

FINAL PRESENTATION

PART 1: THE OFFICIAL REPORT

Dallas City's Operating Budget Analysis for the year 2022 and 2023

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Dataset:

Name: City of Dallas Operating Budget

Dataset link: <https://www.dallasopendata.com/Economy/Operating-Budget/e2fs-y4nb>

Overview:

In this dataset, the city of Dallas's total funds, budget, and spending for the years 2022 and 2023 are listed along with their distribution among the various departments and services. I analyzed the data using this information, and the five questions that I used to guide my analysis are explained below. In addition, as indicated in Figure 12 dashboard, I used two different colors such as Gold for year 2022 and Purple for 2023 to differentiate the data.

Addressed the First Question that Drove the Analysis:

- The First Question that drove my analysis is “How funds have been allocated to each type of fund, and which one has received the most funds during these two years?”

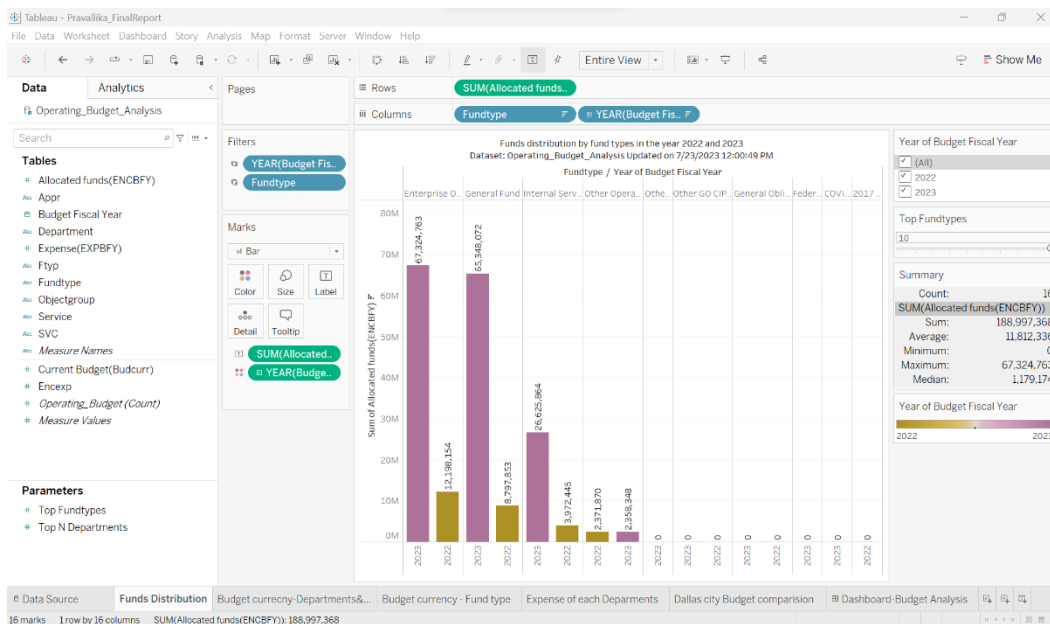


Figure 1: Funds Distribution

- For this, I took the cleaned dataset and visualized using Tableau. Here, I considered, sum of allocated funds that are allocated and the different categories of funds.
- From this, Figure 1 represents the total funds that are allocated to different fund types in the year 2022 & 2023. This clearly visualizes question 1 which was driven from the analysis. I'm using a filter for the Budget Fiscal year which helps to showcase the funds allocation in those selected years.
- In addition, I created a parameter called "Top Fundtypes" to display the Highest Fund types to which the highest amount of Fund was allocated based on the selected range.
- The category with highest funds in the year 2023 is Enterprise Operating Fund, which has a total fund amount of \$67,324,763, and then followed by General Fund, which has a total fund amount of \$65,348,072.
- Also, in the year 2022 Enterprise Operating Fund is having highest funds with \$12,198,154, and then followed by General Fund, which has a total fund amount of \$8,797,853.
- In Figure 2, I selected the range from 1 to 3 for the Top Fundtypes parameter to visualize the top 3 categories of funds which is having highest funds among all.

