
NYC REAL ESTATE CASE STUDY

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Table of Contents

Executive Summary1

Data Analysis Process2

Analysis and Findings.....2

Opportunities and Risks.....3

Recommendations4

Appendix 15

Appendix 25

Appendix 36

Appendix 46

Executive Summary

The NYC real estate market analysis, focusing on Bushwick, provides crucial insights into both local and broader market trends. Data preparation involved connecting to the SQL server and loading the NYC Real Estate dataset into Power BI, ensuring completeness and accuracy of key fields like Date, Neighborhood ID, Sale Price, and Property type. Through careful filtering and segmentation, the analysis zeroed in on Bushwick while also comparing sales data across Boroughs and property types to understand broader market dynamics.

Visualization tools in Power BI were instrumental in presenting the data effectively. Card visualizations showed Bushwick's residential sales volume at \$1.06 billion for 2021, with a significant increase to \$1.19 billion that year, alongside commercial sales totaling \$126.27 million. Comparative analyses through bar and clustered column charts highlight the dominance of residential sales in Manhattan and Brooklyn, with Manhattan leading at \$64 billion and Brooklyn showing \$51 billion in residential sales. These visualizations underscore Bushwick's market trends and its position within the larger NYC real estate landscape.

Bushwick's strong residential sales contribute significantly to Brooklyn's overall market, yet it ranks 7th in sales volume among Brooklyn neighborhoods over the past five years. This ranking points to both opportunities and risks. Investment opportunities in Bushwick arise from Brooklyn's robust market and potential property value appreciation, but local socio-economic factors and inflation pose risks. Stakeholders should consider other Brooklyn neighborhoods, such as Bedford, Borough Park, Crown Heights, Fort Green, and Brooklyn Heights, which significantly influence Bushwick's market. Understanding these broader trends and neighborhood-specific nuances is essential for making informed investment decisions and maximizing returns in NYC's real estate market.

Data Analysis Process

Data Preparation:

Data Preparation involved establishing a connection with the SQL server and loading the NYC Real Estate dataset into Power BI. Key fields such as Date, Neighborhood_ID, Sale_Price, and Property type were inspected for completeness to ensure the accuracy and reliability of the subsequent analysis.

Filtering and Segmentation:

Filtering and Segmentation involved initially focusing the data analysis on Bushwick by filtering relevant data for this neighborhood. Additionally, sales data was segregated by Borough and property type to gain a comprehensive understanding of broader market trends across New York City.

Visualization Creation:

A card visualization was created to represent the total volume of residential sales in Bushwick for the year 2021, accompanied by a line chart to visualize market trends over the five-year period from 2017 to 2021. Additionally, a card visualization depicted the total volume of commercial, mixed, and other property types sold in Bushwick in 2021, as well as a line chart illustrating commercial property sales trends from 2017 to 2021 (*Appendix 1*). To showcase the total revenue of the real estate company in Bushwick for 2021, a calculated column of Revenue was created in the data table considering the 5% commission and market share of 12.5% a card chart was also made (*Appendix 2*).

To provide broader market insights, a bar chart was created to compare boroughs and property types with sale volumes from 2017 to 2021 (*Appendix 3*). Furthermore, a clustered column chart was developed to compare the property sales volume between different neighborhoods within the Brooklyn borough over the same period (*Appendix 4*). These visualizations collectively offer a comprehensive view of the real estate market dynamics in Bushwick and its comparison with other boroughs and neighborhoods.

Analysis and Findings:

Bushwick Neighborhood Analysis

In 2021, Bushwick had a total residential sales volume of 1.06 billion, as shown in the card visualization (*Appendix 1*). The market trend line chart (*Appendix 1*) highlights that Bushwick's residential sales volume fluctuated over the past five years, with a significant increase to 1.19 billion in 2021. Additionally, the total sales volume for commercial, mixed, and other property types in Bushwick was 126.27 million in 2021 (*Appendix 1*). The commercial property sales trend line chart (*Appendix 1*) demonstrates peaks in 2018 (97 million) and 2020 (96 million), with a

decline to 57 million in 2021. The total revenue of real estate company in Bushwick in 2021 is 6.61 million (*appendix 2*).

