Nearby Facilities and their Impact on New York Housing Prices

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Agenda

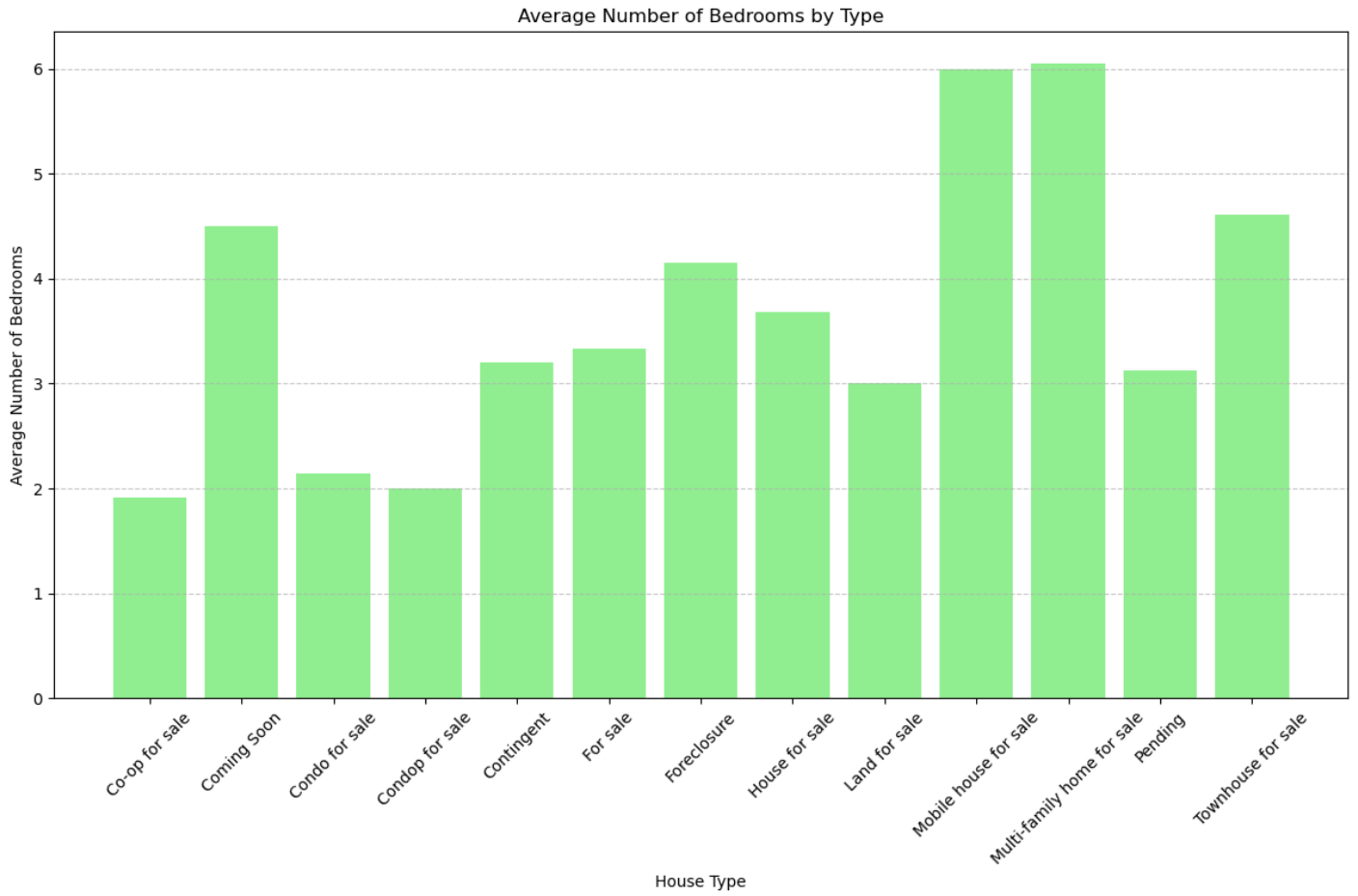
- Introduction
- Visualizations
  - Bar Graphs of Average Housing Commonalities
  - Pie Chart of Types of Properties
  - Map and Box Plot of Co-op's in New York
  - Map of Properties by Type and Houses for Sale by Sub-locality
  - Linear Regressions
- Conclusions
- References

