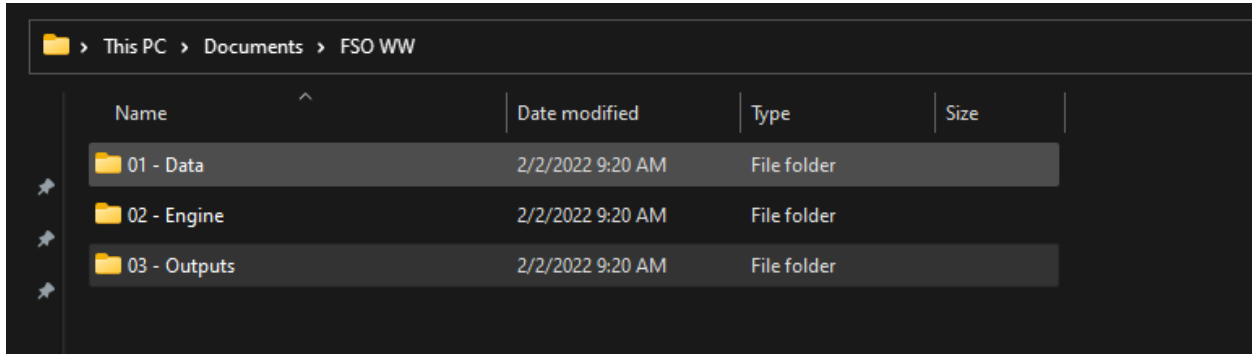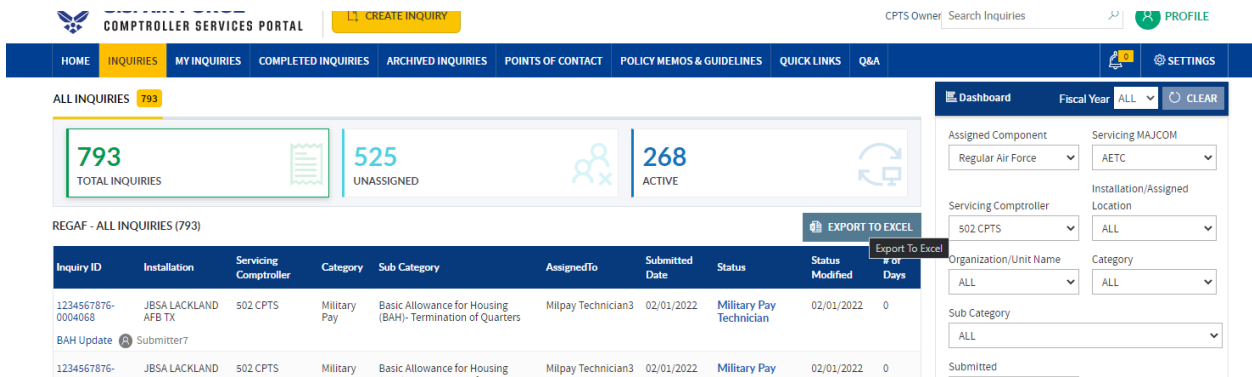# How to Create a PowerBI Database for CSP Analytics

How to Load the Data

1. Create 3 separate folders: Data, Engine, and Outputs. Ensure this folder location will not move. If moved, you will need to relink the files.

2. Download exports from CSP: Inquiries, Completed Inquiries, and Archived Inquiries.

3. Search the entire CPTS in the Archive search and export.

4. Save all files to the Data folder as excel workbooks.

5. Open PowerBI
6. Click File Save As
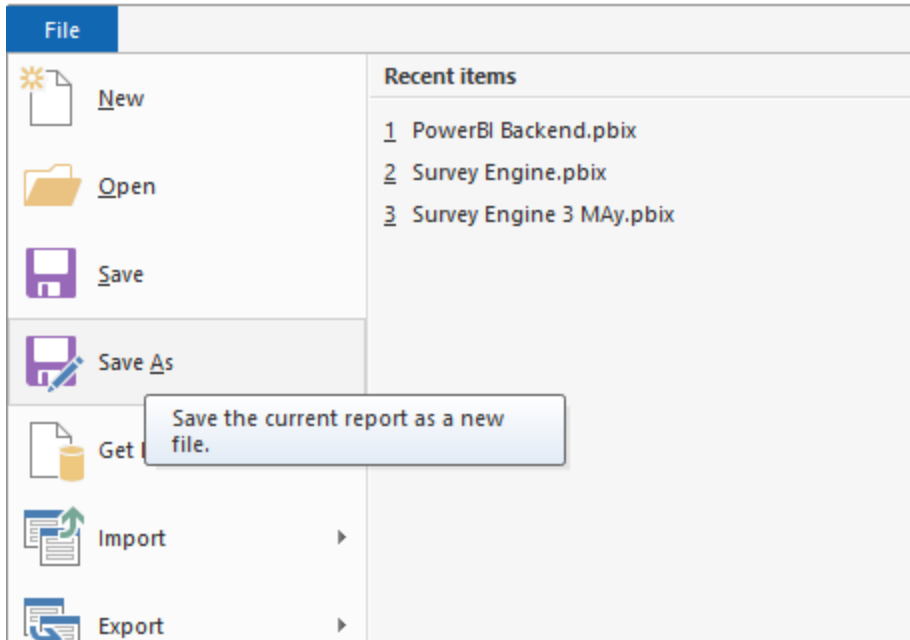
7. Save to the 02 – Engine folder
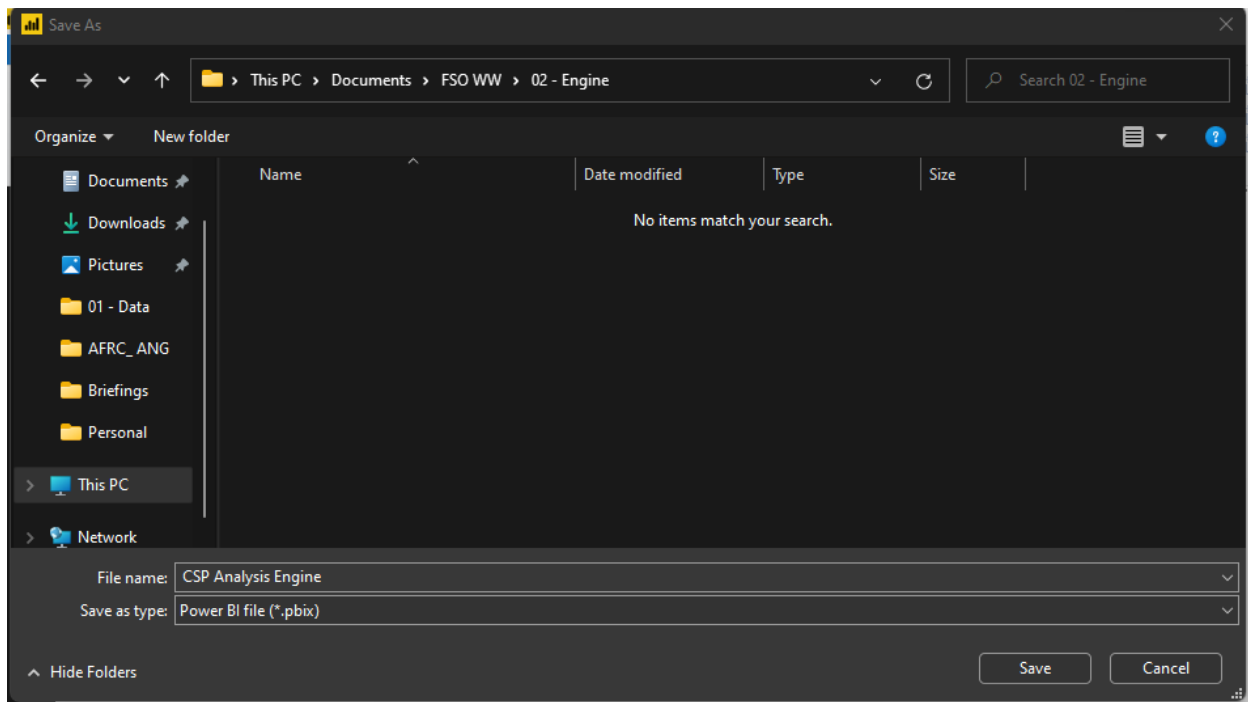
8. Click "Get Data" then Excel Workbook at top of the page