Borough-Specific Trends

Borough-specific trends reveal Manhattan's dominance, particularly in residential sales (likely due to high demand and premium pricing), with a total sales volume of \$64 billion (Appendix 3). Brooklyn boasts a robust and diverse market with strong showings in both residential (\$51 billion) and commercial (\$17 billion) sectors. The Bronx demonstrates steady demand with considerable residential sales (\$22 billion). Queens exhibits a solid residential market (\$14 billion), though smaller compared to the leading boroughs. Staten Island has the lowest overall sales volume (\$15 billion), suggesting a smaller market size, but the data doesn't necessarily reflect the number of properties sold or average sales prices.

Overall Market Trends

The broader market visualization (Appendix 3) indicates that residential properties have the highest sales volumes across all boroughs. Manhattan leads with 98 billion in residential sales, followed by Brooklyn with 51 billion. These trends emphasize the dominance of residential sales in the overall NYC real estate market.

Market Comparison and Assessment:

Bushwick's residential sales contribute to Brooklyn's strong performance in the residential sector, though it ranks 7th with 2.6 billion in sales volume in the past 5 years among other neighborhoods in Brooklyn such as Bedford, Borough Park, Crown Heights, Fort Green, and Brooklyn Heights (*Appendix 4*).

Opportunities and Risks:

Opportunities:

Bushwick presents significant investment opportunities due to Brooklyn's robust market. The neighborhood benefits from sustained demand and potential property value appreciation.

Risks:

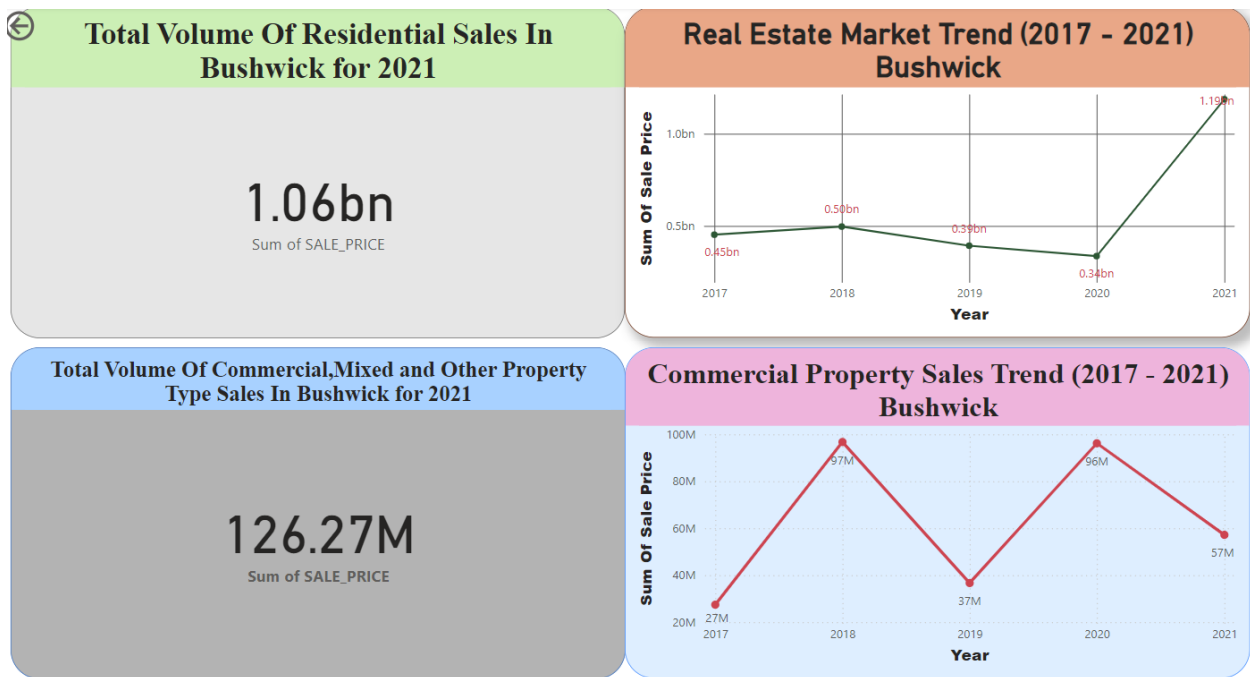
The neighborhoods such as Bedford, Borough Park, Crown Heights, Fort Green, and Brooklyn Heights, (*Appendix 4*) which significantly influence Bushwick's market poses significant risk. Additionally, Local factors such as socio-economic shifts, development projects, and inflation could impact future sales volumes. While the broader market's health suggests limited risk.

