



# Budget and Strategy

## MONTHLY FINANCIAL TRACKING

Trisha Botcha<sup>1,3</sup>, Crosby Qui<sup>2</sup>

<sup>1</sup>William P. Clements High School, Sugar Land, TX

<sup>2</sup>City of Sugar Land Budget and Strategy and Department, Sugar Land, TX

<sup>3</sup> Gifted and Talented Mentorship Program, Fort Bend ISD, TX



Gifted and Talented  
Mentorship Program



## Introduction

The City of Sugar Land, like any other government entity, develops an **annual budget** that helps them to assess their funds and further develop an annual report that they publish to city council and the general public. Through the **financial transparency** comes the understanding of how the budget the department allocates their numbers to certain **fund balances**. With the consistent creation of visual dashboards for the analysis of endless data within countless **excel spreadsheets**, budget analysts at Sugar Land work daily with financials that are updated on a **monthly basis**. It is these monthly financials that help to create **future budgets**.

### THE QUESTION:

How do the implementations associated with tracking monthly financials help display a variance? How can this be shown visually?

## Methodology

This research endeavor was developed in a **two part manner**. The first, to **gather data from the general fund** in the Sugar Land Munis data server. The second, to **create a visual display with a PowerBI dashboard**. The condensed procedures to create the final dashboard are as follows:

1. Choose desired fund to analyze data from.
2. Go to Munis (tylerhub) - Sugar Land database with records and available funds - and export data to new Excel spreadsheet
3. Insert a Cubes into a new sheet and organize data with categories of choice, making sure to include FY23 and FY24 Actuals and Budgeted
4. Build a cohesive table and import this into PowerBI and build out!

The core aspect in ensuring that **desired variance analysis** can be done, is to guarantee that the table created with the data in the Cubes function is **accurate**. To ensure that this research endeavor brings forth quality results means to have certain sections that help to **filter out the financials**. In this case, **Account Type** and **Roll Up** are the key categories to focus on as they help to hone in on the FY23 and FY24 **financial differences**. Now, once the Cubes is fully developed and the data for the given months in the fiscal year are updated, it comes time to create a separate table with the combined data for the actuals and budgeted money. This table is to then be imported into **PowerBI**. Once the data is successfully in PowerBI, it is free reign to develop the data into any desired **visual manner that showcases the variance**. For the purposes of this research endeavor, a **main dashboard** with the overall comparison amongst the previous and current fiscal year and a separate **Actuals and Budgeted page** is to be created. Finally, **analysis** can be made.