9. Navigate to your data folder and select the Inquiries workbook.

10. Click the check box next to the data and click "Load"

Navigator

RegAF-Total Inquiries (2)
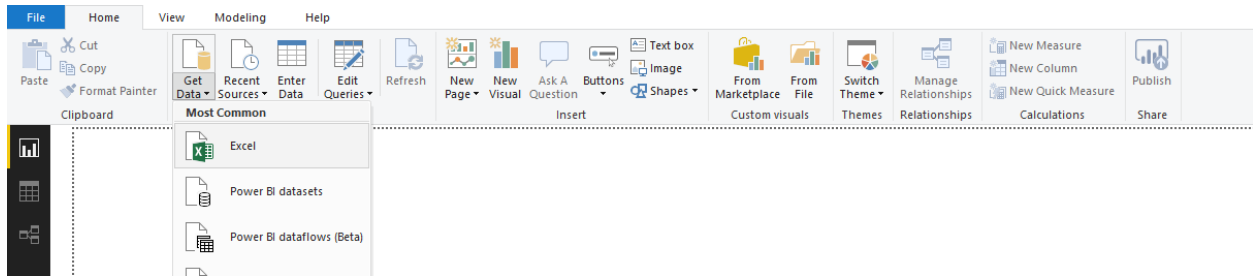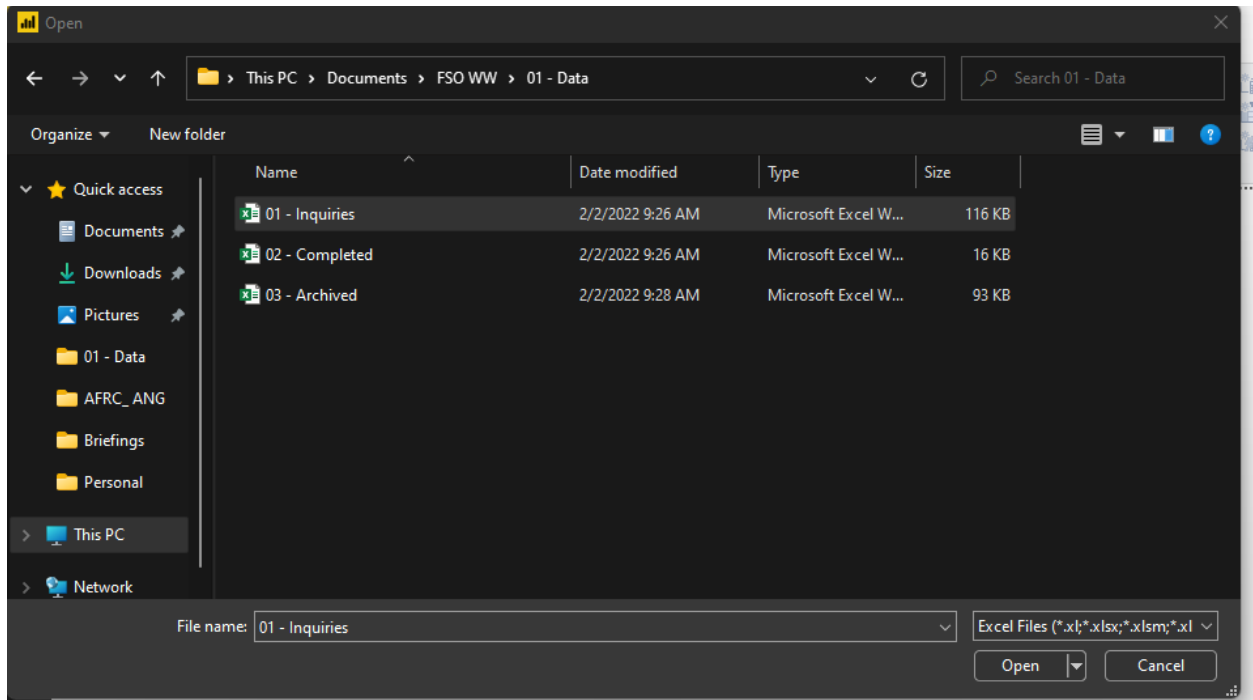
Inquiry ID	Subject
1234567876-0004068	BAH Update
1234567876-0004067	Test - 220201
1234567890-0004065	test
6148067441-0004064	Budget Inquiry
6148067441-0004063	Hardship duty pay
0000000050-0004057	civilian pay advance leave
1234567876-0004053	BAH Update
0000000010-0004050	Military Pay Inquiry
0000000010-0004049	Military Pay Inquiry
1234567811-0003633	The General Fund is the fund into which most receipts of the United State
0000000010-0004046	Test
1234567876-0004035	Need to update my BAH
0000000050-0004018	BAH
1234567876-0003921	Clothing Allowance
0000000050-0003968	Inquiry 001
1234567876-0003965	test

ℹ The data in the preview has been truncated due to size limits.