Recommendations:

The residential real estate market in NYC is dominated by Manhattan and Brooklyn, indicating high demand and robust investment opportunities. Bushwick, as part of Brooklyn, shares this positive market trajectory, presenting significant opportunities for stakeholders of real Estate companies.

However, stakeholders should also consider the other neighborhood options in Brooklyn such as Bedford, Borough Park, Crown Heights, Fort Green, and Brooklyn Heights which influence Bushwick's market substantially more than Bushwick. Understanding these nuances is crucial for making informed investment decisions and maximizing returns. The visualizations and analysis highlight the importance of considering both broader market trends and neighborhood-specific factors in real estate investment strategies.

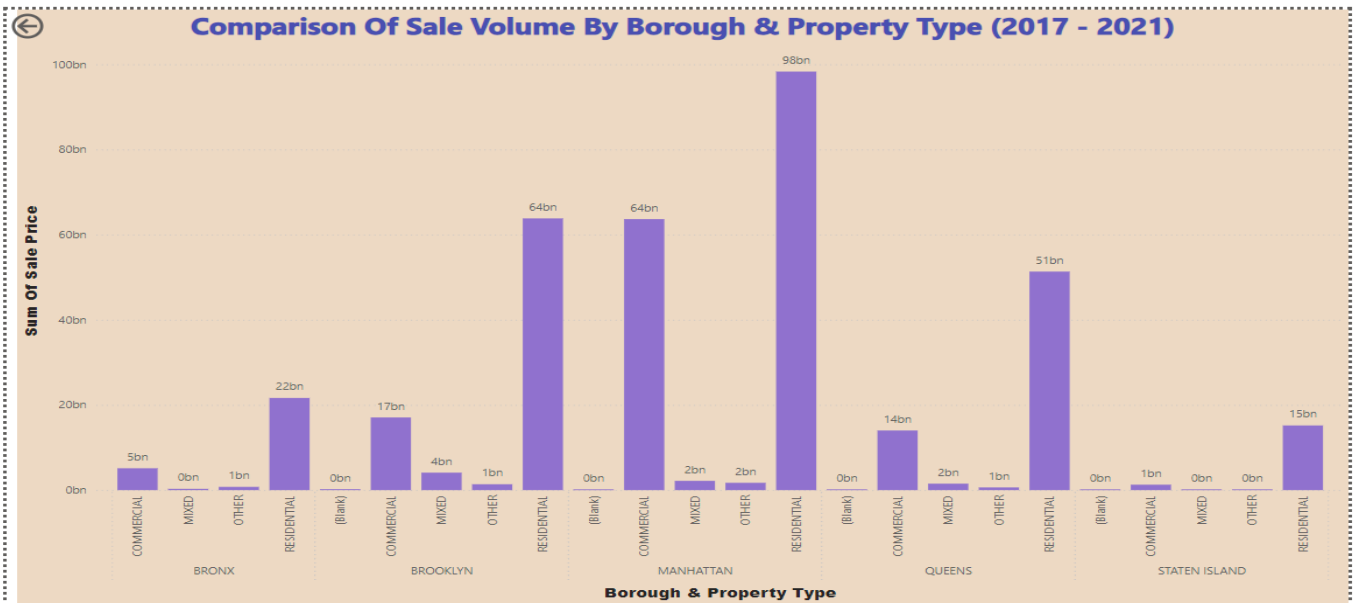
Appendix 1:



Appendix 2:



Appendix 3:



Appendix 4:

