Introduction

Description

The Financial Research Expenditure Dashboard (FRED) is a University-wide tool that was created to assist the Research Community and Department Administrators (DAs) with managing their research dollars. This tool will lead to better management of grant expenditures and explores forecasting capabilities. It is a one-stop dynamic tool built within PowerBI that provides:

- Standard metrics and visualizations
- Forecasting capabilities
- Access controls
- Warning flags based on thresholds used by Sponsored Programs (SP)

Objective

- **Standardized process across the University** – A University-wide tool will help with continuity during employee absence/turnover, reduce duplication of effort, and allow Sponsored Programs to provide metrics and flags to be used by DAs.
- **Time Savings** – Having an automated dashboard should remove hours of work for the DAs every month who were manually updating spreadsheets (shadow systems).
- **Proactive Grant Management –** Reviewing both projected expenditures and actual expenditures against the budget will make grant management easier. DAs will also be able to research any discrepancies all with the same tool.

Data Owners

Any data, technical, or business questions should be addressed via this form: FRED Service Portal.

Once form is submitted, you will receive a response within 3 business days. The response will either come from CIDA (technical questions) or Sponsored Programs, Post Award (best practices / business questions). Please ensure when filling out the form to be as detailed as possible with your question or issue. It is also good practice to provide screen shots of outcome or errors as required.

Future of FRED

This is the ***first phase*** of FRED:

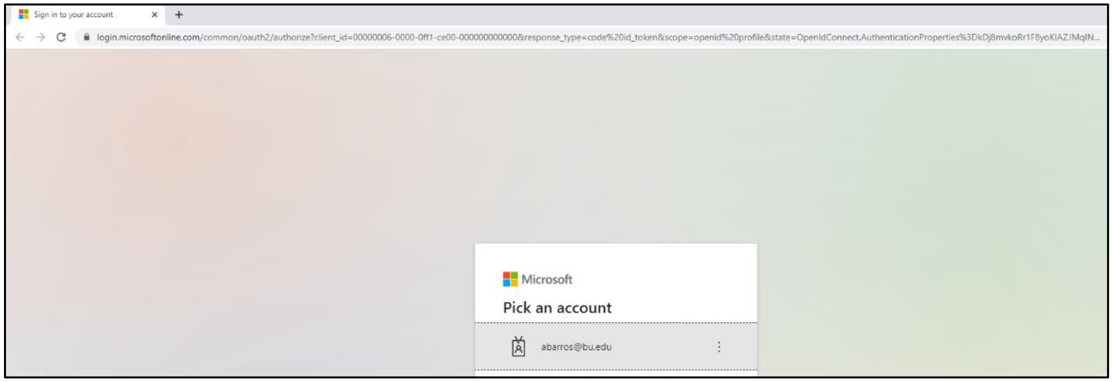
- Salary Projections, including Fringe and Facilities and Administration (F&A)
  - Staff, faculty, and student information
  - Based on Salary in BUWorks (SAP)
  - Only allow DA's and some Principal Investigator (PI) exceptions to update projections.
- Expenditure Projections, including Commitments, Fringe and F&A on both projections and commitments.
- Salary Distribution Report by Employee
- Flags
  - Burn Rate/Award Health
  - Number of Grants Ending
  - Employee Cost Distribution Ending
- Standardized Expenditure Reporting

Table of Contents

Instructions

General Navigation and PowerBI Knowledge

Logging into PowerBI

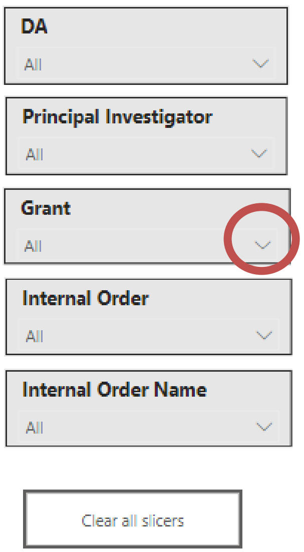


Use the link provided to log into FRED.

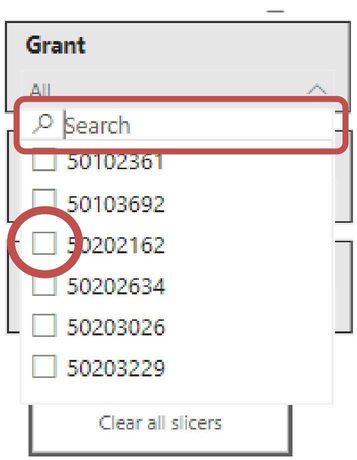
If it is your **first-time** logging onto PowerBI it will ask you for your Kerberos ID credentials.

If you had **previously** opened PowerBI Reports, then it may ask you to select your account to open the report.

Filtering Visuals



On the right-hand side of each page, you will have the option to filter down on certain data attributes.

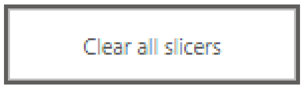


Using the downward carrot will open the data that you can filter down on. You can either:

- Use the search field and type in the information, which will filter the options down, or;
- Hand-select the data you want by clicking on the box next to the items you want to see.

Un-Filtering Visuals

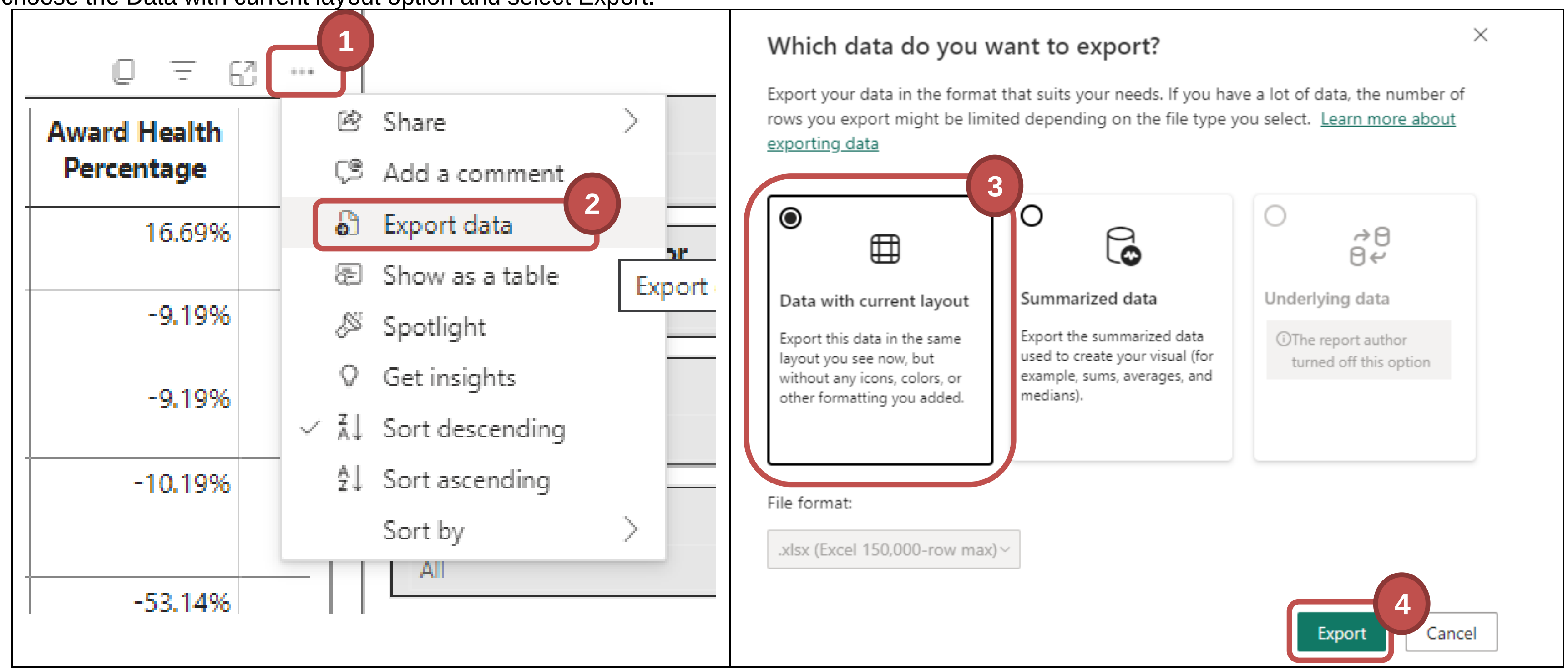
If you only want to remove the filter from one data attribute, then you can select the eraser icon next to that attributes name



If you want to clear all filters from the page, then you can select the “Clear all slicers” button at the bottom of the filters section.

Exporting Data

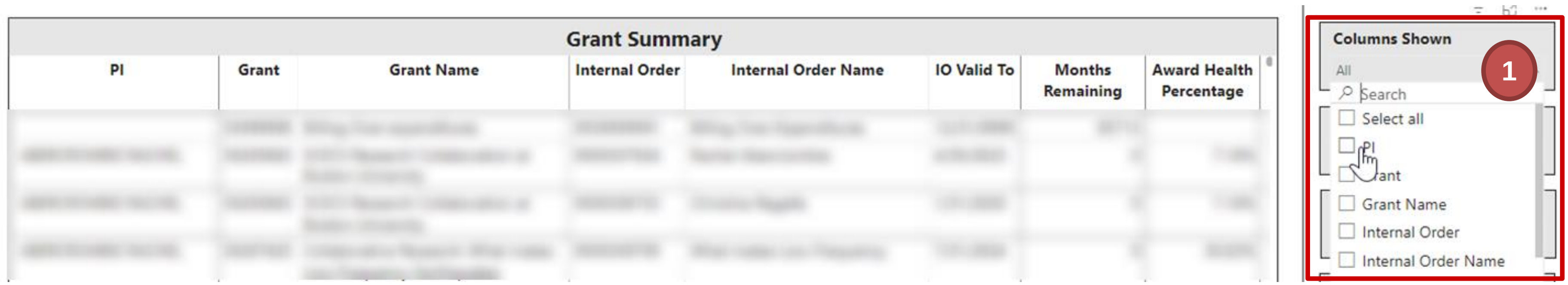
To export your data highlight over a visual, select the ellipsis (three dots) on the top right and click on Export data from the drop down. Then choose the Data with current layout option and select Export.



Columns Shown Filter

On some of the pages, you will see a "Columns Shown" filter. This filter allows you to remove columns, and create a view that may better fit your needs.

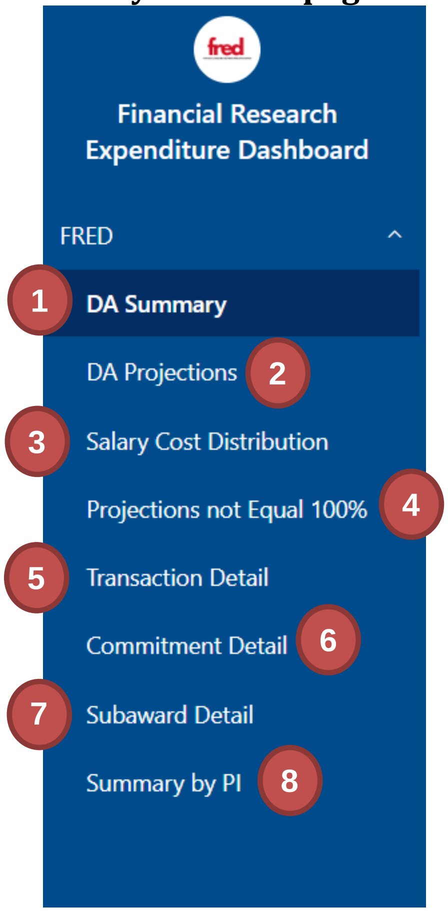
1) Select the Columns Shown filter:



2) By Selecting a few of the different columns the view will change (in this case only the PI & Grant will be displayed:

Pages in FRED

Summary of all the pages



1. **DA Summary** – This page shows a summary of all the grants that a DA is assigned. It shows the projected budget-to-actuals (including projections) as well as flags for award health and ending IOs. This should be the first page you look at when opening the dashboard. Based on what you see on this page, you can do a deeper dive in subsequent pages.
2. **DA Projections** – This page is a multifunctional tool and allows you to:
    - Submit for a temporary Grant
    - Submit for a temporary Internal Order (IO)
    - Submit for a temporary Employee
    - Submit a salary change for an existing employee
    - Generate the Projection worksheet
    - Submit a completed Projection worksheet
3. **Salary Cost Distribution** – This page shows the active salary cost distributions along with a flag to narrow down the distributions ending in the next 30, 60, 90 days that may need to be addressed.
4. **Projection not Equal to 100%** - This page alerts the DA if a salary projection was entered that did not equal a full 100% for a month. This may or may not be a problem depending on the circumstance.
5. **Transaction Detail** – This page is a replica of the Business Warehouse (BW) Transaction Detail Report and shows only the items that have been posted in SAP (aka the actuals)
6. **Commitment Detail** - This page is a replica of the BW Transaction Detail Report and shows only the open commitment items that have been posted in SAP.
7. **Subaward Detail** – This page shows the summary for budget-to-actuals along with projections for the subaward sponsored class. For each grant you can see the FRN total committed amount with what is still outstanding.
8. **Summary by PI** – This page breaks down the budget to actuals of a PI's portfolio by Sponsored Class. It also includes commitments and projections to show a comprehensive picture of financial outlook.

DA Summary

This page was built as a quick overview of each of the grants you are assigned to. Here you can learn about which IOs are ending and may need an action [reporting, requests, invoicing, etc.] along with the award health based on spending and amount of time remaining. You can see what each IO has for direct and indirect remaining balances, taking into account the projections made, actual expenses, and commitments.

PI	Grant	Grant Name	Internal Order	Internal Order Name	IO Valid To	Months Remaining	Award Health Percentage	E
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7/31/2024	12	16.69%	$
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8/31/2023	1	-9.19%	$
[illegible]	[illegible]	[illegible]	[illegible]		8/31/2023	1	-9.19%	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12/31/2023	5	-10.19%	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1/31/2024	6	-53.14%	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7/31/2023	0	26.96%	$
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2/29/2024	7	-7.29%	$
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6/30/2024	11	17.94%	
Total								**$23**

DA

Principal Investigator
All

Grant
All

Internal Order
All

Internal Order Name
All

Clear all slicers

Number of IO's Ending

Internal Order Validity	Number of IO's
0-30 Days	6
31-60 Days	13
90+ Days	50
Total	**69**

Selecting one of the numbers on either chart will filter the top matrix to the flagged IOs

Award Health

Award Health	Number of Grants
Accelerated spending by 25% or more	20
Underspent by more than 25% or more	11
Total	**31**

The Award Health of grants.

Note: This is the same process as currently emailed by the Sponsored Programs Research – Compliance team

Scroll to the right to learn more about each IOs Financial Position including Budget, Actuals, Projections, and Direct/Indirect Remaining Balance

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DA Summary Best Practices

The following are questions to ask yourself about the accounts shown in **Number of IO's Ending**:

Number of IO's Ending	
Internal Order Validity	**Number of IO's**
0-30 Days	1
31-60 Days	9
61-90 Days	3
90+ Days	29
Total	**42**

1. **Do you need a No Cost Extension (NCE)?**
    - Is your Science complete?
    - Is your Science commensurate with spending?
    - Did you have a delayed start time which necessitates an extension?
    - Do you have adequate funding to continue the work during the NCE period?
2. **Do you have Subawards?**
    - Are all subaward invoices in?
    - Will your subaward invoice in full?
        - If not, do you need to re-budget unspent subaward funds to another line item?
        - Was the final invoice marked as final?
3. **Are you going to order or have you ordered Equipment?**
    - NOTE: Equipment should not arrive on last day of award. It must arrive in time to benefit the project from which it was paid.
4. **Do you have consultants?**
    - Are all consultant invoices in?
    - Will your consultants be invoicing in full?
        i. If not, do you need to re-budget unspent consultant funds to another line item?
5. **Are all commitments accounted for?**
    - Have all items arrived at BU?
    - Have all invoices been paid?
    - Do you need to contact the Vendor?

The following are questions to ask yourself about the accounts shown in **Award Health**:

Award Health	
Award Health	**Number of Grants**
Accelerated spending by 25% or more	511
Underspent by more than 25% or more	632
Total	**1143**

A. **Do you have Accelerated spending?**
- What is your plan to adjust? Will science end sooner so employees, supplies, etc, will end sooner?
- Are there employee salary or non-salary expenditures listed on this award that should not be?

B. **Do you have Decelerated spending?**
- Are all expenses on the account or are they on a University account or a different grant that need to be transferred?
- Is salary correct?
- Do you have all subaward invoices?
- Are you waiting on a large piece of equipment?
- Are all vendor invoices accounted for?

Salary Cost Distributions (SCDs)

This page shows the salary cost distributions (SCDs) that are entered into SAP for the previous month, along with any future SCDs. There is a flag for SCDs ending soon so you can quickly pinpoint those employees and make changes if needed.

Salary Cost Distribution Ending

BU ID	Employee Group Name	Grant	Internal Order Number	Internal Order Name	Cost Center	Cost Center Name	Distribution Start Date	Distribution End Date
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9/1/2022	8/31/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6/1/2023	6/30/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11/23/2022	8/24/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6/1/2023	1/7/2024
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6/1/2023	6/30/2024
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8/1/2023	8/31/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5/1/2023	4/30/2024
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4/1/2023	6/30/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7/1/2023	7/31/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4/15/2023	6/30/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6/5/2023	8/4/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2/27/2023	7/13/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7/14/2023	8/31/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6/1/2023	10/31/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9/26/2022	9/30/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2/1/2023	1/31/2024
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6/1/2023	4/30/2024
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1/1/2023	12/31/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1/1/2023	12/31/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5/1/2023	1/22/2024
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6/1/2023	5/31/2024
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6/1/2023	12/31/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5/1/2023	6/30/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1/1/2023	6/30/2023
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	7/1/2023	6/30/2024

DA
All

PI
All

Internal Order Number
All

Internal Order Name
All

Distribution Ending Period	Number of Cost Distributions
0-30 Days	2
31-60 Days	4
61-90 Days	1
90+ Days	12
Total	**19**

Selecting one of the numbers will filter the matrix to the employees whose SCD will be ending in that timeframe

Clear all slicers

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Salary Cost Distribution Best Practices

A. **Is the account truly ending?**
B. **Are you requesting a No Cost Extension?**
C. **Is the Account going to be extended due to an Amendment from the Sponsor?**
D. **Is the Grant continuing but the Internal Order changing? Or staying the same?**
    a. Have you submitted an IPAR to create the next Internal Order number?
E. **What is available balance?**

Best practice is to adjust the cost split 30 days before it expires, so it is most important to focus on the 0-30 Days bucket.

As a reminder, if you do nothing, and a cost distribution of an employee expires, that charge will automatically go to the employee's home cost center. If this occurs and that employee should have been charged to another award, you will have to do a salary adjustment in SAP to fix the error.

Projections not Equal to 100%

This page is a warning that something you entered on your projection template may not look right and might need to be updated. The top table displays the entries that may be incorrect because they do not equal 100% for the month. The bottom table displays projections entered. To filter down to the projections that do not equal 100%, select the employee's name in the first table and it will show the breakdown of the projection by IO in the bottom table.

ⓘ Click on Employee Name in the table below to see break-up by Internal Order

Projections Not Equal to 100%

BU ID	Employee Name	Month and Year	Sum of percent
[illegible]	[illegible]	3/1/2025	200.00
[illegible]	[illegible]	4/1/2025	200.00
[illegible]	[illegible]	1/1/2024	0.86
[illegible]	[illegible]	2/1/2024	0.10
[illegible]	[illegible]	3/1/2025	10.00

Use the top table to filter the bottom table

Projected Cost Distribution by Employee

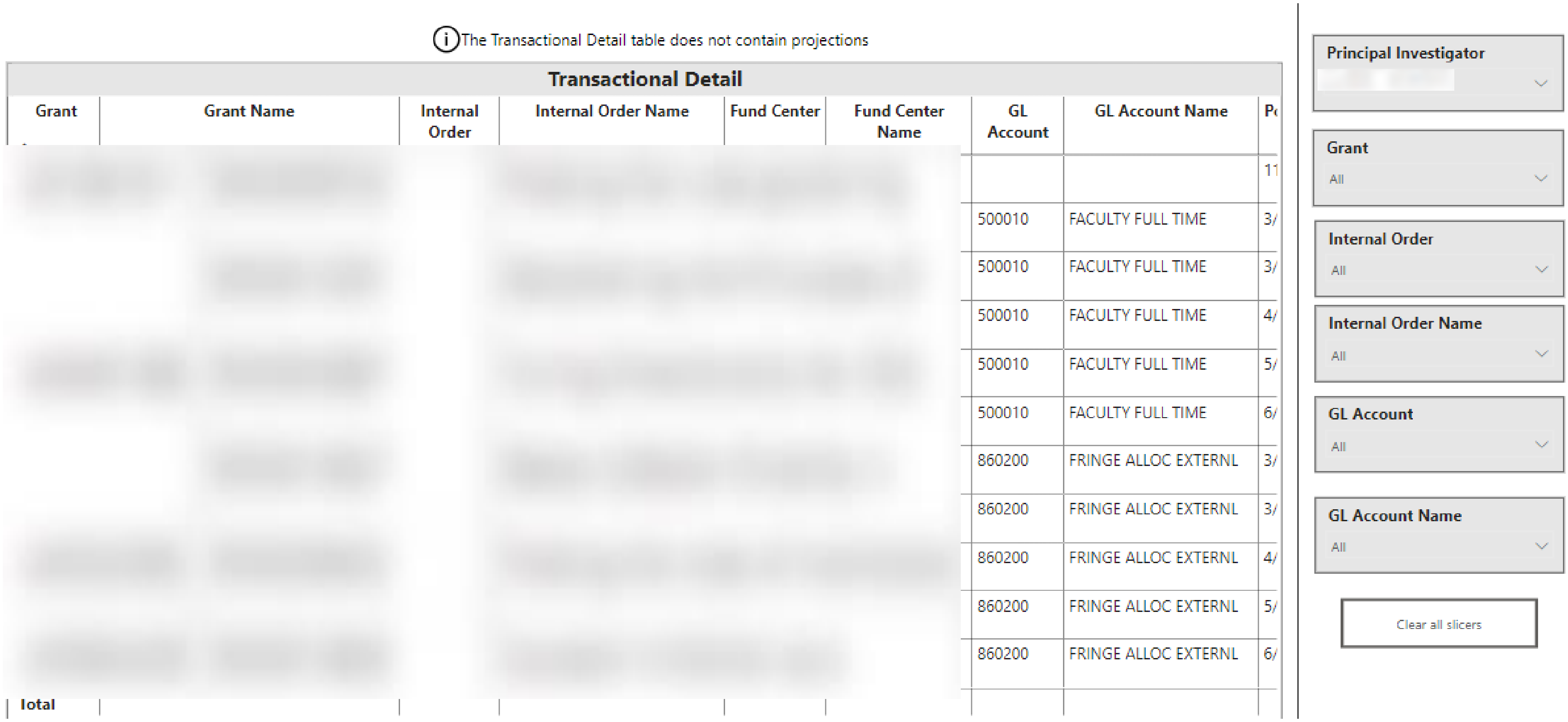
BU ID	Internal Order	Internal Order Name	12/1/2023	1/1/2024	2/1/2024	3/1/2024	4/1/2024	5/1/2024	6/1/2024	7/1/2024	8/1/2024	9/1/2024	10/1/2024	11/1/2024	12/1/2024	3/1/202
[illegible]	[illegible]	[illegible]		100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	
	[illegible]	[illegible]														200.0
[illegible]	[illegible]	[illegible]	100.00		100.00	5.00	10.00									
	[illegible]	[illegible]				95.00	90.00									
[illegible]	[illegible]	[illegible]		0.86	0.10											
[illegible]	[illegible]	[illegible]														10.0

Projections not Equal to 100% Best Practices:

Review this file every time you complete a **DA Projection** to ensure there are no issues or concerns with your employee projections.

Transaction Detail

The transaction detail report matches BUWorks; please note that this report does **not** contain projections. This dashboard will give you high level data, but you will still need to use SAP Reports for further detail as needed.



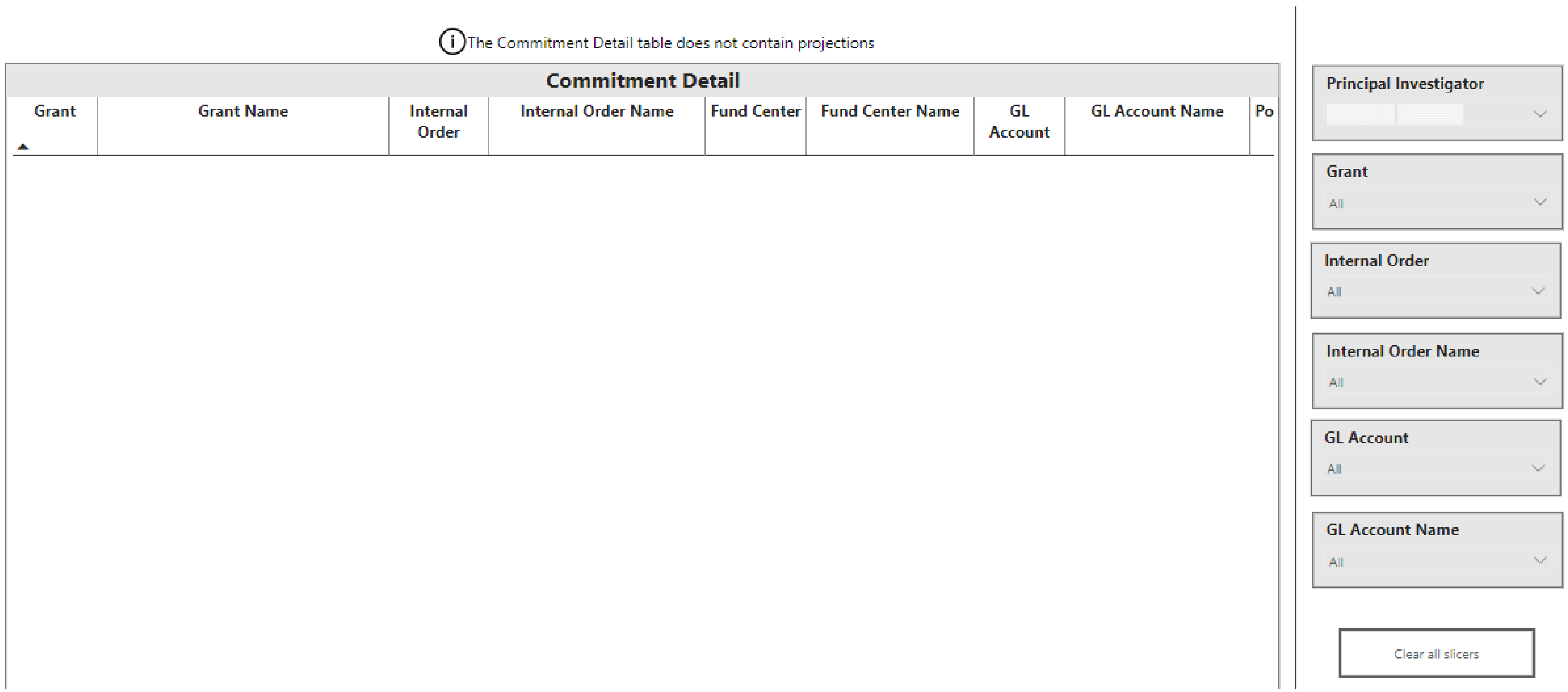
Transaction Detail Best Practices

- **A. Run all reports at the Grant Level**
  - a. Be careful of cost share accounts where expenditures will not be a part of your awarded budget
- **B. Any overspent accounts?**
- **C. Are all personnel accounted for?**
- **D. Are all Key Personnel matching budgeted dollars?**
  - a. If not, a re-budget may be required based on Sponsor rules
- **E. Review accounts with past end dates**
  - **a.** Are charges still occurring?