11. Repeat steps 8-10 for your completed and archived Inquiries.
12. Once data is loaded. Click the datasheet view on the left side, then click edit queries and edit queries from the drop down.

13. Once new page opens, click append queries, append queries as new

14. Click 3 or more tables, then add the remaining 2 datasheets. Click ok.
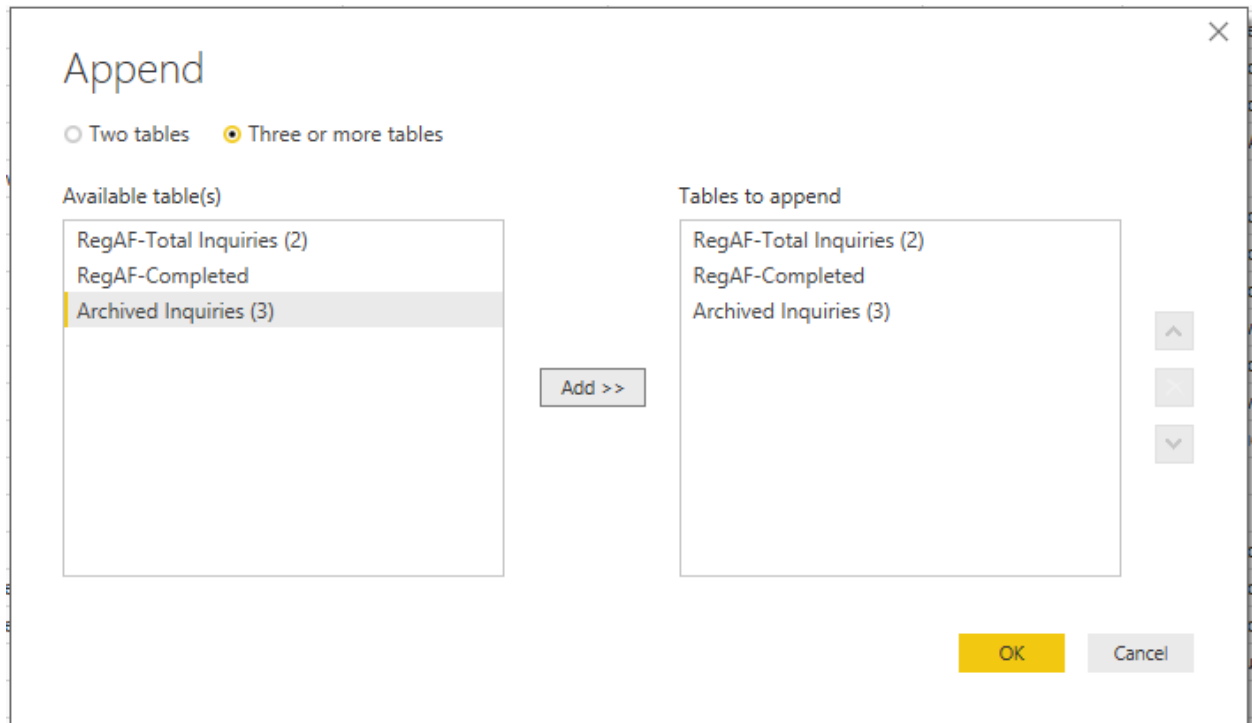
15. Once new query is created, right click on file and rename to Master Inquiries.
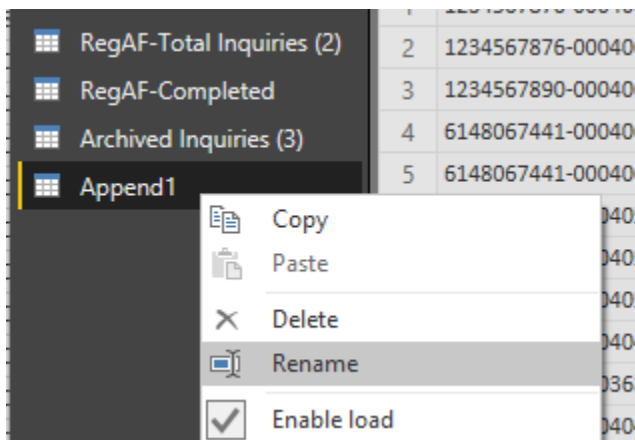
16. Once typed, click outside of text box

Queries [4]

- RegAF-Total Inquiries (2)
- RegAF-Completed
- Archived Inquiries (3)
- Master Inquiries