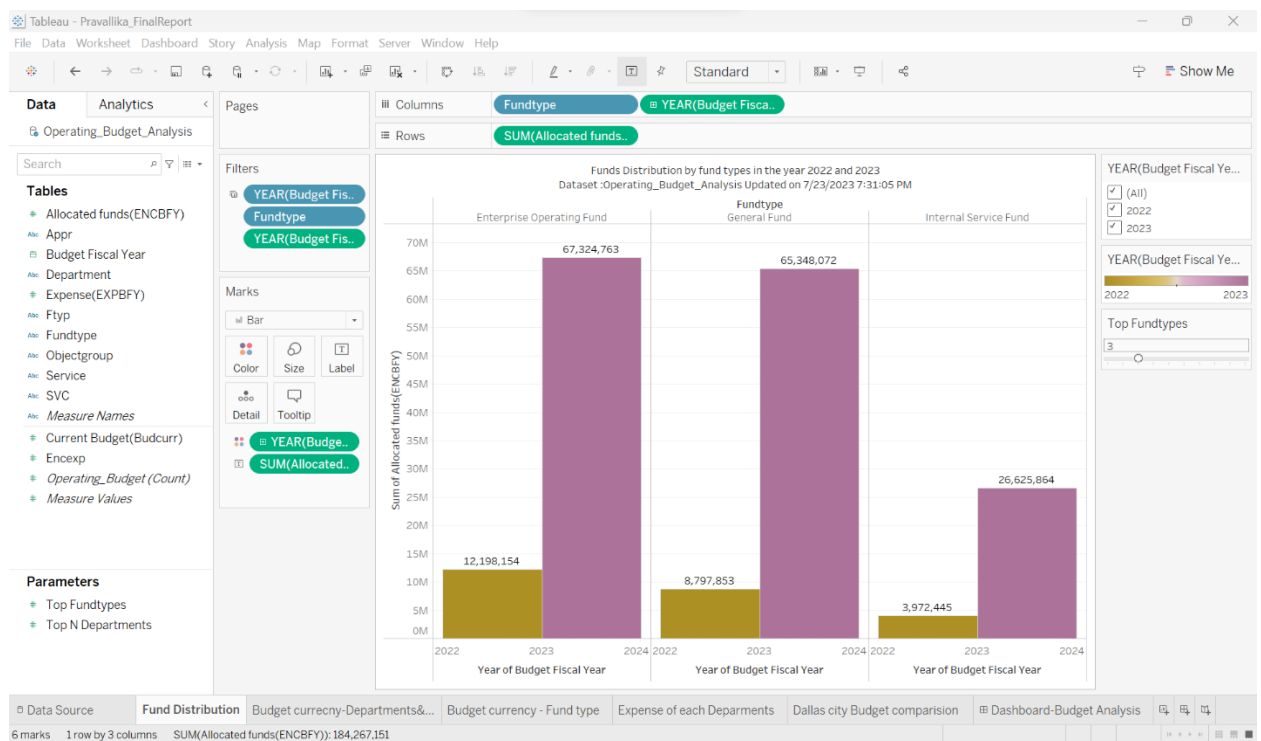


Figure 2: Top 3 Fund categories having highest funds.

Unexpected Findings and/or Recommendations for the First Question:

- During my analysis, I found that there are five fund categories which don't have any funds allocated during both the years. There are 2017 General Obligation Bond Program, COVID 19, Federal Grant (non-Consolidated Plan), General Obligation Debt Service,

Other-Budget Office, and Other GO CIP – Non-Debt. This may have significant impacts on the city’s ability to carry out essential services and projects.

- Due to the COVID 19 virus, the fund category “2017 General Obligation Bond Program” was eliminated in 2023 and a new fund category known as COVID 19 was created in its place. However, this category does not have any funding.

Business Insights:

- More funds are being allocated to fund categories for Dallas city in the year 2023 when compared with 2022.
- When comparing the two years 2022 and 2023, the top three categories show a significant increase in funding. The top three categories are listed below in Table 1.

Table 1:Top 3 Fund categories in both the years based on allocated funds.

Rank	Fund Type	2022	2023
1	Enterprise Operating fund	\$12,198,154	\$67,324,763
2	General Fund	\$8,797,853	\$65,348,072
3	Internal Service Fund	\$3,972,445	\$26,625,864

Addressed the Second Question that Drove the Analysis:

- The Second Question that drove my analysis is “In the city of Dallas, how current budget is allocated across various departments and their services? Which five departments have the highest current budget allocation for their services in both years?”

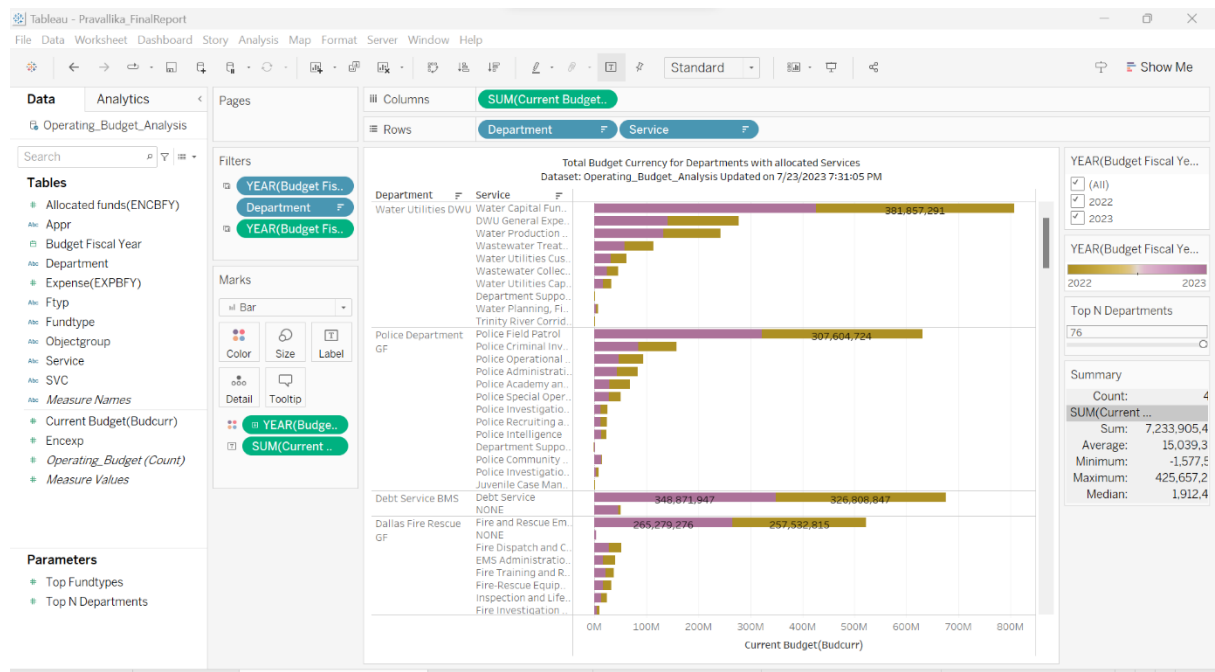


Figure 3: Total Budget distribution for Departments

- For this second question visualization, I considered the total sum of current budget for both the years (2022 & 2023) and all the departments and their services.
- I visualized the budget allocation using Bar chart which was simple and easy to compare the budget allocations between the different services in each department as shown in Figure 3.

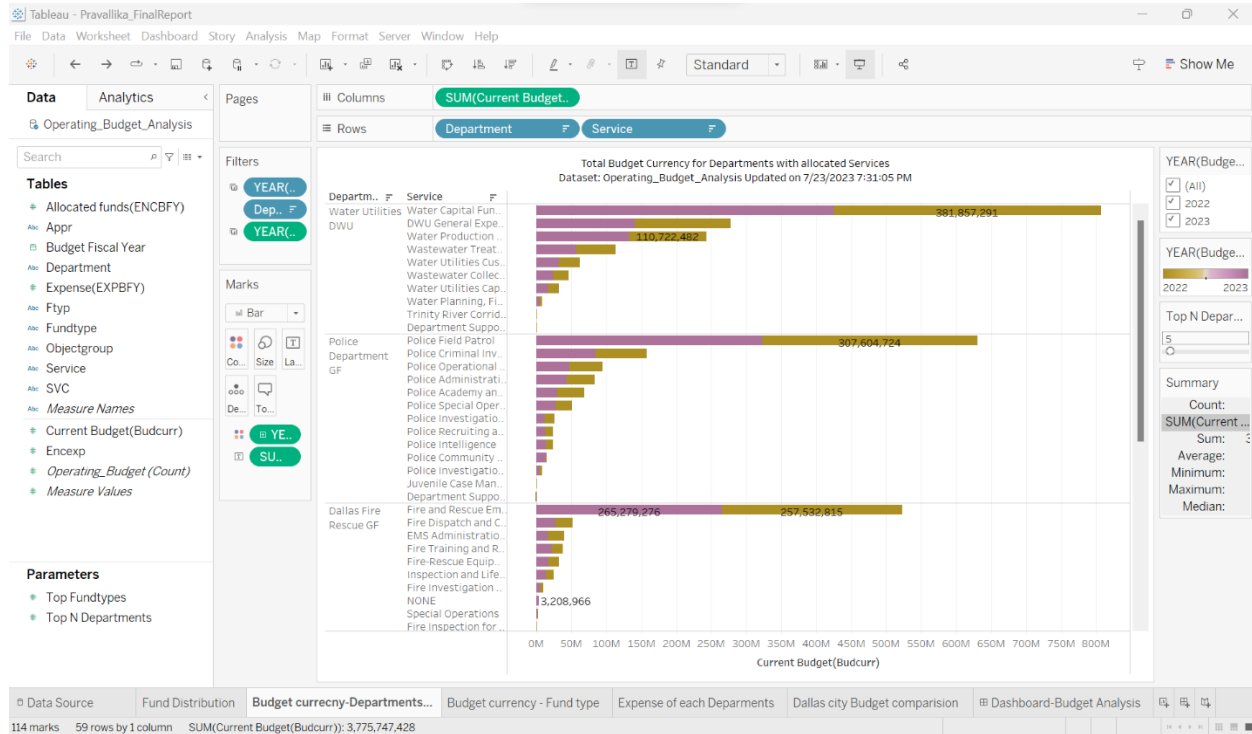


Figure 4:Top 5 Departments with their services allocated with highest Budget in both the years.

- In addition, I created a parameter called “Top N Department” to display the topmost departments to which the highest amount of budget was allocated in those years based on the selected range. In Figure 4, I’m visualizing the top 5 Departments having highest budget allocated in both the years.