Commitment Detail

The Commitment Detail report matches BUWorks; please note that this report does not contain projections. This dashboard will provide you with high level data, but you will still need to use SAP Reports for further detail as needed.

This report is interactive with the **Transaction Detail** report; if you filter on the **Transaction Detail** report, those filters will carry over to this report.



Commitment Detail Best Practices

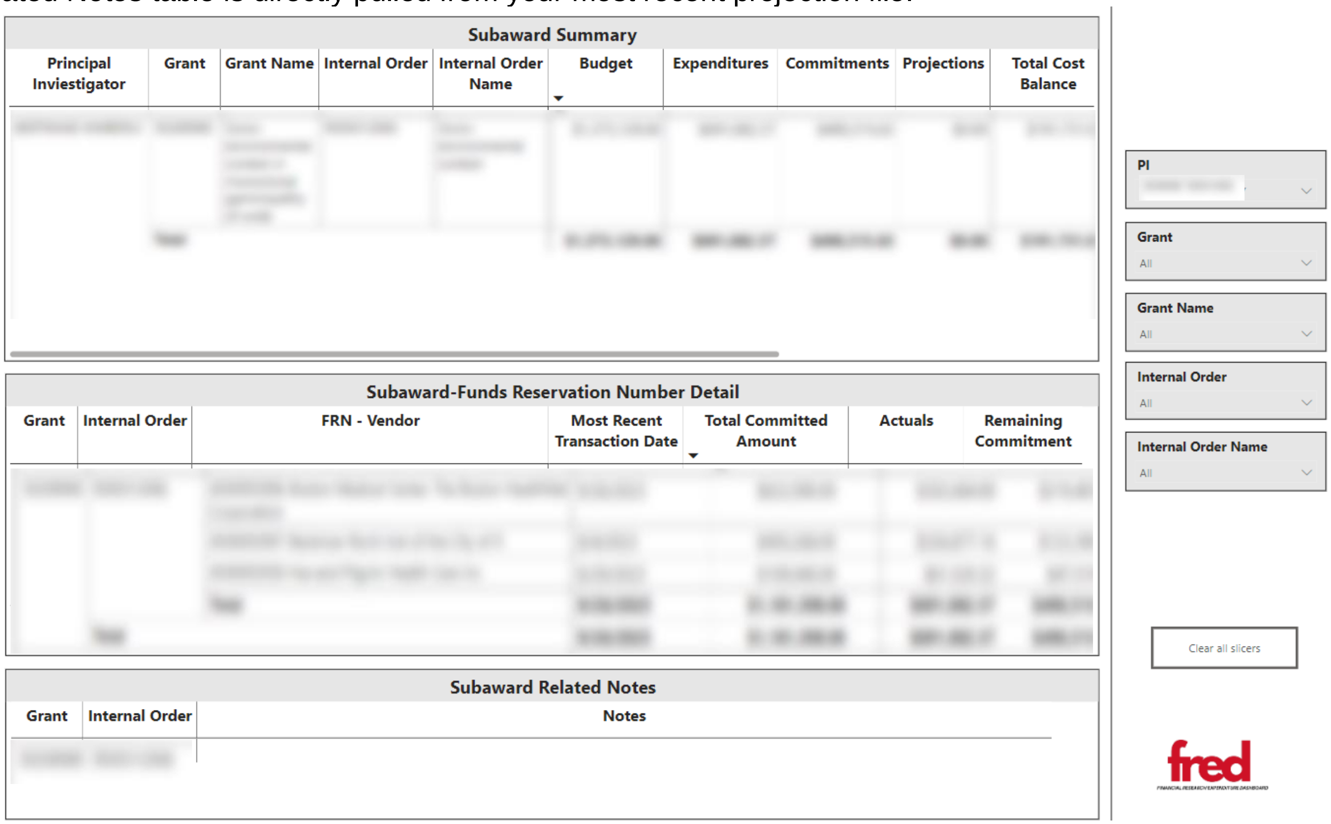
- **A. Run all reports at the Grant Level**
- **B. Are your subawards or Vendors invoicing us?**
- **C. Are there any commitments that can be closed?**

Subaward Detail

This page shows the summary for budget-to-actuals along with projections for the subaward sponsored class. If you select a Grant or IO from the Subaward Summary table, the Subaward-Funds Reservation Number Detail will filter down, giving you the FRN total committed amount with what is still outstanding.

Please note that currently, if the FRN has not been invoiced then the data shows as “Commitment”. Additionally, when a FRN was used for SP Advanced Payments, the Vendor is “SP Advanced Payments”. We are looking to include the FRN title in the future.

The Subaward Related Notes table is directly pulled from your most recent projection file.

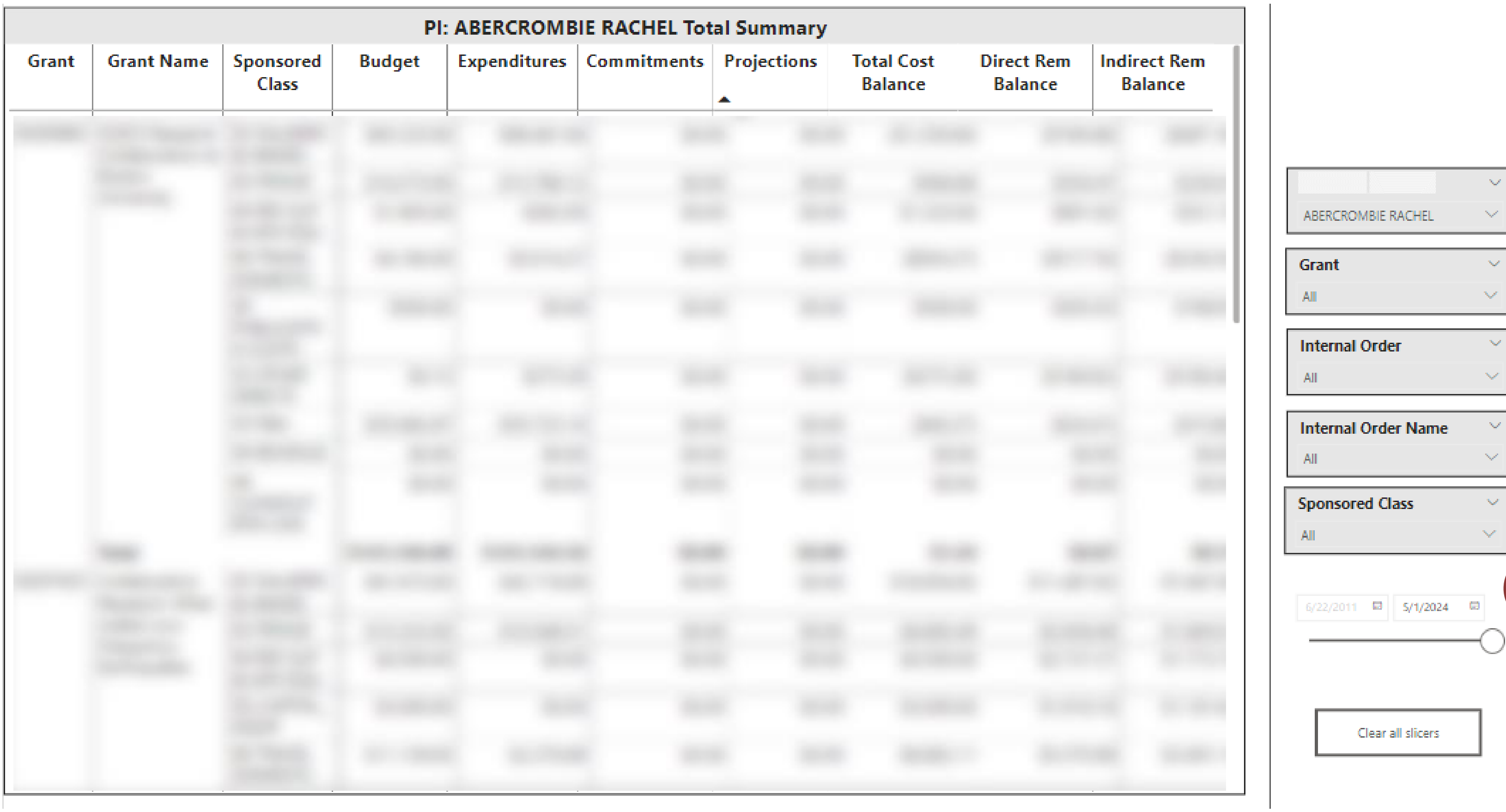


Subaward Detail Best Practices

A. **Are your Subawards invoicing?**

Summary by PI

The Summary by PI shows the budgets, actuals, commitments, and projections for the PI's entire portfolio broken down by Sponsored Class. This view can only show one PI at a time.



1 Use the slider to show a point in time.

Summary by PI Best Practices

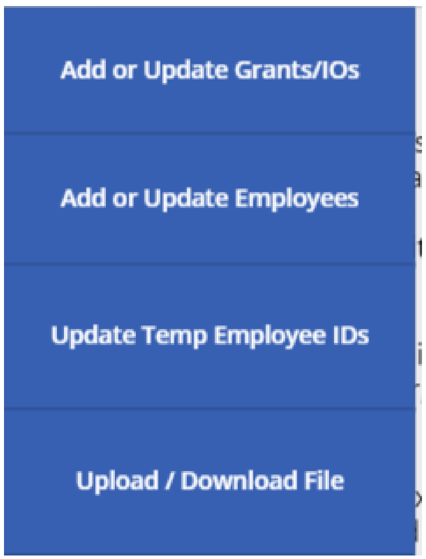
A. **Use this information when talking to your PI to ensure you are spending based on the award expectations.**

DA Projections

This tool will assist the end user with calculating and incorporating salary and non-salary projections into either your current awards or new awards yet to arrive/be set up.

Navigation Summary

Navigation
Selecting the three horizontal lines will bring up the form choices within the DA Projections page.



Add or Update Grants/IOs
This allows a user to create a temporary grant/IO combo for proposals that have been accepted but are not yet entered into SAP that a DA/PI wants to project on. There is also a section to add a temporary IO to a grant so you can project on the next year of the grant before an IO is generated in SAP.

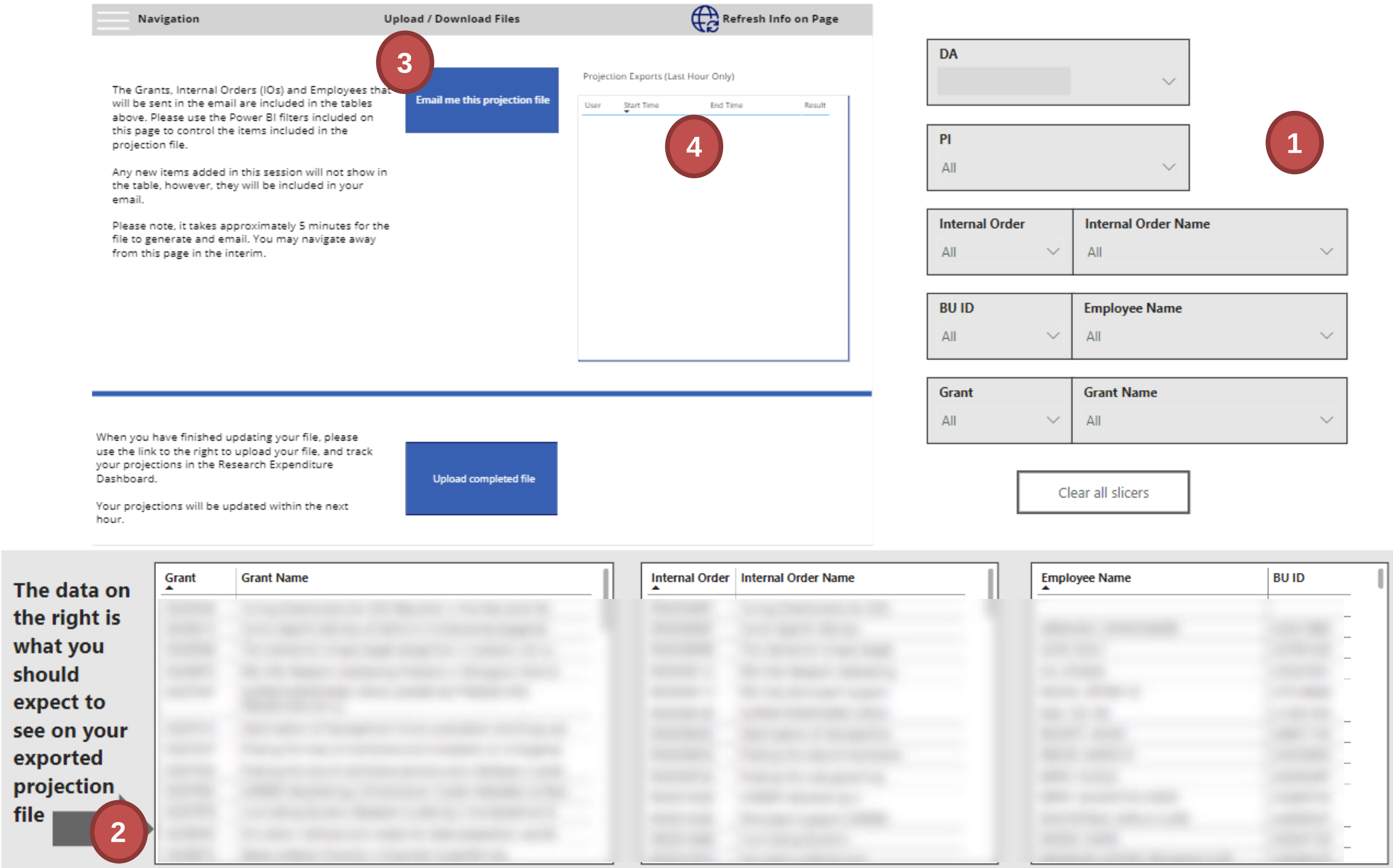
Add or Update Employees
This allows a user to add temporary employees and can be used for open positions, employees being added to a grant that are not currently in your purview, or as a placeholder for new hires. This section also allows the user to alter an existing employee’s salary to project for salary increases, time decreases or promotions.