17. Open Datasheet vie

18. Click the master datasheet on the right
19. Click new column at the top

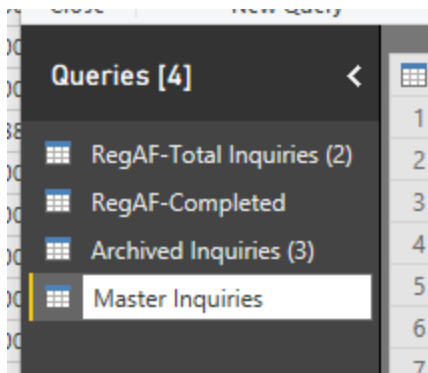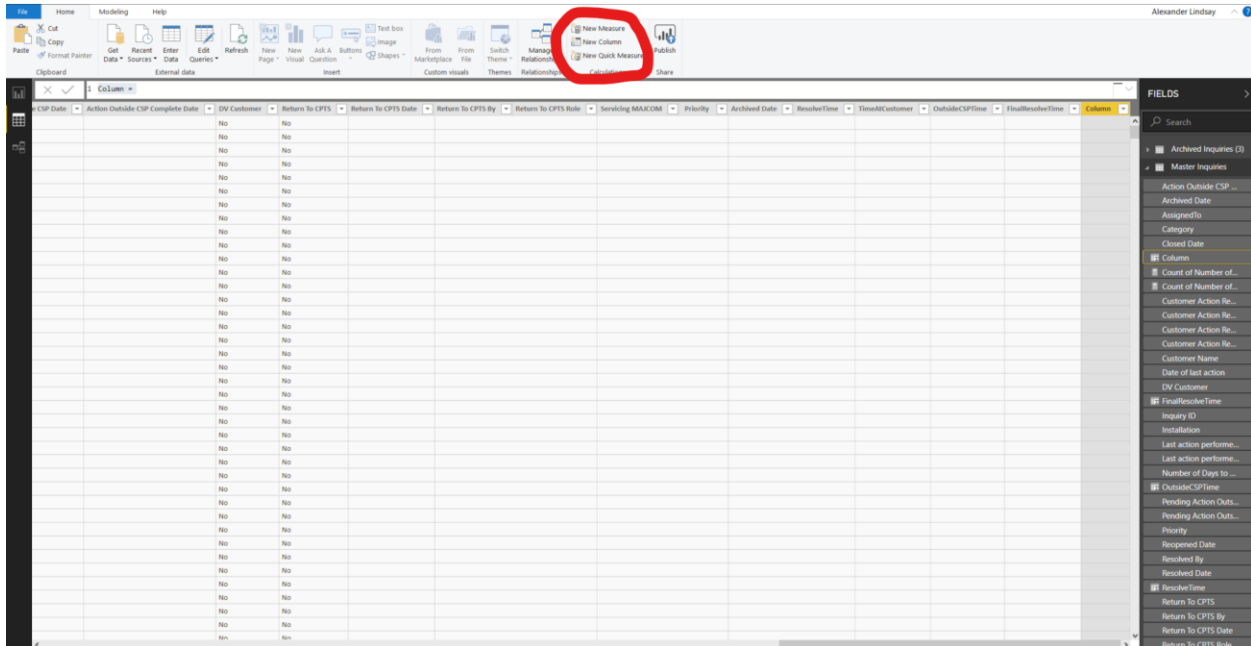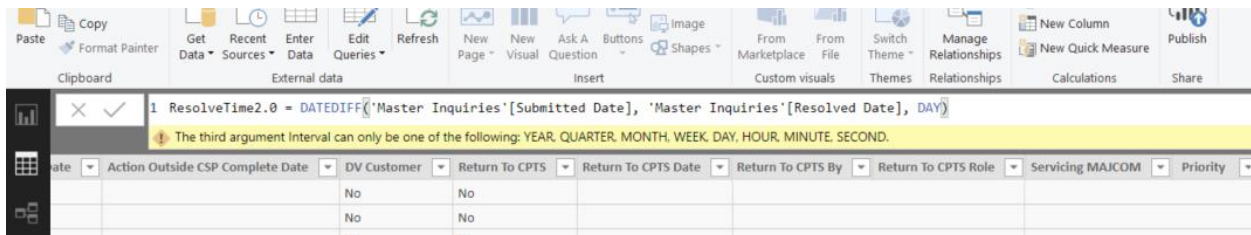20. Write this code to the column: [Variable_Name] = DATEDIFF('Master Inquiries'[Submitted Date], 'Master Inquiries'[Resolved Date], DAY

21. You can use the same formula to remove the time at customer action and pending outside of CSP.
22. Exit the popout window and click yes to apply changes.
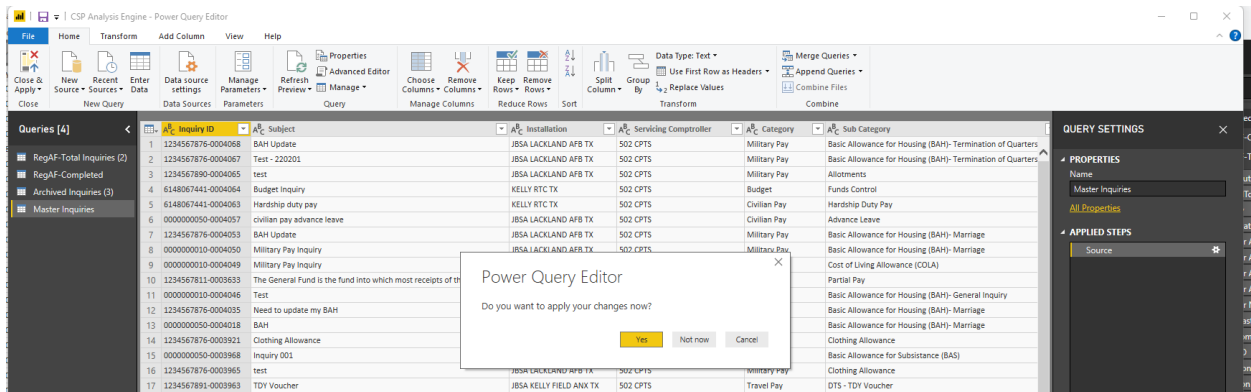
23. When updating the data, save over the files in your "01-Data" folder and click the refresh button at the top of your screen.
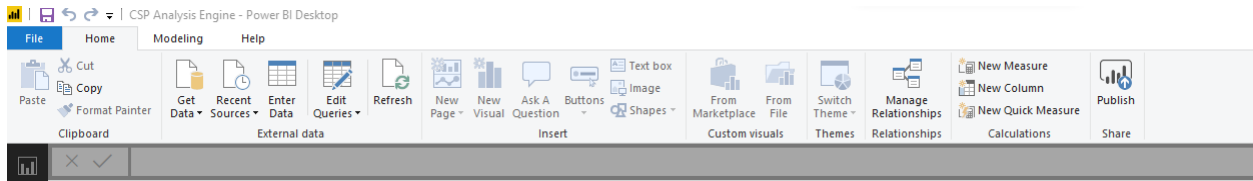
You can also load your Raw Survey data to append to the new data sheet, but that is not covered in this demo.

