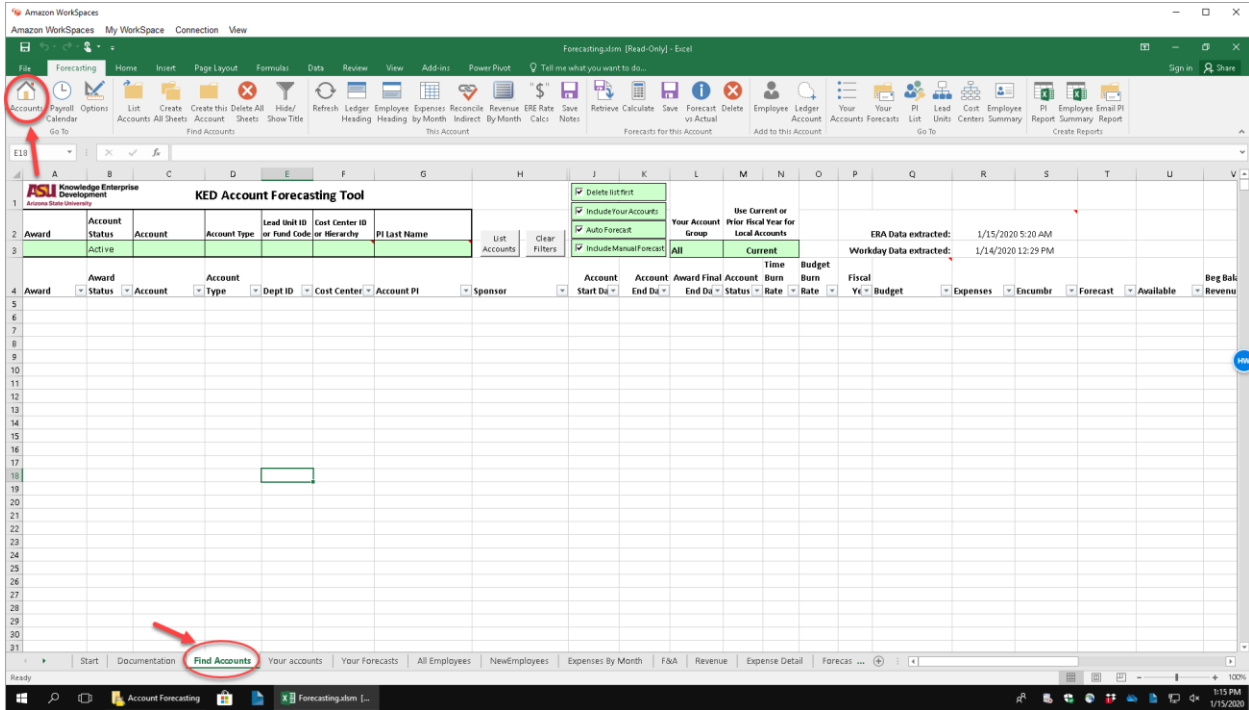


Figure 3.

At the top of the Find Accounts tab you'll see 6 entry cells that can be used to find accounts. It is recommended that only one of these cells be used at a time to look up an account, see figure 4.

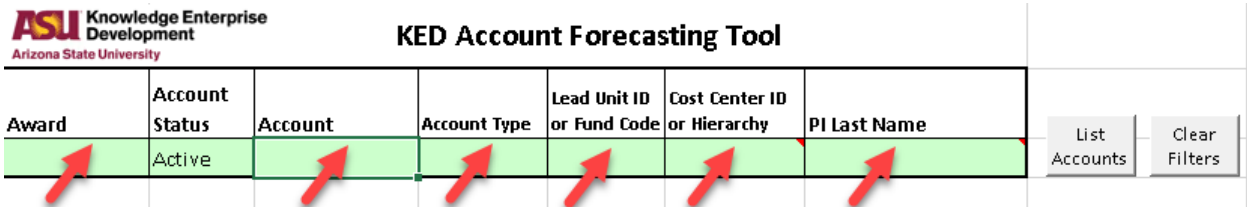


Figure 4.

In the FT, cells that are shaded in green indicate input cells. Typing in the award number and clicking on the List Accounts button to the right of the entry cells will display all accounts that roll up into that award number. Account Status can be filtered between Active, Active and Expiring, All, Activation in Progress and will be detailed later in the guide.

The Account cell is likely the primary cell that will be used to look up single account information. In this cell a grant, program, or gift number can be entered and searched. Account Type defaults to All but can be filtered if needed. The Lead Unit, Cost Center ID, and PI Last Name cells will function in a similar way as the Award cell by pulling all accounts associated with the identifier that's inputted. In this section of the guide, we'll focus on a single account.

Refer to Figure 5 for the following. After entering an account number and clicking on the List Accounts button, the account information will populate in the area below the search cells. Alternatively,

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the List Accounts button in the Ribbon can also be clicked resulting in the same effect. This will include most of the pertinent information at a glance with additional information seen by scrolling to the left. Clicking on the Hide / Show Title button in the Find Accounts Section of the Forecasting Ribbon will expand and collapse column I to make that information easier to view. Note that if another account search is desired, the previous account entry can either be selected with the cursor and deleted. The Clear Filters button can also be pressed to ensure all cells are fully deleted. In the upper right of the Find Accounts page you'll also see the date and time that the account information was extracted from the respective data warehouses. The FT pulls data that is loaded either the day before or the morning of any given search.

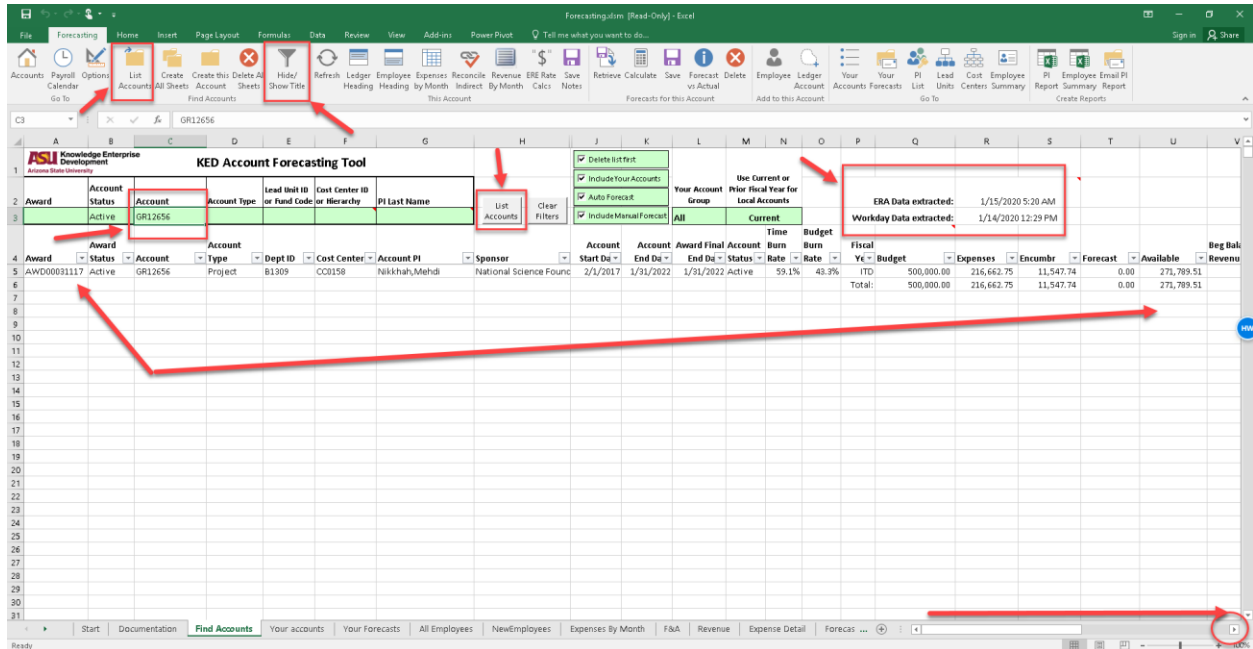


Figure 5.

It is this single feature of automatic data retrieval that can dramatically streamline account analysis, however this comes with a warning. Since the data can be as much as 24 hours old, if major expenditures have been approved throughout the course of the business day, they will **NOT** be reflected in the FT. It is the responsibility of the user to ensure that these expenditures are considered when advising on available funding levels. They can also be projected into the FT and will be demonstrated in the projection's sections of the guide.

Create this Account

Now that an account has been selected and the data found, it's time to create a specific account tab from which forecasting can be done to make specific projections. To do this, select the account in the area below the search field. Then in the Ribbon, the Create this account button needs to be clicked.

At this point, the FT will pull additional detailed information specific to that account and create a separate account tab. The account number under the search field will also turn blue and become a hyperlink to the newly created account tab, see figure 6.

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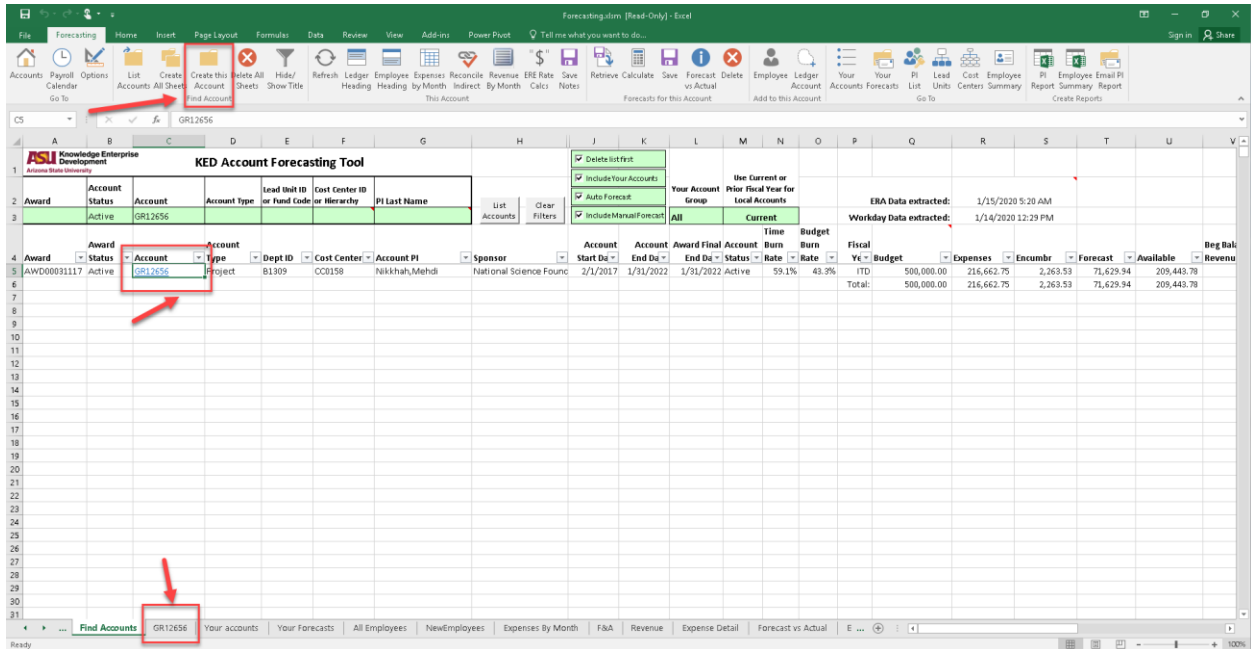


Figure 6.

When creating a single account, the FT will automatically open the new account tab where you'll be able to see ledger account information, encumbrances, expenditures, forecasts, the available account balance, and general award information.

The account tabs can initially be overwhelming with the amount of data that is being displayed all at once. When viewing an account sheet, think of it as having 4 separate main sections. These are 1. Award Info Section, 2. Ledger Account and Personnel Section, 3. Notes Section, and 4. Projection Section.

These sections can be easily viewed by clicking on the Ledger Headings button in the Ribbon, but this is only for ease of viewing and not required for use of the FT. These sections are labeled in figure 7.

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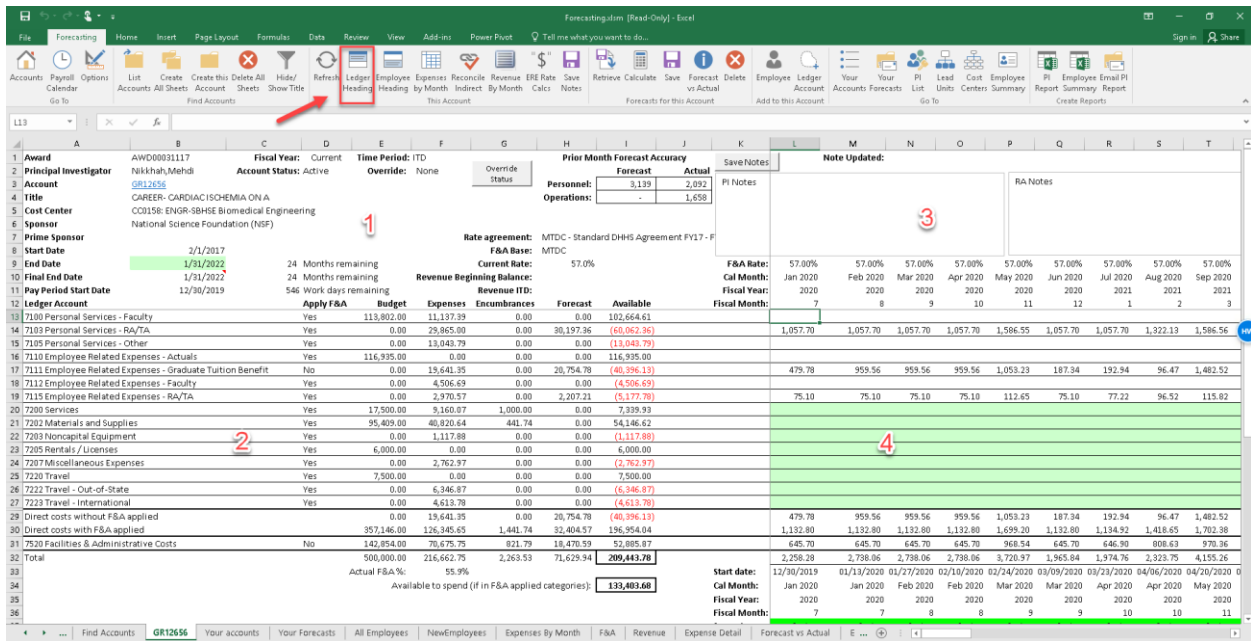


Figure 7.

From the Account tabs we see information that is like what can be found in Workday. This is important so that projections made within the tool can be easily translated to real world applications. This concludes the basic navigation section of the guide. Advanced navigation guidance will be detailed throughout the subsequent sections of the guide.

Non-payroll Projections

Analyzing the Data

Prior to making any projections, an analysis of the current state of the account should be completed. The FT has been formatted so that data such as grant period of performance, F&A rates, available balance, notes, and expense projections stand out from the rest of the data.

Of the data, the most important pieces when it comes to financial analysis are the Total Available Funding in the account and the Total Available Funding to Spend. These figures have a red box drawn around them as well as labeled 1 and 2 respectively in figure 8. These data consider all expenses, encumbrances (with the exception of reserves), forecasts, and budget on the account which are seen in their respective columns. The amount available to spend approximates the amount of funding available if full F&A rates were applied to all direct costs. Both values will turn red when the balance becomes negative to warn of an account deficit.

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Award		Fiscal Year: Current		Time Period: ITD		Prior Month Forecast Accuracy		Save Notes		Note Updated:							
Principal Investigator: Akkshaj, Mehdi		Account Status: Active		Override: None		Forecast: 3,139		Actual: 2,092		PI Notes							
Title: CAREER- CARDIAC/SCHEMIA ON A						Operations: -		1,659		RA Notes							
Cost Center: COOLSE: ENGR-SB/SE Biomedical Engineering																	
Sponsor: National Science Foundation (NSF)																	
Prime Sponsor:																	
Start Date: 2/1/2017		24 Months remaining		Rate agreement: MTDC - Standard DHHS Agreement FY17 - F		F&A Rate: MTDC		Current Rate: 57.0%		F&A Rate: 57.00%							
End Date: 1/31/2022		596 Work days remaining		Revenue Beginning Balance:						57.00%							
Fiscal Start Date: 1/31/2020				Revenue ITD:						57.00%							
Pay Period Start Date: 1/13/2020										57.00%							
Ledger Account	Apply F&A	Budget	Expenses	Encumbrances	Forecast	Available	Fiscal Year:	Cal Month:	Cal Month:	Cal Month:	Cal Month:	Cal Month:	Cal Month:	Cal Month:	Cal Month:	Cal Month:	Cal Month:
7100 Personal Services - Faculty	Yes	113,000.00	1,137.39	0.00	0.00	102,664.61	2020	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020	
7103 Personal Services - RA/TA	Yes	0.00	3,393.85	0.00	29,688.51	(60,062.36)	2020										
7105 Personal Services - Other	Yes	0.00	1,043.79	0.00	0.00	(13,043.79)	2020										
7110 Employee Related Expenses - Actuals	Yes	116,985.00	0.00	0.00	0.00	116,935.00	2020										
7111 Employee Related Expenses - Graduate Tuition Benefit	No	0.00	15,641.35	0.00	20,754.78	(40,396.13)	2020										
7112 Employee Related Expenses - Faculty	Yes	0.00	4,506.69	0.00	0.00	(4,506.69)	2020										
7115 Employee Related Expenses - RA/TA	Yes	0.00	3,808.12	0.00	2,169.66	(5,177.78)	2020										
7200 Services	Yes	17,500.00	9,160.07	1,000.00	0.00	7,339.93	2020										
7202 Materials and Supplies	Yes	95,409.00	40,917.14	441.74	0.00	54,050.12	2020										
7203 Noncapital Equipment	Yes	0.00	1,117.88	0.00	0.00	(1,117.88)	2020										
7205 Rentals / Licenses	Yes	6,000.00	0.00	0.00	0.00	6,000.00	2020										
7207 Miscellaneous Expenses	Yes	0.00	2,762.97	0.00	0.00	(2,762.97)	2020										
7220 Travel	Yes	7,500.00	0.00	0.00	0.00	7,500.00	2020										
7222 Travel - Out-of-State	Yes	0.00	6,346.87	0.00	0.00	(6,346.87)	2020										
7223 Travel - International	Yes	0.00	4,613.78	0.00	0.00	(4,613.78)	2020										
Direct costs without F&A applied		0.00	15,641.35	0.00	20,754.78	(40,396.13)	2020										
Direct costs with F&A applied		357,146.00	127,808.55	1,441.74	31,838.17	196,857.54	2020										
7520 Facilities & Administrative Costs	No	142,854.00	71,853.60	821.79	18,147.74	(57,830.87)	2020										
Total		900,000.00	217,763.50	2,263.53	76,746.00	209,292.28	2020										
Actual F&A %:		55.9%		Available to spend (if in F&A applied categories):		133,307.18											
Start date:		01/13/2020		01/27/2020		02/10/2020		02/24/2020		03/09/2020		03/23/2020		04/06/2020		04/20/2020	
Cal Month:		Jan 2020		Feb 2020		Mar 2020		Apr 2020		May 2020		Jun 2020		Jul 2020		Aug 2020	
Fiscal Year:		2020		2020		2020		2020		2020		2020		2020		2020	
Fiscal Month:		7		8		8		9		9		10		10		11	

Figure 8

Ledger Account Projections

All projections are made at the ledger account level. In order to make non-payroll projections in the FT, the green cells on the right-hand side of the ledger account list should be utilized. That section is divided into columns with each column representing a calendar month. At the top of each column data that pertains to that specific column is detailed and includes the F&A Rate, Calendar Month, Fiscal Year, and Fiscal Month.

Of greatest importance in the column data is the F&A rate because the rate listed here is the rate that is applied to all projections in the column. It is not affected by the Current F&A rate for which the project is set. This allows for projections into periods where ASU's F&A rate may change.

To make a projection, find the cell that corresponds to both the ledger account and month for which an expenditure is expected to be incurred. When a projection is input into the cell and entered, the text will turn blue indicating that a change has been made and registered. Non-payroll projections will be automatically calculated and accounted for in the Forecast Column and the Available Funding cells, see figure 9.

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Award	AWD00031117		Fiscal Year: Current	Time Period: ITD	Prior Month Forecast Accuracy	Note Updated:					
Principal Investigator	Nikkhah,Mehdi		Account Status: Active	Override: None	Forecast	Actual	Save Notes				
Account	SR12656				3,139	2,092	PI Notes				
Title	CAREER- CARDIACISCHEMIA ON A				Operations:	1,658					
Cost Center	CC0158: ENGR-SBHSE Biomedical Engineering										
Sponsor	National Science Foundation (NSF)										
Prime Sponsor					Rate agreement:	MTDC - Standard DHHS Agreement FY17 - F					
Start Date	2/1/2017				F&A Base:	MTDC					
End Date	1/31/2022		24 Months remaining		Current Rate:	57.0%					
Final End Date	1/31/2022		24 Months remaining		Revenue Beginning Balance:						
Pay Period Start Date	1/13/2020		536 Work days remaining		Revenue ITD:						
Ledger Account	Apply F&A	Budget	Expenses	Encumbrances	Forecast	Available	Fiscal Year:	Fiscal Month:	Fiscal Month:	Fiscal Month:	Fiscal Month:
7100 Personal Services - Faculty	Yes	113,802.00	11,137.39	0.00	0.00	102,664.61					
7103 Personal Services - RA/TA	Yes	0.00	30,393.85	0.00	29,668.51	(60,062.36)	528.85	1,057.70	1,057.70	1,057.70	1,057.70
7105 Personal Services - Other	Yes	0.00	13,043.79	0.00	0.00	(13,043.79)					
7110 Employee Related Expenses - Actuals	Yes	116,935.00	0.00	0.00	0.00	116,935.00					
7111 Employee Related Expenses - Graduate Tuition Benefit	No	0.00	19,641.35	0.00	20,754.78	(40,396.13)	479.78	959.56	959.56	959.56	959.56
7112 Employee Related Expenses - Faculty	Yes	0.00	4,506.69	0.00	0.00	(4,506.69)					
7115 Employee Related Expenses - RA/TA	Yes	0.00	3,008.12	0.00	2,169.66	(5,177.78)					
7200 Services	Yes	17,500.00	9,160.07	1,000.00	0.00	7,339.93	37.55	75.10	75.10	75.10	75.10
7202 Materials and Supplies	Yes	95,409.00	40,917.14	441.74	1,337.00	52,713.12	1,337.00				
7203 Noncapital Equipment	Yes	0.00	1,117.88	0.00	1,701.00	(2,818.88)					
7205 Rentals /Licenses	Yes	6,000.00	0.00	0.00	0.00	(6,000.00)					
7207 Miscellaneous Expenses	Yes	0.00	2,762.97	0.00	42.00	(2,804.97)					
7220 Travel	Yes	7,500.00	0.00	0.00	0.00	7,500.00					
7222 Travel - Out-of-State	Yes	0.00	6,346.67	0.00	0.00	(6,346.67)					
7223 Travel - International	Yes	0.00	4,613.78	0.00	0.00	(4,613.78)					
Direct costs without F&A applied		0.00	19,641.35	0.00	20,754.78	(40,396.13)	479.78	959.56	959.56	959.56	959.56
Direct costs with F&A applied		357,146.00	127,008.55	1,441.74	34,911.17	193,777.54	1,903.40	2,833.80	1,174.80	1,132.00	1,132.00
7520 Facilities & Administrative Costs	No	142,854.00	71,053.60	821.79	19,903.14	51,075.27	1,084.94	1,615.27	669.64	645.00	645.00
Total		500,000.00	217,703.50	2,263.53	75,576.21	204,456.68	3,468.12	5,408.63	2,804.00	2,738.00	2,738.00
		Actual F&A %:	55.9%								
		Available to spend (if in F&A applied categories):				130,227.18					
		Start date:	01/13/2020	01/27/2020	02/10/2020	02/24/2020					
		Cal Month:	Jan 2020	Feb 2020	Feb 2020	Mar 2020					
		Fiscal Year:	2020	2020	2020	2020					
		Fiscal Month:	7	8	8	8					

Figure 9.