Unexpected Findings and/or Recommendations for the Second Question:

- A few departments and services which are newly started in the year 2023 are listed below.
 1. Office of Historic Preservation Department – Historic Presentation Service
 2. Express Business Center POM Department – Business services & Disposal of surplus and Police unclaimed property
- In 2022, the Debt Service BMS department received the highest budget allocation of \$326,808,847, making it the top department in terms of budget for Debt Service. However, despite having only two services, it ranked as the third-highest funded department. In contrast, the Police department GF secured the second position with a budget of \$307,604,724, as it has 13 different services.

Business Insights:

- In both years (2022 and 2023), the Water Utilities DWU department receives the greatest budget allocation for the Water Capital Funding Service (\$381,857,291 in 2022 and \$425,657,260 in 2023). While Trinity River Corridor operations and Department support services do not have a budget, this might result in a reduction in the department's total budget.
- In comparison to 2022, there was a significant increase in the money allotted to the various departments providing their services in 2023, which will encourage more development and project work across Dallas.

Addressed the Third Question that Drove the Analysis:

- The third question that drove my analysis is “Which Fund type receives the highest budget allocation? Also, what are the differences in budget allocations across fiscal years?”

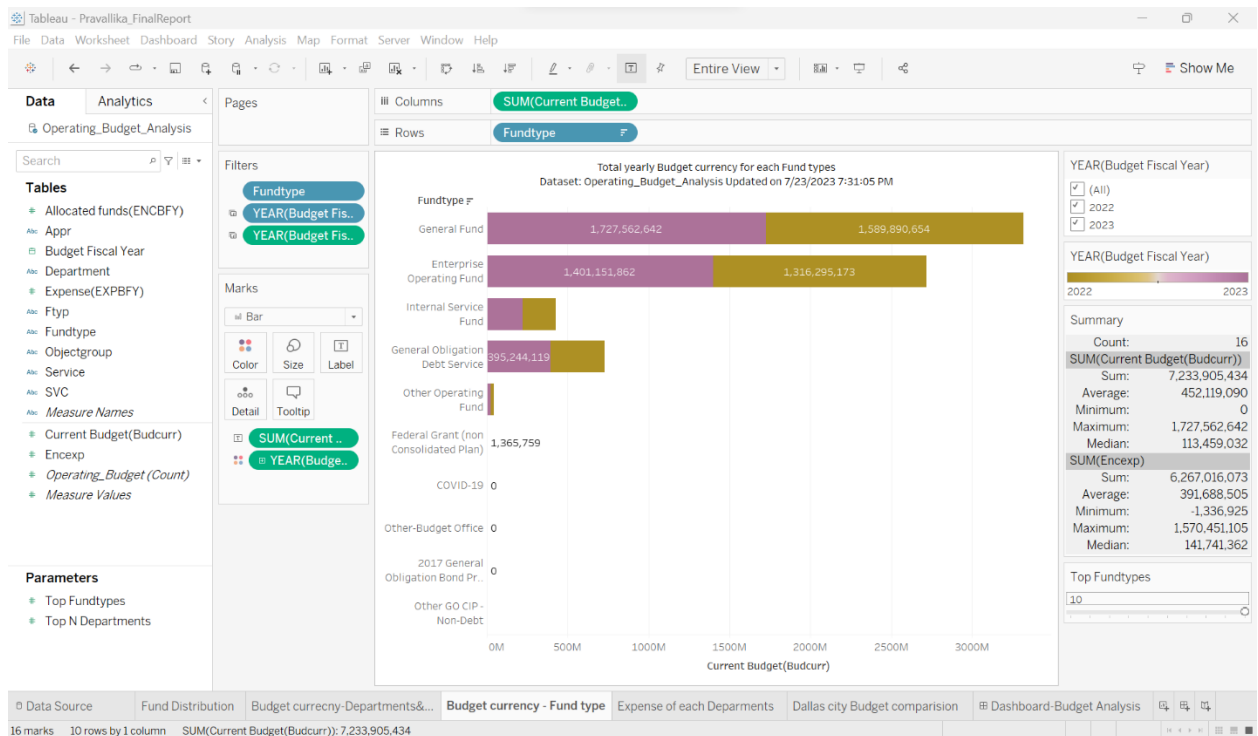


Figure 5: Yearly Budget for Fund Types

- For this third question visualization, I considered the total sum of current budget for both the years (2022 & 2023) and all the fund types.
- I visualized the budget allocation for each fund category with respect to the year as shown in Figure 5.

- In addition, I used “Top Fundtypes” parameter to display the topmost fund category having the highest amount of allocated budget in those years based on the selected range.

Unexpected Findings and/or Recommendations for the Third Question:

- There are no funds committed for the General obligation debt service fund category, although there are budgetary allocations of \$395,224,119 in 2023 and \$331,163,653 in 2022.
- While there was no budget assigned for the Federal Grant (non-Consolidated plan) fund category in the year 2022, there is a budget of \$1,365,759 in the year 2023.
- There are few fund categories which don’t have any assigned budgets in both the years such as, COVID 19, Other-Budget Office, 2017 General Obligation Bond Program, and Other GO CIP - Non-Debt.