How to Explore the Data

1. Click the Reports button on the left, and ensure you are using the Master Inquiries datasheet
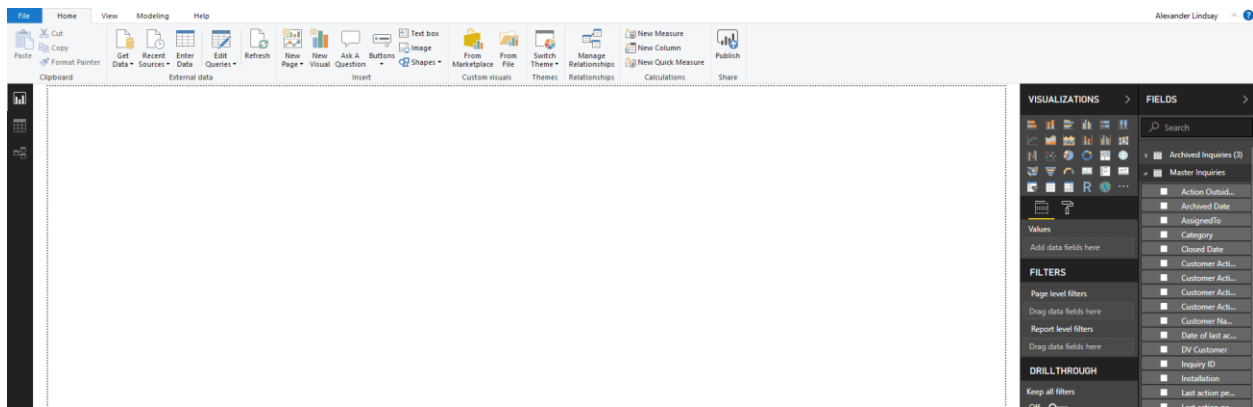
2. You can begin building Visualizations using the tab next to the data fields.
   a. The best way to learn PowerBI and mastering data visualizations is by trying new things. We will go over some basic visualizations.
3. Click the Clustered Columns chart on the visualizations tab.
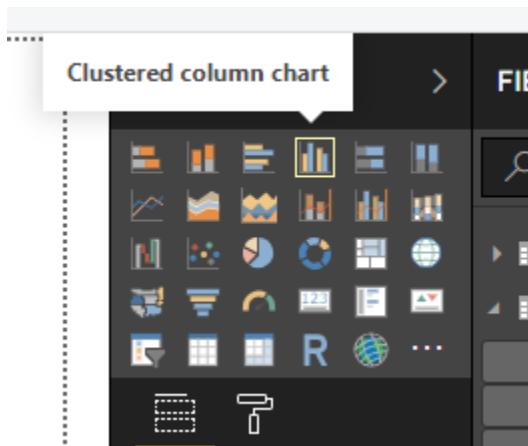
4. Click and drag category to the Axis, Inquiry ID to the value, and submitted Date to the filter

VISUALIZATIONS

(chart type icons)

Axis
Category ▼ ✕

Legend
Add data fields here

Value
Count of Inquiry ID ▼ ✕

Tooltips
Add data fields here

FILTERS

Visual level filters

Category ⌄
is (All)

Count of Inquiry ID ⌄
is (All)

Submitted Date ⌃ ✕
is (All)
Filter type

Relative date filtering ▼

Show items when the value:

is in the last ▼

30

days ▼

☑ Include today

Apply filter

FIELDS

🔍 Search

	Field
■	Archived Date
■	AssignedTo
☑	Category
■	Closed Date
■	Customer Action Requested By
■	Customer Action Requested Role
■	Customer Action Required
■	Customer Action Required Date
■	Customer Name
■	Date of last action
■	DV Customer
☑	Inquiry ID
■	Installation
■	Last action performed by
■	Last action performed role
■	Number of Days to Resolve
■	Pending Action Outside CSP
■	Pending Action Outside CSP Date
■	Priority
■	Reopened Date
■	Resolved By
■	Resolved Date
■	Return To CPTS
■	Return To CPTS By
■	Return To CPTS Date
■	Return To CPTS Role
■	Servicing Comptroller
■	Servicing MAJCOM
■	Status
■	Sub Category
■	Subject
■	Submitted By
■	Submitted Date

▶ ▦ RegAF-Completed

▶ ▦ RegAF-Total Inquiries (2)