Adding Ledger Accounts

If a projection needs to be made on a ledger account that does not currently exist within the award, one can be added using the Ledger Account button found in the Add to this Account section of the Forecasting Ribbon. Clicking the button will launch a popup window with a list of all expense ledger accounts. These accounts can be selected from the menu or if the ledger account number is known, it can be typed directly into the window. Once the desired account is found, click the OK button in the window and the ledger account will be added to the award and projections can be made on that line, as previously described, see figure 10.

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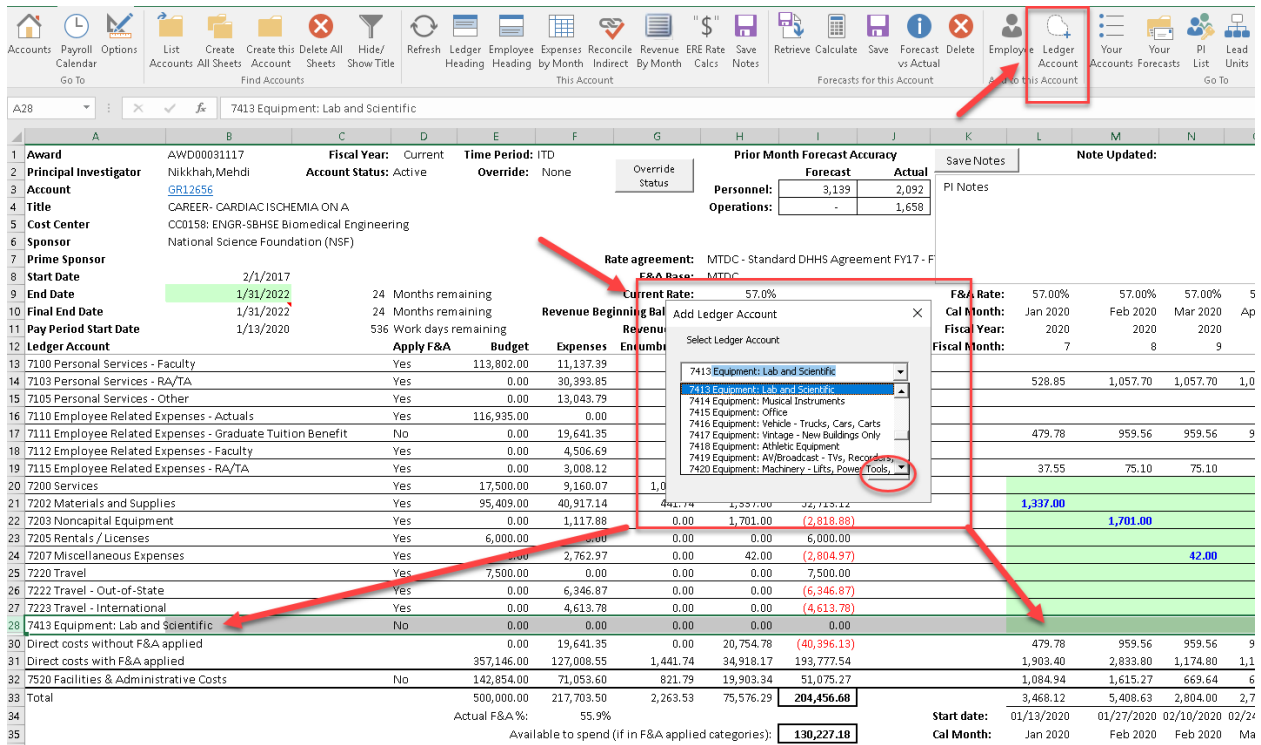


Figure 10.

Extending Project End Dates

The FT can artificially extend the end date of the award along with the number of month columns to the right of the ledger accounts. This is useful if a projection needs to be made beyond the project end date for reasons such as an expected no cost extension or an anticipated incoming funding increment. Placing projections in the future month columns that expenses are expected to post in has the benefit of ensuring that the correct ERE and or F&A/ASC rates are applied to the projections. This will have the greatest impact during fiscal year change overs when ASU's rates tend to change as well.

To change the end date in the FT, simply type the new end date in MM/DD/YYYY format in the green end date cell at the top left of the account sheet. After pressing enter, the month columns will extend out to the right of the spread sheet to accommodate the added time frame. Scrolling to the right, a vertical line can be seen that will denote where the original award end date was, for reference see figure 11. Projections can now be entered for the future dates as previously described.

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Award		Fiscal Year: Current		Time Period: ITD		Prior Month Forecast Accuracy		Save Notes	
Principal Investigator: AWD00031117 Nikkhah, Mehdi		Account Status: Active		Override: None		Forecast: 3,139 Actual: 2,092		PI Notes	
Title: CAREER - CARDIAC SCHEMIA ON A CC0158: ENGR-SBHS Biomedical Engineering		Rate agreement: MTDC - Standard DHHS Agreement FY17 - F		F&A Base: MTDC		Personnel: 3,139 Operations: -			
Sponsor: National Science Foundation (NSF)		Current Rate: 57.0%		Revenue Beginning Balance:		F&A Rate:			
Prime Sponsor:		36 Months remaining		Revenue ID:		57.00%			
Start Date: 2/1/2017		24 Months remaining		Forecast:		57.00%			
End Date: 1/31/2023		797 Work days remaining		Available:		57.00%			
Final End Date: 1/31/2022		Apply F&A:		Revenue ID:		57.00%			
Pay Period Start Date: 1/13/2020		Budget:		Forecast:		57.00%			
Ledger Account:		Expenses:		Forecast:		57.00%			
7100 Personal Services - Faculty	Yes	113,802.00	11,137.39	0.00	0.00	102,664.61			
7103 Personal Services - RA/TA	Yes	0.00	30,393.85	0.00	43,471.50	(73,865.35)	1,057.70	1,057.70	1,586.55
7105 Personal Services - Other	Yes	0.00	13,043.79	0.00	0.00	(13,043.79)			
7110 Employee Related Expenses - Actuals	Yes	116,935.00	0.00	0.00	0.00	116,935.00			
7111 Employee Related Expenses - Graduate Tuition Benefit	No	0.00	19,641.35	0.00	30,736.23	(50,377.58)	1,018.00	1,018.00	1,527.00
7112 Employee Related Expenses - Faculty	Yes	0.00	4,306.69	0.00	0.00	(4,306.69)			
7115 Employee Related Expenses - RA/TA	Yes	0.00	3,008.12	0.00	3,229.75	(6,237.87)			
7200 Services	Yes	17,500.00	9,160.07	1,000.00	0.00	7,339.93			
7202 Materials and Supplies	Yes	95,409.00	40,917.14	441.74	1,337.00	52,713.12			
7203 Noncapital Equipment	Yes	0.00	1,117.88	0.00	1,701.00	(2,818.88)			
7205 Rentals / Licenses	Yes	6,000.00	0.00	0.00	0.00	6,000.00			
7207 Miscellaneous Expenses	Yes	0.00	2,782.97	0.00	42.00	(2,824.97)			
7220 Travel	Yes	7,500.00	0.00	0.00	0.00	7,500.00			
7222 Travel - Out-of-State	Yes	0.00	6,346.87	0.00	0.00	(6,346.87)			
7223 Travel - International	Yes	0.00	4,613.78	0.00	0.00	(4,613.78)			
7413 Equipment: Lab and Scientific	No	0.00	0.00	0.00	0.00	0.00			
Direct costs without F&A applied		0.00	19,641.35	0.00	30,736.23	(50,377.58)	1,018.00	1,018.00	1,527.00
Direct costs with F&A applied		957,146.00	127,008.55	1,441.74	49,781.25	178,914.46	1,137.02	1,137.02	1,705.53
7520 Facilities & Administrative Costs	No	142,854.00	71,053.60	821.79	26,375.27	42,603.34	448.10	448.10	972.15
Total		500,000.00	217,703.50	2,263.53	108,892.75	171,140.22	2,803.12	2,803.12	4,294.68
Actual F&A %:		55.9%		Available to spend (if in F&A applied categories):		109,006.51			
Start date:		Nov 2020		Dec 2020		Dec 2020		Jan 2021	
Cal Month:		2021		2021		2021		2021	
Fiscal Year:		2021		2021		2021		2021	

Figure 11.

Saving and Deleting Projections

At any point in the forecasting process, projections that have been made can be saved. It is extremely important that the Forecasting.xlsm [Read-Only] file **NOT BE SAVED** to any location in the BI workspace or personal computer unless you want it to be a read-only document. Saving the actual file can result in a loss of FT functionality or projection data. The FT saves projections to an OKED database to allow granted ASURite users to retrieve the forecasts later. Any user can save a projection to any account, that said, it is also important to only save forecasts on accounts that are the responsibility of the user to monitor.

To save a series of projections, click on the Save button in the Forecasts for this Account section of the Forecasting Ribbon. Doing so will upload the projection data to the database and the FT will be momentarily suspended while the data is uploaded. Once the upload is complete, a dialogue window will pop up confirming that the save is complete. Click the OK button to continue to use the FT, see figure 12.

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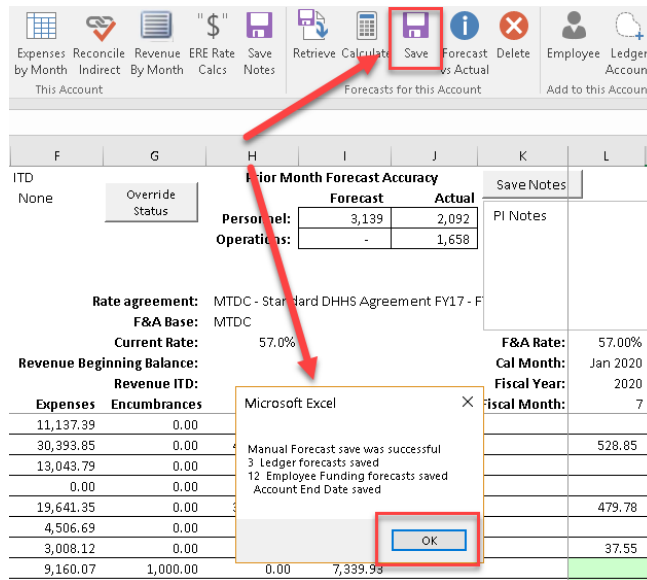


Figure 12.

To delete a projection, click on the Delete button in the Forecasts for this Account section of the Forecasting Ribbon. Doing so will prompt a dialogue window to popup confirming the deletion of the forecasts. This will be the last chance for the user to end the deletion process. Clicking on yes will delete all forecasts for the given account, see figure 13.

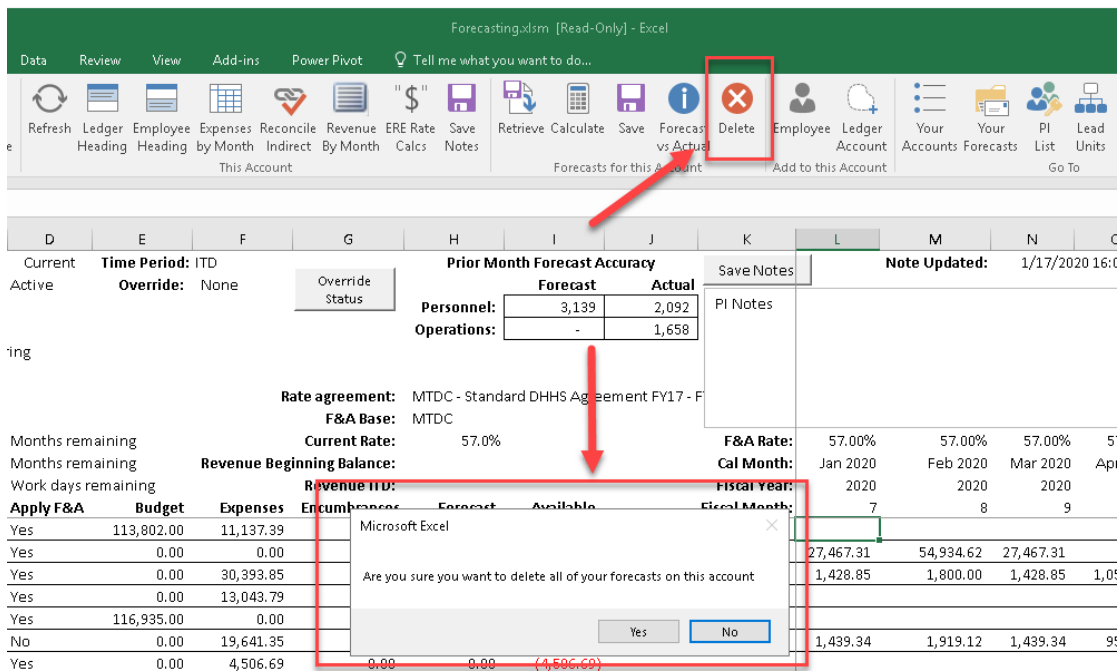


Figure 13.

If the yes option is pressed, a second dialogue box will popup informing that the forecasts have been deleted from the data base, see figure 14.

Forecasting Tool Training Guide

Forecasting.dsm [Read-Only] - Excel

Data Review View Add-ins Power Pivot Tell me what you want to do...

Refresh Ledger Employee Expenses Reconcile Revenue ERE Rate Save Retrieve Calculate Save Forecast vs Actual Delete Employee Ledger Your Your PI Lead Cost Employ Accounts Forecasts List Units Centers Summa

This Account Forecasts for this Account Add to this Account Go To

D	E	F	G	H	I	J	K	L	M	N	O	P
Current	Time Period: ITD		Override	Prior Month Forecast Accuracy			Save Notes	Note Updated: 1/17/2020 16:07 Jayson J				
Active	Override: None		Override Status	Forecast		Actual	PI Notes					
				Personnel:	3,139	2,092						
				Operations:	-	1,658						
ing				Rate agreement:	MTDC - Standard DHHS Agreement FY17 - F							
				F&A Base:	MTDC							
Months remaining				Current Rate:	57.0%							
Months remaining	Revenue Beginning Balance:			F&A Rate:	57.00%	57.00%	57.00%	57.00%				
Work days remaining	Revenue ID:			Cal Month:	Jan 2020	Feb 2020	Mar 2020	Apr 2020				
Apply F&A	Budget	Expenses	Encumbrances	Fiscal Year:	2020	2020	2020	2020				
Yes	0.00	13,043.79	0.00	Fiscal Month:	7	8	9	10				
Yes	116,935.00	0.00	0.00	Forecast	Microsoft Excel							
No	0.00	19,641.35	0.00	Available	Forecasts have been deleted in the database							
Yes	0.00	4,506.69	0.00		1,439.34	1,919.12	1,439.34	959.56				
Yes	0.00	0.00	0.00		10,080.50	20,161.00	10,080.50	0.00				
Yes	0.00	3,008.12	0.00		101.45	127.80	101.45	75.10				
Yes	17,500.00	9,160.07	1,000.00									
Yes	95,409.00	40,917.14	441.74		1,337.00	52,713.12			1,337.00			
Yes	0.00	1,117.88	0.00		1,701.00	(2,818.88)			1,701.00			
Yes	6,000.00	0.00	0.00		0.00	6,000.00						
Yes	0.00	2,762.97	0.00		42.00	(2,804.97)				42.00		
Yes	7,500.00	0.00	0.00		0.00	7,500.00						
Yes	0.00	6,346.87	0.00		0.00	(6,346.87)						
Yes	0.00	4,613.78	0.00		0.00	(4,613.78)						
	0.00	19,641.35	0.00		23,357.28	(42,998.63)			1,439.34	1,919.12	1,439.34	959.56

Figure 14.

Note that this will not delete the values that are currently entered on the account. The delete button only deletes forecasts that are stored in the OKED database, not values entered on the spreadsheet. Anything entered will still be present until the account sheet is either recreated or the Refresh button in the This Account section of the Ribbon is clicked, see figure 15.

Forecasting Tool Training Guide

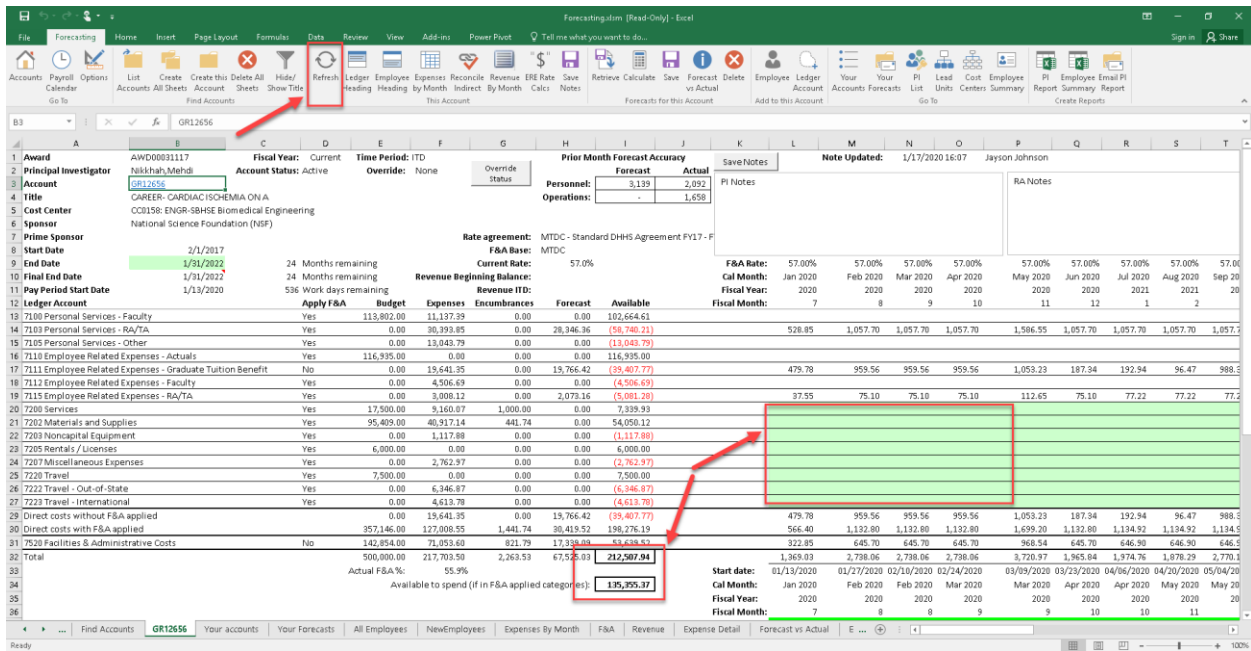


Figure 15.

Adding Notes and Comments

Throughout the course of making projections, a user may wish to add notes to an account. This allows for an account specific reminder to be carried through for future reference to either the PI or the RA. In the upper right section of the FT are two text boxes labeled PI Notes and RA Notes. Comments can be written into these boxes and saved for later review by clicking on either the Save Notes button just above the text boxes or by clicking on the Save Notes button in the This Accounts section of the Forecasting Ribbon. Be sure to click the cursor to a cell outside of the note box area after the note has been added prior to clicking the save button so that the FT registers that the note section is no longer in use. Doing so will cause the Note Updated line of the FT to refresh in blue with the current date and time of the save, as well as the name of the user who saved the note, see figure 16.

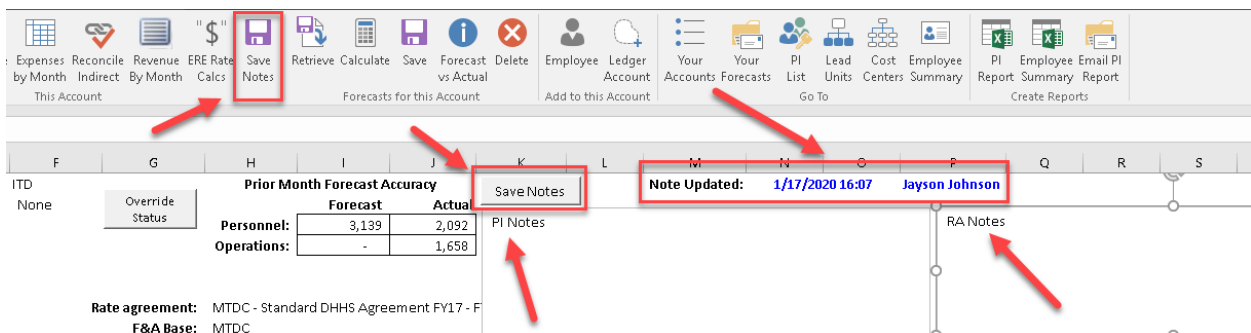


Figure 16.

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The reason for 2 different note boxes allows the user to input a note that the PI will be able to see when a PI report is generated for them. The PI report will be discussed later in the guide. The RA Notes box is intended to be reserved for information that only the RA would find useful, such as a reminder to redistribute funds, check on account revenue, etc. Only the Save Notes Button will have the notes, clicking on the Save Forecasts button will not.

Comments can also be added to individually projected figures in the green projection area. This is useful for reminding the RA what a specific projection was for i.e. a specific service, Pcard, or non-capital expense. To enter a comment, move the cursor over the projected expense cell and right click it. An options window will popup with the choice of being able to Insert Comment, see figure 17.

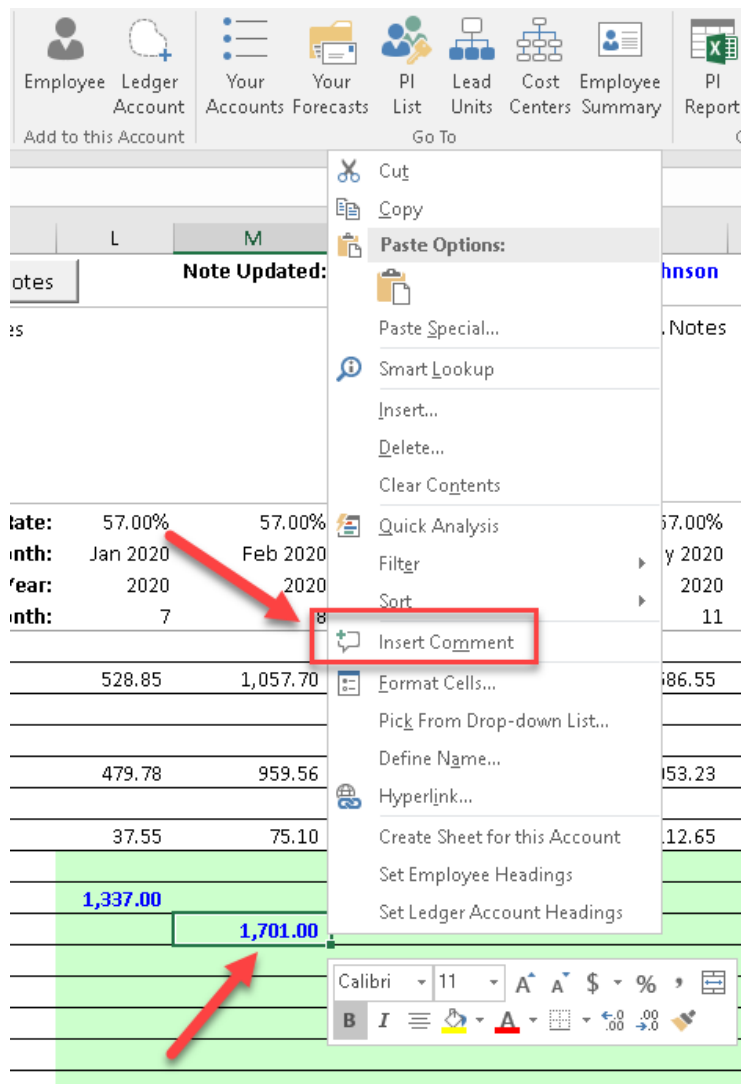


Figure 17.