Introduction

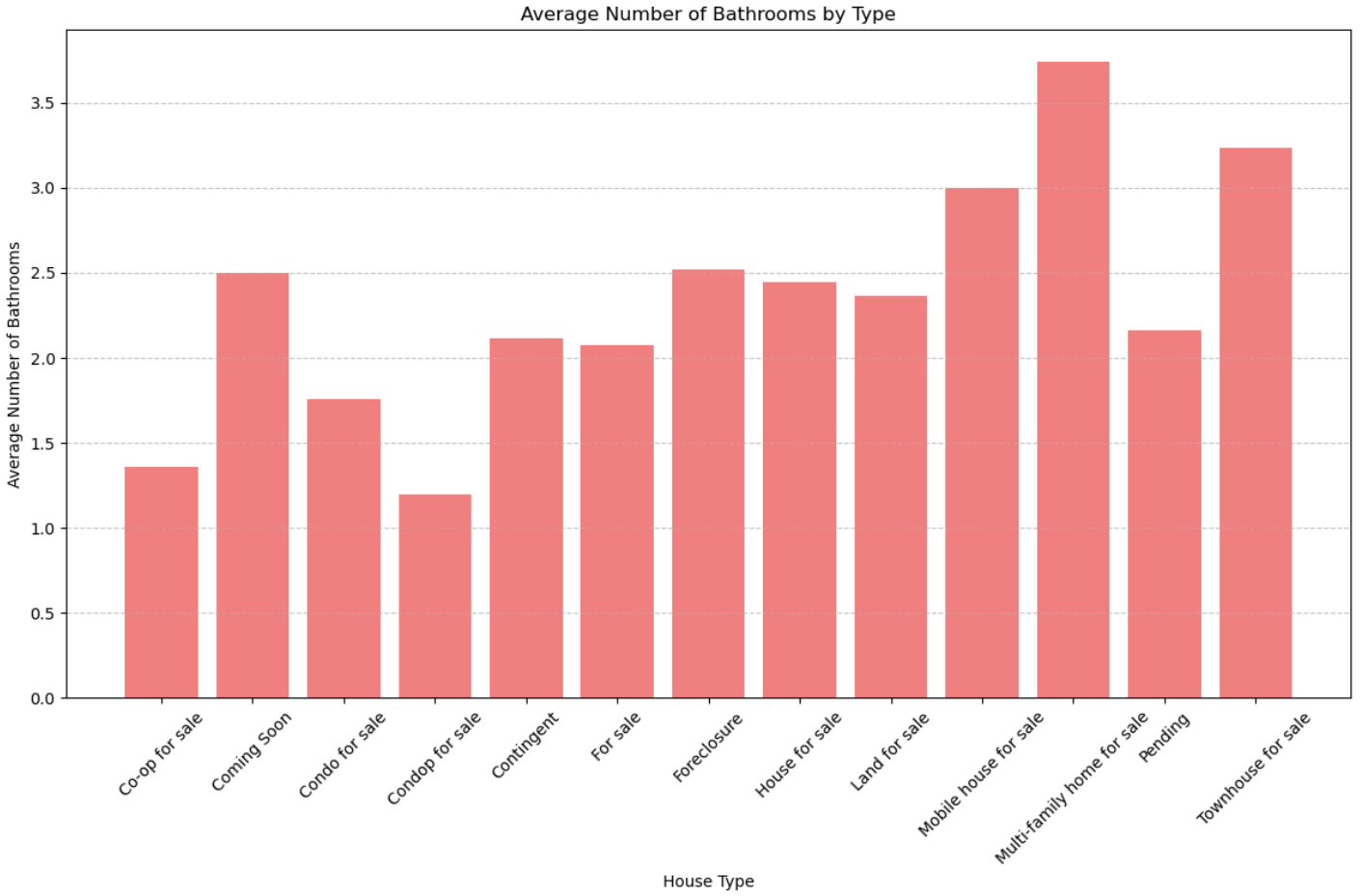
- Are the housing prices in New York affected by nearby services in the area?
  - Schools
  - Hospitals
  - Supermarkets
- What commonalities in housing preferences are there in New York?
  - Square Footage
  - Bedrooms
  - Baths
  - Price