Update Temporary IDs
This allows a user to reassign projections created with a temporary IO, Grant or Employee ID to a SAP ID. Once done, the projections are transferred to the new ID for any future projections.

Upload / Download File
When you are ready to create projections, this page will take the filtered data and send you an Excel projection file. Once you have entered in all the data into the workbook, you will navigate back to this page and upload it.

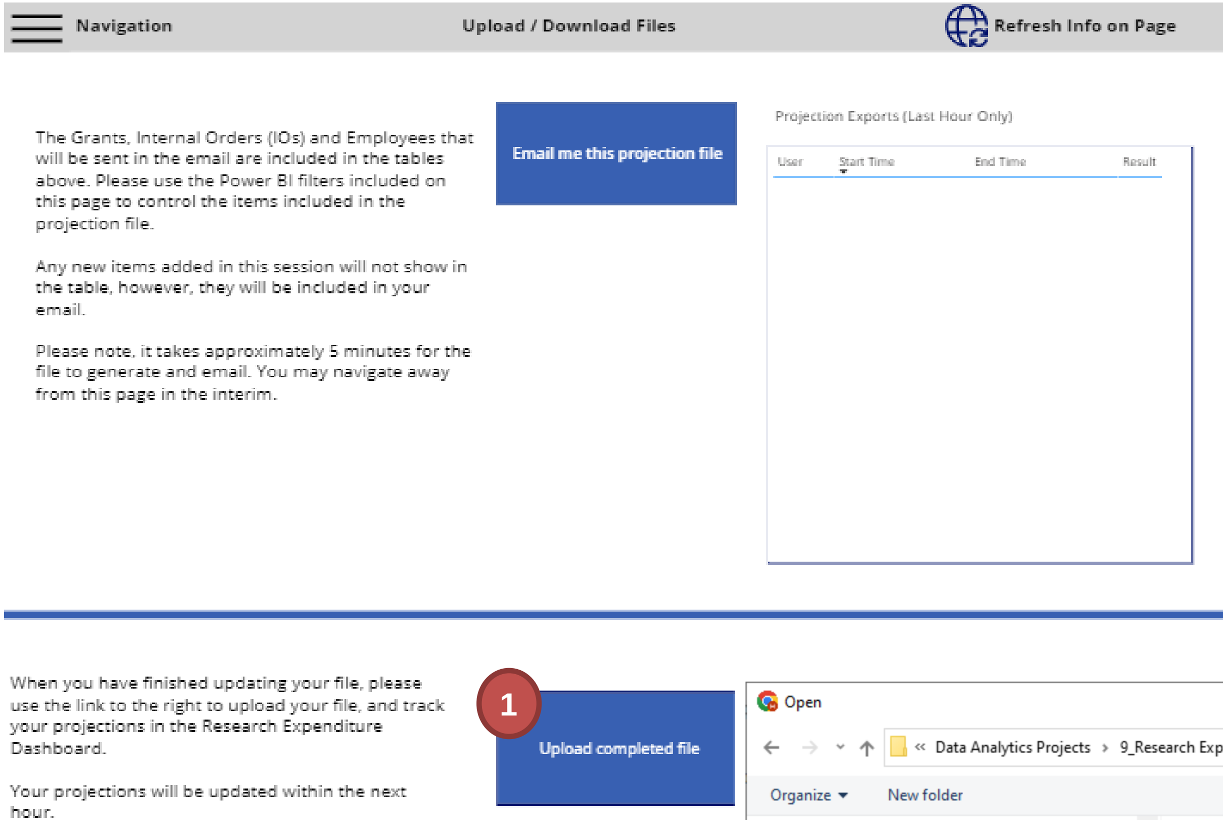
Upload / Download File

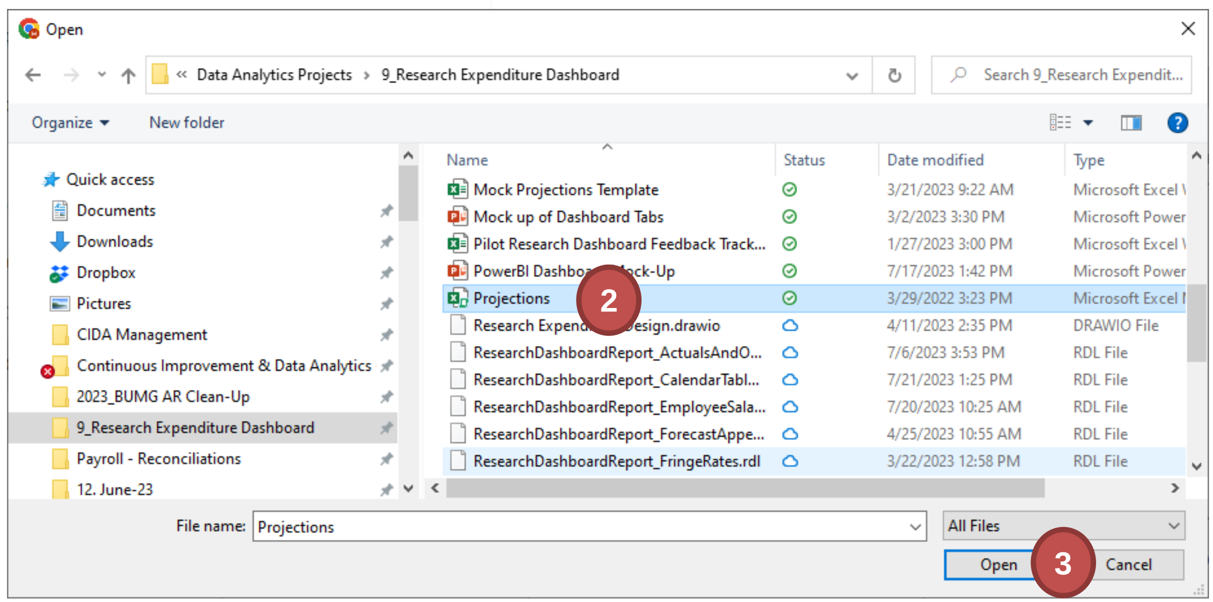
Download Projection File



1. Use the filters on the right-hand side to limit the data sent to you in the projection file.
2. Verify that you will be receiving all the data you are intending using the three tables (Grant, Internal Order, Employee)
3. Select the “Email me this projection file” button. You will receive a file via email in 5 minutes or less after clicking the button.
4. Any recently requested projection file is shown here for your user. This is only meant to monitor new projection file creation, so it is filtered to display only the last hour.

Upload Projection File





1 Once you are satisfied with your projections file, save it to a place you can easily access. Select the "Upload completed file" button.

2

This will bring up a folder navigation pane. Locate and select the projection file you just completed. **Tip: Look at the Date Modified if you are unsure.*

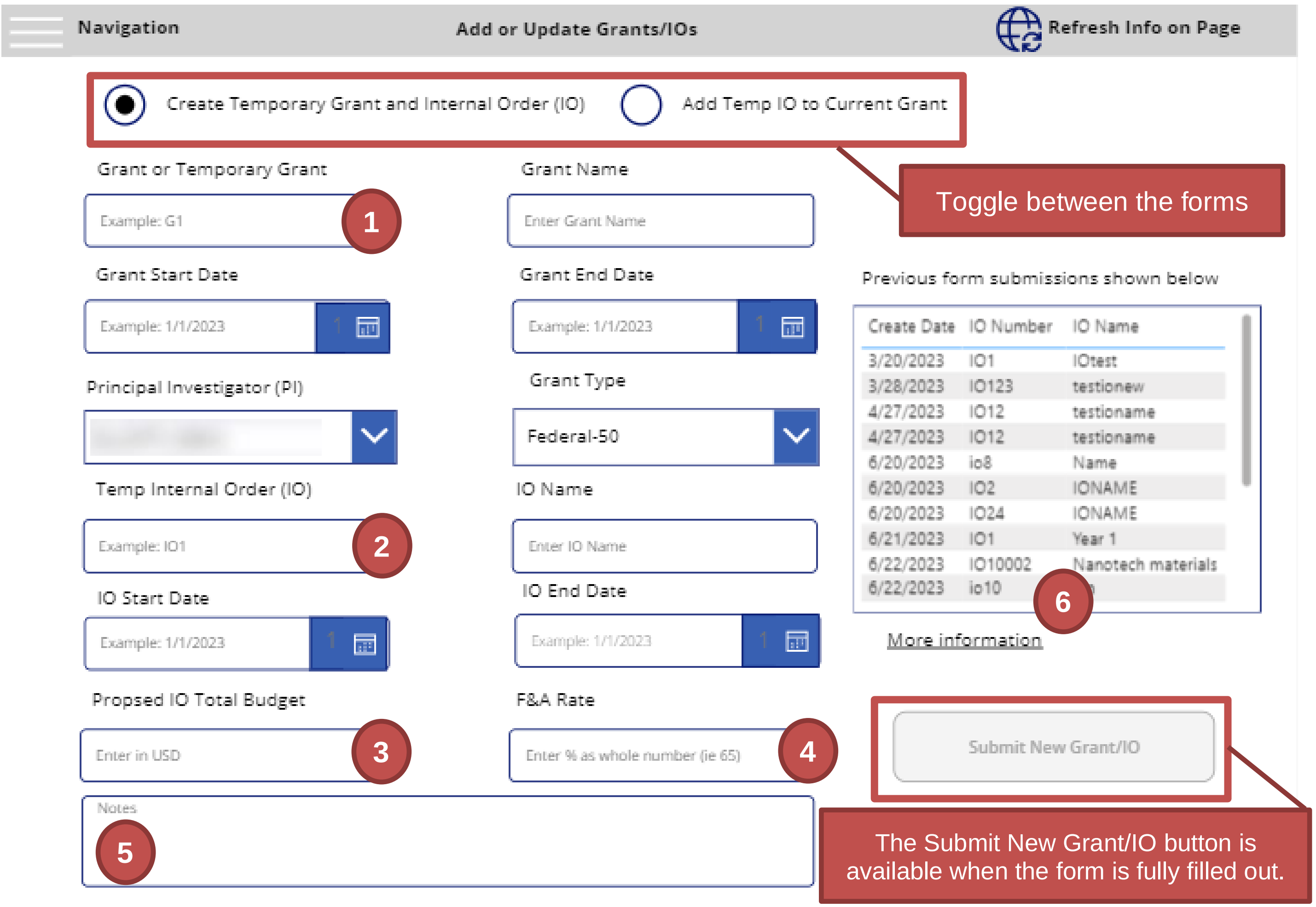
3

Select the "Open" button to upload it to our systems. The data will be processed and added back to the dashboard in approximately 30 minutes between 8:00 am and 6:00 pm.

Add or Update Grants/IO

Create Temporary Grant and Internal Order (IO)

****Note: Nothing you enter here effects SAP.**



1 Temporary grants need to start with a G and can have up to 9 characters. *You cannot reuse the same temporary grant number.*

2 Temporary IOs need to start with IO and can have up to 12 characters. *You cannot reuse the same IO number.*

3 Enter the total budget for the temporary IO. This number will be used to calculate the remaining balances on the summary page.

4 Please enter the F&A rate as a full number (i.e. 65 for 65% rate). This will be used to calculate the F&A on both salary and expenditure projections.