Selecting the Insert Comment option will allow the user to input a text comment for the single cell. After the comment has been entered, a red flag will appear in the upper right corner of the cell to indicate

Forecasting Tool Training Guide

that a comment has been made. Hovering the cursor over the cell will pop out the comment box, see figure 18. Note that to save cell comments, the Save button in the Forecasts for this Account section of the Ribbon must be clicked. To delete or edit a comment, right click the cell again and choose the appropriate option. The forecast must then be saved again to upload the edit or deletion of the comment.

F&A Rate:	57.00%	57.00%	57.00%	57.00%	57.00%	57.00%
Cal Month:	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020
Fiscal Year:	2020	2020	2020	2020	2020	2020
Fiscal Month:	7	8	9	10	11	12
	528.85	1,057.70	1,057.70	1,057.70	1,586.55	1,057.70
	479.78	959.56	959.56	959.56	1,053.23	187.34
	37.55	75.10	75.10	75.10	112.65	75.10
	1,337.00					
	1,701.00					

Figure 18.

This concludes the basics of making non-payroll projections. The next section will cover payroll projections which tend to require more complex calculations due to additional factors such as ERE type, tuition remission, length of time of a position, and FTE of a position.

Payroll Projections

Account Personnel

Before any payroll projections are made, it is important to understand the current status of any personnel who are already mapped to the account. This can be seen in the section of the FT below the ledger accounts and the non-payroll projection by scrolling down. There you will see any employees who have ever been mapped in PeopleSoft to the account along with their ID, position number, and title information. Next to that you'll see their academic year pay rate, summer semester pay rate, inception to date project earnings, and staff type. The information described here is not a projection, it is the current or past data of the respective employee.

To the right of the previously described data, we begin to see the projection data which includes the earnings, ERE, and tuition remission forecasts. The employee status and the FTE of the employee by pay period start date are also projected. If the projection data for an employee is blank, both under

Forecasting Tool Training Guide

dollar forecasts and the green FTE projection section, this means that there are currently no projections forecasted for the employee, see figure 19.

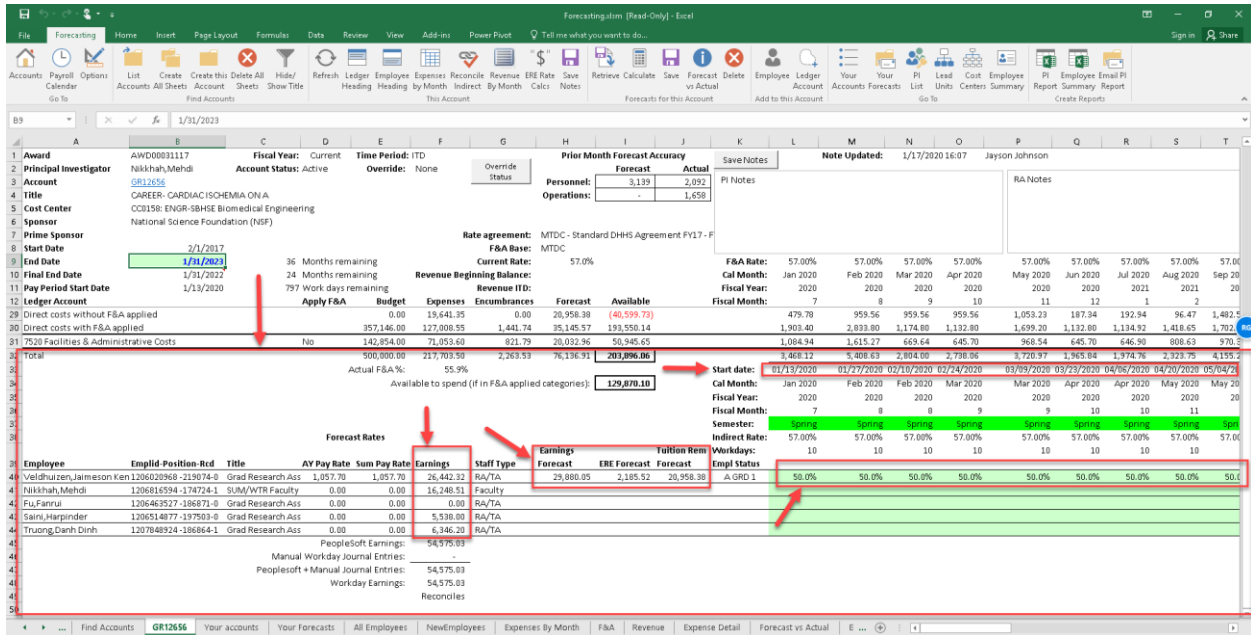


Figure 19.

Simply scrolling down to view the personnel information can result in confusing the column headings from the non-payroll ledger account section. To avoid this, the Employee Heading button in the This Account section of the Forecasting Ribbon can be clicked to hide the ledger section. Doing so will leave only the information pertinent to making personnel projections which includes the total and available to spend account balances. This also freezes the scroll pane so that only the employee information can be navigated. This is useful on accounts that have large numbers of employees mapped to them. To return to the default ledger account view, click on the Ledger Heading button in the same section of the Forecasting Ribbon, see figure 20.

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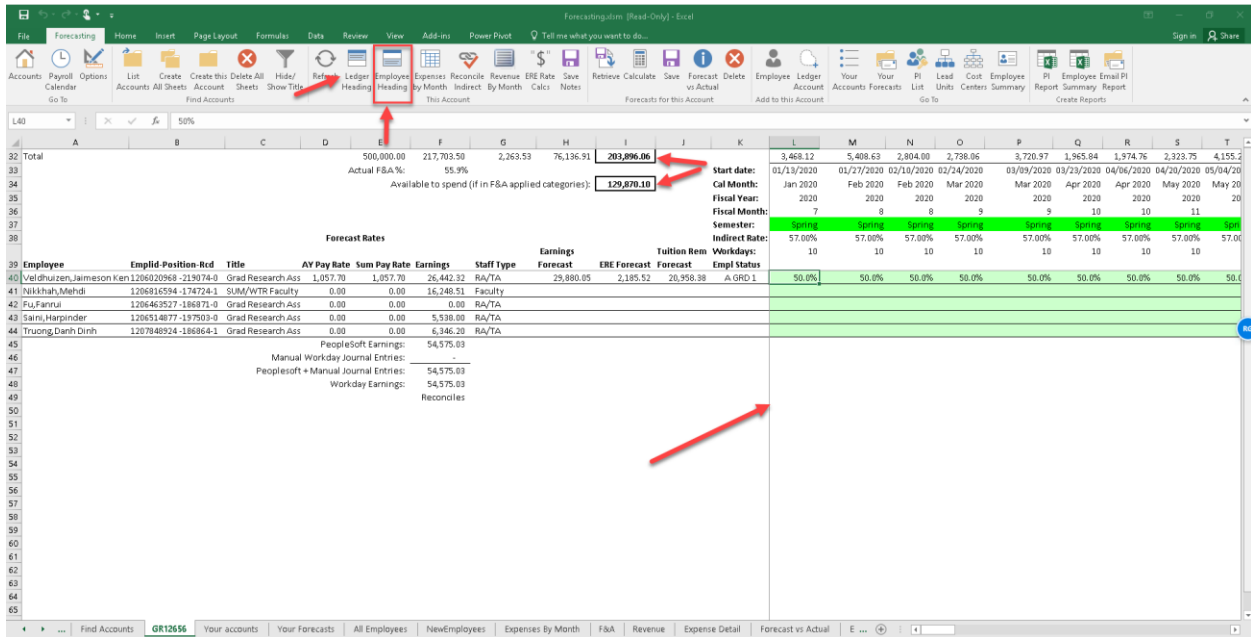


Figure 20.

Adjusting FTE Percentage

A payroll projection can be made using two primary methods. The first and easiest way to make a projection is by manipulating the FTE percentage of an employee that is already mapped to an account. In the FT, think of the FTE displayed **NOT** necessarily as the employees' PeopleSoft position FTE (i.e. a 50% GRA or 75% Staff), but as the percent of their total effort mapped to the account. For example, this means that a 50% GRA that draws their support completely from a single account would see 100% FTE mapped in the green FTE projection section.

Similarly, a full time 50% GRA that is split evenly over 3 accounts would see 1/3 or 33.333% of their FTE mapped on a single account. It is the personnel Staff Type that is used to factor in PeopleSoft position FTE, this will be detailed further in the Adding Employees subsection. Manipulating the FTE of the employee will change the font color to blue but will not update the total available balance or the forecasted dollar amounts in the FT, see figure 21.

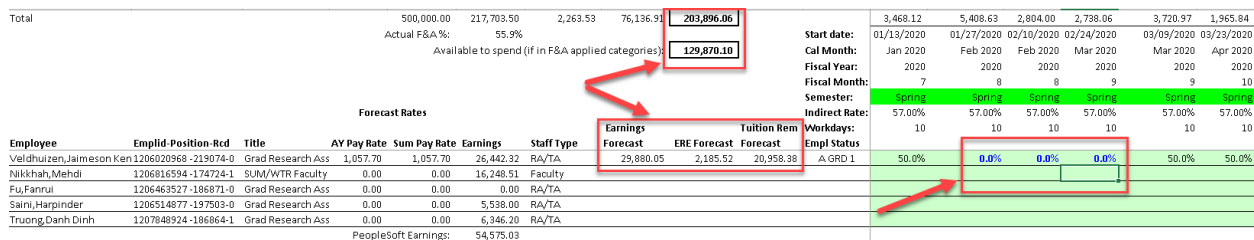


Figure 21.

Calculating Payroll Projections

Unlike with non-payroll projections, the FT will **NOT** auto calculate payroll projections. This section is meant to emphasize this point and inform all users that to properly forecast a payroll projection, the Calculate button in the Forecasts for this Account section of the Forecasting Ribbon must be clicked. Once this is done, both the forecasted dollar amount for every employee will update along with the Total and Available to Spend account balances, see figure 22. If the payroll projection is intended to be saved for later reference, then as with all projections, the Save button in the Ribbon must be clicked.

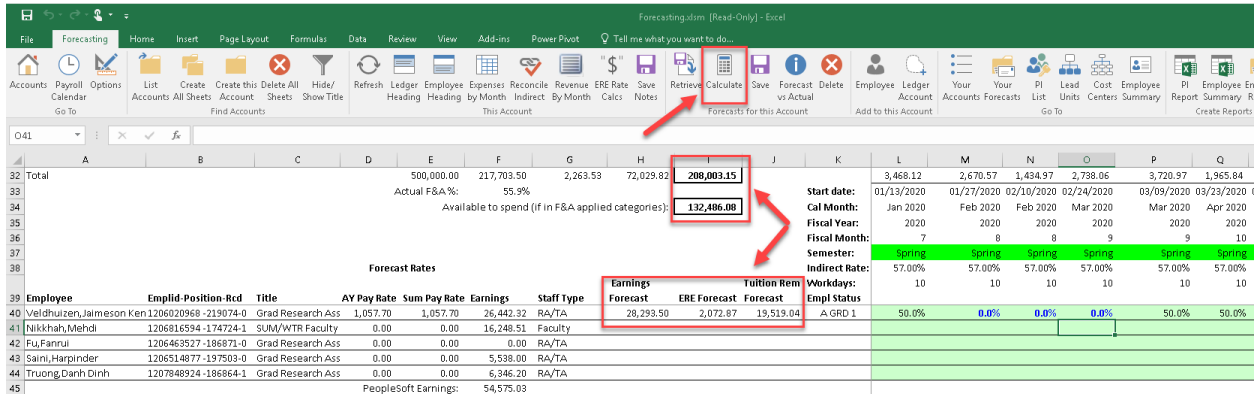


Figure 22.

Adding Employees

The second method for making a payroll projection is accomplished by adding an employee to the account. To do this, click on the Employee button in the Add to this Account section of the Forecasting Ribbon. Doing so will take you to the New Employees tab of the FT and autofill the For Account cell of the worksheet, see figure 23.

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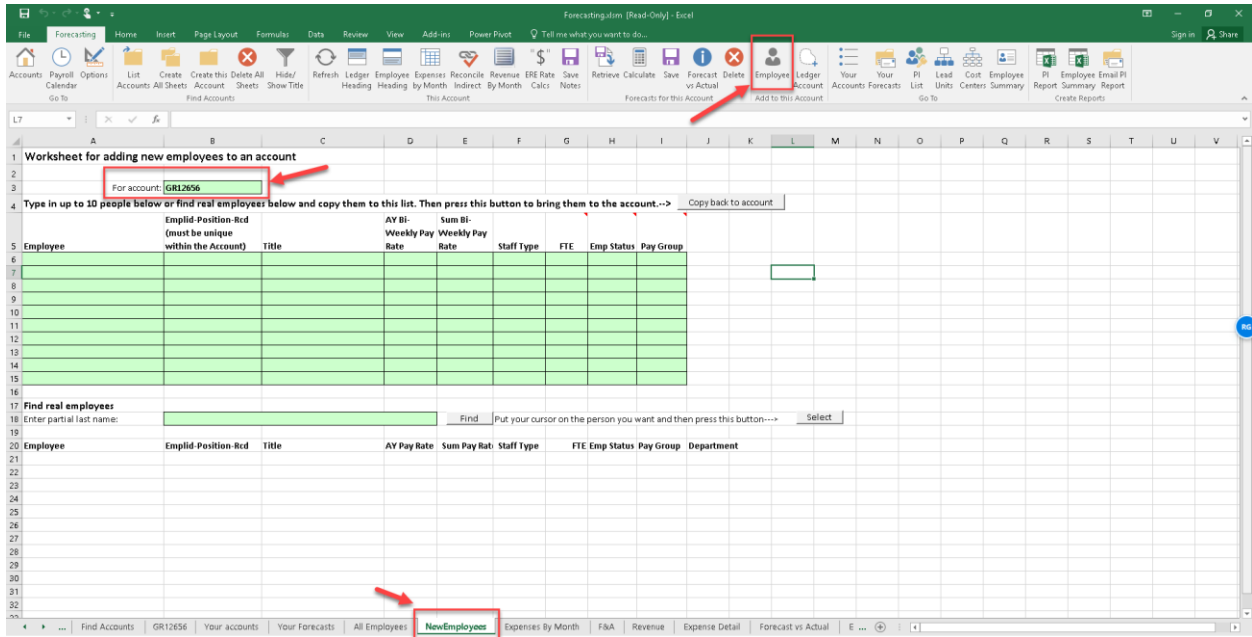


Figure 23.

Once on the New Employees tab, a user has two options for adding a new employee to an account. The first and easiest way is to look up an employee using the Find Real Employees search cell. For this search to work, the employee needs to already be hired and active within PeopleSoft. It is advised that the full last name is entered in the search cell, though a partial last name can work, but it will result in more personnel found in the search requiring more time to filter through. Once the last name is entered, press the Find button to execute the employee search.

A list of personnel with the given last name will then generate below the search cell. If nothing appears, the likely cause is that the personnel is not active in PeopleSoft or the last name was spelled incorrectly as there is no search margin for error when typing the name. To add the desired employee to an account, click on the name of the employee from the generated list and then without deselecting the cell, click on the Select button. This will move the employee to the green input section of the worksheet along with all applicable pay rates and job classifications, see figure 24.

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Worksheet for adding new employees to an account

For account: **GRI2656**

Type in up to 10 people below or find real employees below and copy them to this list. Then press this button to bring them to the account.-->

Employee	Emplid-Position-Rcd (must be unique within the Account)	Title	AY Bi- Weekly Pay Rate	Sum Bi- Weekly Pay Rate	Staff Type	FTE	Emp Status	Pay Group
Crow,Michael M	1000719240 -104219-0	President & Professor	27,467.31	27,467.31	Staff	1.00	A	SAL

Find real employees

Enter partial last name: Put your cursor on the person you want and then press this button-->

Employee	Emplid-Position-Rcd	Title	AY Pay Rate	Sum Pay Rate	Staff Type	FTE	Emp Status	Pay Group	Department
Crow,Cassidi Nicole McCann	1213406829 -141169-0	Police Radio Dispatcher			Staff	.50	A	HRY	D0601002
Crow,Ellyse Diann	1001469015 -34143-4	Program Coordinator Sr			Staff	1.00	A	SAL	B1201
Crow,Kelly Suzanne	1213764038 -144549-0	Coordinator Senior			Staff	1.00	A	SAL	B0138009
Crow,Lauren Elizabeth	1711049110 -219184-0	Grad Research Associate			RA/TA	.50	A	GRD	B1716003
Crow,Michael M	1000719240 -104219-0	President & Professor	27,467.31	27,467.31	Staff	1.00	A	SAL	A0101007
Crowder,Emily R	1217505185 -240728-0	Student Worker IV			Student	.50	A	STU	B1341
Crowe,Brandon Michael	1000675234 -189455-0	Faculty Assoc			NoBen	.40	A	ACD	M0507002

Figure 24.

The second way to add a new employee is by typing information directly into the green input section of the worksheet. This is useful if the employee is not yet active within PeopleSoft or if a projection is needed for a hypothetical position such as a planned GRA. This occurs most frequently when a PI is trying to plan out project costs for a semester or longer.

Under the Employee column the user can type in anything such as TBD GRA. The employee ID and Title cells can be left blank or TBD may be entered. The AY Bi-weekly pay rate and the Summer Bi-Weekly pay rate should be entered at the best estimated rate. If these cells are left blank, then no payroll calculation can occur because the FT reads the values in these cells as zero. For students and staff, typically the AY and Summer pay rates are the same. A distinction is made in the FT because faculty positions are grossed up during the summer semesters. This requires the summer pay rate cell to make the correct calculations. Note that even if the summer pay rate does not change from the AY pay rate, both cells need to have a value inputted for the calculations to be made for the entire calendar year.

Next, the employee classification information needs to be entered. Of these, Staff Type is the most important because this filter determines the applied ERE rate for the employee. The available Staff Types can be selected from a drop-down menu. Next to this cell we see FTE, Employee Status, and Pay Group. Hovering the cursor above the cells with the red flags will pop out a comment with a description of the purpose of each cell. Most faculty and staff positions will default to 1.00 FTE however, GRA/TA positions also require tuition remission calculations and the FTE value is used to determine the tuition rate.

When projecting costs for GRAs, it is important to choose the correct FTE. In the case of a 50% FTE GRA, the cell would be entered as 0.5 as this will yield 100% tuition remission and by convention, 0.25 will calculate 50% tuition remission. The last two columns can be left blank, but if desired, employee status can be defaulted to A for Active and Pay Group to GRD for Graduate in the case of a

Forecasting Tool Training Guide

GRA. Once all employee(s) have been input into the green projection area, ensure that the proper account is selected in the For Account cell. Then click on the “Copy back to account button”, see figure 25.

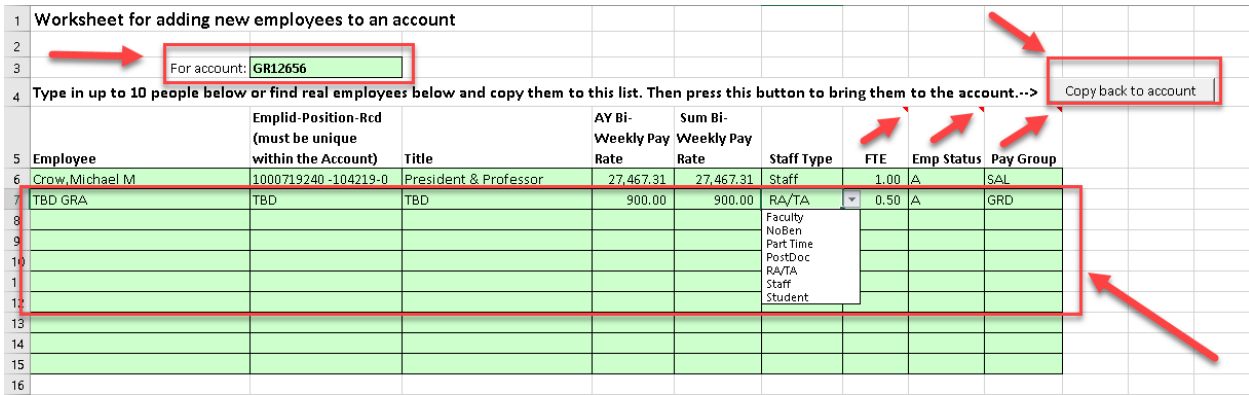


Figure 25.

When the employee(s) are successfully copied back to the account, the FT will automatically move back to the account tab. At that point the new employee(s) will show up under the active employees on the account in blue text to designate that a change has been forecasted. There will be no projected earnings because at this point the FTE for the new personnel is defaulted to 0%, see figure 26.

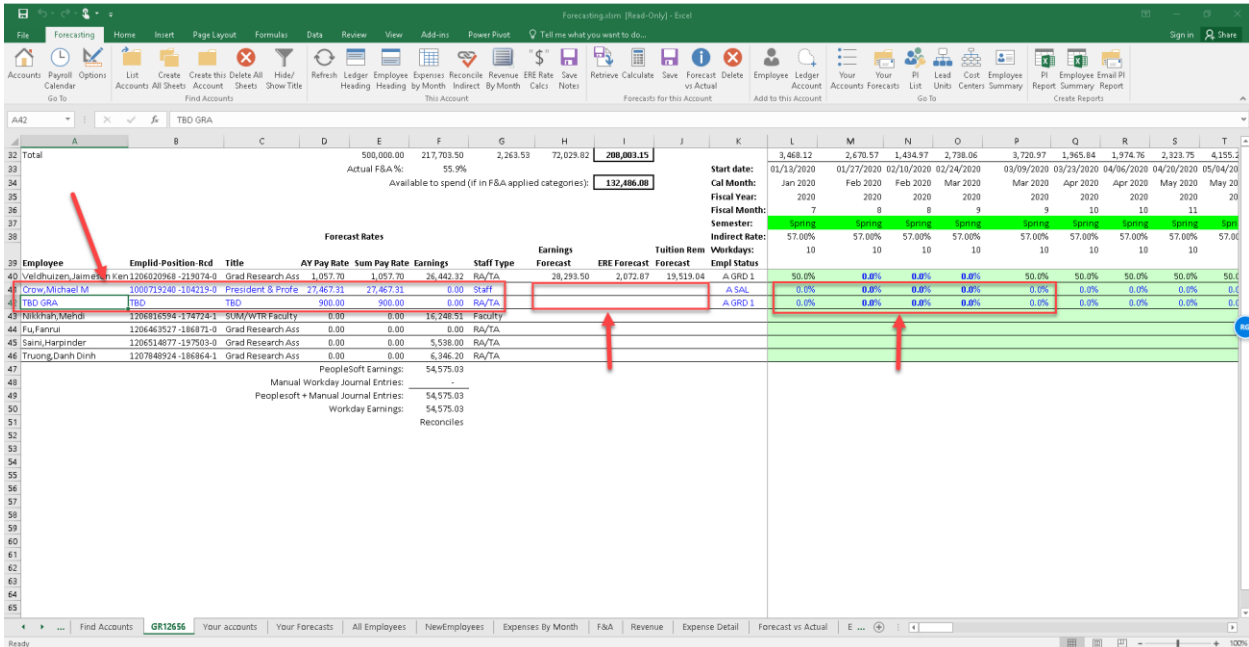


Figure 26.