Business Insights:

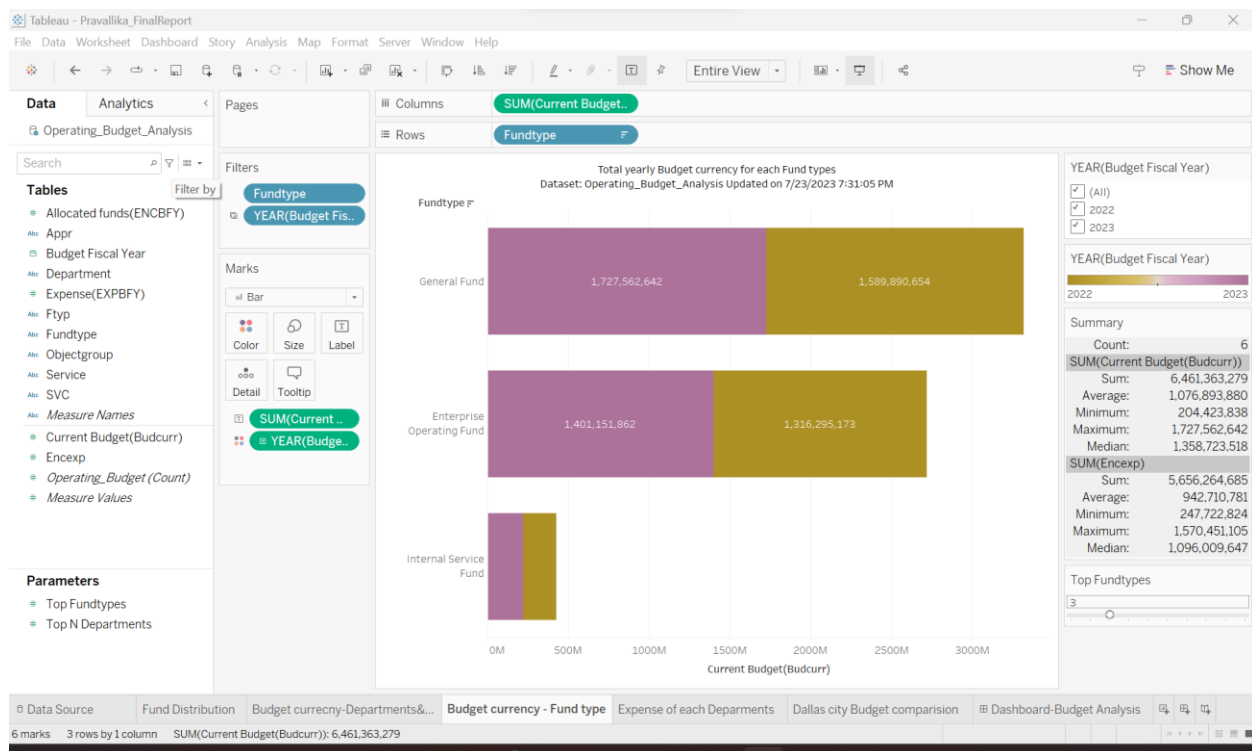


Figure 6:Top 3 Fund categories with highest Budget allocation

- The General Fund category is having highest budget allocation in both the years. In the year 2022, it was allocated with budget of \$1,589,890,654 whereas in 2023 it was allocated with \$1,727,562,642 as shown in Figure 6.
- Year 2023 has the greatest budget allocation when compared between two year’s budget allocations. Budget allocation for the General Fund category varies by \$137,671,988 between the years 2023 and 2022.

- In both years, the top 3rd fund category i.e., the Internal Service Fund (year 2023-\$222,039,110; year 2022-\$204,423,838) has a much lower budget allocation than the top 2nd fund category, the Enterprise Operating Fund (year 2023-\$1,401,151,862; year 2022-\$1,316,295,173).

Addressed the Fourth Question that Drove the Analysis:

- Fourth question that I visualized during my analysis is, “In the city of Dallas, which year experienced the highest budget allocation?”