5 Feel free to use the Notes section as free text for yourself.

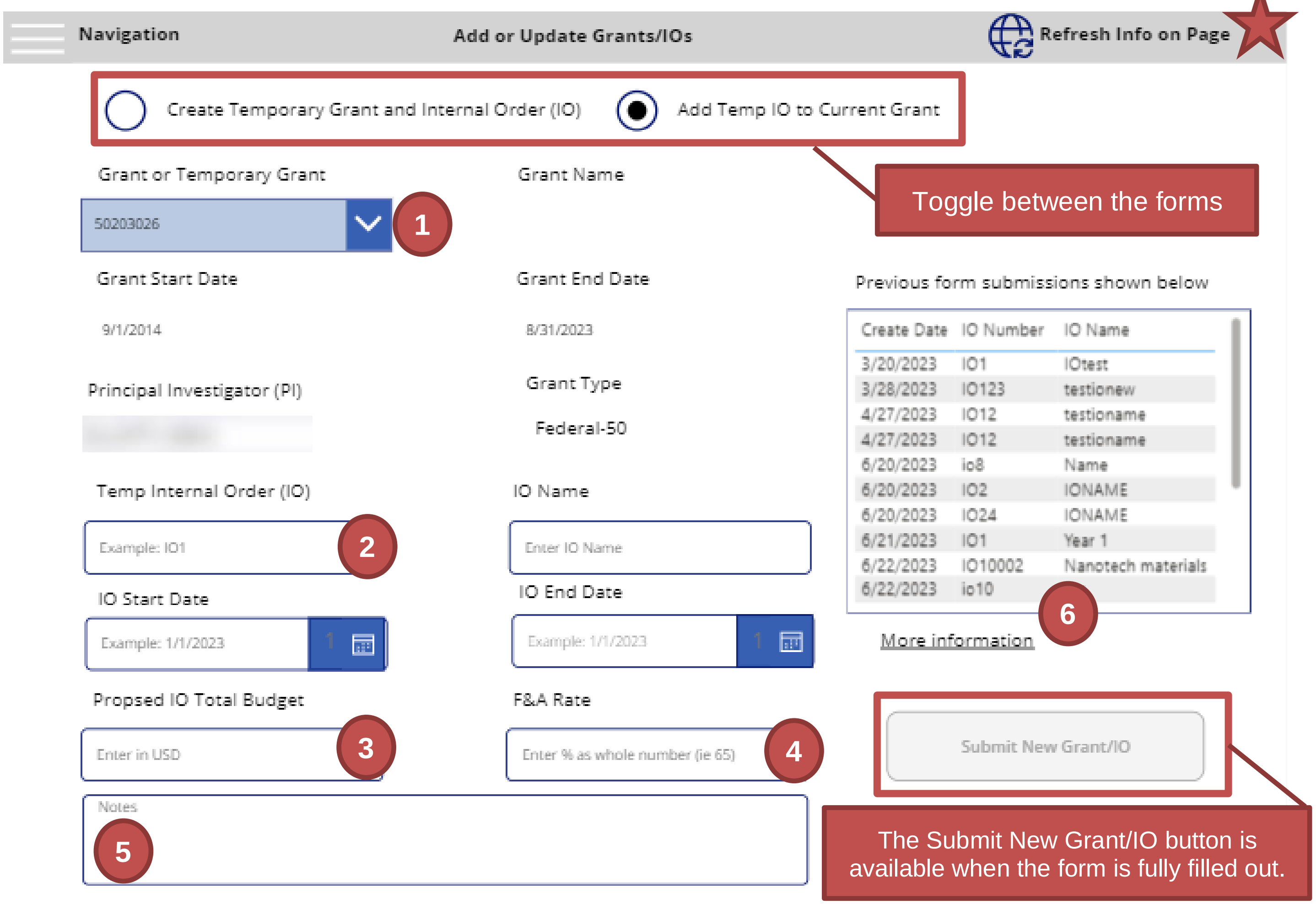
6 This table shows all the temporary grants and IOs that have been used.

Other Notes:

- The dates can either be typed in or selected using a date picker.
- Use the drop down to select Principal Investigator and Grant Type.
- This does not submit a form to SAP or Sponsored Programs. This is just for projections.

Add Temporary IO to Current Grant

****Note: Nothing you enter here effects SAP.**



1 Use the dropdown to select the grant you want to add the temporary IO to. The name, dates, PI, and type should automatically fill out. **If it does not update, hit the "Refresh Info on Page" button.*

2 Temporary IOs need to start with IO and can have up to 12 characters. *You cannot reuse the same IO number.*

3 Enter the total budget for the temporary IO. This number will be used to calculate the remaining balances on the summary page.

4 Please enter the F&A rate as a full number (i.e. 65 for 65% rate). This will be used to calculate the F&A on both salary and expenditure projections.

5 Feel free to use the Notes section as free text for yourself.

6 This table shows all the temporary IOs that have been used.

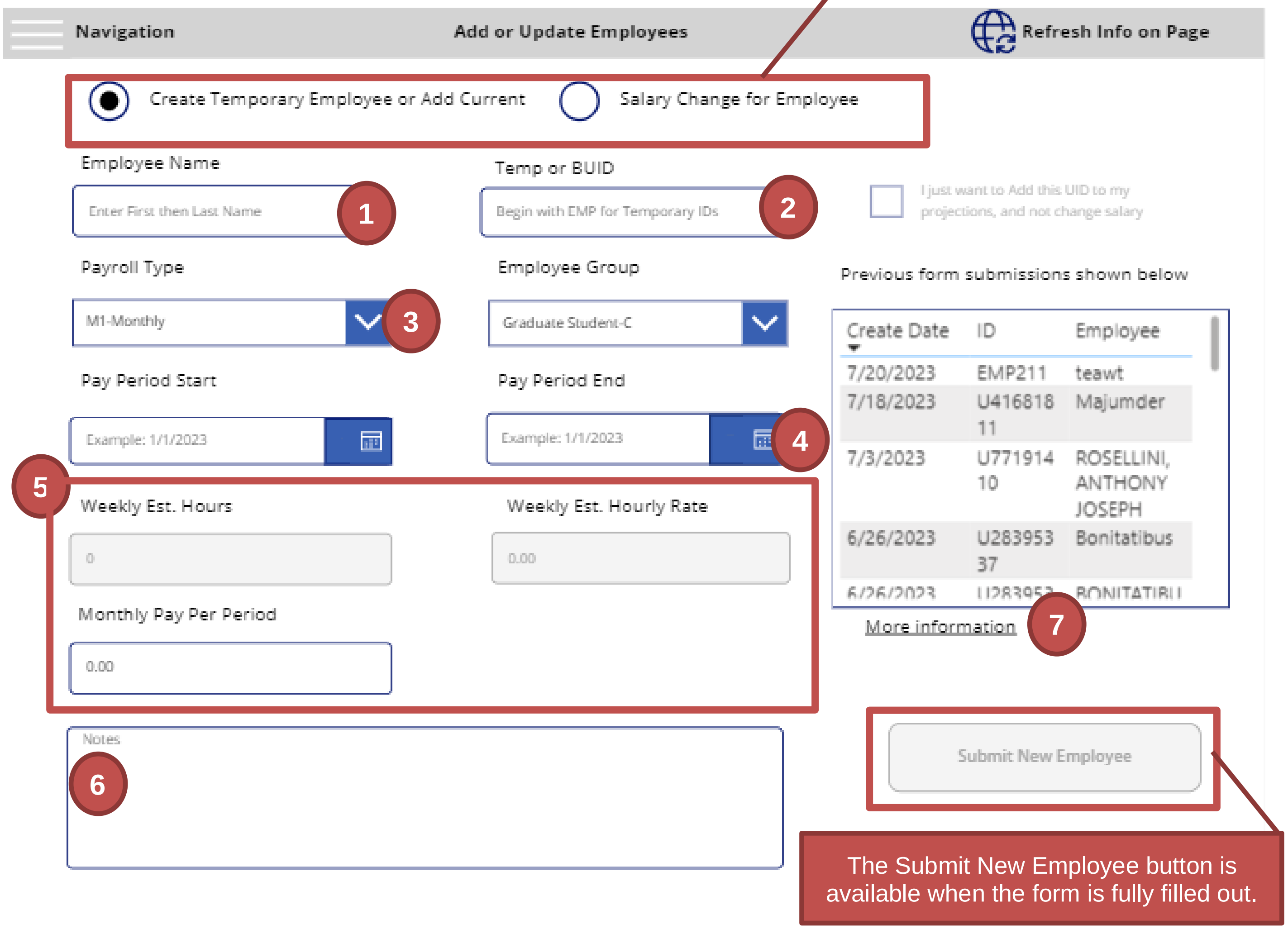
Other Notes:

- The IO Start and End Dates can either be typed in or selected using a date picker.
- This does not submit a form to SAP or Sponsored Programs. This is just for projections.

Add or Update Employees

Create Temporary Employee or Add Current

****Note: Nothing you enter here effects SAP.**



1 If you know the employee's name enter it (First and Last Name). You can also put terms like "Placeholder", "New Employee", etc.

2 Temporary BUIDs need to start with EMP and can have up to 12 characters. *You cannot reuse the same Temp Employee number.*

3 This dropdown is to distinguish semi-monthly versus weekly paid employees and will determine the salary fields available to fill out.

4 If you do not want to have an end date, please use 12/31/9999

5 Depending on the Payroll Type, you will either enter the monthly pay per period (i.e. annual pay divided by12*) or the employees weekly estimated hours and their hourly rate to get a weekly payment amount. If they are on stipend, input 1 est. hour and the stipend amount in the hourly rate box.

6 Feel free to use the Notes section as free text for yourself.

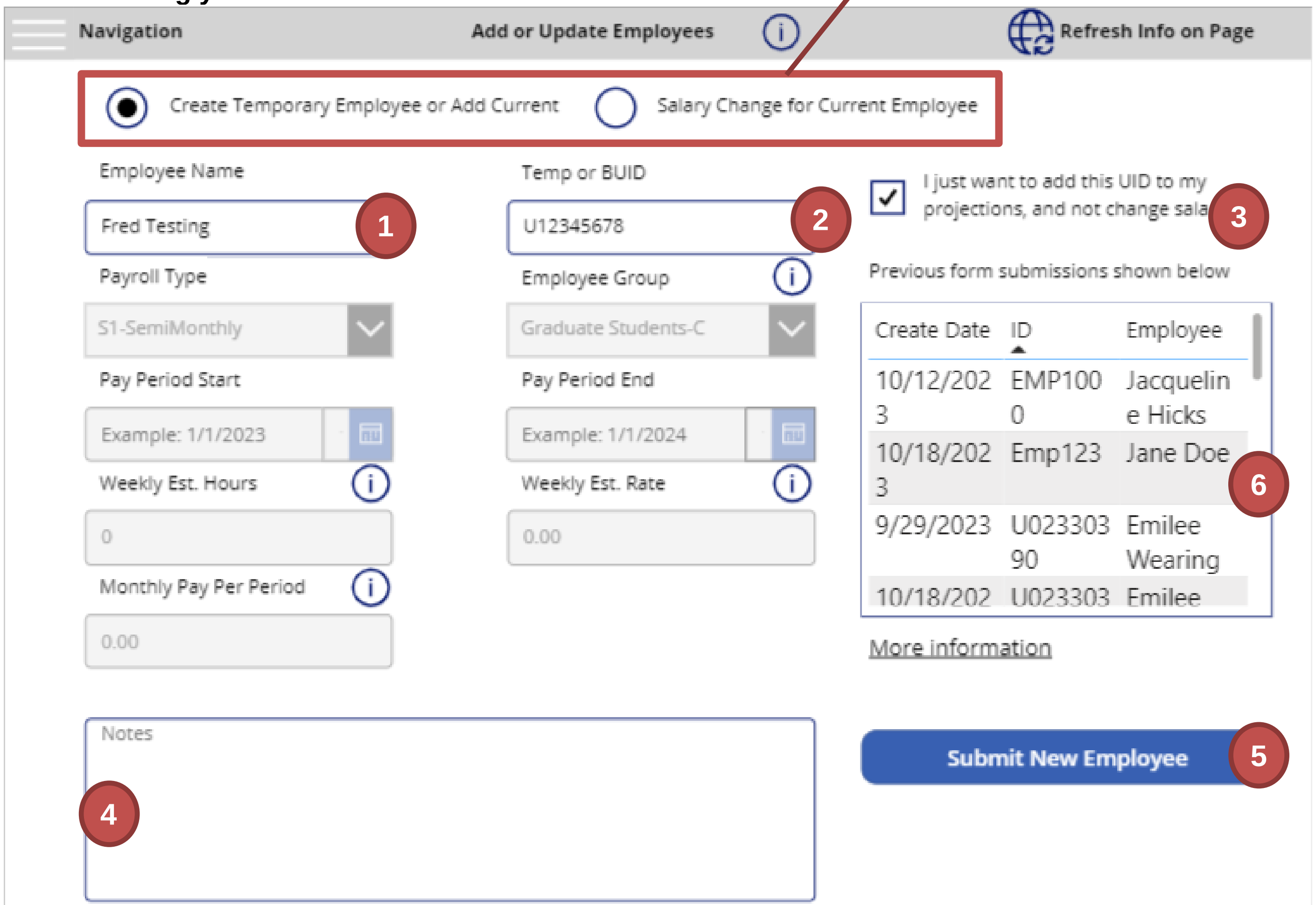
7 This table shows all the temporary employees that have been used.

Other Notes:

- The Pay Period Start and End Dates can either be typed in or selected using a date picker.
- This does not submit a form to SAP or Human Resources. This is just for projections.
- *Use the amount that hits your budget, not what the employee take home pay amount.
  - Example: 9-month faculty (even accrual) would be annual amount divied by 9.

Add Current Employee to Your Projection File

****Note: Nothing you enter here effects SAP.**



1 Enter in the Employee's First and Last Name. Don't worry about spelling.

2 Enter in the employee's BUID.

3 Once you have entered in the BUID, the "I just want to Add this UID to my projections, and not salary change" will become available for you to select.