Once the new employees have been added to the account, payroll projections can be made the same way as they were on the employees that were already mapped to the account by changing the FTE percentages in the corresponding pay start date cells. Doing this will cause the percentage to bold indicating a change has been made. Remember that to see the projections forecasted, the Calculate button must be clicked, see figure 27.

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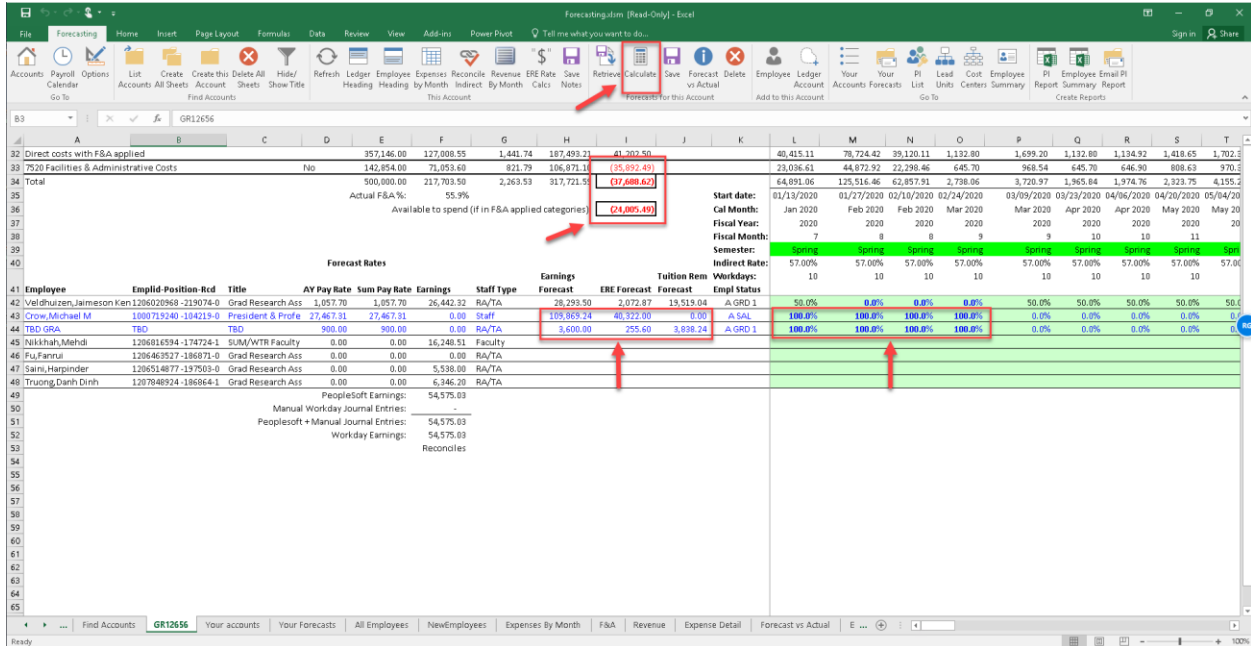


Figure 27.

Reviewing Rate Calculations

At any point when the rate calculations require a review for accuracy, the ERE Rate Calcs button in the This Account section of the Forecasting Ribbon can be clicked while on the account tab that you desired to review. This is useful in verifying that the proper ERE, F&A, or tuition rates are being used in any newly forecasted payroll projections. It is also beneficial in helping to confirm that the first pay period of a semester is not charging tuition remission. This piece of information will be useful when projection of payroll redistributions is discussed later in the guide. Please note that the default ERE and tuition is escalated at 3%. Currently, the FT does not escalate pay rates. However, the FT can simulate pay rate escalation if the user simply adds multiple rows for the desired employee onto an account as previously described then increases their pay rates and changes the FTE start dates respectively. When doing this it is suggested that the user give each subsequent employee row a unique name or ID to differentiate the escalated rates.

Clicking on the ERE Rate Calcs button will trigger the FT to open the Rate Detail tab for the given account. On this tab you can verify the account number at the top left of the tab. Below that cell, every forecasted employee will be listed. To the right of each employee will be listed each pay start date that will occur over the current period of project performance. Any forecasted payroll, ERE, or tuition will be listed by column and as well as the rate at which these values are being calculated, see figure 28.

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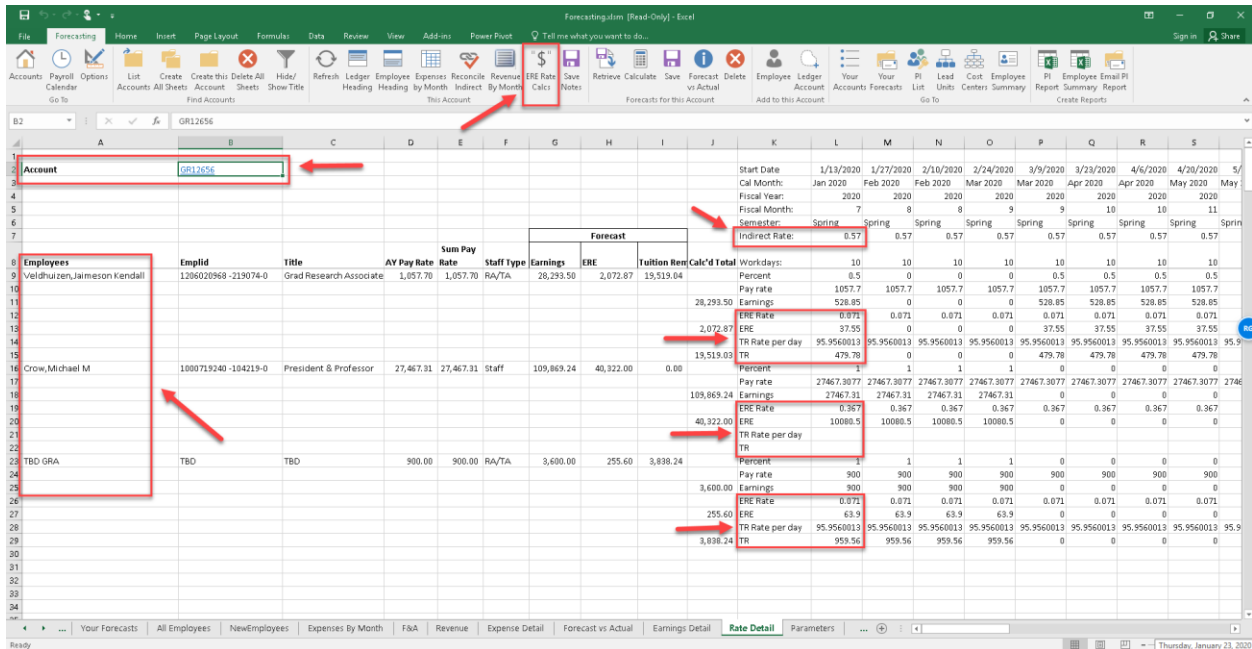


Figure 28.

When done reviewing the rate information the user can return to either the account sheet or the find accounts tab to continue any forecasting. This concludes the section on payroll projections, next the guide will discuss how to project redistributions off an account.

Redistribution Projections

Non-payroll Redistributions

While less frequent than projecting added costs onto an account, it is just as important to be able to project cost transfers off one. Since the FT is Excel based and retains the same arithmetic functions as the base program, a non-payroll redistribution can be projected by simply entering a negative value in the green projection area to the right of the respective ledger accounts.

When making a non-payroll redistribution projection, the Fiscal Month and Year column need to be using the F&A rate that corresponds to the rate at which the item being redistributed was originally posted under. That is, if a cost was posted in a year with an F&A rate of 56% and the FT Fiscal Month column is displaying an F&A rate of 57%, then the rate should be reduced to ensure that projection will be accurate (instructions on how to do this are in the next paragraph). This would not be a concern for redistributions that occur during the same fiscal year or that are exempt from F&A. The user can also see the redistribution forecasts per month at the bottom of the projection columns.

The non-payroll redistribution process with an alternate F&A rate becomes more complicated when there is a month that contains conventional projections such as payroll. To maintain accuracy, the projections need to be calculated at the current F&A rate. However, this will lead to the redistribution being inaccurate unless the alternate F&A rates are compensated for. To do this, a formula of the form: $= - (\text{redistribution amount} + (\text{redistribution amount} * \text{alternate F\&A rate})) / (1 + \text{current F\&A rate})$ needs

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to be used. For example if the amount to be redistributed was \$2,063.00 from a period when the F&A rate was 56% and the current F&A rate is 57% then the formula to input would be $= - (2063 + (2063*0.56)) / (1+0.57)$. At the time of the FT launch this situation is not a common one but can occur. In future updates of the FT, the need for this type of rate compensation may be eliminated, but do illustrate the Excel based capabilities of the FT. An example is shown in figure 29.

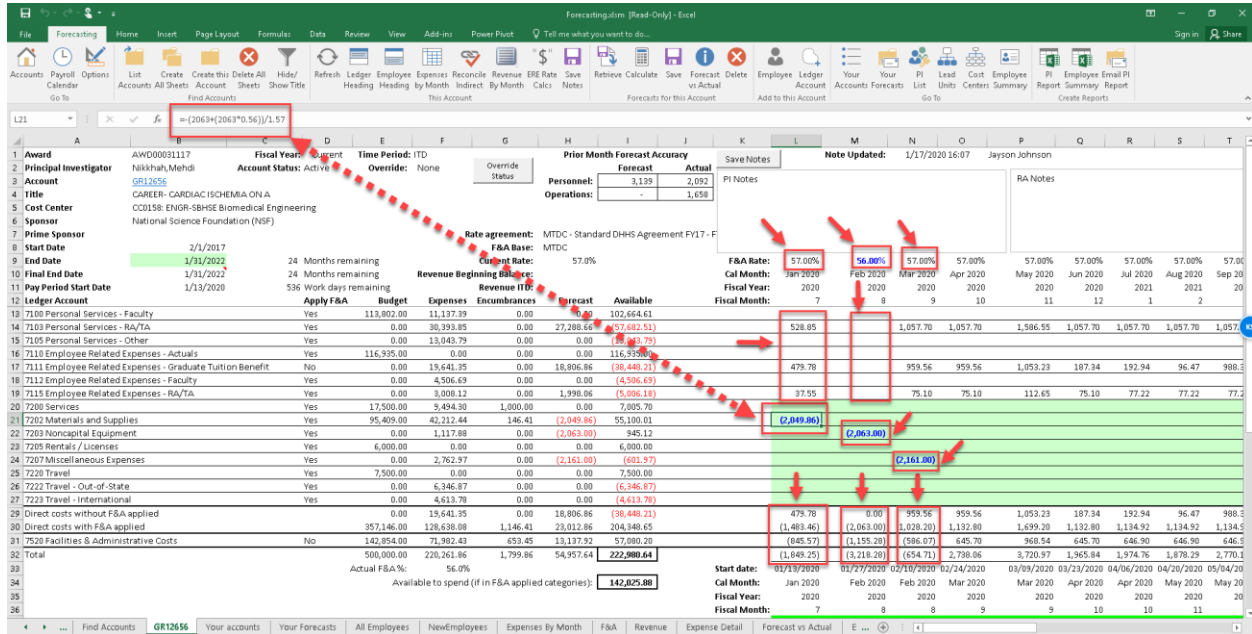


Figure 29.

Payroll Redistributions

The same concept at work with a non-payroll redistribution can be utilized while projecting payroll redistributions. The difference lies in adjusting FTE percentages rather than dollar amounts. Additional considerations include ensuring that the correct ERE and tuition remission rates are used as well as the afore mentioned F&A rates. To project a payroll redistribution, input a negative FTE percentage over the pay periods that are desired to be redistributed.

Take note that the FT color codes the academic semesters such that Spring is bright green, Summer is light yellow, and Fall is light orange. When making payroll redistributions, this can be useful in quickly identifying where negative FTE percentages can be entered to also automatically account for the appropriate ERE and tuition rates. For example, if summer payroll is desired to be redistributed, the negative FTE should be projected during the summer semester.

In practice, when forecasting a payroll projection for a specific individual, it is best to add them to the account as a new employee even if they are already mapped to the account. This is because in the case of a payroll redistribution, the goal is not to lose the future forecast data for the employee, but rather it is to see what effect removing past posted payroll related to the employee will have on the account. Remember that when projecting payroll that the Calculate button in the Forecasting Ribbon must be clicked, this holds true for redistributions as well.

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Once the redistributed payroll has been calculated, the Earnings Forecast will update, and all values of the redistribution will appear negative. This will be a visual confirmation that a redistribution projection has been calculated. As with a regular payroll projection, the rate calculations for the payroll redistribution can be reviewed using the ERE Rate Calcs button in the Forecasting Ribbon, see figures 30 and 31.

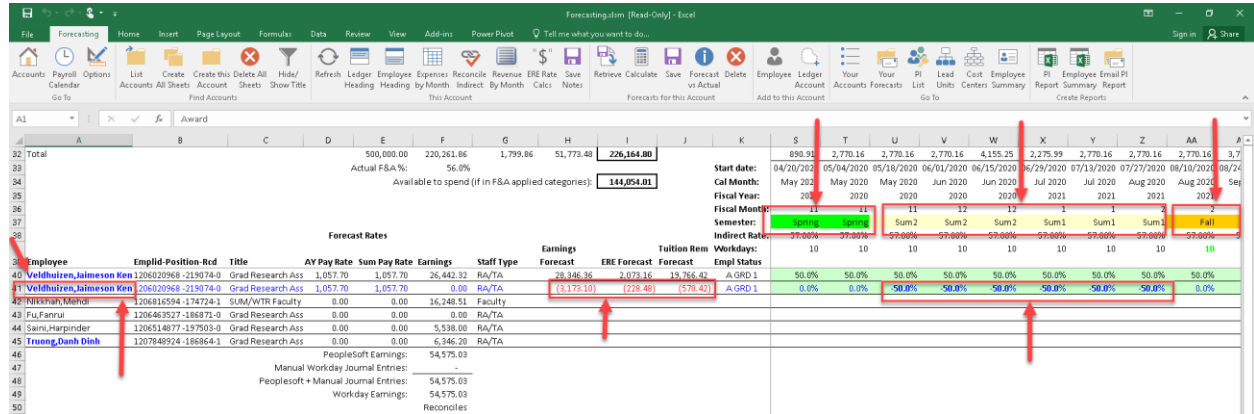


Figure 30.

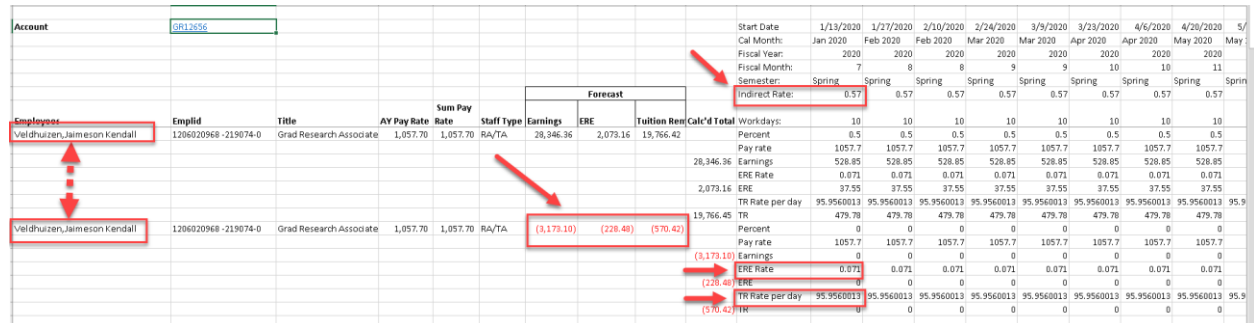


Figure 31.

The method for projecting a payroll redistribution as described above can only work if the current ere and tuition remission rates match the rates that are being redistributed. This limits the effectiveness of this method to within a single fiscal year because these rates do not typically adjust until the fiscal year change over.

At the time of the FT's launch there are already planned updates to make the payroll redistributions process more streamlined and reduce the probability of error in calculation. It is expected that each user double check and understand the underlying math that is involved in the redistribution process to ensure the accuracy of any redistribution projections. As can be seen, an understanding of the functionality of the FT described in the sections leading up to this point is also required for advanced utilization. This concludes the redistribution projections section of the guide.

Pulling Multiple Accounts

Your Accounts List

Up to now this guide has focused on projections that involve a single account. This is useful when needing to quickly review an account. However, most users likely support principal investigators with multiple accounts and wish to review all their resources. The FT can download account data from multiple accounts at once using 2 primary methods.

The first method for displaying multiple accounts at once is by using the Your Accounts functionality of the FT. This can be navigated to either by clicking on the Your Accounts tab at the bottom of the FT spreadsheet or by clicking on the Your Accounts button in the secondary Go To section of the Forecasting Ribbon. Doing so will take you to the Your Accounts tab where you will see a green input area to enter account information, see figure 32.

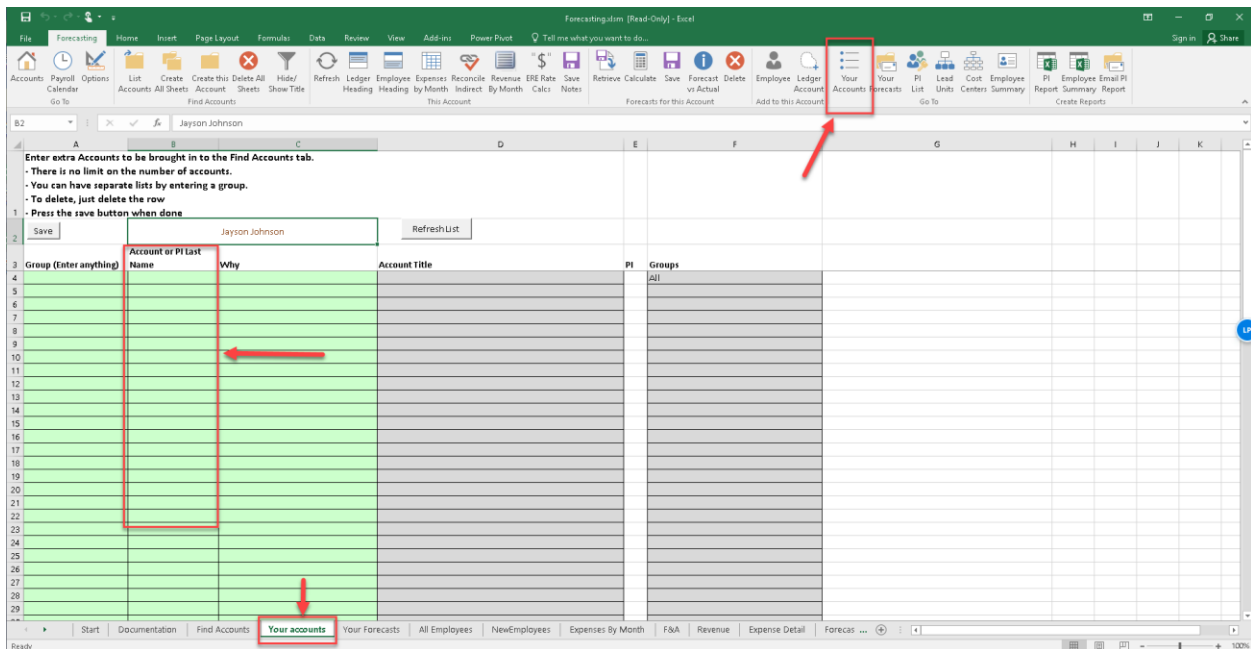


Figure 32.

Accounts can be entered into the green input area in 2 ways. The first is by entering a set of accounts one at a time with a single account in each cell under the Account or PI Last Name Column. The Group and Why Columns can be left blank; however the Group column serves the important purpose of grouping all the accounts with the same group name under a single unique identifier. If no group name is chosen, the accounts will be classified under the Default group name. It is advised that the PI last and first name be used to identify a set of accounts, though any group name can be used in this column. When the account and optional group name is entered, click on the Save button at the top of the spreadsheet to save the entries. A dialogue box will pop up confirming how many accounts have been saved and the Group names will populate in the grey Groups column. Click the OK button in the dialogue box to continue using the FT, see figure 33.

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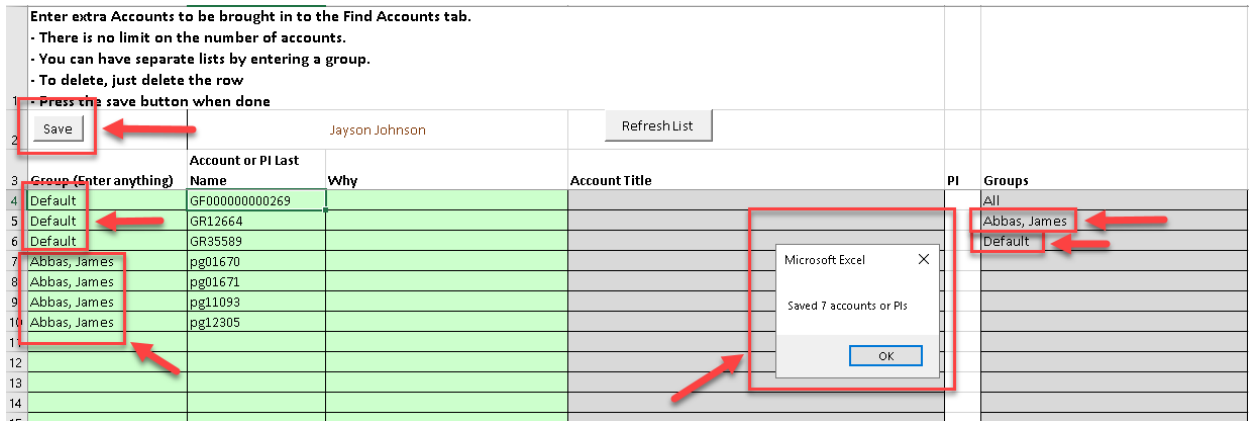


Figure 33.

At this point, it's recommended to click on the Refresh List button. Doing so will cause the Account Title column to populate with the Workday account titles. If this happens, it means that the account numbers were entered correctly, and data was successfully pulled from Workday. If the titles don't populate, it means that the account number was not correctly entered, see figure 34. It should be noted that this method can only pull accounts that have been entered in the green Account or PI Last Name column. Because of this, it is possible to miss any new accounts that might be created but not manually entered.

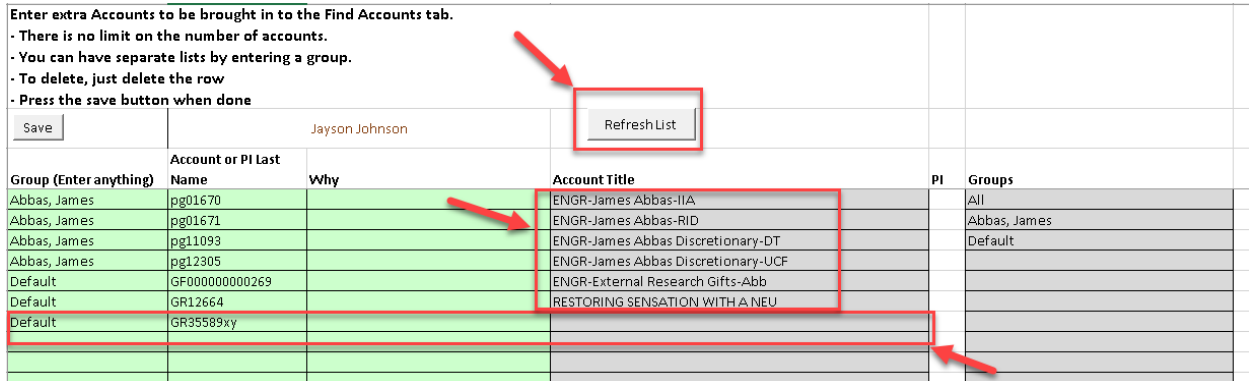


Figure 34.