5. Rename Count of Inquiry ID to "Total Inquiries"
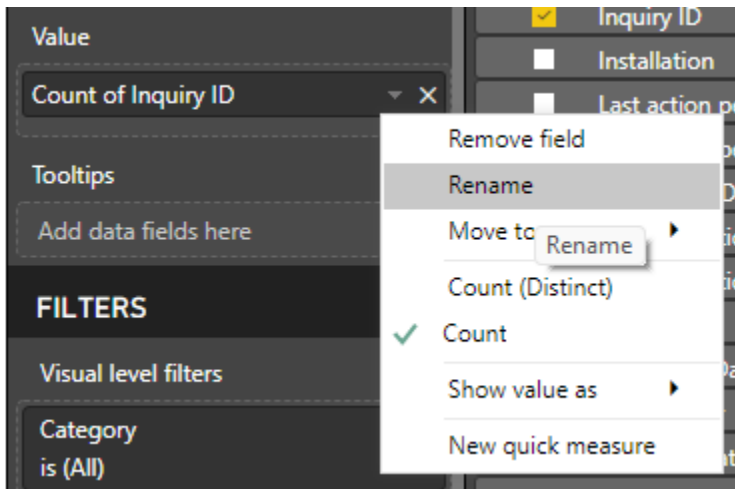
6. For your date filter, click the drop down that says Basic Filtering and select "Relative date filtering"
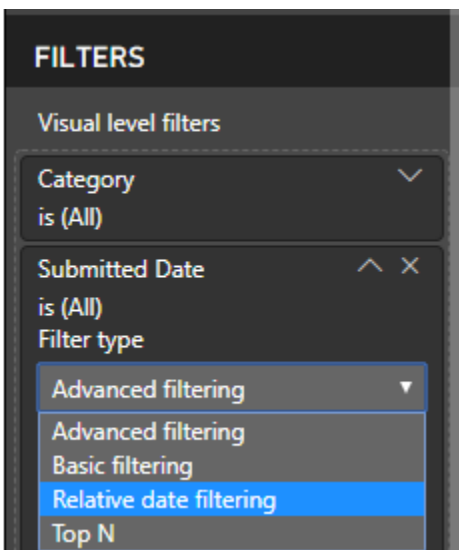
7. Leave the filter as the last 30 Days, click apply filter
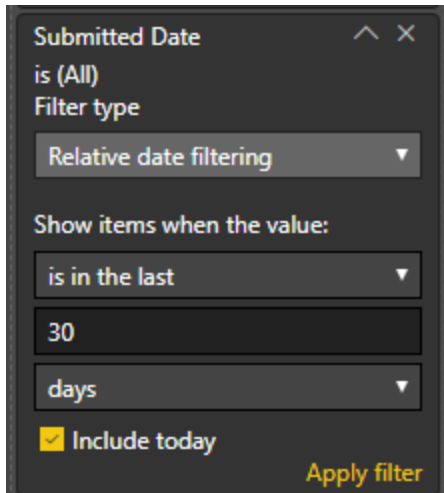
8. Add Data labels to the graph, click the format button.
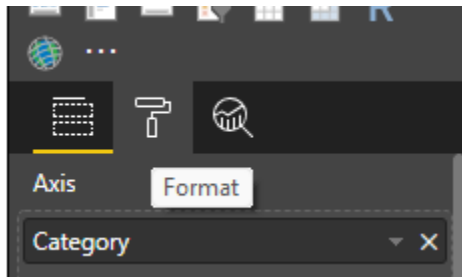
9. Turn data labels on
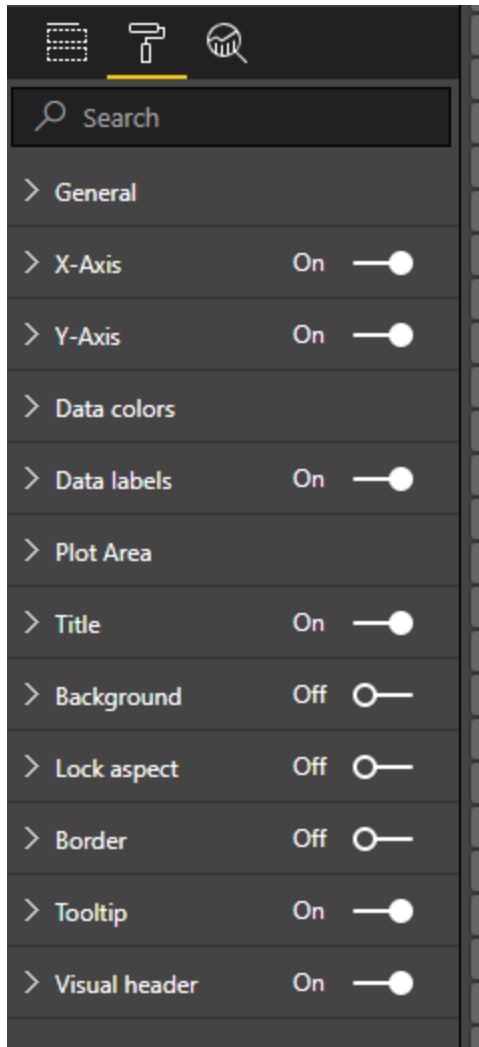
10. Click the Title drop down, then rename the Title "Total Inquiries Submitted Last 30 Days", change font to black, and center
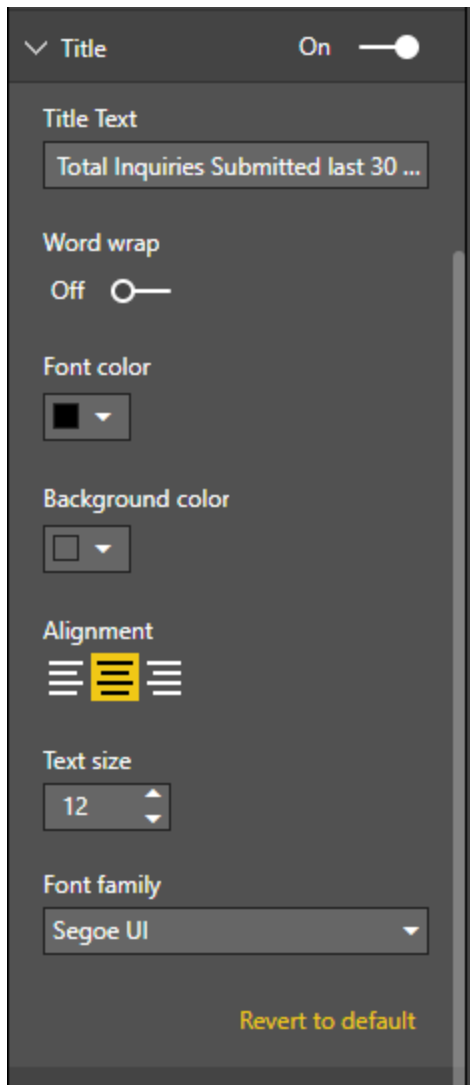
11. You can play around with the format of each graph to best fit what you are trying to convey.
12. Rename the page at the bottom to "Commander's Dashboard"
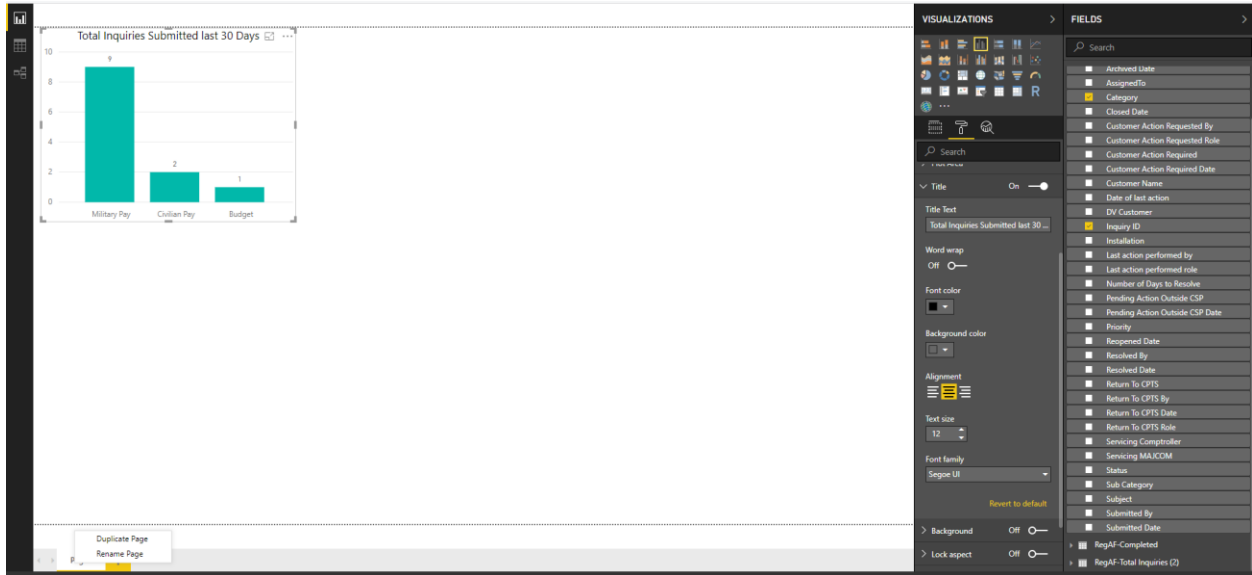
13. Next, we will explore the Active Inquiries.
14. Click the clustered column chart. Click and drag the submitted Date to the Axis and Inquiry ID to the Value.
    a. Depending on how you wish to display the data, you can X out the Year, Quarter, Month and Day.
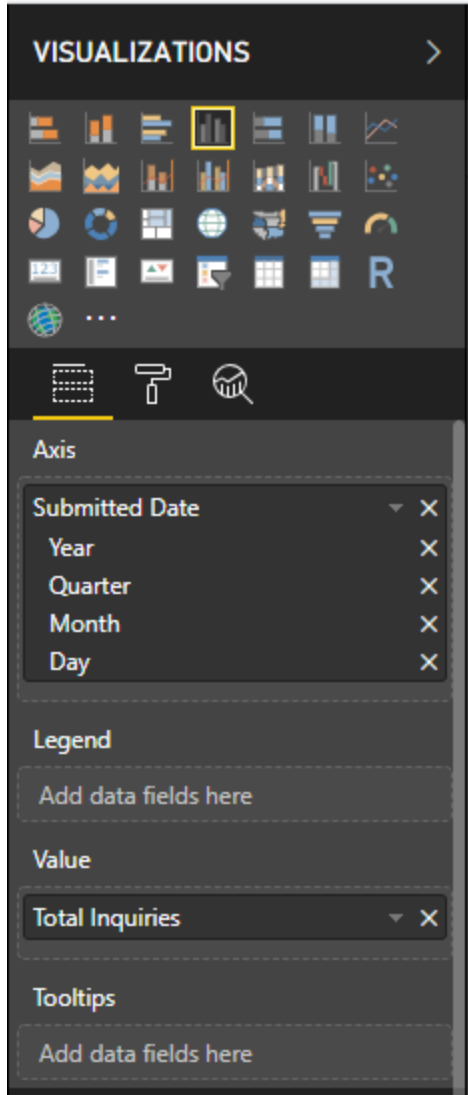
15. Drag the status into the filter, click select all, then deselected Canceled, Closed, and Resolved Inquiries.
16. Add Data labels
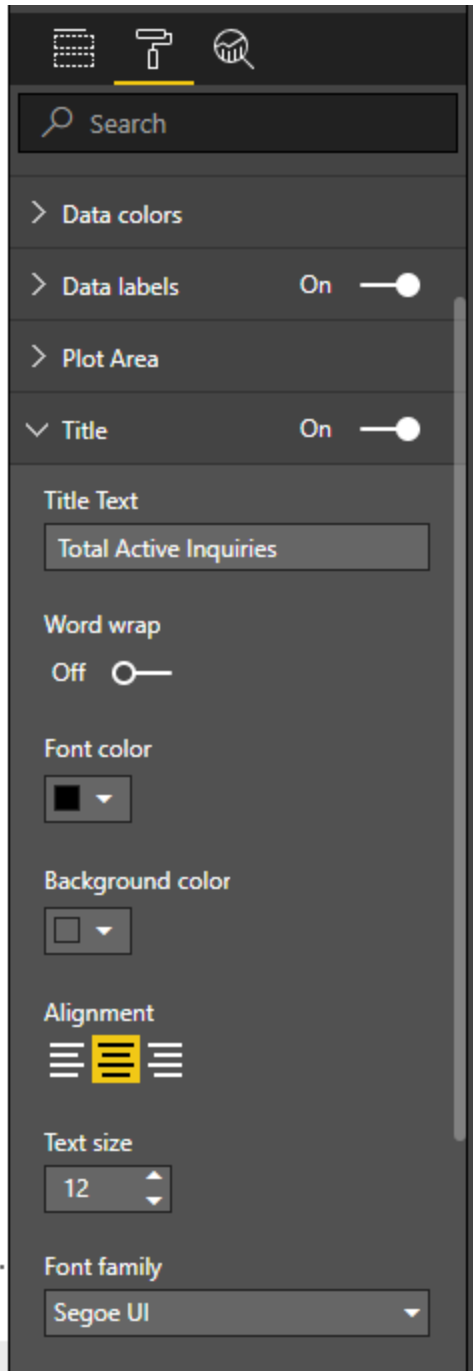
17. Next, we'll view the last action performed by customer.
    a. These inquiries should be recorded as stagnant for the CPTS.
18. Click Stacked Column Chart, click and drag AssignedTo to Axis, InquiryID to Value, and last action performed role to the filter.
    a. Deselect all roles, and click on Customer.