Figure 1

## Results and Findings

### PowerBI Dashboard Home Page

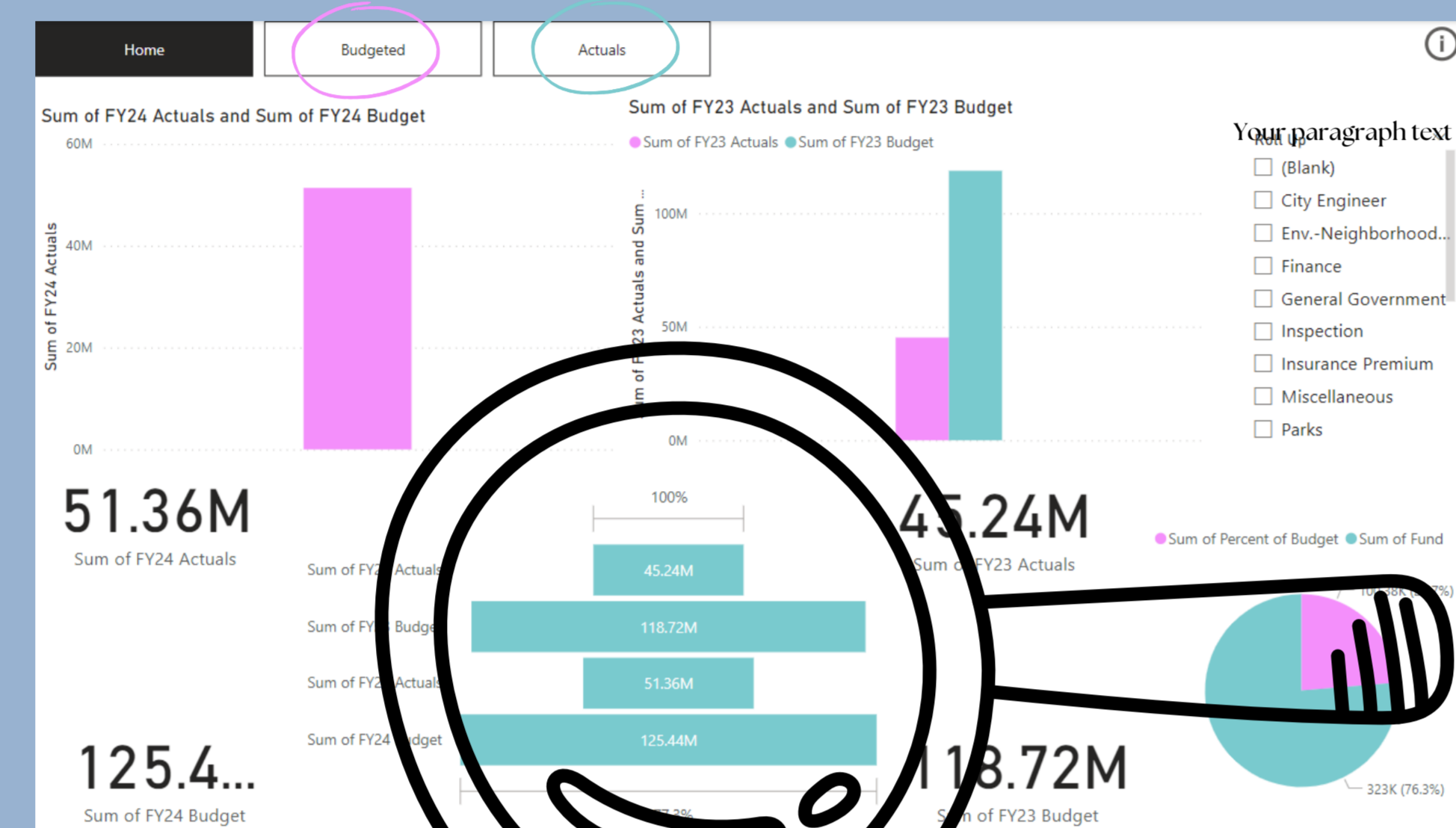


Figure 2

### Comparison of FY23 and FY24 Actuals and Budgeted Financials

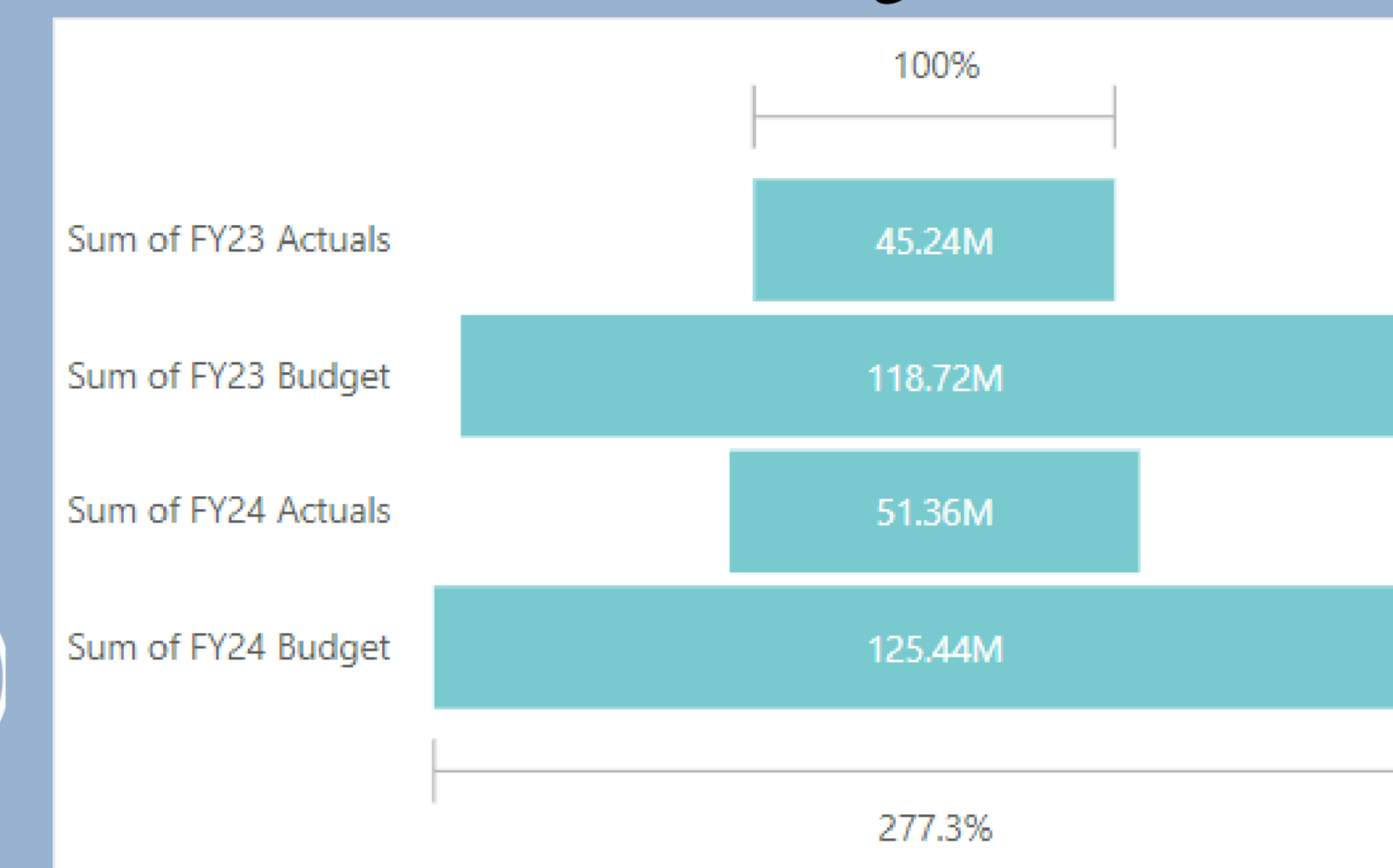


Figure 3

The **Actuals** support the calculations of the true revenues and expenditures of the given fiscal year, and the variance is thus developed by comparing the **Budgeted** amount to the actual financials that were brought in. Figure 3 displays the comparison amongst the present and previous **fiscal years**. As can be analyzed by the given values and bar length, the budgeted amount for the present fiscal year is greater than FY23. The dashboard display of Figure 2 fosters the finding to be a result of the actuals brought in for FY23. The implementation of a **conservative budget** enabled a favored **surplus in revenue** over **expenditures** and consequently resulted in budgeting a greater amount for FY24. The manipulation of the "Roll Up" filter in Figure 2 will support this finding.

### What does "FY" mean?

In finance and government FY stands for Fiscal Year and depicts a yearly accounting period used to generate the financial statements of an organization or government entity. A Fiscal Year begins on October 1st of the previous year and ends on September 30 of the given year.

### What is a Conservative Budget?

In simple terms, a conservative budget means overestimating expenses and having actuals that end up being under the budgeted amount. You always want to overestimate your budget so that you have the liberty to have left over funds that will put your carry-over budget as a positive surplus. This ensures that the city doesn't build unnecessary debt and will have the funds to carry out crucial city projects.