The next method for entering a set of accounts is by using the PI's last name. This method has the advantage of pulling all the accounts that are currently loaded into the Data Warehouse that match the PI's last name. The disadvantage of this method is that if the PI has a common last name such as Smith or Johnson, it will pull all related accounts which more than likely will not be under the review of any single admin. If, however, the set of accounts is listed under a unique last name, then in the green

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input section the PI last name can be entered in 2 different formats. These formats are: (PI_Last_Name -) and (PI_Last_Name,). The first format with the last name ending with a space then a dash will pull all program and gift accounts associated with the PI. The second format ending with a comma will pull all the grant accounts linked to the PI. This will only work if the accounts have been established with the correct Academic Employee Work tags. If the worktag was not correctly established, then it is recommended that the account be manually entered as described in the first method. Note that unlike with the first method, saving accounts by PI last name will not result in the Account Titles populating. This does not mean that the information was not entered correctly, and the FT can continue to be used see, figure 35.

Enter extra Accounts to be brought in to the Find Accounts tab.

- There is no limit on the number of accounts.
- You can have separate lists by entering a group.
- To delete, just delete the row
- Press the save button when done

Save	Jayson Johnson	Refresh List			
Group (Enter anything)	Account or PI Last Name	Why	Account Title	PI	Groups
Abbas, James	pg01670		ENGR-James Abbas-IIA		All
Abbas, James	pg01671		ENGR-James Abbas-RID		Abbas, James
Abbas, James	pg11093		ENGR-James Abbas Discretionary-DT		Default
Abbas, James	pg12305		ENGR-James Abbas Discretionary-UCF		Nikkhah, Mehdi
Default	GF00000000269		ENGR-External Research Gifts-Abb		
Default	GR12664		RESTORING SENSATION WITH A NEU		
Default	GR35589xy				
Nikkhah, Mehdi	Nikkhah -				
Nikkhah, Mehdi	Nikkhah,				

Figure 35.

The last item to be discussed within this tab is the username at the top of the spreadsheet. This will always default to the user that is signed into the FT. Clicking on this cell will allow for a drop-down menu to be seen and alternate users selected. Once a new user is selected, click the Refresh List button to see an updated set of accounts. This is useful if an admin is out of the office, has left the university, or a student worker is assisting with generating PI reports. The accounts for each unique ID are stored under the user ID of the person signed into the FT that created the list. This means a user is able to view another user's set of accounts without concern over deleting or altering the other user's list, figure 36.

Enter extra Accounts to be brought in to the Find Accounts tab.

- There is no limit on the number of accounts.
- You can have separate lists by entering a group.
- To delete, just delete the row
- Press the save button when done

Save	Jayson Johnson	Refresh List			
Group (Enter anything)	Account or PI Last Name	Why	Account Title	PI	Groups
Abbas, James	Amber Hall		IGR James Abbas-IIA		All
Abbas, James	April MacCleary		IGR James Abbas-RID		Abbas, James
Abbas, James	Carole Flores		IGR James Abbas Discretionary-DT		Default
Abbas, James	Holly Williams		ENGR James Abbas Discretionary-UCF		Nikkhah, Mehdi
Abbas, James	Jamie Colburn				
Abbas, James	Jayson Johnson				
Abbas, James	Karen Gatlin				
Abbas, James	Kasey Guidry				
Abbas, James	pg12305				
Default	GF00000000269		ENGR-External Research Gifts-Abb		
Default	GR12664		RESTORING SENSATION WITH A NEU		
Default	GR35589xy				
Nikkhah, Mehdi	Nikkhah -				
Nikkhah, Mehdi	Nikkhah,				

Figure 36.

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Your Account Group

Now that the Your Accounts tab has been populated with accounts and just as important, the account Groups, the Your Account Group drop-down menu on the Find Accounts tab can be used to pull multiple accounts at once. To do this, select the drop-down menu and one of the Account Groups that was created in the Your Accounts Tab of the FT. After a selection is made, click on the List Accounts button and the FT will pull all the accounts associated with the Account Group. The Hide/Show Title button in the Find Accounts section of the Forecasting Ribbon can also be clicked to toggle the title between hidden and visible to save screen space, see figure 37.

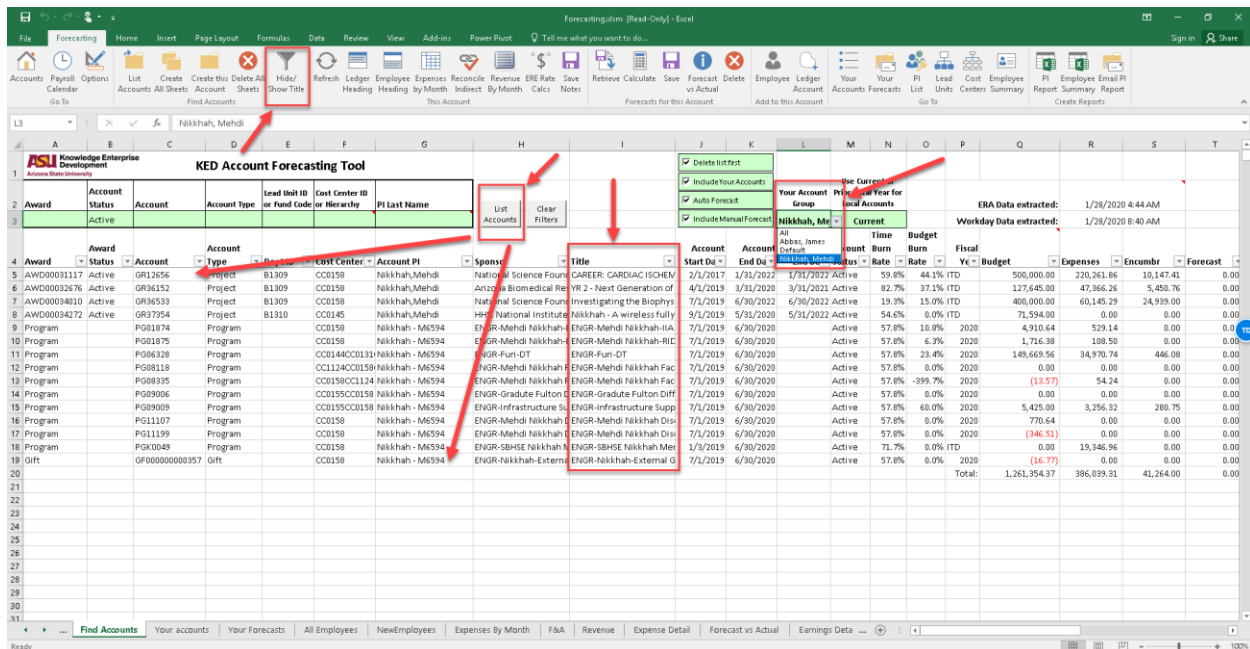


Figure 37.

Create All Sheets

Once all the accounts have been pulled into the FT, the account sheets can be created to begin a review and/or make projections. The account sheets can be created one at a time by clicking on the Create this Account button as previously discussed. However, the more efficient route is taken by the Create All Sheets button in the Find Accounts section of the Forecasting Ribbon.

Clicking on the Create All Sheets button will create an account sheet for all accounts listed on the Find Account tab. Doing so will turn each account number into a blue hyperlink in series starting from the top of the list. The FT will not be useable while the account sheets are being created. When the sequence is complete, a dialog box will pop up displaying the time elapsed for creation of the accounts. This process usually takes under one minute for a typical set of 10 to 20 accounts but may take longer depending on network connection speeds and total number of listed accounts. It is advised that all

Forecasting Tool Training Guide

account sheets be created prior to a scheduled meeting with a PI to avoid waiting for the FT to create account sheets. Once the OK button is clicked, the FT can be used as before, see figure 38.

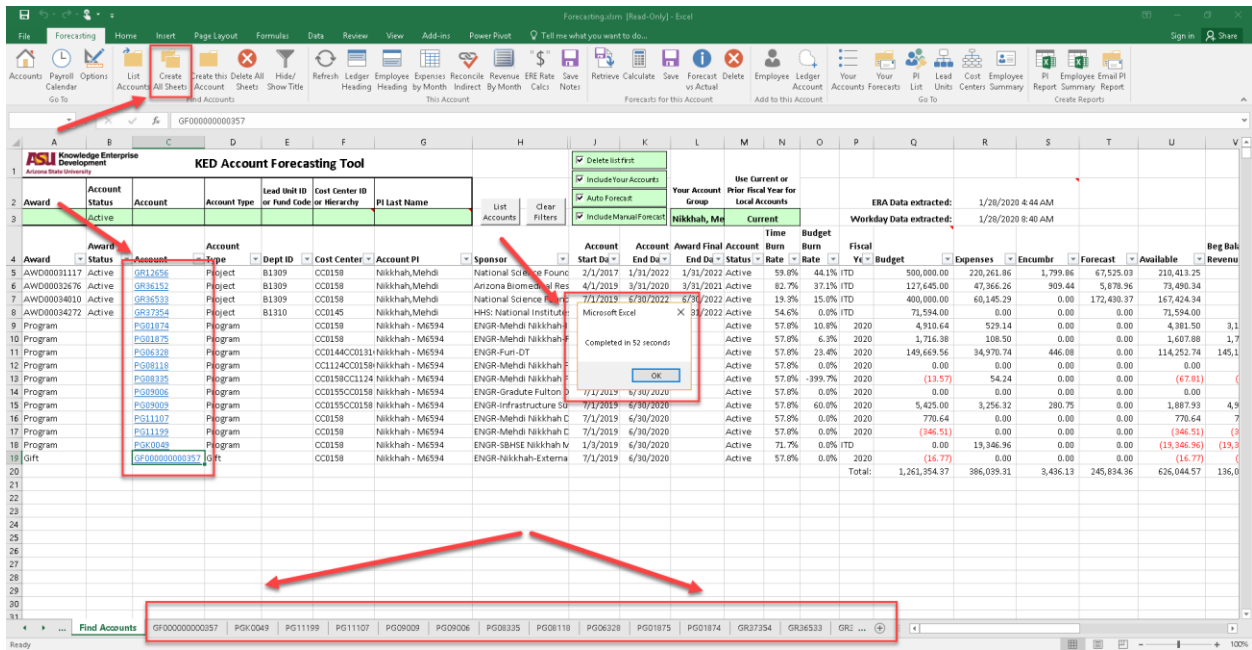


Figure 38.

Check Box Filters

The Check Box Filters to the left of the Your Account Group drop-down menu are useful for manipulating the accounts that appear on the Find Accounts tab as well as the data seen in the Account Sheets of the FT. The first 2 check boxes will filter data that's seen on the Find Accounts tab whereas the last 2 check boxes will filter data that is visible on the individual account sheets, see figure 39.

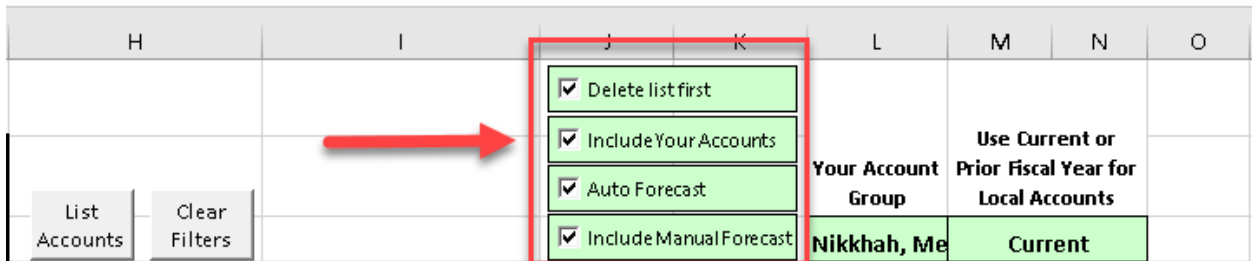


Figure 39.

If the Delete List First box is checked, it will have the effect of clearing any accounts that are currently shown on the Find Accounts tab every time the List Accounts button is clicked. If no changes are made to the selected Group, the result will be that the respective accounts will be refreshed. If another group is selected and the List Accounts button is clicked, then the accounts related to the new group will replace the accounts already in the list.

If the Include Your Accounts box is checked, then anything that is selected under the Your Account Group drop-down menu will always populate in the Find Accounts tab when the List Accounts

button is clicked. This is in addition to any account that may be entered in the single search fields to the left of the List Accounts button initially discussed in the guide. Toggling between the Delete First and the Include Accounts filters is useful in adding additional accounts to the Find Accounts list and will be discussed later.

If the Auto Forecast box is selected, then all the account sheets that have been created will contain the account forecasts that are the result of the FT pulling personnel and non-payroll information from the various data warehouses. For example, if a staff member is mapped to an account, the PeopleSoft default in Workday is to map them to the account to the end of the fiscal year repeating again the next fiscal year unless the position mapping is altered. Whether or not this is intended on the account, with The Auto Forecast filter checked, the FT will forecast the position out to the end of the obligated end date on an account. If the box is not checked then the FT would only display the raw financial data in the account, provided the Include Manual Forecast box is unchecked.

If the Include Manual Forecast box is checked, then the FT will include all the forecasts that the user has projected onto each account sheet. Toggling between the Auto Forecast and Manual Forecast filters is useful in helping to see how account funding is being actually utilized versus how a user may have projected use on an account. This can help a user identify if real world changes need to be implemented to see an account projection realized. That is to say that projections made using the FT need to be input in the various systems used to post expenses to an account such as PeopleSoft or Workday.

Adding Accounts from the Find Accounts Tab

Adding accounts in the Find Accounts tab was previously discussed on a singular basis, that is adding one account while at the same time deleting a prior account. The FT can add and delete accounts from the Find Accounts tab to create a unique custom-built set of accounts by toggling the Delete List First and Include Your Accounts check box filters.

Building off the previous example, in the Create all Sheets section of the guide, a second Account Group can be added to an already pulled set of account by deselecting the Delete List First filter and then choosing another Account Group from the drop-down menu. Once the List Accounts button is clicked both sets of accounts will now be listed, see figure 40.

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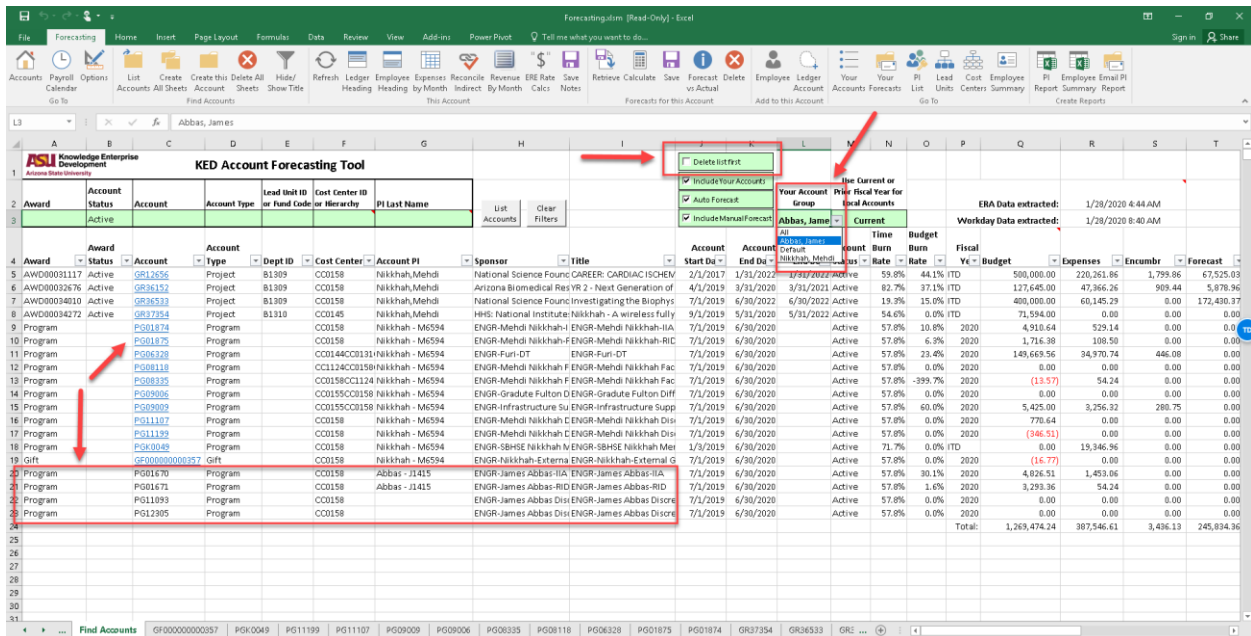


Figure 40.

Notice how the new set of accounts has populated below the previous set and are not blue hyperlinks because account sheets have not yet been created for them. The Create All Sheets button in the Ribbon can be clicked to regenerate the previous sheets as well as create the new ones. If the user does not wish to regenerate the previous sheets to prevent a loss of data, then each new sheet can be created separately using the Create this Account button in the Ribbon. Stacking PI accounts in this manner is useful if multiple PIs are collaborating and wish to see their project accounts all at once.

The created account sheets can all be deleted at any point by clicking on the Delete All Sheets button in the Find Accounts section of the Forecasting Ribbon. This is useful if a user wishes to start over with a fresh set of accounts after creating a large number of sheets. Doing so will cause any accounts on the Find Accounts tab that had account sheets created, to display #REF errors because the account sheets have been deleted, see figure 41. This can be resolved by checking the Delete List First box and then clicking on the List Accounts button to repopulate the list.

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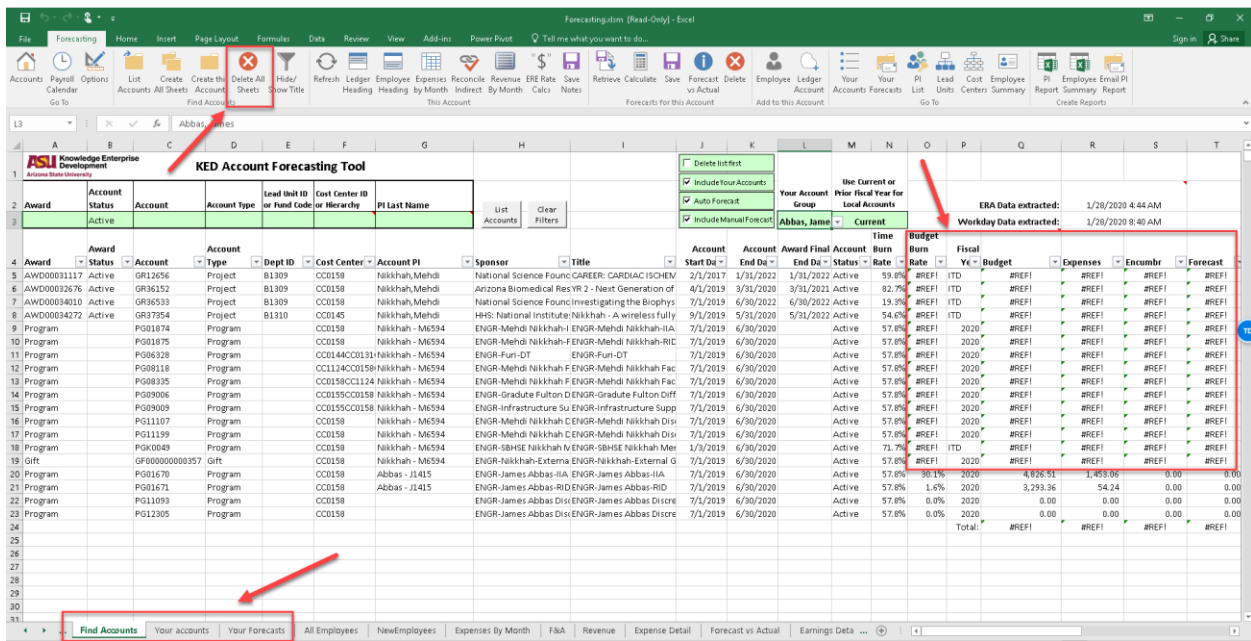


Figure 41.

The last way to add multiple accounts to the Find Accounts tab is by either populating the list with a group of accounts or populating the list with a single account and then deselecting both the Delete List First and Include your Accounts boxes. Then singular accounts can be entered in the single account search field and added to the overall list with the List Accounts button, see figure 42.

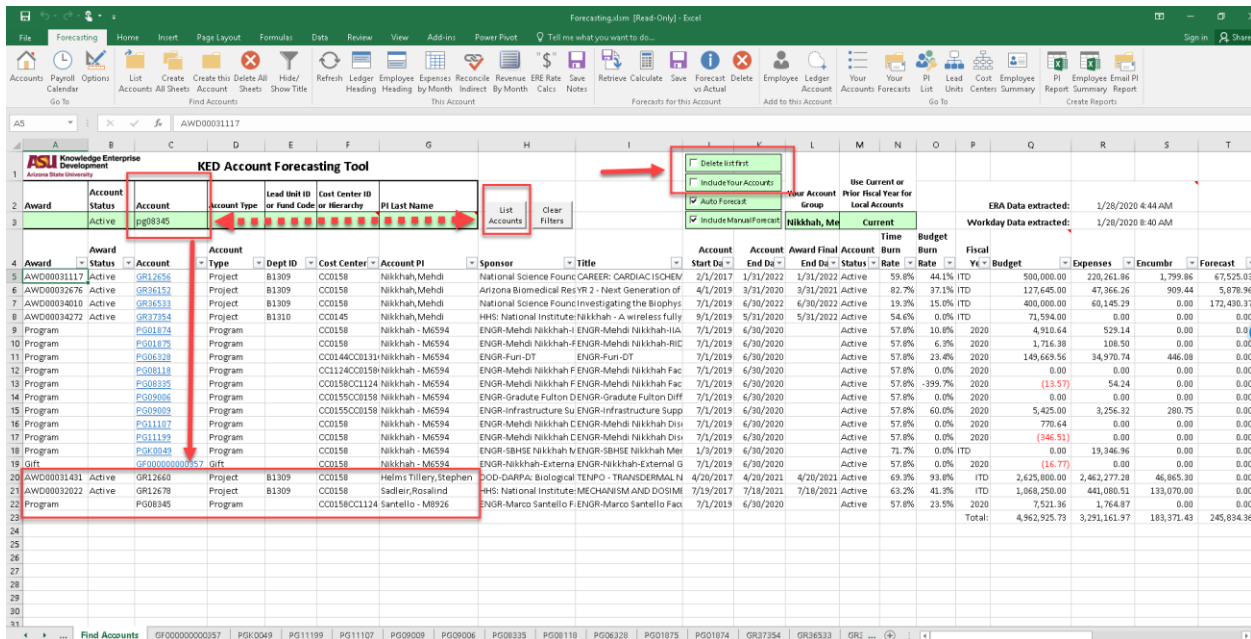


Figure 42.

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Using this method of adding accounts will allow a user to create a custom account list that may only be needed at one point in time to test projections on and is not intended to be saved as a unique account group. This concludes the section on pulling multiple accounts in the FT.

Account Analysis

Override Status

In the course of managing a set of PI accounts there may be instances when an account, especially a grant account, comes to the end of its period of performance and expires. The FT by default will only list Active accounts on the Find Accounts tab. To view expired accounts, the Account Status in the single search area of the Find Accounts Tab can be filtered using the drop down. By selecting the All value and clicking the List Accounts button the FT will now display expired accounts as well. Alternatively, the Active and Expired filter can be used to the same effect here, see figure 43.

Award	Account Status	Account	Account Type	Dept ID	Cost Center	Account PI	Sponsor	Account Start Date	Account End Date	Award Final End Date	Account Status	Time Burn Rate	Budget Burn Rate
AWD00028026	Expired	GR12593	Project	B1309	CC0158	Nikkhah, Mehdi	National Science Founc	6/1/2015	5/31/2019	5/31/2019	Expired	100.0%	100.0%
AWD00031117	Active	GR12656	Project	B1309	CC0158	Nikkhah, Mehdi	National Science Founc	2/1/2017	1/31/2022	1/31/2022	Active	59.8%	44.1%
AWD00031265	Expired	GR12647	Project	B1309	CC0158	Nikkhah, Mehdi	Arizona State Universit	11/6/2016	11/6/2017	11/6/2017	Expired	100.0%	97.7%
AWD00031826	Expired	GR12663	Project	B1309	CC0158	Nikkhah, Mehdi	Phoenix Children's Hos	7/1/2017	12/31/2018	12/31/2018	Expired	100.0%	99.9%
AWD00032368	Expired	GR12680	Project	B1309	CC0158	Nikkhah, Mehdi	Arizona State Universit	10/19/2017	10/18/2018	10/18/2018	Expired	100.0%	104.9%
AWD00032676	Active	GR34620	Project	B1309	CC0158	Nikkhah, Mehdi	Arizona Biomedical Res	4/1/2018	3/31/2019	3/31/2021	Expired	100.0%	116.9%
AWD00032676	Active	GR36152	Project	B1309	CC0158	Nikkhah, Mehdi	Arizona Biomedical Res	4/1/2019	3/31/2020	3/31/2021	Active	83.0%	37.1%
AWD00034010	Active	GR36539	Project	B1309	CC0158	Nikkhah, Mehdi	National Science Founc	7/1/2019	6/30/2022	6/30/2022	Active	19.4%	15.0%
AWD00034272	Active	GR37954	Project	B1310	CC0145	Nikkhah, Mehdi	HHS: National Institute:	9/1/2019	5/31/2020	5/31/2022	Active	54.9%	0.0%
Program		PG01874	Program		CC0158	Nikkhah - M6594	ENGR-Mehdi Nikkhah-I	7/1/2019	6/30/2020		Active	58.1%	10.8%
Program		PG01875	Program		CC0158	Nikkhah - M6594	ENGR-Mehdi Nikkhah-F	7/1/2019	6/30/2020		Active	58.1%	6.3%
Program		PG06328	Program		CC0144CC0131	Nikkhah - M6594	ENGR-Furi-DT	7/1/2019	6/30/2020		Active	58.1%	23.4%
Program		PG08118	Program		CC1124CC0158	Nikkhah - M6594	ENGR-Mehdi Nikkhah F	7/1/2019	6/30/2020		Active	58.1%	0.0%
Program		PG08335	Program		CC0158CC1124	Nikkhah - M6594	ENGR-Mehdi Nikkhah F	7/1/2019	6/30/2020		Active	58.1%	-399.7%
Program		PG09006	Program		CC0155CC0158	Nikkhah - M6594	ENGR-Gradute Fulton D	7/1/2019	6/30/2020		Active	58.1%	0.0%
Program		PG09009	Program		CC0155CC0158	Nikkhah - M6594	ENGR-Infrastructure Su	7/1/2019	6/30/2020		Active	58.1%	60.0%
Program		PG11107	Program		CC0158	Nikkhah - M6594	ENGR-Mehdi Nikkhah C	7/1/2019	6/30/2020		Active	58.1%	0.0%
Program		PG11199	Program		CC0158	Nikkhah - M6594	ENGR-Mehdi Nikkhah C	7/1/2019	6/30/2020		Active	58.1%	0.0%
Program		PGK0049	Program		CC0158	Nikkhah - M6594	ENGR-SBHSE Nikkhah Iv	1/3/2019	6/30/2020		Active	71.9%	0.0%
Gift		GF000000000357	Gift		CC0158	Nikkhah - M6594	ENGR-Nikkhah-Externa	7/1/2019	6/30/2020		Active	58.1%	0.0%

Figure 43.

At this point an expired account sheet can be created. The expired account sheet will have all the same functionality as an active account and is useful if the account is in expired status, but it is anticipated that an NCE or incremental funding is forthcoming. Should this be the case, it is beneficial to still be able to see the account by default without needing to filter the Account status to All. This can be accomplished using the Override Status button on the account sheet.

All account sheets are set to an override status of None by default. Clicking on the Override Status button will toggle the override to Active and prompt a dialogue box to appear confirming that the override status is active, see figure 44.

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The screenshot shows the Forecasting Tool interface for account AWD00028826. The account status is 'Expired' and the override is 'Active'. A dialog box is open with 'OK' highlighted. The interface includes fields for Fiscal Year, Time Period, Account Status, and Override Status. A table of ledger accounts is visible at the bottom, showing columns for Apply F&A, Budget, Expenses, Encumbrances, Forecast, and Available. The dialog box contains the text 'The Expired Status has been overridden to Active' and an 'OK' button.

Figure 44.

Clicking OK in the dialogue box will allow continued use of the FT. The override will continue to remain active until the Override Status button is clicked again or the account becomes active again in ERA. Doing so will change the status to None and prompt a similar dialogue box, see figure 45.

The screenshot shows the Forecasting Tool interface for account AWD00028826. The account status is 'Expired' and the override is 'None'. A dialog box is open with 'OK' highlighted. The interface includes fields for Fiscal Year, Time Period, Account Status, and Override Status. A table of ledger accounts is visible at the bottom, showing columns for Apply F&A, Budget, Expenses, Encumbrances, Forecast, and Available. The dialog box contains the text 'Override removed' and an 'OK' button.

Figure 45.

Note that the Override Status button will only work if the account's period of performance has ended and the account is in expired status in Workday. The override cannot be preempted and so it is the responsibility of the user to keep track of their accounts when reviewing their portfolios.

Expenses and Revenue by Month

Analyzing account expenses and understanding trends is a key step in understanding the status of an account. After an account sheet is created, the Expenses by Month button in the This Accounts section of the Forecasting Ribbon can be clicked to show a breakdown of monthly account expenses. Doing so will prompt the FT to open the Expenses By Month tab and populate it with the financial

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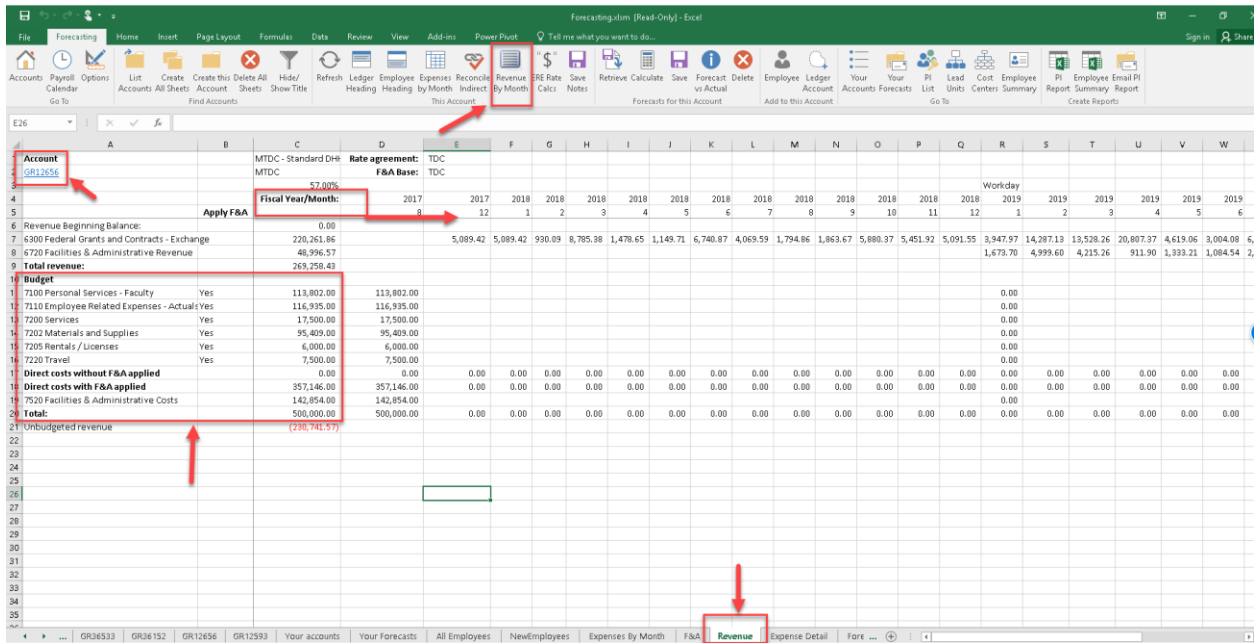


Figure 47.

View Ledger Detail

Returning to the topic of monthly expenses, it may be necessary to drill into a specific ledger account expense to determine what the costs were related to. This is especially useful if the user or PI questions the validity of an expense and requires additional details to determine if the expenditure was legitimate and appropriate for the account.

To view details of an expense, the user must be on the Expenses by Month tab and click on the cell or a range of cells that more information is desired for. Once the cell or range of cells are selected, the View Ledger Detail button at the top of the spread sheet must be clicked. Selecting the total expense values will display the details of all expenses from inception to date for that entire ledger account. Therefore, it is recommended that a cell be selected from the monthly expense columns to narrow a search, see figure 48.

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Forecast vs Actual

At the time of the FT launch, the Forecast vs Actual feature is still in the testing phase. However, the premise is that this element of the FT can be applied to alert the user of discrepancies between what was forecasted on an account and what actually posted to an account. The FT will always display data that has actually posted to the account because it draws this information from the data warehouses with each refresh of an account.

As a result, if a projection was not made real in either PeopleSoft or Workday, it would lead to a miss match of an account forecast versus actual posted expenses. The Prior Month Forecast Accuracy can be seen at the top of any account sheet and is divided between personnel and operations expenditures, see figure 50.

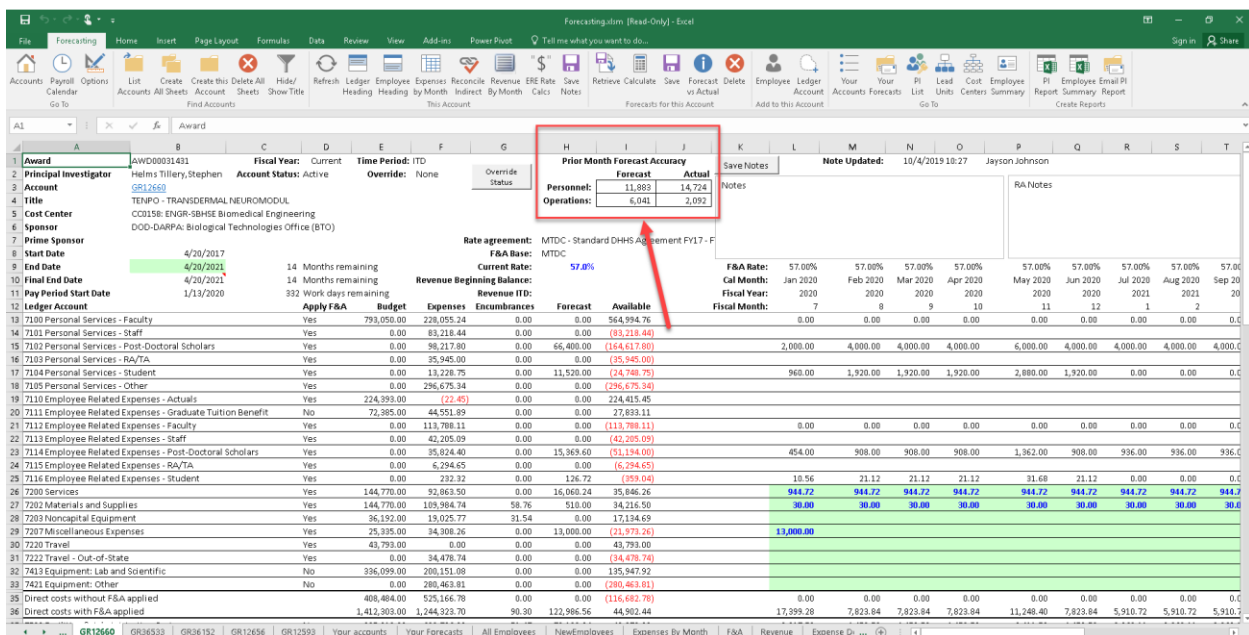


Figure 50.

Observing a mismatch between Forecasts and Actuals does not necessarily mean that there is an issue with account projections. It may be that the user has made projections to visualize burn out scenarios and did not intend to implement them but saved the forecasts for later review. The Forecast vs Actuals feature is meant more to be a trigger for the user to analyze the account to ensure that all aspects of it are setup correctly.

To help pinpoint where discrepancies are identified, the Forecast vs Actual button in the Forecasts for this Account section of the Forecasting Ribbon can be clicked. This will prompt the FT to populate data in the Forecast vs Actual tab. There will be displayed line item details on what has been forecasted. At the end of each row will be two columns one for Forecasts and another for Earnings or Expenses depending on if forecasts included personnel or operational costs. The Earnings / Expenses are what has actually posted to the account. When there is a mismatch, the FT highlights the Forecast cells in yellow, see figure 51.

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The screenshot shows the Forecasting Tool interface with an Excel spreadsheet. The ribbon is set to 'Forecast vs Actual'. A red box highlights the 'Forecast vs Actual' button in the ribbon, and another red box highlights the 'Forecast' and 'Earnings' columns in the spreadsheet. Red arrows point from the ribbon button to the spreadsheet columns.

Employee	EmplId	Position	Rcd	Title	AY Pay Rate	Summer Pay Rate	Fiscal Year	Fiscal Month	Semester	Start Date	End Date	Workdays	Funding Percent	Forecast	Earnings
Knight,Amanda Renee	1208776240	222838-0		Laboratory Coordinator	1,569.23	1,569.23	2020	6	Fall	11/18/2019	12/15/2019	10	25.00%	392.31	0.00
Knight,Amanda Renee	1208776240	222838-0		Laboratory Coordinator	1,569.23	1,569.23	2020	6	Fall	12/2/2019	12/15/2019	10	25.00%	392.31	0.00
Knight,Amanda Renee	1208776240	222838-0		Laboratory Coordinator	1,569.23	1,569.23	2020	6	Fall	12/16/2019	12/29/2019	10	25.00%	392.31	0.00
Knight,Amanda Renee	1208776240	222838-0		Laboratory Coordinator	0.00	0.00	2020	6	Fall	11/18/2019	12/1/2019	10	25.00%	0.00	0.00
Knight,Amanda Renee	1208776240	222838-0		Laboratory Coordinator	0.00	0.00	2020	6	Fall	12/2/2019	12/15/2019	10	25.00%	0.00	0.00
Knight,Amanda Renee	1208776240	222838-0		Laboratory Coordinator	0.00	0.00	2020	6	Fall	12/16/2019	12/29/2019	10	25.00%	0.00	0.00
Tanner,Justin Cody	1202900616	219277-3		Postdoctoral Research Scl	2,000.00	2,000.00	2020	6	Fall	11/18/2019	12/1/2019	10	100.00%	2,000.00	2,000.00
Tanner,Justin Cody	1202900616	219277-3		Postdoctoral Research Scl	2,000.00	2,000.00	2020	6	Fall	12/2/2019	12/15/2019	10	100.00%	2,000.00	2,000.00
Tanner,Justin Cody	1202900616	219277-3		Postdoctoral Research Scl	2,000.00	2,000.00	2020	6	Fall	12/16/2019	12/29/2019	10	100.00%	2,000.00	2,000.00
Hourly PHD					960.00	960.00	2020	6	Fall	11/18/2019	12/1/2019	10	100.00%	960.00	0.00
Hourly PHD					960.00	960.00	2020	6	Fall	12/2/2019	12/15/2019	10	100.00%	960.00	0.00
Hourly PHD					960.00	960.00	2020	6	Fall	12/16/2019	12/29/2019	10	100.00%	960.00	0.00

Figure 51.

Once the forecasted discrepancy is identified the user can then either correct the forecast or refer to the relevant ASU system, such as PeopleSoft or Workday, to ensure that data has been correctly input.

Indirect Reconciliation

With the launch of Workday, indirect reconciliation has become less of an issue to be concerned with, but discrepancies do still arise. From any account sheet, the Reconcile Indirect button in the This Account section of the Forecasting Ribbon can be clicked. The FT will then load data into the F&A tab from the respective account. The data will be displayed like the monthly expenses tab with additional indirect rate information at the bottom of the spreadsheet.

The F&A tab will show 4 separately calculated F&A rates divided over fiscal month columns. The Actual F&A % is a measure of the actual indirect that were assessed on the related expenses. Post Workday, the rate is stabilized. The ERA Budgeted F&A Rate % is the rate that a project was budgeted at during the time of proposal. This rate has little bearing on the account since ASU has had the authority to increase the F&A rate to the current agreed upon DHHS rate. The Standard DHHS Agreement % is the F&A rate at which ASU was authorized to assess to all expenditures.

Prior to FY18, older F&A rates were grandfathered in. The COEUS/Workday F&A Rate % is the most important rate calculation. This is the rate at which all accounts should be assessed F&A. Prior to FY18 ASU utilized COEUS to assess F&A, in FY19 Workday took over this procedure. The difference between the calculated F&A and the actual F&A should ideally be zero. Precluding that, the average difference should be zero or as close to zero as possible. A difference of zero means that the calculated and actual indirect rates reconcile, and the account is assessing F&A correctly. This can be seen at the bottom of the first F&A column in figure 52.

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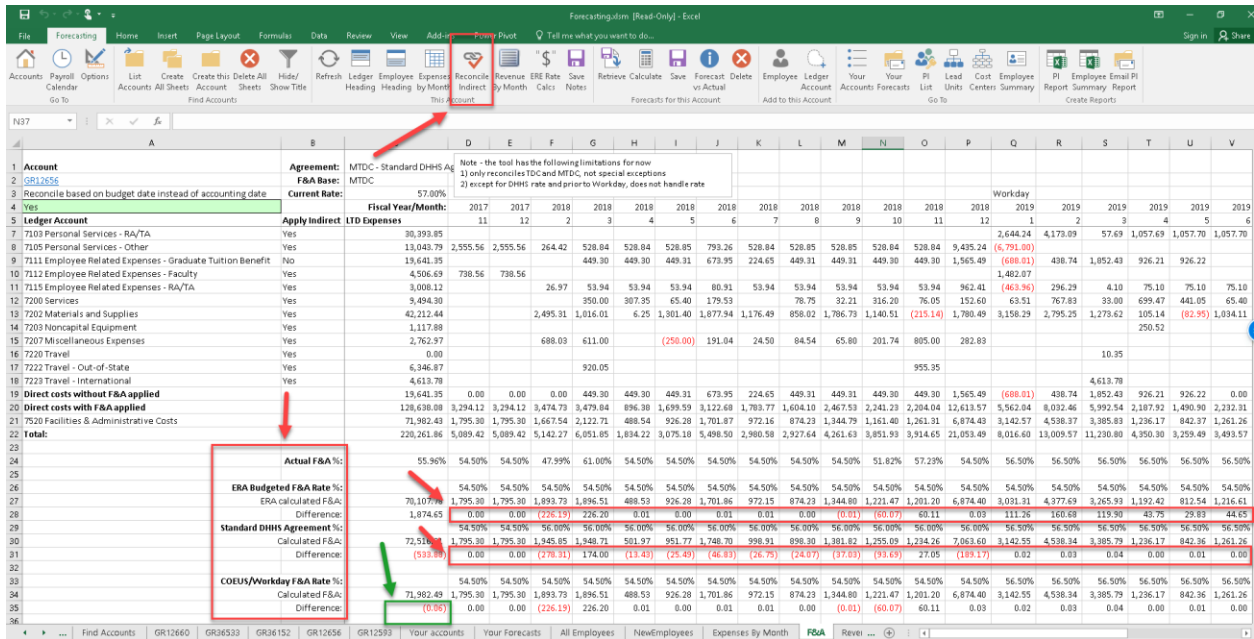


Figure 52.

All the topics discussed in this section should be taken into consideration when a user in reviewing and advising a PI on the status of their account portfolio. This concludes the Account Analysis section.

PI Reports

Employee Summary

The FT has the capability of generating reports that can be delivered to principal investigators. These reports lack the functionality of the FT, but still display the financial projections made by the user. Before a PI report is made, an Employee Summary should be created. It is important to create the Employee summary first so that it can be incorporated into the PI report. If the Employee Summary is created after the PI report, then it will not show the payroll information and be blank.

Prior to making the Employee Summary, the user must have created a set of account sheets from which data for the Summary will be drawn. These sheets should have already been reviewed by the user and ideally comprise a complete group of accounts relating to a single PI. Then from either the Find Accounts Tab, or any created account sheet, the Employee Summary button in the Create Reports section of the Forecasting Ribbon should be clicked. The FT will then populate the All Employees tab with data from the account sheets and prompt a dialogue box confirming summary creation.

The summary will show all personnel on the account sheets along with the data of which accounts they are mapped to and what their FTE percentage split across the next 4 semesters. Hovering over the red flag in the current semester will show all accounts that the employee is mapped to. This is useful if an employee's FTE is split over multiple accounts. The numbers above the semester represent the number of workdays remaining in each semester at the time that the summary is made. This number updates biweekly with each new payroll. The account numbers will hyperlink back to the

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respective account spread sheets. At any time after the summary is created the Employee Summary button in the secondary Go To section of the Ribbon can be pressed to return to the summary tab without needing to recreate the summary, see figure 53.

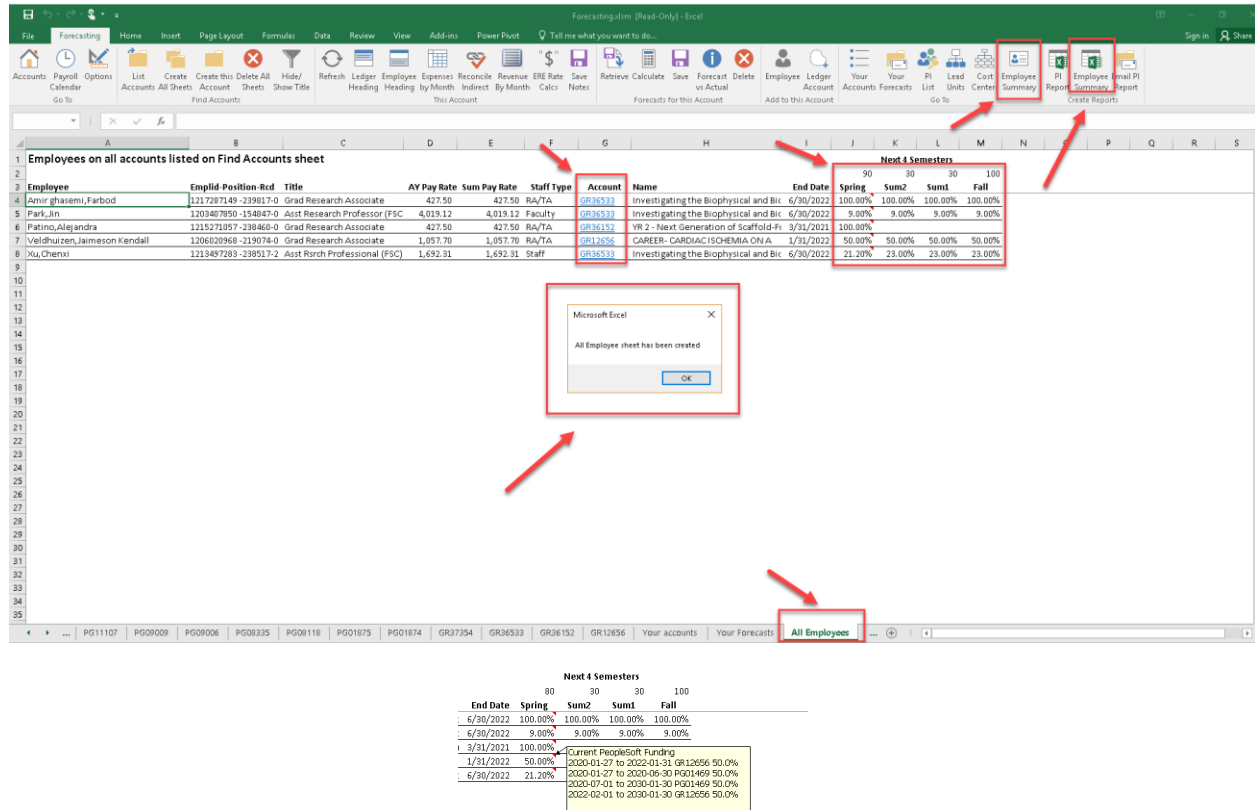


Figure 53.