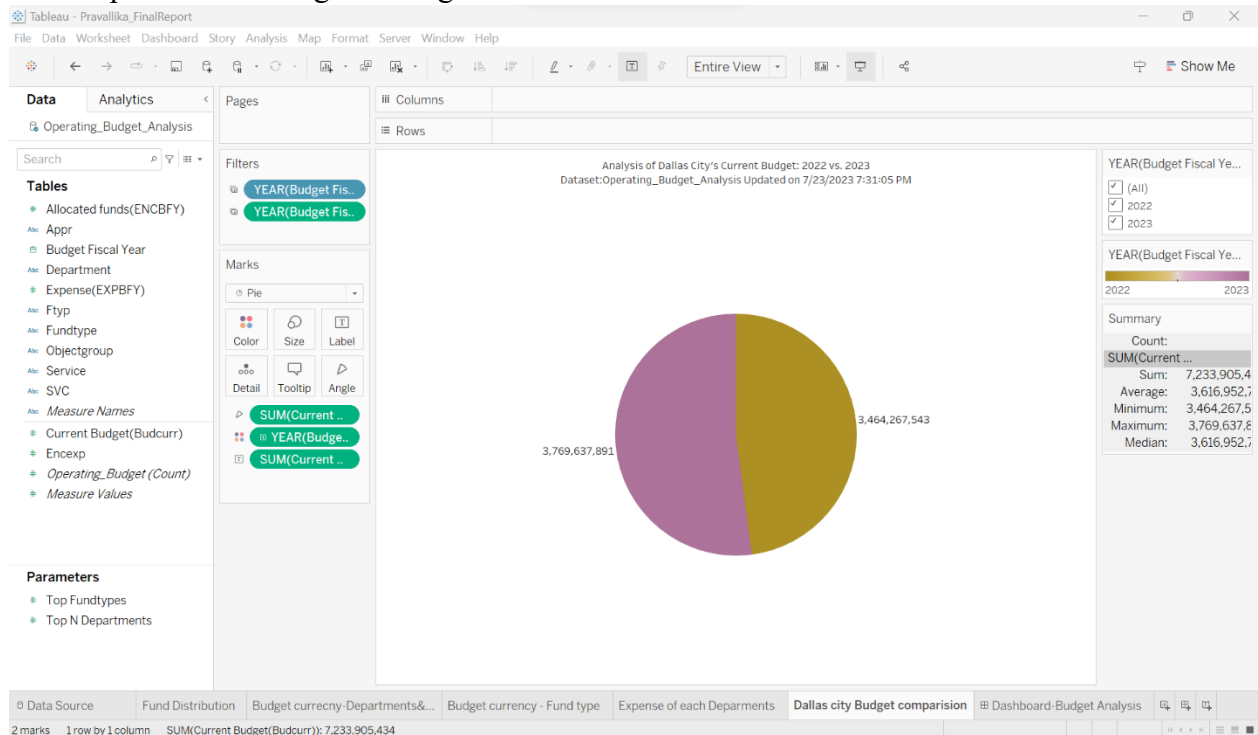


Figure 7: Analysis of Dallas City's Current Budget: 2022 vs. 2023

- For this analysis, I visualized the current budget allocated for both the years using the PIE chart. The area will describe the sum of the total budget allocated in that particular year as shown in Figure 7.

Unexpected Findings and/or Recommendations for the Fourth Question:

- During my analysis, I observed that there are more funds and budget was allocated for Dallas city in the year 2023 when compared with the year 2022.

Business Insights:

- The budget for the year 2023 (\$3,769,637,891) is higher than the budget for the year 2022(\$3,464,267,543), with a difference of \$305,370,348 as shown in Figure 7.

Addressed the Fifth Question that Drove the Analysis:

- The fifth question that drove my analysis is, “In the year 2023, which department has the highest expenses and achieved the top ranking among all departments?”

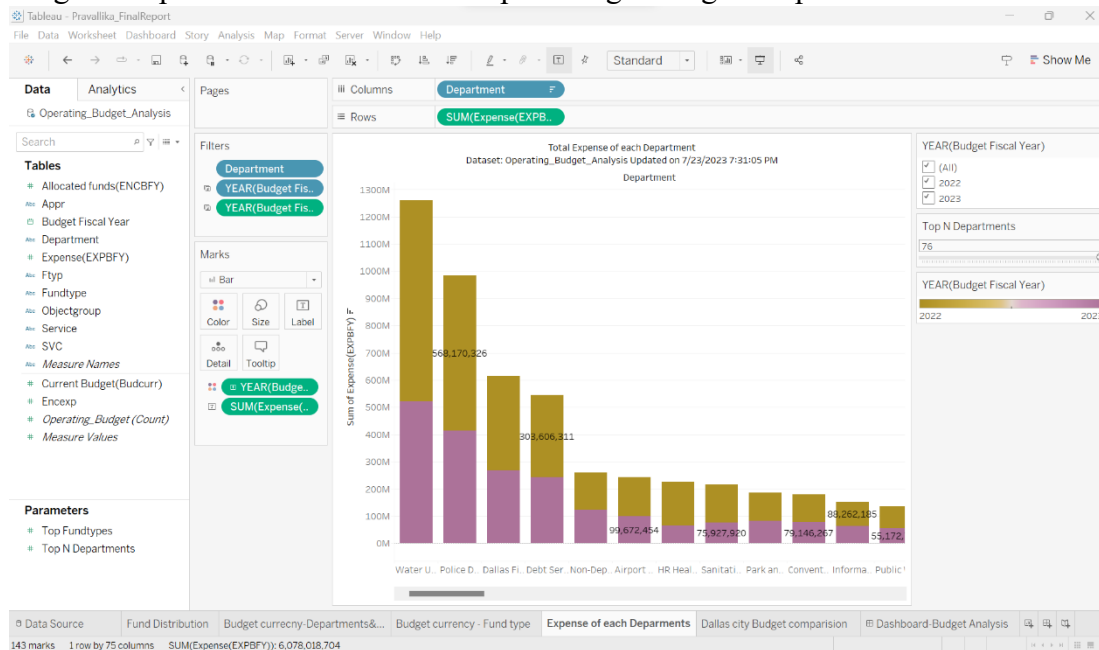


Figure 8: Total Expense of each Department

- For this analysis, I visualized the sum of total expense that was spent by each department with respect to the years 2022 and 2023.
- For this visualization I used Bar charts as shown in Figure 8.

