**South St. Pete Corridors Data - Group1**

# Introduction

The primary objective of this project is to conduct a comprehensive analysis of commercial corridors within the CRA of St. Petersburg, Florida, since 2015. This analysis will examine the yearly fluctuations and general trends in property values and provide valuable insights for individuals or organizations interested in real estate development or investment in St. Petersburg. Additionally, the project aims to examine private investment across various corridors, including investment patterns over time, new building counts, total construction costs, renovated building counts, average/median construction values, and total construction values. The findings of this analysis will also highlight the allocation of private investment in different corridors, indicating which corridors have received the highest and lowest amounts of investment. Overall, this research will provide critical information that can inform important business decisions related to developing, leasing, buying, or investing in the area.

# Methodology

**Data Source:**

The data used in this project comprises building permit records for St. Petersburg city, covering the period between 2015 and 2022. The data sets were obtained directly from the data provider and are formatted in Excel. The complete document listing each column and its matching column name, which is necessary for our analysis, is also included with the data sets.

**Data Cleaning:**

To address the data-cleaning aspect of our analysis, we employed several techniques to ensure that our data was accurate and reliable. Firstly, we filtered the raw data and organized it in an Excel spreadsheet based on the corridors. We achieved this by segregating the data based on the corridor columns, allowing us to easily identify and analyze the data for each corridor.

Once the data was organized, we aggregated the data based on the value of investments. This involved summing up the total cost of construction, building renovations, and other related expenses for each corridor. By doing this, we were able to get a comprehensive view of the total investments made in each corridor over the years.

Next, we analyzed each corridor based on the value of investments. This involved comparing the total construction costs, number of new buildings, and number of building renovations for each corridor over time. Overall, our data cleaning process involved rigorous checks and analyses to ensure that the data was accurate, reliable, and free from errors.

# Results

**Data Analysis:**

Tableau was utilized for data analysis purposes in our project. For question 2, we made the strategic decision to represent the trend of private investments over time using a line graph. This approach allowed us to effectively visualize any significant changes or patterns in private investment behavior.

To address the other questions, we chose to use side-by-side charts and horizontal bar charts to present the data. This was a strategic decision, as these formats provided a clear and concise method to display comparisons between different categories or variables. The use of these allowed us to easily illustrate the differences and similarities between the various data points.

Below is the list of the research questions, their insights, and their visualizations.

**1)** **What is the total private investment amount for each corridor?**

To address question 1, we chose to use horizontal bars to effectively compare the total private investment amount for each corridor. The bars were presented in millions to provide a clear and concise representation of the data.

Based on the available data, our analysis indicates that the 34th St corridor has the highest amount of private investment, with a total of $65,510,526 followed by other corridors.

Timeline

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**2) What were the total private investment trends over time, shown annually?**

To answer question 2, we utilized line graphs to visualize and compare the total private investment trends over a span of ten years, from 2013 to 2022. The use of line graphs was a strategic decision, as it allowed us to easily observe any patterns or trends in private investment behavior over time.

Our analysis of the line graph revealed a significant increase in private investment in the year 2016, with a projected value of $93,042,313. Furthermore, we observed that the total private investment gradually decreased over the years following the peak in 2018.

Chart, line chart

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**3)What is the count of new buildings in each corridor, annually?**

To address question 3, we used side-by-side charts to compare each corridor's annual count of new buildings. Our analysis revealed that the 34th St corridor had the highest count of new buildings, with a maximum of 53 in 2015. In 2016, the Dr.MLK Jr St Corridor had the highest count with a maximum of 134 new buildings. In 2019, the Central Ave corridor had the highest count of new buildings with 126 constructions, followed closely by the 34th St corridor.

For the years 2017,2020, 2021, and 2022, the number of new constructions was significantly lower, with a count below 10.

**Chart

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**4)What were the total construction costs ($) for new buildings for each corridor, shown annually?**

To address question 4, we used side-by-side charts to compare each corridor's total construction cost for new buildings. Our analysis revealed that the 34th St corridor had the highest construction cost, with a maximum cost of $7,460,000 in 2015. In 2016, the 34th St corridor also had the highest construction cost, with a maximum cost of $23,726,414.

In 2019, the Central Ave corridor had the highest construction cost of $12,913,239, followed closely by the 34th St corridor. However, for the years 2017, 2018, and 2020, the total construction cost was significantly lower, with a cost of less than $1.5 million. Furthermore, for the years 2021 and 2022, there were no recorded construction costs, indicating a decline in new building construction during those years.