Creating PI Reports

The PI Report can be created without an Employee summary, but this is not recommended as a best practice. The only thing required to create the PI Report is the creation of account sheets. As with the Employee summary, the account sheets should all ideally belong to a single PI. To create the report, click on the PI Report button in the Create Reports section of the Forecasting Ribbon, see figure 54.

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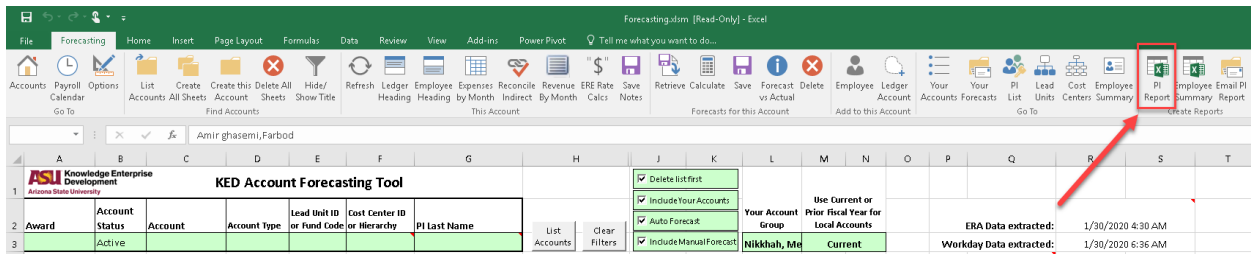


Figure 54.

The FT will then create a report that is independent of the FT itself and launch the PIReportTemplate.xlsm read only file that will be populated with data from the account sheets. A dialogue box will pop up to confirm that creation of the PI Report is complete. After clicking OK the report can be reviewed and the FT used once again, see figure 55.

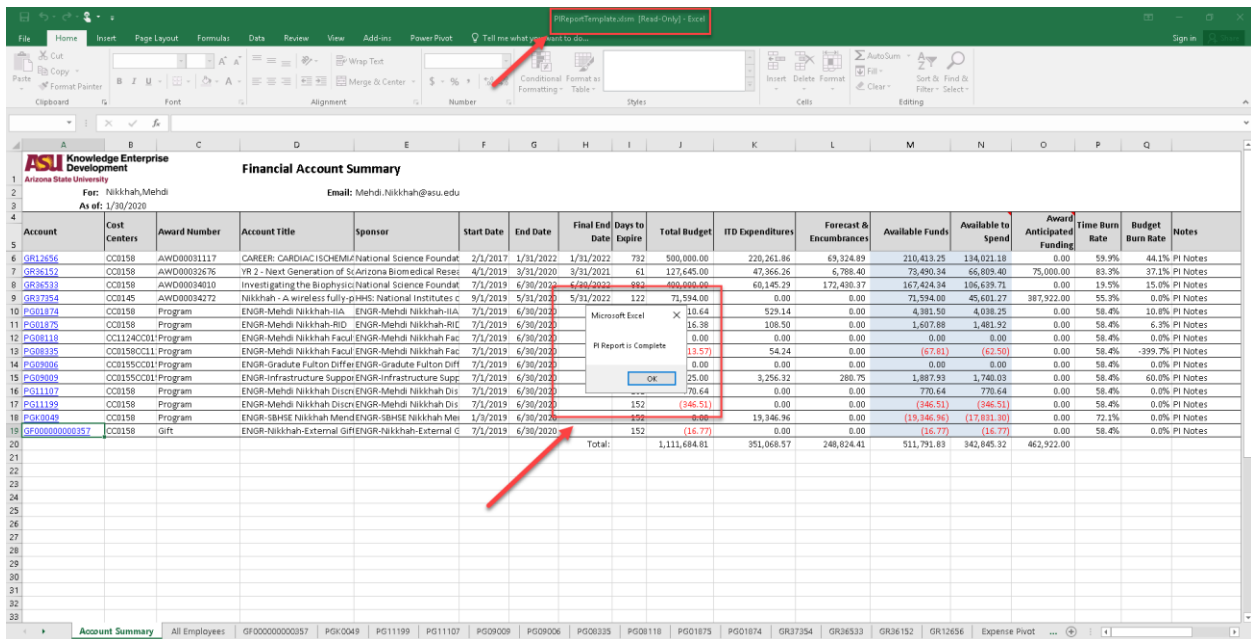


Figure 55.

Summary, Account Details, Graphs, and Monthly Expenditures

Notice on the PI Report that the Account Summary tab has information like what is seen on the Find Accounts tab of the FT with the addition of the PI Notes from the individual account sheet of the FT. These notes need to be saved in the FT prior to creating the PI Report for them to show on the PI Report. The summary tab will also contain the date that the report was created, the PI the report is for, and the PI's email address. Note that the PI information is drawn from the first account on the summary list. This is another reason why it is best practice to limit the PI Report to a single PI as multiple PIs will

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not populate this section of the report. The report will then also contain tabs for all the account sheets in addition to the Employee Summary, see figure 56.

Account	Cost Centers	Award Number	Account Title	Sponsor	Start Date	End Date	Final End Date	Days to Expire	Total Budget	ITD Expenditures	Forecast & Encumbrances	Available Funds	Available to Spend	Award Anticipated Funding	Time Burn Rate	Budget Burn Rate	Notes
GR12656	CC0158	AWD00031117	CAREER: CARDIAC ISCHEMIA/National Science Foundat		2/2/2017	1/31/2022	1/31/2022	732	500,000.00	220,261.86	69,324.69	210,413.25	134,021.18	0.00	59.9%	44.1%	PI Notes
GR36152	CC0158	AWD00032676	YR 2 - Next Generation of S/Arizona Biomedical Resear		4/2/2019	3/31/2020	3/31/2021	61	127,645.00	47,366.26	6,788.40	73,490.34	66,809.40	75,000.00	83.3%	37.1%	PI Notes
GR36533	CC0158	AWD00034010	Investigating the Biophysics/National Science Foundat		7/1/2019	6/30/2022	6/30/2022	882	400,000.00	60,145.29	172,430.37	167,424.34	106,639.71	0.00	19.5%	15.0%	PI Notes
GR17354	CC0145	AWD00034272	Nikkhah - A wireless fully-pHHS: National Institutes c		9/1/2019	5/31/2020	5/31/2022	122	71,594.00	0.00	0.00	71,594.00	45,661.27	387,922.00	55.3%	0.0%	PI Notes
PG01874	CC0158		ENGR-Mehdi Nikkhah-IA	ENGR-Mehdi Nikkhah-IA	7/1/2019	6/30/2020		152	4,910.64	529.14	0.00	4,381.50	4,038.25	0.00	58.4%	10.9%	PI Notes
PG11872	CC0158		ENGR-Mehdi Nikkhah-RI	ENGR-Mehdi Nikkhah-RI	7/1/2019	6/30/2020		152	1,716.38	108.50	0.00	1,607.88	1,481.92	0.00	58.4%	6.3%	PI Notes
PG08119	CC11AC0011		ENGR-Mehdi Nikkhah-Facul	ENGR-Mehdi Nikkhah-Fac	7/1/2019	6/30/2020		152	0.00	0.00	0.00	0.00	0.00	0.00	58.4%	0.0%	PI Notes
PG08335	CC0158CC011		ENGR-Mehdi Nikkhah-Facul	ENGR-Mehdi Nikkhah-Fac	7/1/2019	6/30/2020		152	(13.57)	54.24	0.00	(67.81)	(62.50)	0.00	58.4%	-399.7%	PI Notes
PG09006	CC0158CC011		ENGR-Graduate Fulton Differ	ENGR-Graduate Fulton Diff	7/1/2019	6/30/2020		152	0.00	0.00	0.00	0.00	0.00	0.00	58.4%	0.0%	PI Notes
PG09009	CC0158CC011		ENGR-Infrastructure Support	ENGR-Infrastructure Supp	7/1/2019	6/30/2020		152	5,425.00	3,256.32	280.75	1,887.93	1,740.03	0.00	58.4%	60.0%	PI Notes
PG11107	CC0158		ENGR-Mehdi Nikkhah Disor	ENGR-Mehdi Nikkhah Dis	7/1/2019	6/30/2020		152	770.64	0.00	0.00	770.64	770.64	0.00	58.4%	0.0%	PI Notes
PG11192	CC0158		ENGR-Mehdi Nikkhah Disor	ENGR-Mehdi Nikkhah Dis	7/1/2019	6/30/2020		152	(346.51)	0.00	0.00	(346.51)	(346.51)	0.00	58.4%	0.0%	PI Notes
PG08049	CC0158		ENGR-SBHS Nikkhah-Mend	ENGR-SBHS Nikkhah-Me	1/2/2019	6/30/2020		152	0.00	19,346.96	0.00	(18,346.96)	(17,631.90)	0.00	72.1%	0.0%	PI Notes
PG08000000357	CC0158		ENGR-Nikkhah-External	ENGR-Nikkhah-External C	7/1/2019	6/30/2020		152	(16.77)	0.00	0.00	(16.77)	(16.77)	0.00	58.4%	0.0%	PI Notes
Total:									1,111,684.81	351,068.57	248,824.41	511,791.83	342,845.32	462,922.00			

Figure 56.

Each of the individual account detail sheet tabs contains the same expenditure information as the FT account sheets, but they exclude the green payroll and non-payroll projection sections. The forecasted encumbrance totals remain along with forecasted personnel. This allows for a cleaner, more streamlined report for PIs to review and opens up additional area for notes to PIs. At the top of the report are Graph, Return, and Freeze Employee Headings buttons. The Headings button will freeze pane the report in a way similar to the Employee Headings button in the FT. The return button will prompt the PI Report to open the Account Summary tab and the graph button will be discussed next, see figure 57.

Employee	Emplid-Position-Rcd	Title	AY Pay Rate	Sum Pay Rate	Earnings Staff Type	Forecast	ERE Forecast	Forecast	semester	Spring	Spring	Spring	Spring	Spring	Spring	Spring	Spring	Sum2	Sum2
Veldhuizen, Jameson Kendall	1206820968 -213074-0	Grad Research Associate	1,057.70	1,057.70	26,442.32 RA/TA	26,346.36	2,073.16	19,766.42		50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Nikkhah, Mehdi	1206816594 -174724-1	SUM/WTH Faculty Resear	0.00	0.00	16,248.51 Faculty														
Fu, Fannu	1206463937 -186971-0	Grad Research Associate	0.00	0.00	0.00 RA/TA														

Figure 57.

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Clicking on the graphs button will prompt the report to open the Expense Pivot Tab. This tab will be populated with data from the account detail sheet that the graph button was clicked on. The graph displays 3 separate plots that include the total budget, which is the obligated project budget to date. The graph displays 3 separate plots that include the total budget, which is the obligated project budget to date. Next is the Spend Plan which is the cumulative average budget by month. This is an approximation of the level at which a grant should be spent out per month based on the current budget to see full burn out before the end of the project's period of performance. If another increment of funding is received the spend plan will recalculate based on the new total budget and performance period. Finally, the Cumulative Spend plot displays the total project expenses to date. All three plots are shown over fiscal month. Drop down filtering menus are also available to change the range of fiscal months and the account. Filtering by fiscal month is useful if only a short span such as a single quarter of performance period is desired to be analyzed.

Below the graph is a pivot table that contains data on project expenditures by fiscal year or month and itemized by Object Class and Ledger Account. Clicking on the plus and minus icons will toggle the pivot table to expand and collapse showing variable level of detail. This is most useful for PIs working on projects that require granular levels of financial detail due to sponsor reporting requirements, see figure 58.

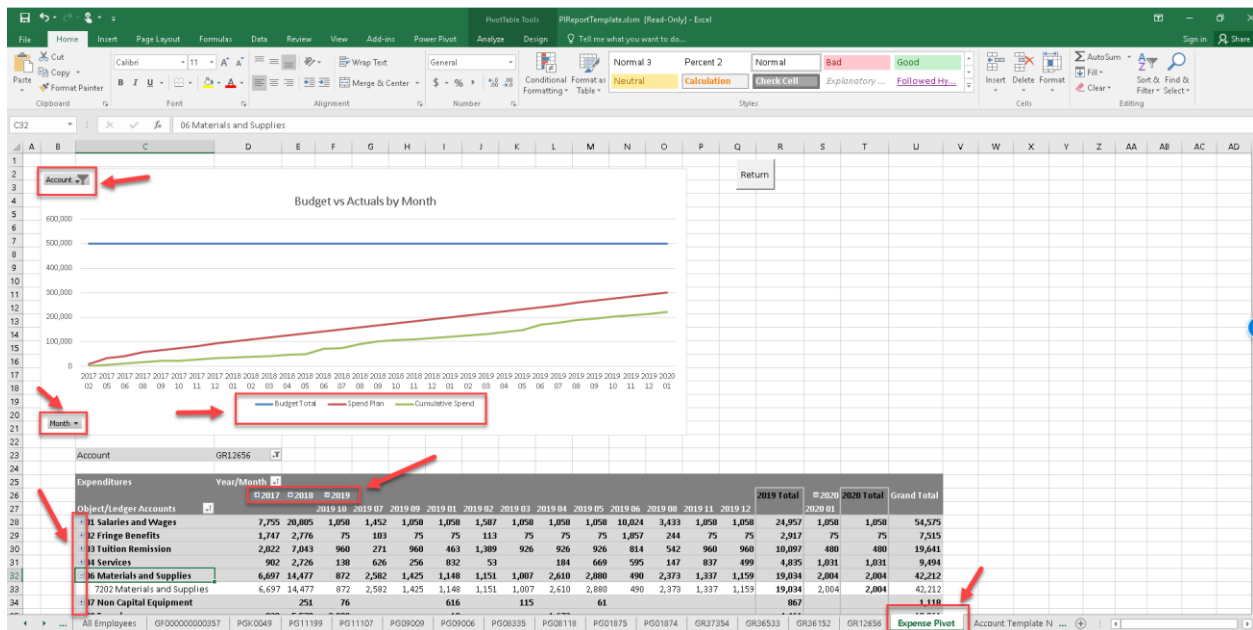


Figure 58.

Emailing / Exporting the PI Report

Once the PI report has been created and checked for accuracy, the final step will be to deliver it to the PI. This is accomplished in two primary ways. The first is by using the FT to email the report out of the BI Workspace, and the second is by exporting it using a virtual drive. Before either method can be used, the PI Report needs to be saved within the BI Workspace. Unlike the FT, the PI Report can be

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saved in the traditional sense within the virtual environment by selecting File and saving. The naming convention and location of the file is at this discretion of the user, it simply needs to be easily located within the Workspace.

After saving the PI Report, the FT can email it using the Email PI Report located in the Create Reports section of the Forecasting Ribbon. Clicking the button will prompt the FT to launch File Explorer at which point the saved PI report must be located, selected, and opened, see figure 59.

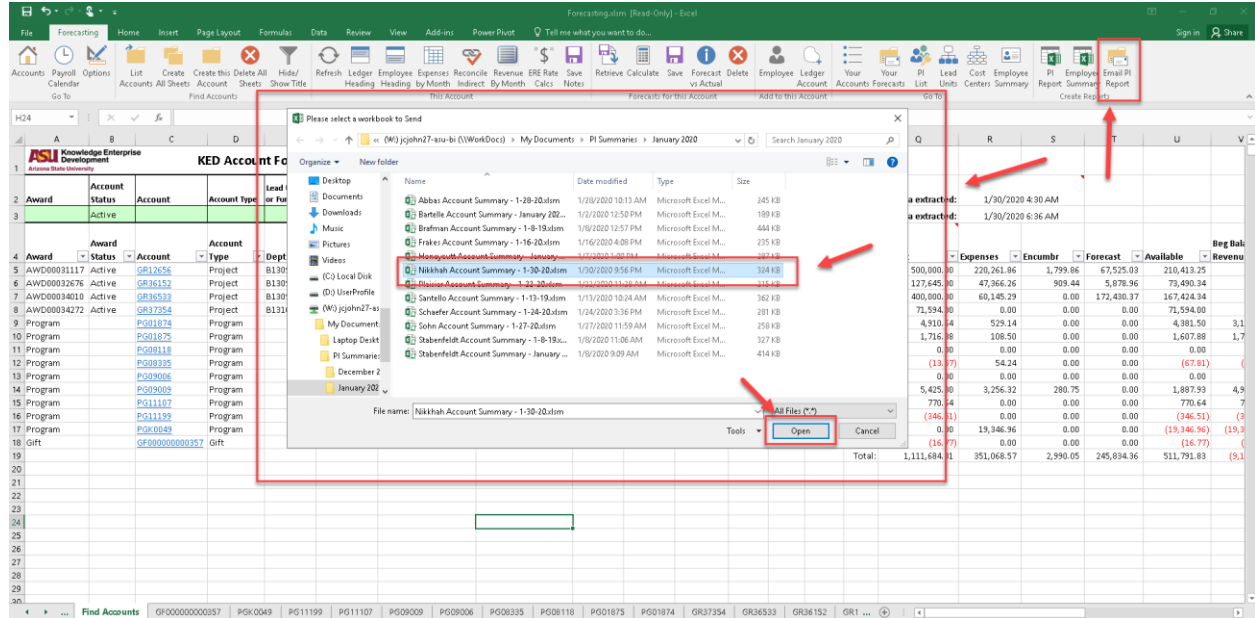


Figure 59.

After clicking on the Open button, a dialog box will pop up confirming that the PI Report should be sent. The popup will display the to and from email addresses, a pre scripted subject line, and the file path of the PI Report being sent. Clicking on yes will send the report via email and prompt another dialog box to confirm the email has been sent, see figure 60.

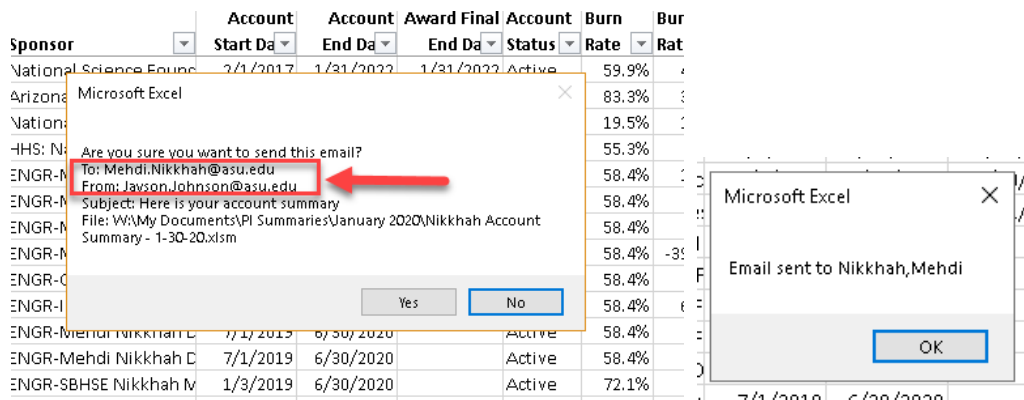


Figure 60.

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The subject line cannot be changed at this stage nor can a message be added to the body of the email. Due to this it is recommended that the user email the PI Report to themselves in order to uniquely identify the email to the PI. The email address on the Account Summary tab of the PI Report can be manually changed to the user's email address and then resaved. Once this is done the FT can be used to email the PI report again with the result being that the report is sent to the user. The FT will still popup a dialogue box saying that the report was emailed to the PI, but this is because it pulls that information from the For: cell of the PI Report, see figures 61 and 62.

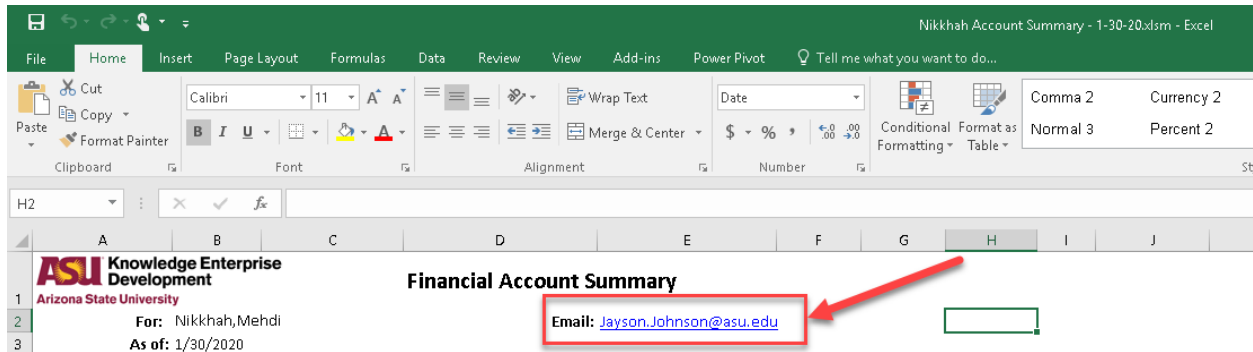


Figure 61.

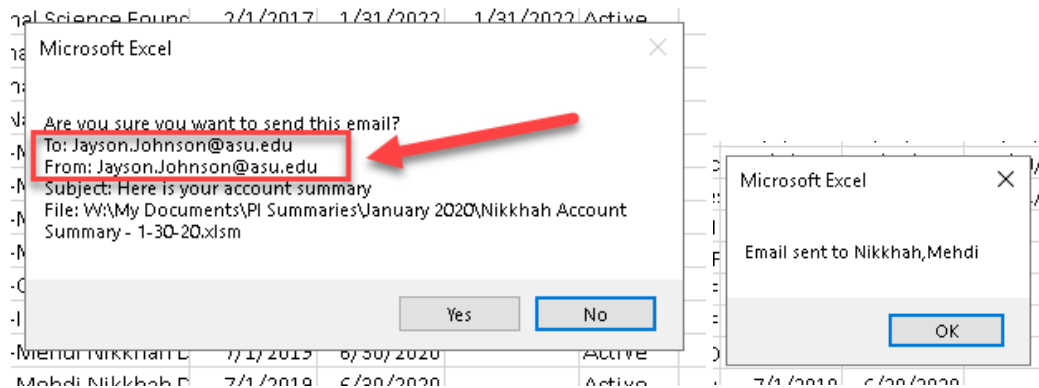


Figure 62.

Emailing the reports from the BI Workspace can take an extended period depending on server health and network speeds. Often a faster method for exporting the PI Report is by saving a copy of it in either the Amazon WorkDocs Drive or the Dropbox(ASU) drive from within the BI Workspace. These drives should be setup prior to accessing the FT and already be available. Separate instructions for the setup of these drives will be included with this training guide. Both the WorkDocs Drive and the Dropbox(ASU) Drive can be located in the File Explorer as separate and independently mounted drives, see figure 63.