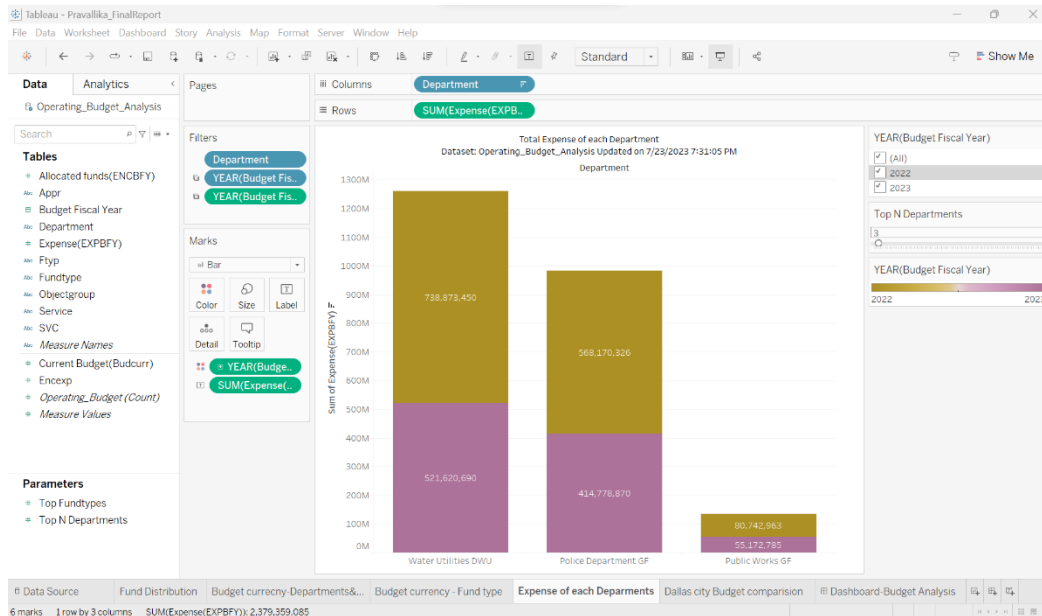
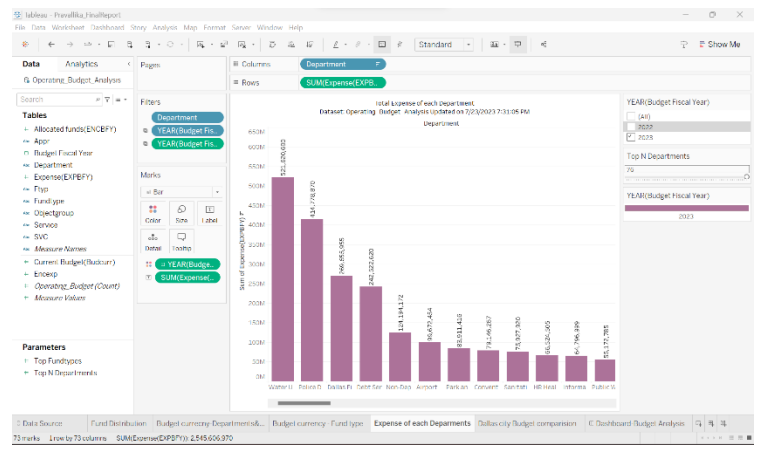
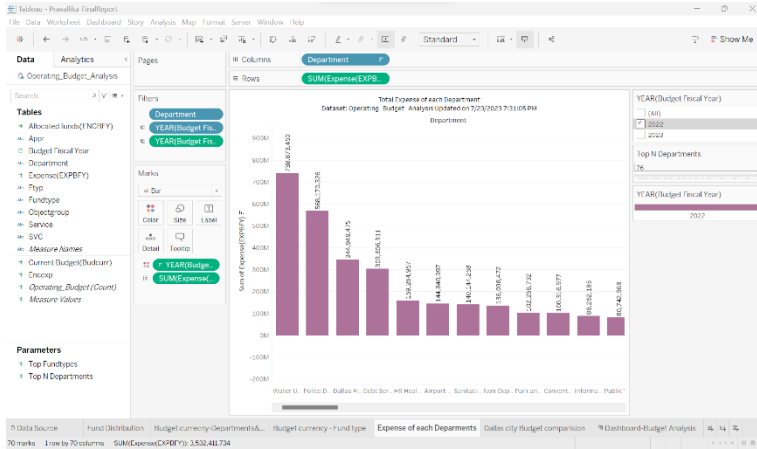
Unexpected Findings and/or Recommendations for the Fifth Question:

- In the year 2022, the "Resurfacing and Reconstruction Improvements" department has reported a negative expense of -\$1,336,925 which indicates that the department's expenditures have exceeded their budget amount.
- In the city of Dallas, the departments with the greatest budget allocations spent more money in both years.
- Based on expenditure spending as shown in Figure 11, the top 3 departments are the same for both years.