VISUALIZATIONS ❯
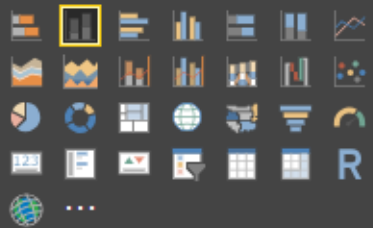
Axis
AssignedTo ▾ ✕

Legend
Add data fields here

Value
Count of Inquiry ID ▾ ✕

Tooltips
Add data fields here

FILTERS

Visual level filters

AssignedTo ⌄
is (All)

Count of Inquiry ID ⌄
is (All)

Last action performed role ⌃ ✕
is Customer ✎
Filter type

Basic filtering ▾

🔍
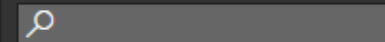
☑ Select All
☐ (Blank)   1217
☐ Accounting Manager   1
☐ AFIMSC   7
☐ Budget Analyst   3
☐ Civilian Pay CSR   9
☐ Civilian Pay CSR Manager   1
☐ Civilian Personnel Office   1

19. This graph will allow you to see all items which the customer took action on last and the technicians have not responded.
20. Add Data labels and update the title and Count of InquiryID.
21. Next, we will view the top resolvers.
22. Click, clustered column chart, drag and drop Resolved by into the Axis, InquiryID to the Value, and deselect Blank from the ResolvedBy.