**Chart, bar chart

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**5)How** **many buildings were renovated on each corridor, shown annually?**

To answer question 5, we utilized side-by-side charts to determine the annual number of building renovations for each corridor. Our analysis revealed that the 34th St corridor had a substantial number of building renovations in both 2017 and 2018, with a total of 206 and 85 renovations, respectively. Similarly, the Central Ave corridor also experienced a notable number of renovations, with a peak of 61 in 2017.

However, our analysis also showed that all other corridors had considerably fewer renovations, with fewer than ten renovations recorded between 2015 and 2022. This data highlights that the 34th St corridor and Central Ave corridor were the most active areas in terms of building renovations during the period under review.

**Chart, bar chart

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**6)What was the annual average/median construction value ($) for building renovations for each corridor?**

To determine the annual average/median construction value for building renovations for each corridor, we used side-by-side charts to visualize the data. Our analysis revealed that the 34th St corridor had the highest construction value for building renovations in 2017, with a value of $131,705.80.

In contrast, all the other corridors had much lower values for building renovations, with none of them reaching a value of $100,000 from 2015-2022. This suggests that the 34th St corridor had a much higher level of investment in building renovations compared to the other corridors.

Chart, bar chart

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**7)What was the total construction value ($) for all renovations for each corridor, shown annually?**

To answer the question of what the total construction value was for all renovations for each corridor, we employed side-by-side charts to compare the values for each corridor. Our analysis revealed that the 34th St corridor had the highest total construction value for all renovations in 2017, with a value of $13,845,477.

In contrast, the other corridors had relatively negligible values for all renovations, with none of them crossing the $2.5 million mark from 2015-2022. This indicates that the 34th St corridor had significantly higher investments in building renovations compared to the other corridors.

**Chart

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**8)Private investment comparison ranking: Showing “ranking” of corridors by the amount of private investment (i.e., which corridors have received the most investment to the least investment)**

To compare the private investment ranking of each corridor, we analyzed the data and found that the 34th St corridor had the highest private investment ranking, with an investment value of over $65 million. This indicates that the respective corridor has received the most private investment compared to other corridors.

On the other hand, the 16th corridor had the lowest private investment ranking, with an investment value of only $127,486. This suggests that the 16th corridor has received the least amount of private investment compared to other corridors.

Our analysis enabled us to rank the corridors based on the amount of private investment they have received, from highest to lowest.

Chart, bar chart

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# Conclusions

Based on the analysis of private investment, new building constructions, building renovations, and total construction costs, the 34th St corridor appears to be the most active area for investment and development. This corridor had the highest private investment amount, the highest number of new buildings, and the highest construction costs for new buildings and building renovations. The Central Ave corridor also showed strong development potential, particularly in terms of new building constructions, with the highest number of new buildings constructed in 2019.

The Dr.MLK Jr St Corridor had the highest number of new buildings constructed in 2016 but did not have the highest construction costs for new buildings or building renovations. It had a relatively low private investment amount compared to the 34th St corridor and the Central Ave corridor. The other corridors, including the 16th corridor, had significantly lower levels of private investment, new building constructions, building renovations, and total construction costs.

Based on these findings, the project sponsor should focus on the 34th St corridor as the most active area for private investment and development. However, it is important to investigate the reasons behind the decline in new constructions and total construction costs in recent years to understand whether it is a temporary or long-term trend.

The Central Ave corridor also shows potential for development, particularly in terms of new building constructions. The sponsor should consider further investment in this corridor to take advantage of its growth potential.

For the other corridors, further analysis may be necessary to understand the reasons behind the low levels of activity and whether there are opportunities for growth in these areas. The sponsor should clarify whether there are any specific challenges or limitations to investment in these areas and explore potential strategies to overcome them. Additionally, it may be helpful to consider the broader economic and demographic trends in the region and how they could impact investment and development in each corridor.

# Link to Visualizations

**Combined visualizations for Q1-Q4:**

[**https://public.tableau.com/app/profile/dinesh.reddy7949/viz/Final\_Data\_Visualization\_11111/WholeDashBoard#3**](https://public.tableau.com/app/profile/dinesh.reddy7949/viz/Final_Data_Visualization_11111/WholeDashBoard#3)

**Combined visualizations for Q4-Q8:**

[**https://public.tableau.com/app/profile/dinesh.reddy7949/viz/Final\_Data\_Visualization\_11111/WholeDashboard5-8?publish=yes**](https://public.tableau.com/app/profile/dinesh.reddy7949/viz/Final_Data_Visualization_11111/WholeDashboard5-8?publish=yes)