Business Insights:

- As the largest amount of budget was allotted in the year 2023, there is a significant decline in the expense amount from 2022 to 2023.
- In 2022, the Water Utilities DWU department spent the most money (\$738,873,450), followed by the Police Department GF (\$568,170,326), and Dallas Fire Rescue GF (\$344,948,475) as shown in Figure 10.

- In 2023, the Water Utilities DWU department spent the most money (\$521,620,690), followed by the Police Department GF (\$414,778,870), Dallas Fire Rescue GF (\$266,655,955), and other departments as shown in Figure 9.



DASHBOARD:

Logo Reference:

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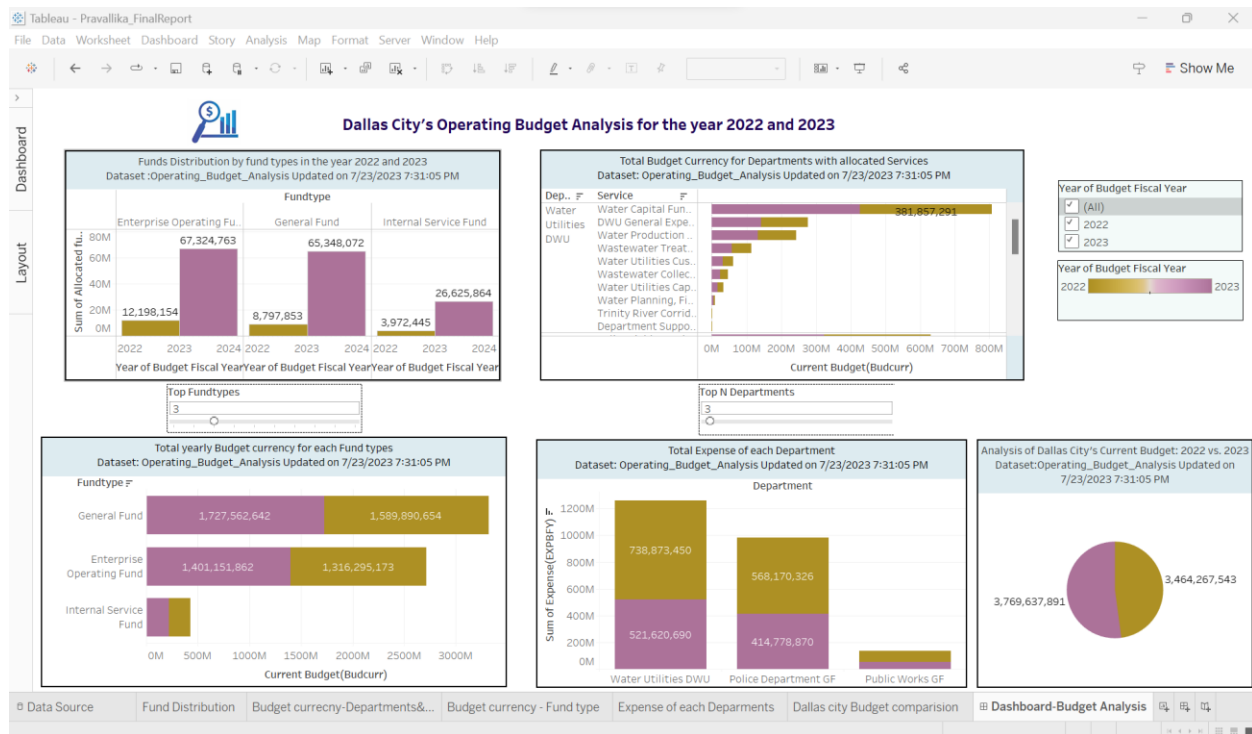


Figure 12: Dallas city Operating Budget Analysis for the year 2022 & 2023

Overall Business Insights:

- In comparison to the year 2022, the budget and funds committed to Dallas City are larger in 2023. As a result, compared to 2023, 2022 will have the highest expenses as shown in Figure 12.
- There are various departments in the city of Dallas that are operating without any funding or budget. The total budget analysis for the city has decreased because of the absence of funding for these departments. Because of this, the city's capacity to carry out necessary services and projects may be significantly impacted, which might have an influence on the standard of public services and development efforts.
- It becomes important for decision-makers to resolve the budgetary shortages and properly distribute resources to all departments going forward to maintain effective budget management and proper operations within the city.