4 Feel free to use the Notes section as free text for yourself.

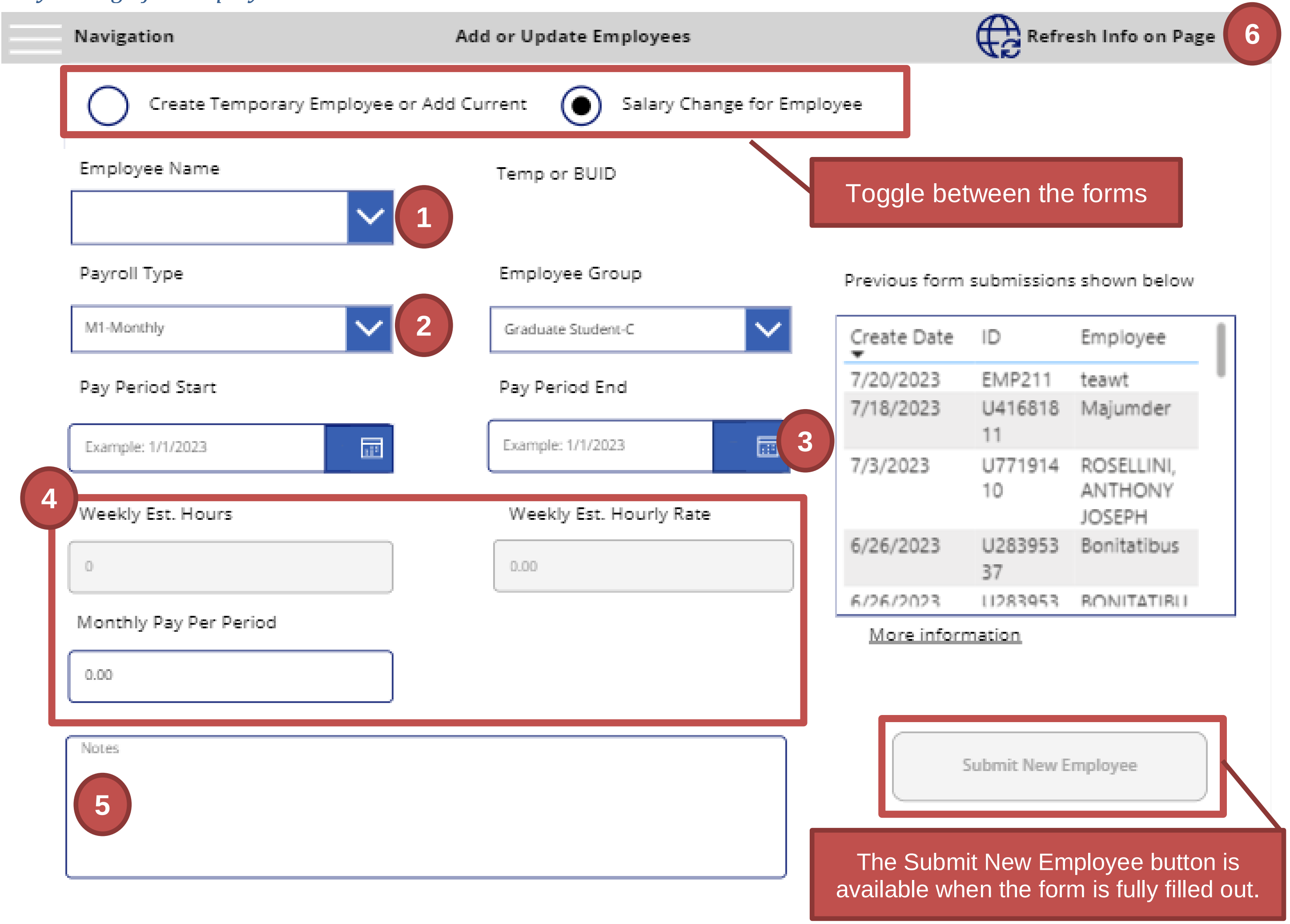
5 The Submit New Employee button is available when the form is fully filled out. When you are happy with your entry, click the button.

6 This table shows all the temporary employees that have been used as well as the employees that you have added to your projections.

Other Notes:

- This does not submit a form to SAP or Human Resources. This is just for projections.

Salary Change for Employee



1 Use the dropdown to select the Employee you want to create a salary change for. The BUID should automatically fill out. **If it does not update, hit the "Refresh Info on Page" button.*

2 This dropdown is to distinguish semi-monthly versus weekly paid employees and will determine the salary fields available to fill out.

3 If you do not want to have an end date, please use 12/31/9999

4 Depending on the Payroll Type, you will either enter the monthly pay per period (i.e. annual pay divided by12*) or the employees weekly estimated hours and their hourly rate to get a weekly payment amount. If they are on stipend, input 1 est. hour and the stipend amount in the hourly rate box.

5 Feel free to use the note section as free text for yourself.

6 This button can be used to refresh the auto-filled in fields (BUID, Calculation for hourly pay, etc.)

Other Notes:

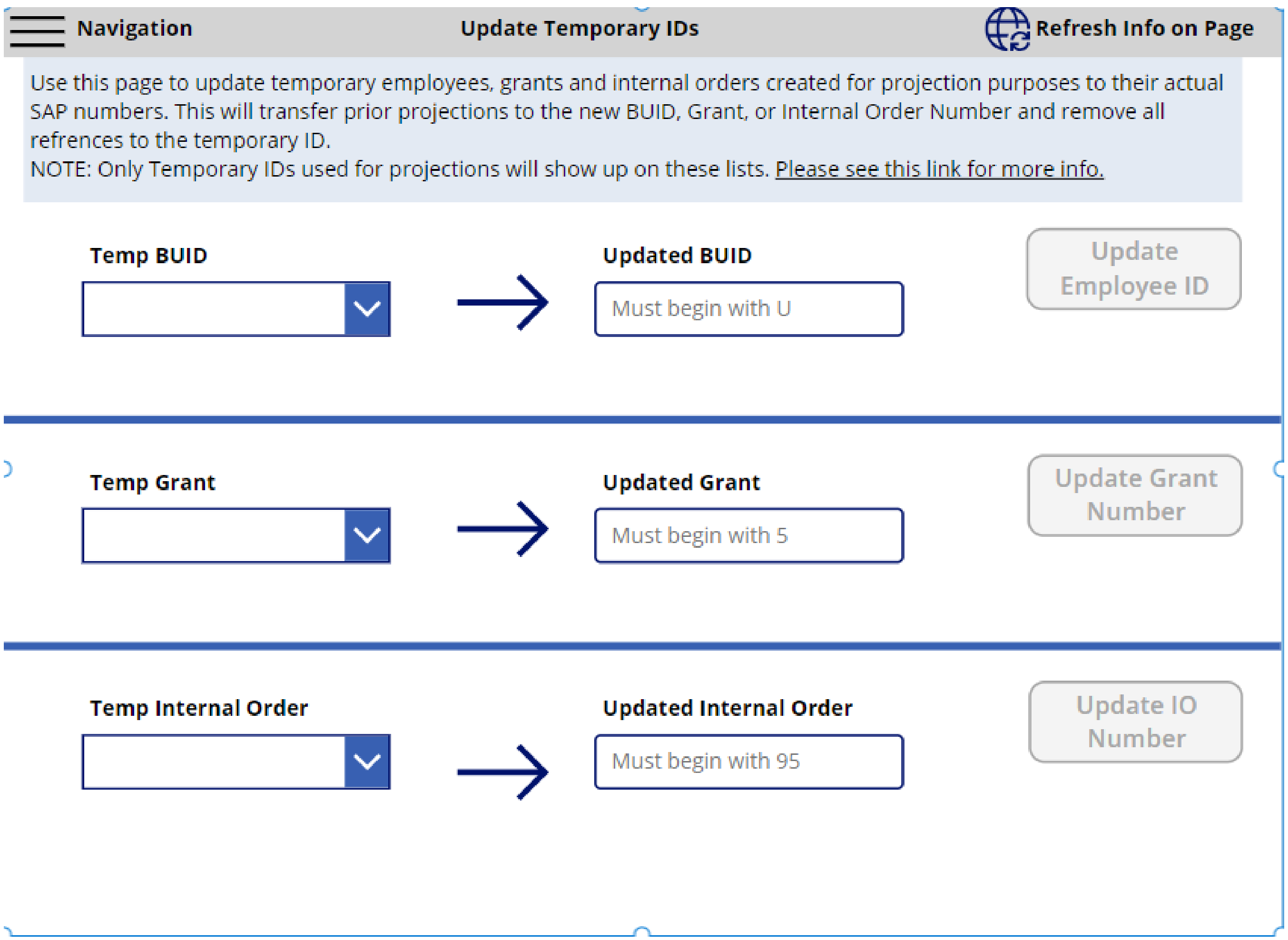
- We intentionally did not automatically fill out the Payroll Type and Employee Group in case of promotion or change to employee position.
- The Pay Period Start and End Dates can either be typed in or selected using a date picker.
- This does not submit a form to SAP or Human Resources. This is just for projections.
- *Use the amount that hits your budget, not what the employee take home pay amount.
    - Example: 9-month faculty (even accrual) would be annual amount divided by 9

Update Temporary IDs

You can use this page to update Temporary BUIDs, Grant or Internal Order numbers.

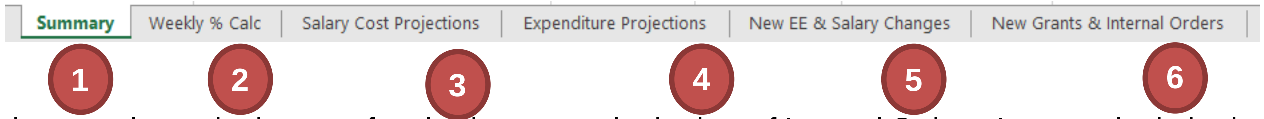
The data can only be updated if the Temporary ID has been used in projections, otherwise there are no projections to transfer.

To complete the process, select a Temporary ID from any dropdown and then enter the SAP number in the Updated ID section. Once you have filled the form out completely, the button to update will be enabled.



Excel Projections File

Tab Summary



1. **Summary** - This page shows the impact of projections upon the budget of Internal Orders. It covers both the impact of Salary, and Expenditures and updates with any changes made to either the Salary Cost Projections or the Expenditure Projections. There are calculations for the Projected F&A, Fringe, and Direct and Indirect Balance Remaining.

    The summary page is to be used to show during meetings with PIs when attempting to do projections across their internal orders. Using the projections on other sheets, you would be able to adjust the amounts projected and then see the effect on the remaining budget for different internal orders.

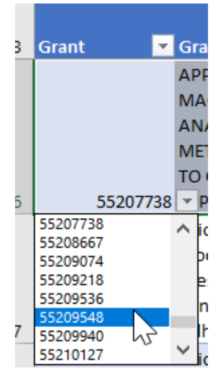
2. **Weekly % Calc** – A tool to calculate the number of Fridays (aka paychecks) weekly employees will receive in a month to accurately capture the right percentage to use on the Salary Cost Projection tab. This tool has breakdowns for 1, 2, and 3 grants, allowing for the percent of time to be multiplied by the total percent of effort that the individual will be working.
3. **Salary Cost Projections** – This page allows projections for Internal Orders on any Employee included in the spreadsheet using a percentage of their salary. This percentage is the amount that the individual will be paid for the month from this Internal Order and not an estimate of their effort. The summary uses this percentage to calculate the total effect on the budget of the Internal Order. Note that the Salary Cost Projections will include internal orders that are not the responsibility of the requesting DA. This is to allow for a full picture of the Employee and to see all Internal Orders they are currently being charged to. Please see the best practices for projecting on these additional Internal Orders.
4. **Expenditure Projections** – This page allows projections of expenditures based on the combination of Internal Order, GL Account and Sponsored Class. The Summary uses this dollar amount to calculate the total effect on the budget of the Internal Order.
5. **New EE & Salary Changes** – This page displays any temporary employees or salary changes currently active in the projection system. These are employees being added to grants, placeholder for new hires, or changes to an employee's salary to project for salary increases, time decreases or promotions.
6. **New Grants & Internal Orders -** This page displays any temporary grants or internal orders currently active in the projection system. These are temporary grant/IO combos for proposals that have been accepted, but not entered into SAP or a temporary IO on a current grant to allow for projections on the next year of the grant.

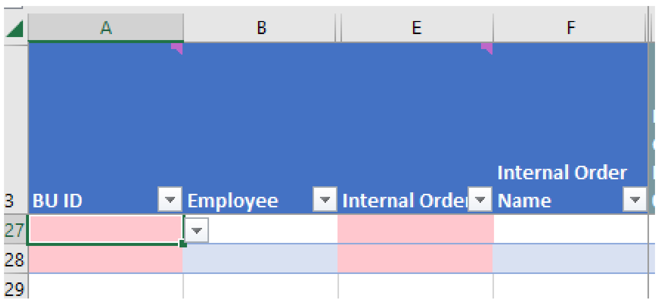
General Instructions

On the Salary Cost Projections and Expenditure Projections, you will find that there are dropdowns for all required fields.

These dropdowns represent either requested items (like for grants shown on the right) from the Financial Research Expenditure Dashboard (FRED) or will represent all options available, such as for the Sponsored Class and GL Account.

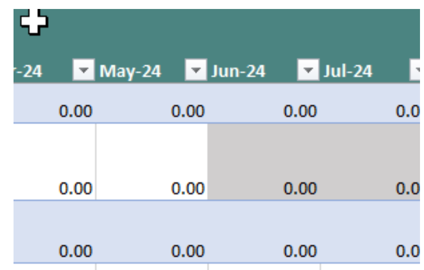
These dropdowns also act as data validation, allowing only certain entries. You are not able to project on Employees, Grants or Internal Orders not included in the Projections Sheet. If you do not see a grant, please go back into PowerBI and change your filters and request a new spreadsheet.