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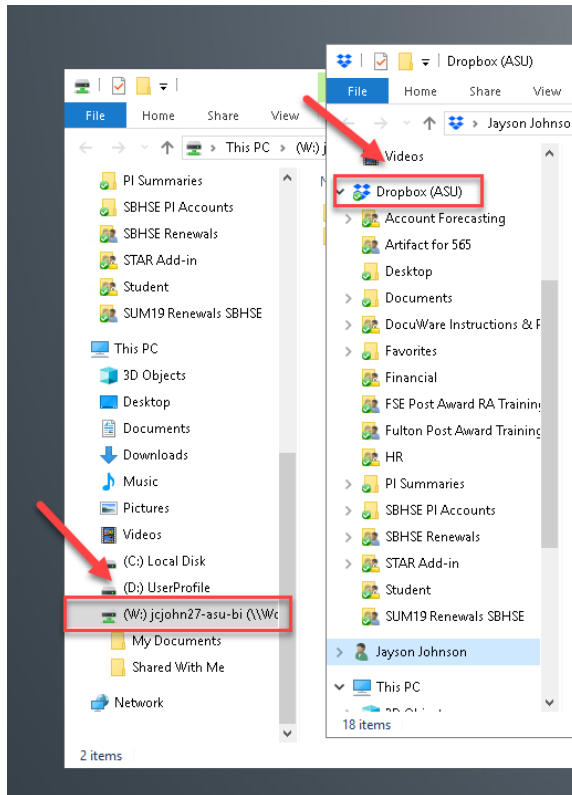


Figure 63.

The user can save the PI Report into a folder location of their choice within these drives inside the BI Workspace. Once the drives synchronize with the cloud servers the PI Report will become available on any device that has access to the user's respective drives outside of the BI Workspace. This concludes the PI Report section.

Trouble Shooting

Data Warehouse Loading

As discussed previously, the FT pulls data from the various data warehouses at ASU. For the FT to be updated with accurate information, those data warehouses also need to be up to date. The warehouses usually update on a set schedule, but there are times that they are delayed. To warn FT users of the potential for data inaccuracy due to being out of date a dialogue prompt will launch informing that the data warehouses are still loading, see figure 64.

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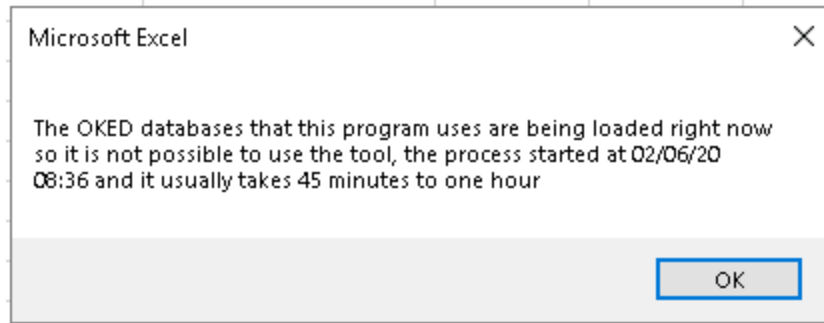


Figure 64.

Upon FT startup if the warehouses have not yet been loaded the popup will launch and the FT will be disabled until the data loading is complete. This is done because using the FT at the same time that the data bases are being loaded leads to instability with the FT code. The Start Tab of the FT breaks down the data extract times for each of the databases and if there is a delay of any of the data base loads a unique dialogue prompt will pop up detailing which database is undergoing the up/download process, see figure 65.



Figure 65.

In practice despite data not being up to date in real time the FT is still accurate to use for most project accounts even when this warning has appeared. Only the most active accounts and accounts nearing burnout require additional monitoring. This includes cross referencing the figures in the FT with the figures shown in Workday. If both sets of data reconcile then the FT can still be trusted as a projection tool. It is the responsibility of the user to ensure this is the case.

Subscript Errors

A common error for first time FT users is the subscript error, see figure 66. This occurs when the FT is performing a process that requires it to find a template to load data into and cannot. The most likely cause of this is because the user has saved a local copy of the FT instead of using the Read Only file that exists in the ASU Dropbox. To correct this error the Read Only file must be used. If the user has entered projections into their local copy of the FT, they can be copied and pasted into the Read Only file or recreated there.

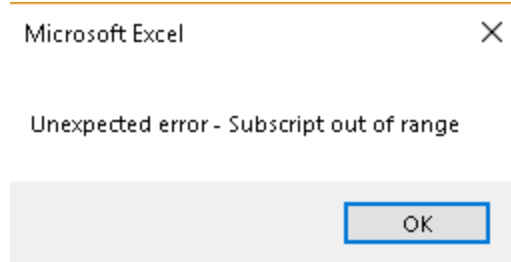


Figure 66.

Run-time Errors

There are multiple types of Run-time errors that can occur throughout the use of the FT, see figure 67. They are often the result of prompting the FT to perform an action without having completed the prerequisite steps. An example of this would be attempting to create account sheets without first finding accounts. Whatever the type of run-time error that is encountered, ensure that all processes are being performed in specific order by referring to the various sections of this guide.

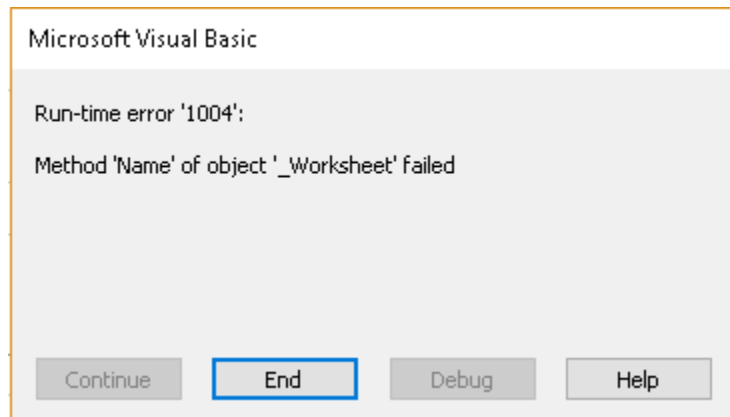


Figure 67.

Account Sheet Cannot be Found

Account sheet errors are similar to run-time errors, see figure 68. These errors occur when the FT is performing a procedure that requires a specific sheet to load data into, but the sheet either does not exist or the FT is not being correctly directed to it. This is typically the result of either performing FT processing steps out of order such as attempting to create a PI Report without first creating the account sheets, or attempting to copy a new employee back to an account without specifying the desired account first. In both cases this can be corrected by ensuring that the correct workflow processes are followed as described in the guide.

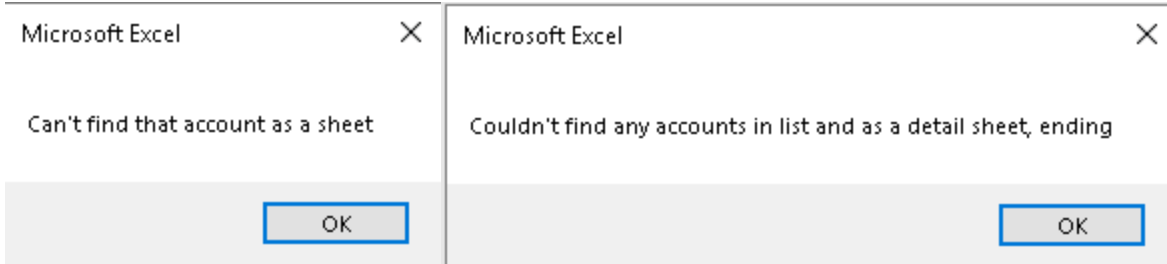


Figure 68.

Most errors can be resolved in this way however, if a solution cannot be found in this guide then refer to your department senior financial admin or [DL.ORG.KE.RTO.BI.Staff](#) for assistance. This concludes the trouble shooting section of the guide.

Limitations

Cost Centers

At launch, the FT will not have the ability to separate accounts from their respective Cost Centers. This means that when a single account such as a program account is searched all cost centers that are tied to that program will be found and merged into one. The limitation here is if a program under one cost center has a \$100 balance and under another cost center it has a \$200 balance, then the FT will show that the program account has a balance of \$300 without making a distinction as to which cost center intersection the funding exists under. Further FT enhancements are anticipated to help address this limitation, but for now, users are advised to take this into consideration and cross reference these types of situations with data in Workday.

Startup Accounts

Certain units at ASU, such as the units within the Fulton Schools of Engineering (FSE), provide new faculty with research startup funding. The operational funding in these packages are loaded into program accounts and can be treated like any other type of program account when making projections within the FT. Most startup operational funds are deposited in two incremental instalments within the first two years of the faculty's appointment. The FT will only show funding that is currently available in the program account and not the next increment of funding.

To account for the next increment of funding, a user can either make a note in the startup account that additional funding is anticipated, or they can manually update the budget to reflect more funding than is currently available. The latter method is not advised as it can lead to unanticipated deficits that would need to be addressed at the end of each fiscal year.

Startup packages also typically come with personnel support. In FSE this support is not measured by a dollar figure, but rather by the number of supported pay periods. At launch, the FT does not have a way to measure pay periods used on an account. As a result, startup personnel accounts will typically display as being in deficit because revenue is not transferred to these accounts until the end of

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each fiscal year. Future enhancements to personnel tracking are planned for the FT to address this limitation.

Until those enhancements are deployed, users are advised to track pay periods using the RA notes section of the account sheets. Then when sending PI Reports, users are advised to manually change the account summaries to reflect the correct number of used and available pay periods remaining, as well as inform the PI to ignore any deficits on the account detail sheets.

Payroll History

At launch, the FT will not have the ability to review historical payroll information by pay period. The total payroll for any individual personnel will be accounted for, but the individual past pay periods are not. This information is useful when being used in sponsored progress reports to document personnel effort. Currently the Expenses by Month feature of the FT can show personnel expenses by month, but not by original pay period. There is a planned enhancement to allow for this function within the FT. Until then users will need to cross reference with Workday and PeopleSoft to confirm details on past payroll.

Settings and Reference

Start Tab

The Start tab was intentionally left to be discussed in the last section of this guide because the purpose of the Start tab in the FT is meant to be a quick reference guide for first time FT users. On the Start tab bullet point information is listed to assist users in understanding the general aspects of the FT. The Start Tab can be thought of as a supplemental guide to this one. It will also detail the current FT version as well as the date the version was enhanced, see figure 69.

Enhanced: 1/8/2020
This Version: 1.33
Version should be: 1.33

Recent Enhancements

- Drill into journal line detail from Expenses by Month
- F&A reconciliation now defaults to using budget date
- Tuition remission rate adjusted based on FTE
- Can now filter by cost center hierarchy or grant hierarchy
- Can now filter by fund code

How To Use This System - refer to Forecasting menu

Find Accounts	<ul style="list-style-type: none"> • Use Accounts button to bring up the Find Account sheet. Enter Filters such as cost center, PI • Press List Accounts button, Grants, Gifts, Programs and Projects can be found
Create a sheet per account	<ul style="list-style-type: none"> • On Forecasting Menu, press Create All Sheets button or • Select one account by clicking on that row and pressing Create this Account button
Enter Forecasts	<ul style="list-style-type: none"> • Ledger accounts - enter amounts in fiscal month cells, manually entered amounts should turn blue. Insert comments if desired. • Employees - change funding percents by pay period or use Add Employees button.
Calculate Button	<ul style="list-style-type: none"> • Press Calculate Button if you made employee funding changes, this will calculate ERE and Tuition Remission.
Save forecasts	<ul style="list-style-type: none"> • Press Save button on Forecasts menu to save forecasts to a database and bring them back next time • Since they are saved by future month, historical months will just drop off

Features - use the Forecasting Ribbon

Find a list of accounts by filtering on Cost Center, Lead Unit, PI, Award, Cost center or grant hierarchy, active status etc

Start Documentation Find Accounts Template (3) Your accounts Your forecasts All Employees New Employees Expenses by Month F&A Revenue Expense t ...

Figure 69.

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Documentation Tab

The documentation tab is meant more for Knowledge Enterprise developers to track FT changes and maintain a checklist of enhancements that are planned for future versions of the FT. It is left visible within the FT for all users to see in order to help identify when, or if, new functionality patches have been deployed, see figure 70.

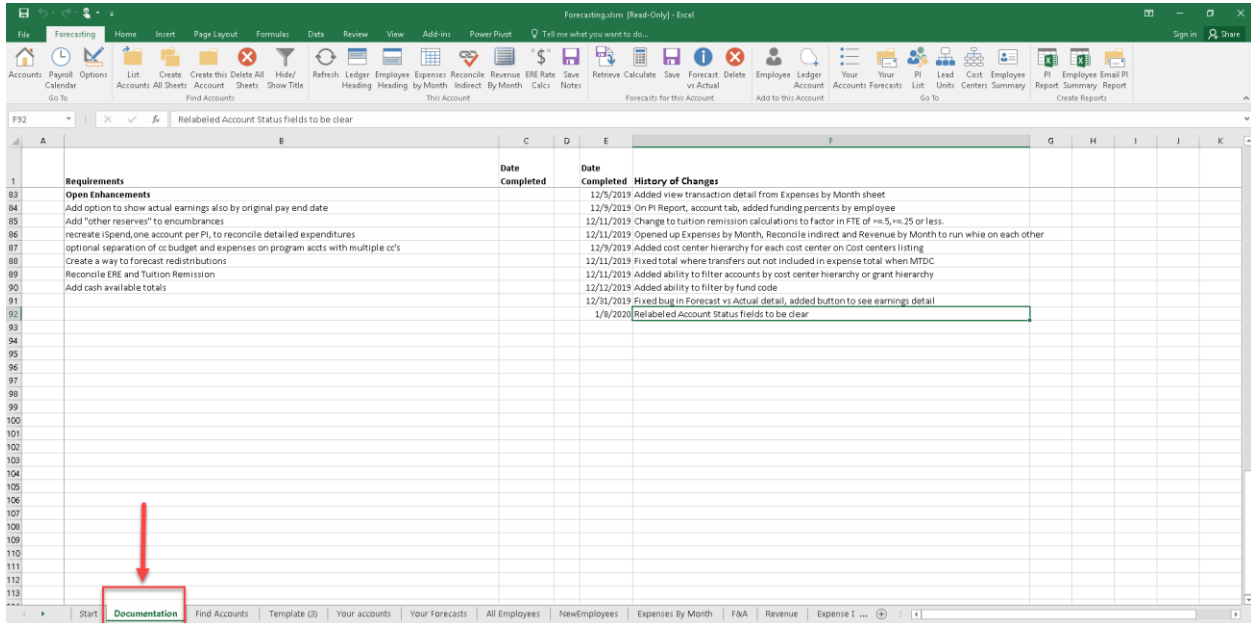


Figure 70.

PI List, Lead Units, and Cost Centers

The FT maintains a list of PI, Lead Units, and Cost Centers to be referenced through the operation of the FT. These tabs can be navigated to either by scrolling along the tabs of the FT spreadsheet or by clicking on the respective buttons in the secondary go to section of the Forecasting Ribbon. These tabs will not be utilized by the average user and are required only for background functions of the FT. However, if a user was interested in ensuring that the data in these lists was correct, they can reference them in these locations, see figure 71.

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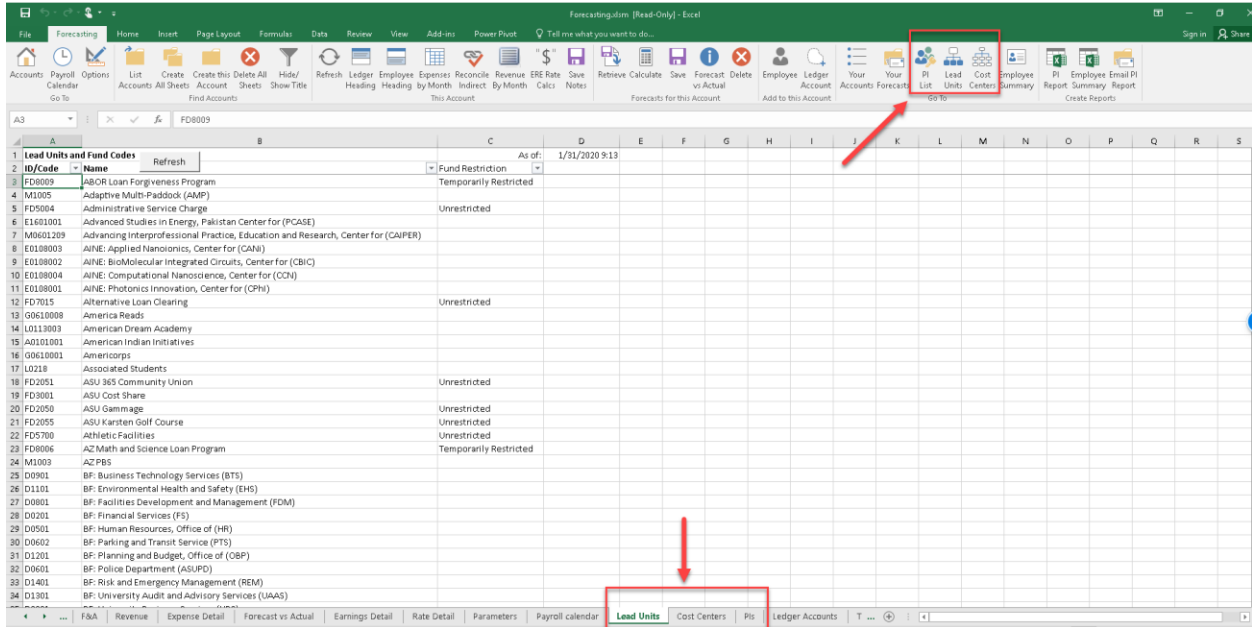


Figure 71.

Payroll Calendar

As with the previously discussed tabs, the Payroll Calendar tab is required for the FT to be able to populate payroll date information to allow for projections. It can be useful if a user is working on projections and finds it convenient to see the payroll calendar listed by row instead of column but is otherwise meant for background FT operations and should not be altered. It can be displayed by clicking on the Payroll Calendar button in the primary Go To section of the Forecasting Ribbon, see figure 72.

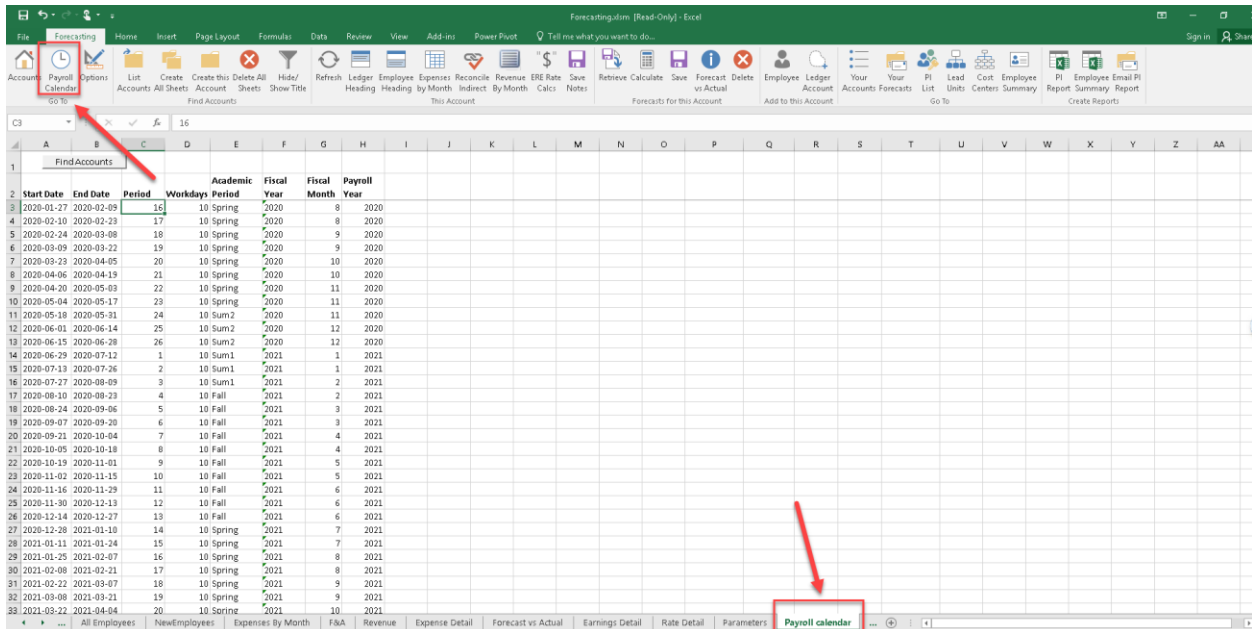


Figure 72.

Options

The Options button in the primary Go To section of the Forecasting Ribbon will open the Parameters tab of the FT, see figure 73. This tab controls settings for items such as drop-down menus and rate information. Most of this information should not be altered unless the user is attempting to make projections with future rate information that is not reflected in the current options settings. If a user makes changes to rates such as ERE, or inflation here and clicks the save button, then all their future session with the FT will be calculated at the rates that were input. If the save button is not pressed, then the rates will only be effective until the FT is closed. Once reopened, the rates will default back to their presets. In practice these settings rarely need changing and doing so is not recommended due to the risk of making inaccurate projections.

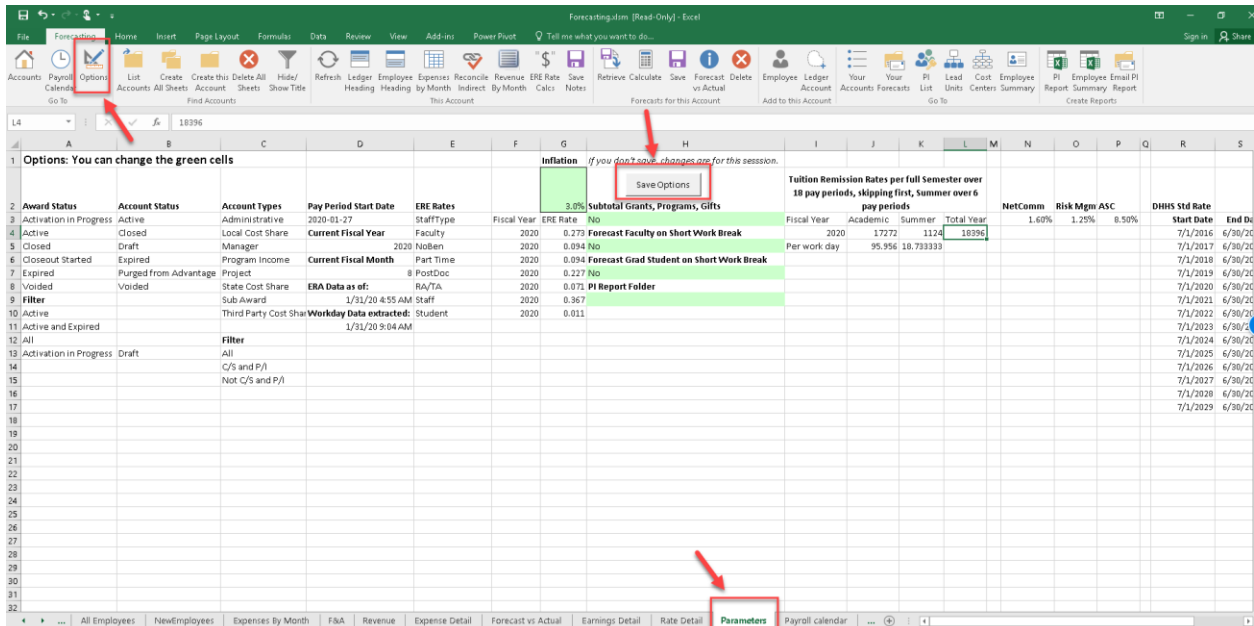


Figure 73.

Epilogue

The Forecasting Tool is only as reliable as the person using it. The mathematical calculations it performs may be accurate, but the interpretation and implementation of those calculations all fall to the user. The FT is not meant to be a definitive affirmation of how finances on an account will be utilized and cannot replace the skill and knowledge that come from a trained administrator. What the Forecasting Tool can contribute, and is intended for, is increased efficiency and accuracy. With practice the Forecasting Tool can be an integral instrument for any financial administrator at ASU.