VISUALIZATIONS
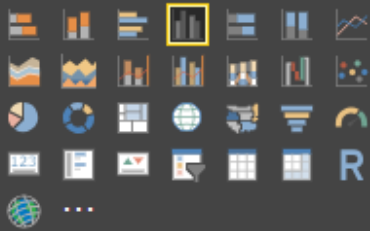
Axis
Resolved By ▼ ✕

Legend
Add data fields here

Value
Total Inquiries ▼ ✕

Tooltips
Add data fields here

FILTERS

Visual level filters

Resolved By ⌃
is not (Blank) ◇
Filter type

Basic filtering ▼

🔍

⊡	Select All	
☐	(Blank)	968
☑	Accounting Manager1	6
☑	Accounting Supervisor1	1
☑	Accounting Supervisor3	4
☑	Accounting Technician1	20
☑	Accounting Technician3	7
☑	ba3	1
☑	Budget Analyst1	3

☐ Require single selection

Total Inquiries ⌄
is (All)

23. Finally, you can view the Total Inquiries resolved on a particular date.
24. Select clustered column, drag and drop Resolved Date to the Axis, Inquiry ID to the Value, and remove the blanks from the Resolved Date filter.

VISUALIZATIONS >
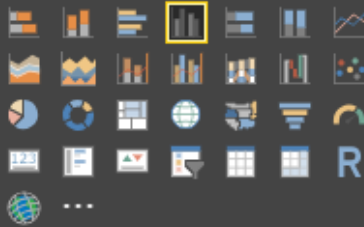
Axis

Resolved Date ▼ ✕

Legend

Add data fields here

Value

Count of Inquiry ID ▼ ✕

Tooltips

Add data fields here

FILTERS

Visual level filters

Count of Inquiry ID ⌄
is (All)

Resolved Date ⌃
is not (Blank) ✎
Filter type

Basic filtering ▼

🔍

☑ Select All
☐ (Blank)   844
☑ 1/10/2020   1
☑ 1/10/2022   1
☑ 1/13/2021   1
☑ 1/22/2021   7
☑ 1/25/2021   2
☑ 1/25/2022   1
☑ 1/6/2020   2

☐ Require single selection

25. Update the data labels and title.
26. Finally, your commander's dashboard is ready.
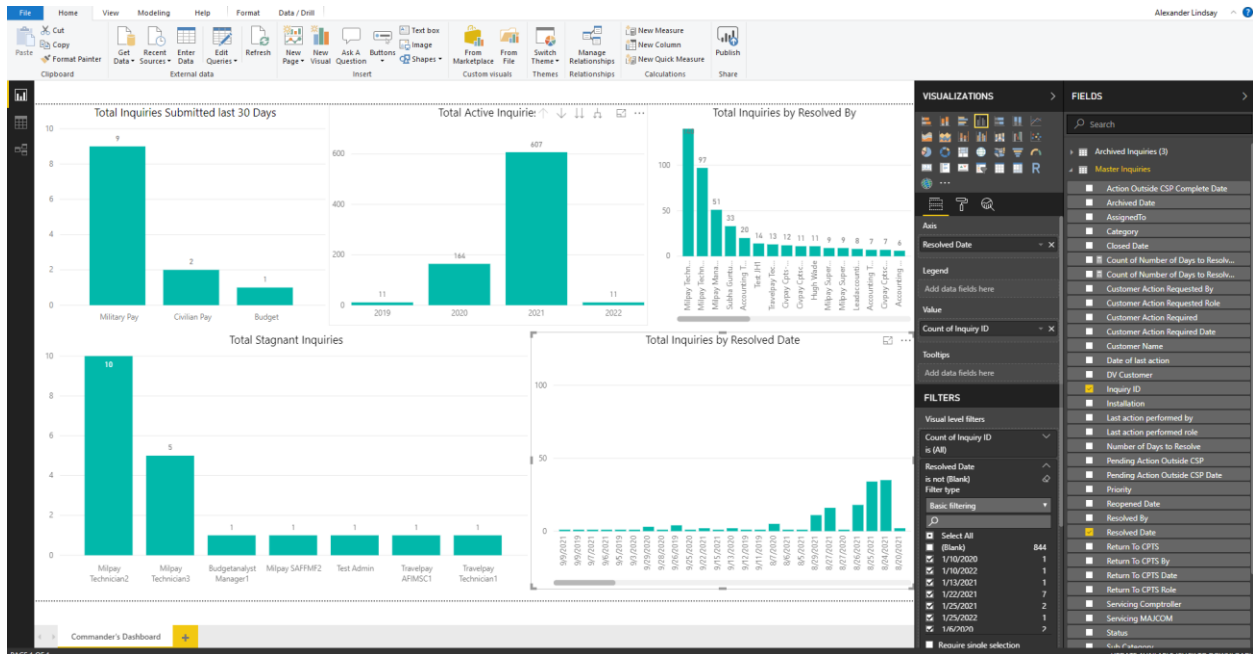

27. Update data labels and Title.

How to Export you Data

1. Now that your dashboard is complete, you can now export.
2. In addition to export, you can provide the file location to leadership to view the data.
3. Click the file button, then export to PDF.
4. The PDF will print to your desktop and you can email or print for your leadership.

Note, there are a lot of things you can do with PowerBI,:

1. Building Additional Pages to do deep dives in certain areas.
2. Slicing the data across the previous months/years.
3. Adding your Surveys to the data model.
4. Viewing key influences for data points.

Please take some time and explore all the visualizations you can build for you and leadership.