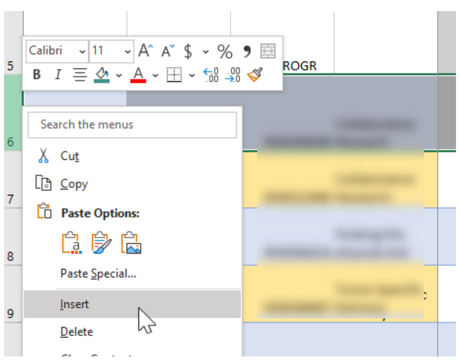




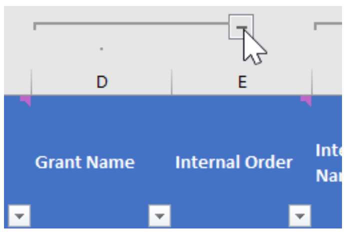
Required fields on the Projections sheets will be highlighted in light red when they are incorrect. If the sheet is submitted without all required fields, an email will be sent from FREDhelp@bu.edu with information about filling out the projection sheet, and which sheets had missing data.

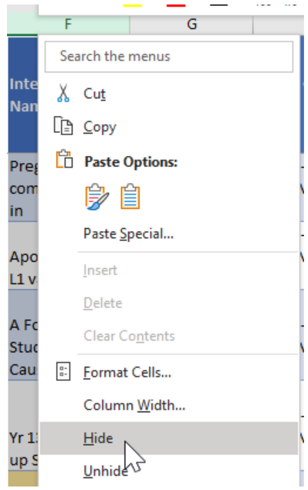
On the Salary Cost Projections and Expenditure Projections the cells highlighted in grey are outside of the Internal Order Project dates. This is informational only, you can still project even though the cells are grey. For this, the Internal Order on the second line is not valid after May 2024.





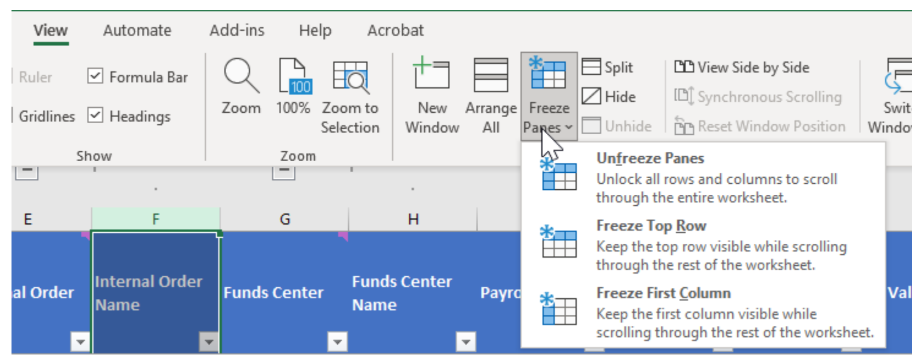
If you need to add rows to any of the Projection sheets, you can do so by either inserting a row (by right-clicking on the row and selecting insert) you can also utilize the additional empty rows at the bottom of the table.





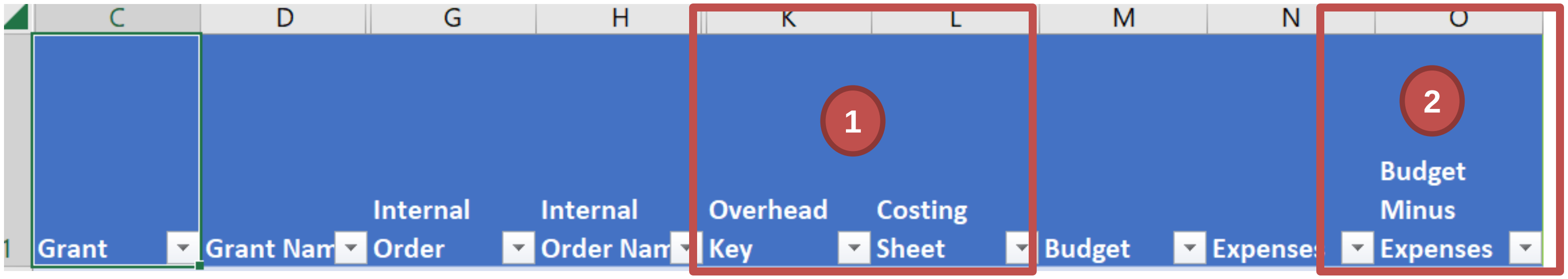
You are able to hide and show columns by clicking the + buttons on top of the rows (these are columns that are grouped together), or by right clicking any column header and selecting the "Hide Column" option.

You can freeze and unfreeze panes within the different sheets by opening the View menu and selecting "Unfreeze Panes" under the "Freeze Panes" option.

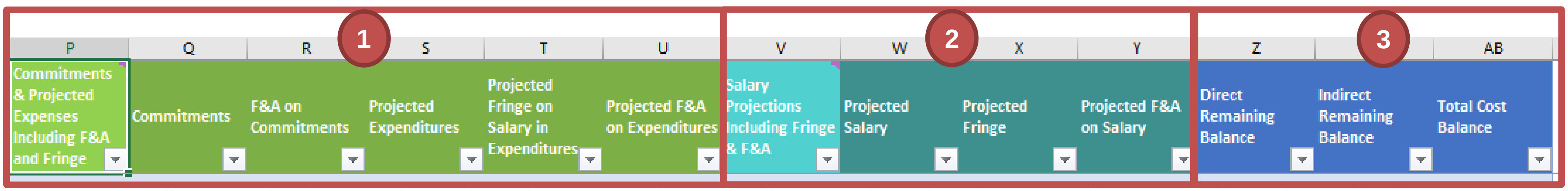


Summary Sheet

The Summary page is used to display the effects of projections on each Internal Order. This page allows for filtering, sorting and the hiding of any row or column.
The projections are organized by Grant and Internal Order.



1. **Overhead Key and Costing Sheet** - The overhead key is the current F&A rate for the grant expressed as a whole number and derived from the Costing Sheet. This data is taken from SAP.
2. **Budget Minus Expenses** – This is the current available budget as of the date this file was generated. The totals are accurate to what would appear that day in the BW report: Grant – Budget Vs. Actuals.



1. **Expenditure Projections** – These show the totals of the expenditures projected on the Expenditure Projections sheet. The first column combines commitments and projected expenditures with the F&A and fringe as necessary per expenditure. The other columns show the breakdown of the amount for Commitments, Projections, Fringe, and F&A**.**
2. **Salary Projections** – These show the totals of the salaries projected on the Salary Cost Projections sheet. The first column combines all salary and their additional Fringe and F&A as necessary per Internal Order. The other columns show the breakdown of that amount into Salary, Fringe and F&A.
3. **Remaining Balance** – These show the remaining balance after projections, combining those numbers with the Budget Minus Expenses column. The Direct Remaining Balance is Budget – Actuals - Projections, incl. both Fringe and F&A. The Indirect Remaining Balance is (Direct Remaining Balance / (1 + F&A Rate / 100).

Weekly % Calc Sheet

The Weekly % Calc sheet contains a tool to calculate the number of Fridays (aka paychecks) weekly employees will receive in a month to accurately capture the right percentage to use on the Salary Cost Projection tab. This tool has breakdowns for 1, 2, and 3 grants, allowing for the percent of time to be multiplied by the total percent of effort that the individual will be working.

Projection Percentage Calculator for Weekly Employees

Start Date	End Date	# Fridays	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		# Paychecks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Month/Year																		
Percent of time	100	Percentage																		

Start Date	End Date	# Fridays	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		# Paychecks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Month/Year																		
Percent of time #1	50.00	Percentage #1																		
Percent of time #2	50.00	Percentage #2																		

Start Date	End Date	# Fridays	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		# Paychecks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Month/Year																		
Percent of time #1	50.00	Percentage #1																		
Percent of time #2	30.00	Percentage #2																		
Percent of time #3	20.00	Percentage #3																		

Weekly % Calc Best Practices

If you have a student who is only going to be working the semester you would:

1. Determine how many grants they will be on and select the appropriate calculator (1, 2, or 3 grants)
2. Next you would adjust the percentage of time accordingly for the grant(s)
3. Then you would enter in the semester working time frame into the Start/End Date
4. Next copy the Percentage and Paste Special values into the corresponding employee/IO line.

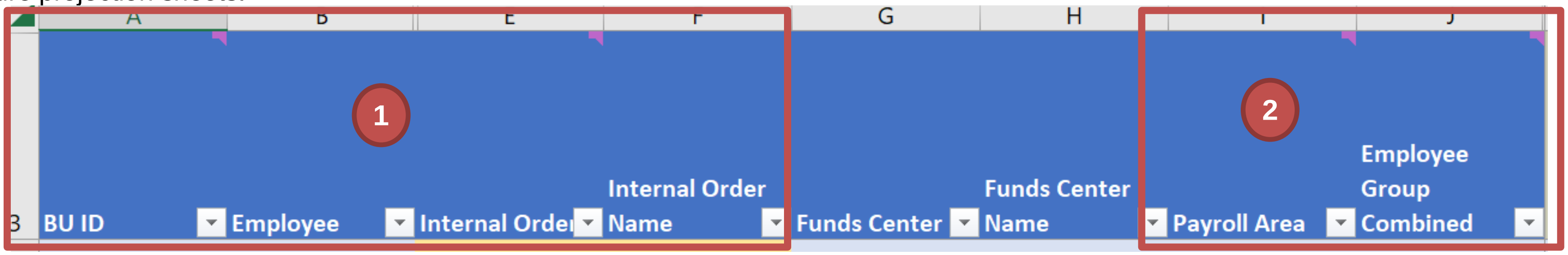
Start Date	End Date	# Fridays	5	4	4	5	4	4	5	4	5
9/4/2023	5/3/2024	# Paychecks	4	4	4	5	4	4	5	4	1
		Month/Year	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24
Percent of time	100.00	Percentage	80.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	20.00

Start Date	End Date	# Fridays	5	4	4	5	4	4	5	4	5
9/4/2023	5/3/2024	# Paychecks	4	4	4	5	4	4	5	4	1
		Month/Year	09/23	10/23	11/23	12/23	01/24	02/24	03/24	04/24	05/24
Percent of time #1	60.00	Percentage #1	48.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	12.00
Percent of time #2	40.00	Percentage #2	32.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	8.00

Salary Cost Projections Sheet

The Salary Cost Projections sheet is used to enter percentages on each employee to account for the percentage of their Salary that is assigned to a particular Internal Order or Funds Center.

This sheet allows for filtering, sorting and the hiding of any row or column. The sheet allows for both inserting and deleting rows. Please note that while the sheet allows for the deletion of rows, any Employees with actuals or projections for them will continue to show up on future projection sheets.



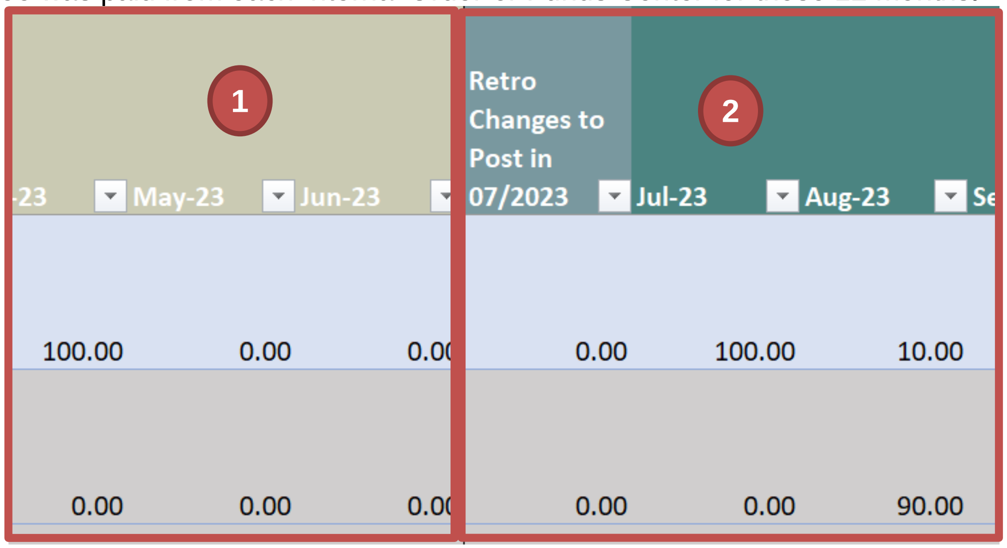
1. **BU ID, Employee & Internal Order** – Cost Projections are assigned based on the BU ID and Internal Order and update the summary page. Available employees can be selected by BU ID. There are Data Validation dropdowns for BU ID, Employee, Internal Order and Internal Order name.
2. **Payroll Area & Employee Group Combined** – The Payroll Area is whether the employee is paid semi-monthly (S1) or weekly (W1). All students are considered weekly employees. Employee Group Combined is a combined column of the code for the Employee Group and the text explanation. This is a condensed list that is used to calculate Fringe rates.

Below is an example of an employee paid across two Internal Orders and a funds center:

EXAMPLE EMPLOYEE	55210450	Default Value when Grant is Not Relevant	9550306219	Probing the physical and
EXAMPLE EMPLOYEE	50206213	Tumor Specific Delivery of Verticillin A	9500308087	Tumor Specific Delivery
EXAMPLE EMPLOYEE	GRANTNR	Default Value when Grant is Not Relevant	NDED_PROGR	

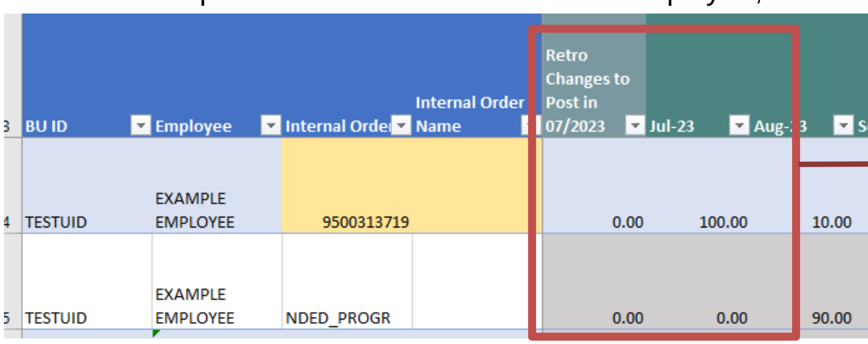
The rows highlighted in Yellow are also on the Summary worksheet, and will update the calculations for Salary projections and balances on the summary tab. Please see the best practice guidelines for how to update the Percentage for employees who are in outside internal orders.