### "Budgeted" Financials Page Display

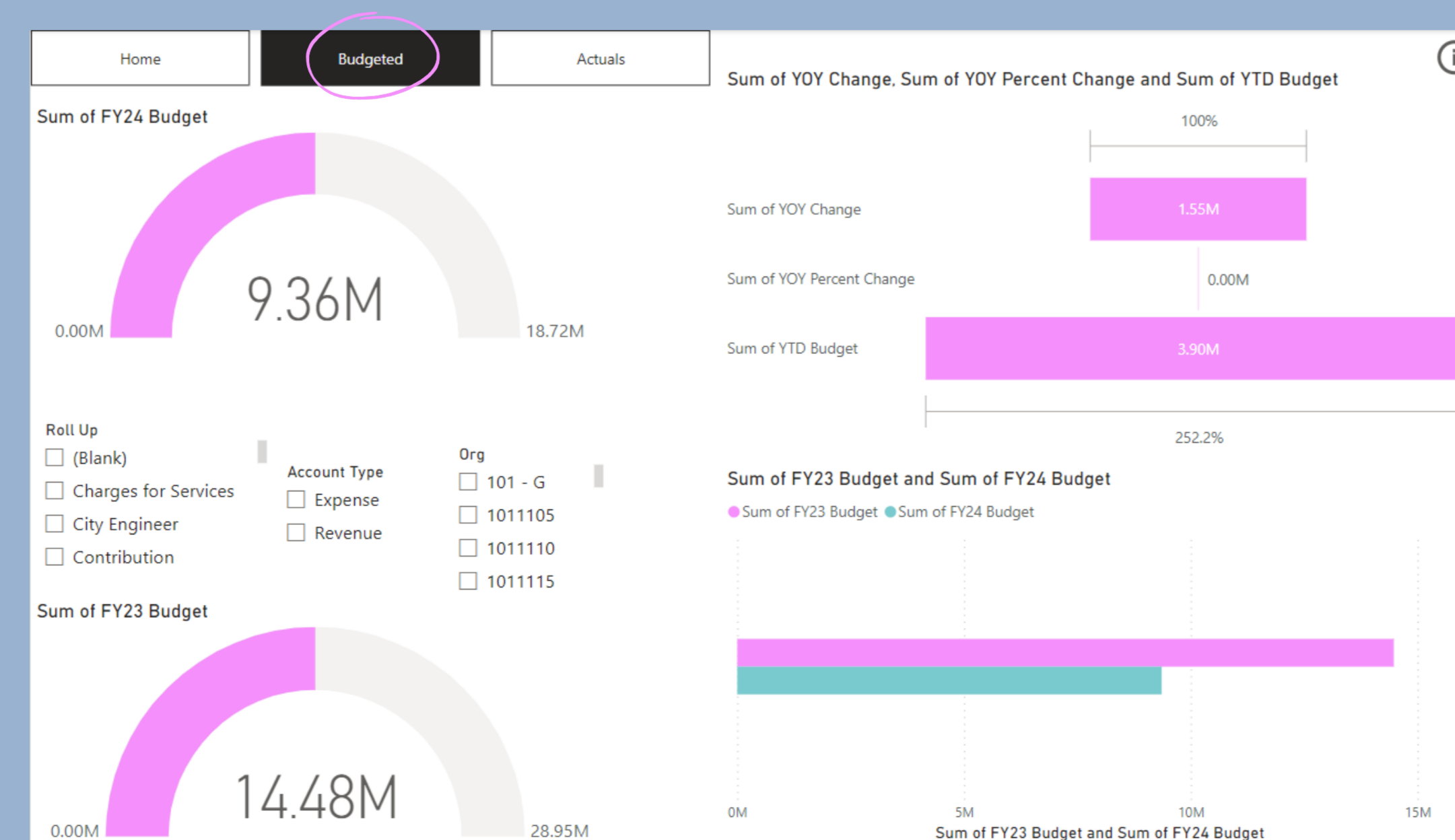


Figure 4

### "Actuals" Financials Page Display

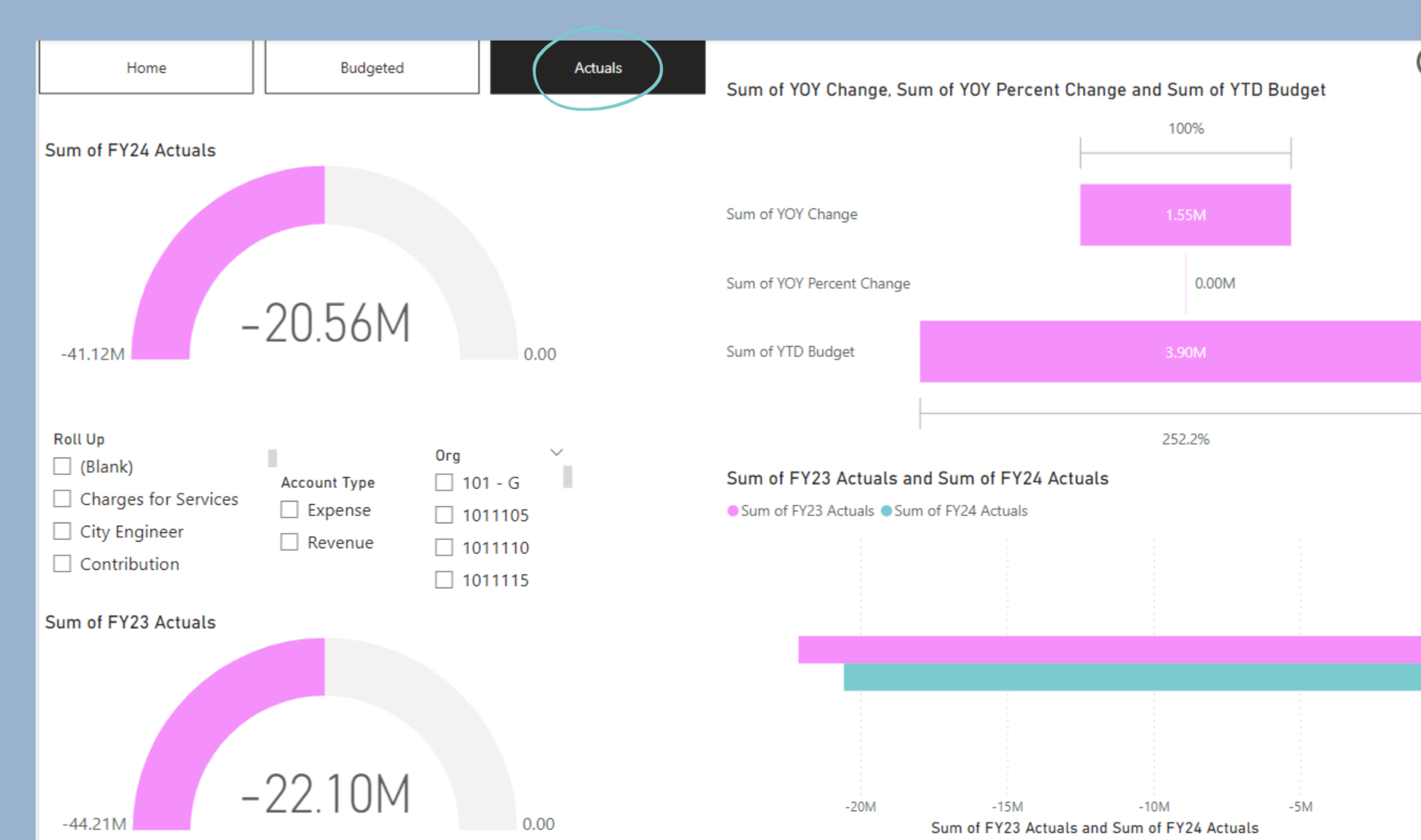


Figure 5

## Conclusions

The discovered results **prove value to the question** at hand. The **variance between fiscal years** (In this case FY23 and FY24) is easily depicted from the **visual display of data**. Based on the performance of the past budgets and the remaining fund balance, the Budget and Strategy department allocates money to different accounts for the upcoming fiscal year. On the daily, budget analysts build out visuals for data to help them understand the variance between certain funds or balances. Although the visual creation does not have to be at the level of this research endeavor, the simple building of charts help to **efficiently analyze the large numbers and ensures that proper allocations can be made**.

### KEY TAKEAWAYS FOR BUILDING VISUALS:

#### Creation

- Follow procedures set forth by methodology to ensure that all **data is imported accurately** and from the correct server.
- Have the **numbers properly calculated** with the correct formulas
- **Develop a table** that has all desired fields to work with in PowerBI
- **Create PowerBI dashboard** to display variance between fiscal years

#### Implementation

- **Highlighting the following aspects** in some manner in your table and/or dashboard help to **ensure that desired analysis** can be made:
  - The overall budget process, the importance of a conservative budget, budgeted vs. actuals vs. YE projections

#### Analyzation

- Since the creation of the dashboard is in all means the **creators personal discretion**, it is important to create the dashboard in a way that is also **understandable to outside viewers** looking to analyze similar findings. This research endeavor helped prove this true through the **implementation of multiple pages for best analysis**.

## Next Steps

This research endeavor highlighted just how important **tracking monthly financials** is to budget analysts, especially visually. In the long run, it helps them to **create adopted budgets**. However, it is important to note the **limitations in this study**. For starters, since FY24 is still ongoing, it is not ideal to measure the full variance of the actuals, in relation to the budgeted amount for the year. On a similar note, since the **data is being depicted based on real time** with the updated accounts in the Sugar Land server, we need to ensure that our table that was imported into PowerBI is **always up to date**. To satisfy this, we must go in and refresh the data for the previous month that has passed at the beginning of the current month. Moreover, however vast the data used in this research endeavor may be, it **only supports the arena of the general fund**. Thus, to be able to analyze the variance between other supporting funds, we would need to follow our methodology with the re-exporting of data from the Sugar Land server, creating a cubes, importing data into PowerBI, and developing further visuals to show comparisons.