The sheet is prepopulated with actuals for the last 12 months for Employees who were requested from FRED. It shows the percentage of PAR Eligible salary the employee was paid from each Internal Order or Funds Center for those 12 months.



1. **Actuals** – The actuals for any employee are in the columns in light brown. The dates will change dependent on when the file is generated but will always show the most recent 12 months.
2. **Projections** – The first projections column allows for entry of Retroactive Changes to the first month of the projections, in this case July 2023. There are 5 years of projections columns available to project on salary, totaling 60 individual months.

Below shows an example of how to fill out two rows an Employee, for instance.



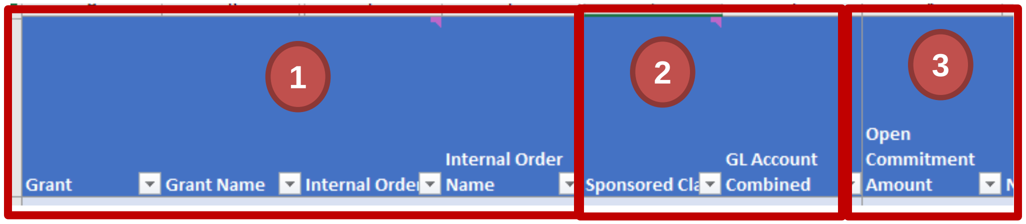
Fill out the percentage of Salary as a number, for instance 70% would be 70.00, and 50.5% would be 50.50

To **remove a projection** you have previously made, you can simply set the projection in that month to zero.

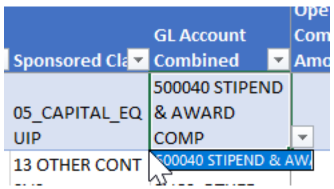
Expenditures Projections Sheet

The Expenditures Projections sheet is used to enter the total amount of expenditures for a particular Sponsored Class and General Ledger (GL) Account.

This sheet allows for filtering, sorting and the hiding of any row or column. The sheet allows for both inserting and deleting rows. Please note that while the sheet allows for the deletion of rows, any Employees with actuals or projections for them will continue to show up on future projection sheets.



1. **Grants and Internal Orders –** Expenditure Projections are prepopulated only with the Grants and Internals orders with current open commitments or was previously projected on. However, any Grant or Internal Order requested from the Financial FRED is available for Expenditure Projections. In addition, any temporary grants or internal orders are always available.
2. **Sponsored Class and GL Account Combined –** The Sponsored Class and GL Account are the two fields that drive what the expenditure should be charged to. There are drop downs available for both Sponsored Class and GL Account. The Sponsored Class filters the GL Accounts available, as shown to the right. There is only 500040 General Ledger available for the 05_Capital Equipment Sponsored Class.

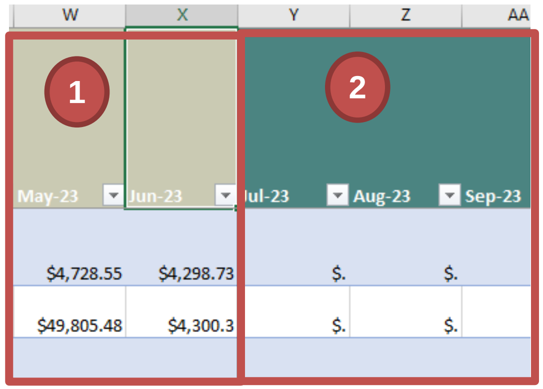


3. **Open Commitment Amount –** This open commitment is the amount accurate as of when the file was generated. This open commitment amount is specific to the Sponsored Class and GL Account.

Grant	Grant Name	Internal Order	Internal Order Name	Sponsored Cla	GL Account Combined	Open Commitment Amount
EXAMPLEGRANT	GRANT NAME	EXAMPLEIO	IO NAME	05_CAPITAL_EQUIP	500040 STIPEND & AWARD COMP	$246.28
EXAMPLEGRANT	GRANT NAME	EXAMPLEIO	IO NAME	13 OTHER CONT SVS	515000 CNTR SVCS-OTHER	$41.96

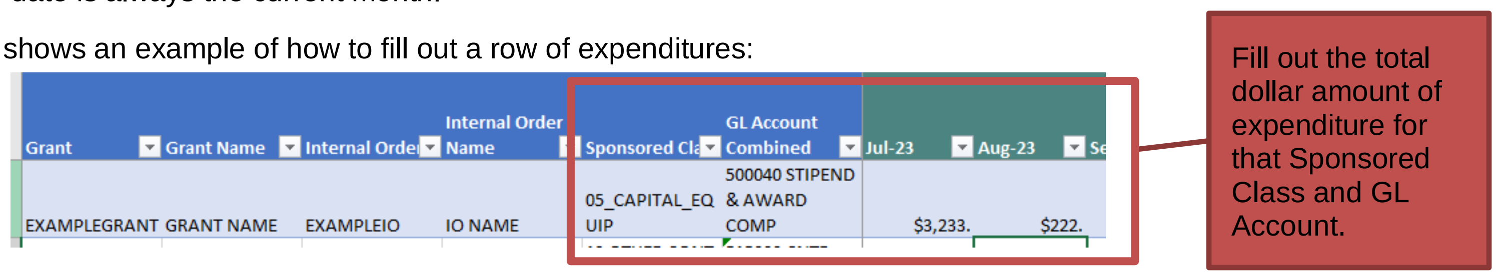
The above example shows a single IO generated with two lines of open commitments, tied to that specific Sponsored Class and GL combination.

The sheet is prepopulated with actuals for the last 12 months for expenditures on the Internal Orders requested from the Financial Research Expenditure Dashboard. It shows the dollar amount for those 12 months of the actuals for any Sponsored Class and GL Account with currently open commitments. The sheet allows for additional rows which would allow for projection on any combination of Sponsored Class and General Ledger.



1. **Actuals** – The actuals of the expenditures are in the columns in light brown. The dates will change dependent on when the file was generated but will always show the most recent 12 months.
2. **Projections** – There are 5 years of projections columns available to project on expenditures, totaling 60 individual months. The start date is always the current month.

Below shows an example of how to fill out a row of expenditures:



To **remove a projection** you have previously made, you can simply set the projection in that month to zero.

New EE & Salary Changes sheet

This sheet shows any temporary employees that the person requesting the data has created. This page is for display only but can be filtered and sorted.

	A	B	C	D	E	F	G	H	I
1	This page is informational only. It is used to show the New Grants and Internal Orders that you have created in the FRED app.								
2	Created Date	Temp BUID	Employee Name	Pay Period Start	Pay Period End	Payroll Type	Employee Group	Pay Per Period	Notes
3	6/26/2023 14:51	[redacted]	[redacted]	6/26/2023 0:00	8/27/2023 0:00	W1	Graduate Student-C	750	
4	6/26/2023 14:51	[redacted]	[redacted]	6/26/2023 0:00	8/27/2023 0:00	W1	Graduate Student-C	750	
5	6/26/2023 14:52	[redacted]	[redacted]	6/26/2023 0:00	8/27/2023 0:00	W1	Graduate Student-C	750	

Employees on this page can be projected on the Salary Projections sheet.

New Grants & Internal Orders sheet

This sheet shows any temporary internal orders that the person requesting the data has created. This page is for display only but can be filtered, and sorted.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	This page is informational only. It is used to show the New Grants and Internal Orders that you have created in the FRED app.												
2	Grant	Grant Name	Grant Type	Project Start Date	Project To Date	Principal Investigator	Internal Order	Internal Order Name	SP Valid From	SP Valid To	Proposed Budget	F & A Rate	Notes
3													
4													
5													
6													
7													

Any Grants or Internal Orders on this page are available for projecting expenditures, or to project salary for an employee on the Salary Cost Projections sheet.

Best Practices for Completing Projections

A. **Complete at a minimum on a quarterly basis**
   a. Based on Portfolio, PI's, and dollar amount, monthly projections may be appropriate
B. **Complete at time grant is set-up in system.**
C. **Project salaries (Faculty, Staff, Graduate Students) for the first year.**
D. **Project other non-salary committed items as you know them.**
E. **Do not project beyond the current obligated budget.**
F. **Update the file to include any new hires and/or terminations.**

Examples of Common Requests using the Financial Research Expenditure Dashboard

Question: I would like to promote my research assistant to project manager, cover 50% of a current doctoral student's time, and add a post-doc at 100%, how will this affect my budget?

Technical Steps:

1. Submit two forms in FRED to change the salary for the research assistant and then add a temporary employee for the new Post-Doc with their salary and start/end dates. (Using the Add/Or Update Employees page)
2. Request and receive a projection excel workbook from FRED. (Using the Upload/Download Page)
3. Enter the Salary Percentages for these Employees on the particular internal orders. (Using the Salary Cost Projections sheet)
4. On the Summary Sheet, you will see the effect of these projections on the Direct and Indirect Remaining Balance. (Using the Summary sheet)
5. Once you are finished, upload the file back to FRED (Using the Upload/Download Page)

Question: I need to decrease the materials and supplies budget and add a new fee for service agreement (not part of the original budget), can I do this and stay within budget?

Please note that budgets are not projected, however you are able to project that your expenditures of $X amount on a particular Sponsored Class, GL Combination within a certain month.

Technical Steps:

1. Request and receive a projection excel workbook from FRED. (Using the Upload/Download Page)
2. Update the projections for the Materials and Supplies, filtering to the correct Sponsored Class and GL Account. (Using the Expenditures Projections sheet)
3. Add a line for the new Service Agreement with the correct Sponsored Class and GL Account (Using the Expenditures Projections sheet)
4. Once you are finished, upload the file back to FRED. (Using the Upload/Download Page)

Question: Faculty B is a Co-PI on my award, they are moving to a new institution, thus I need to add a subaward, how will this affect my budget?

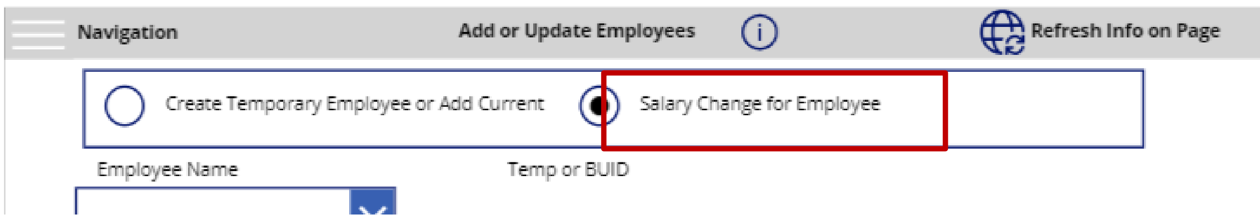
Please note that you will need to update budgets in SAP to see any budget changes in FRED.

Technical Steps:

1. Request and receive a projection excel workbook from FRED. (Using the Upload/Download Page)
2. Add an expenditure for the Subaward for the correct months. (Using the Expenditures Projections sheet)
3. Remove any Salary Projections for that individual by setting them to zero. (Using the Salary Cost Projections sheet)
4. Once you are finished, upload the file back to FRED. (Using the Upload/Download Page)

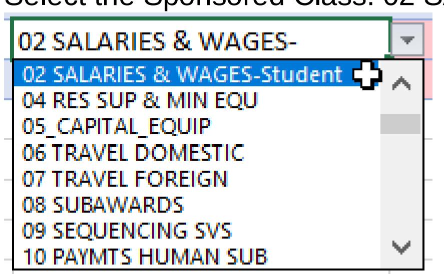
Question: The amount I expect for my student employees is not matching FRED. Why?
Due to the timing of student employment and the inconsistency of student employment data, forecasting on graduate and undergraduate student employees might not come out to the numbers you would expect. There are a few options you can utilize to mitigate this problem and depending on the number of employees affected, one might make sense over the other.

1. **Ensure you are using the right timeframe percentage.**
    a. For instance, if the semester starts on 9/4, their first paycheck will be on 9/8. This means that they will only get paid 3 out of the 5 weeks in September. For this we would need to adjust the percentage pay to 60% entered as 60.00. To help in this calculation, we have created a [weekly percentage calculator.]()
    b. If they are not working 100% for a grant, then you would multiply 60% * working time. Ex. 60% (Fridays) * (50% working time) then the percentage pay would be 30.0%, entered as 30.0 in the September projection.
2. **Update the salary amounts in the DA Projection App.**
    a. Not all salary amounts are entered into student employment in advance of the semester starting. To get a more accurate picture of total costs to the grant, you may need to enter in a salary change in the DA Projection App.



    b. Enter the salary projects for student employees in the Expenditure Projections page.

3. **If you have a lot of students, entering all the new salaries might be too tedious. For this you can utilize the expenditure projections.**
    a. Add a row at the end of the sheet. Enter in the grant/IO information pertaining to the student employees you want to project. Select the Sponsored Class: 02 SALARIES & WAGES-Student and a payroll GL.



    b. You can either enter a different row per student employee, entering the EE name in the notes section or aggregate the total population. Enter in the dollar amounts that will hit the IO each month.