Average Housing Commonality Bar Graphs by Type

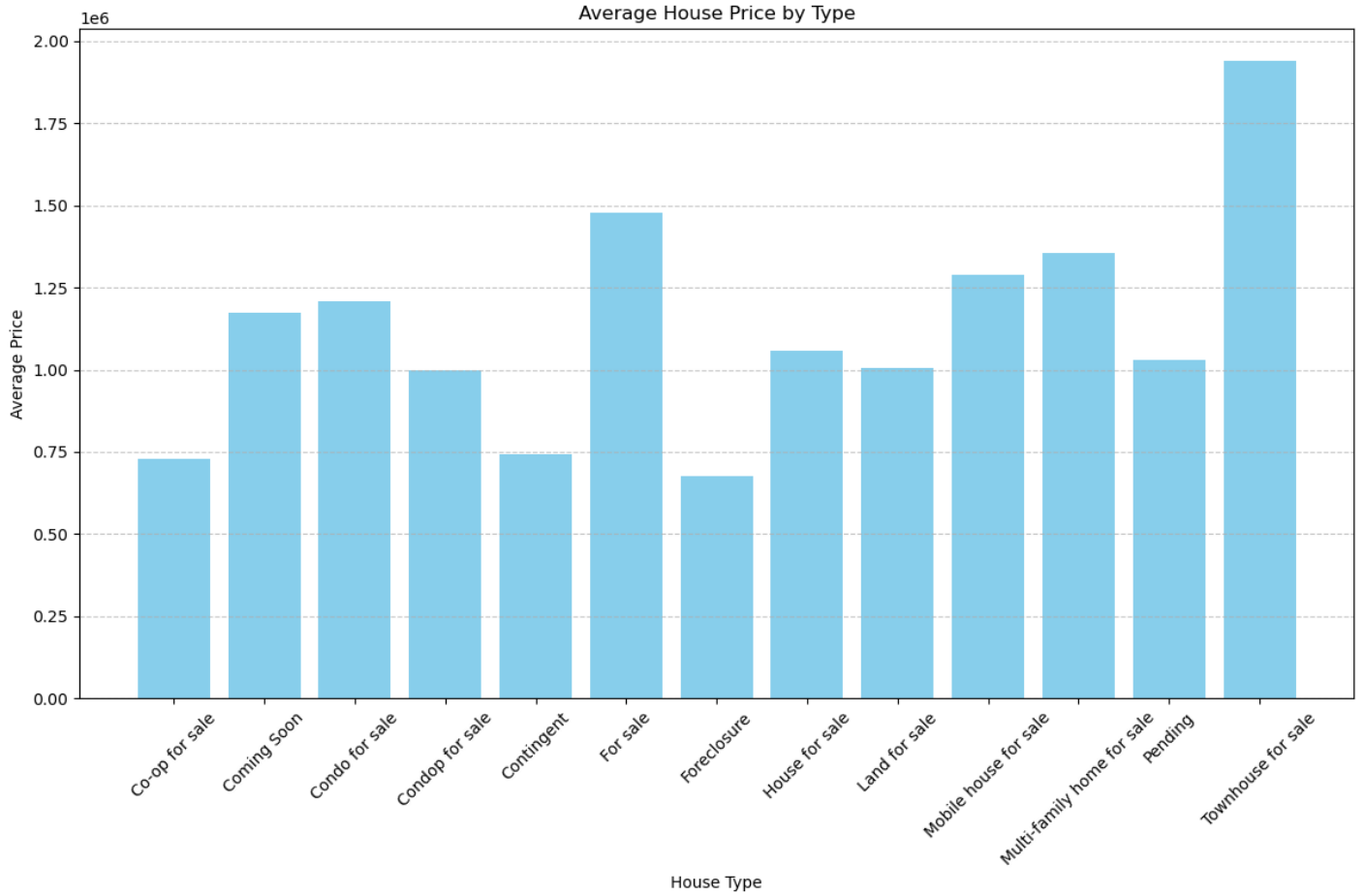
Average Bedrooms per Type of Home



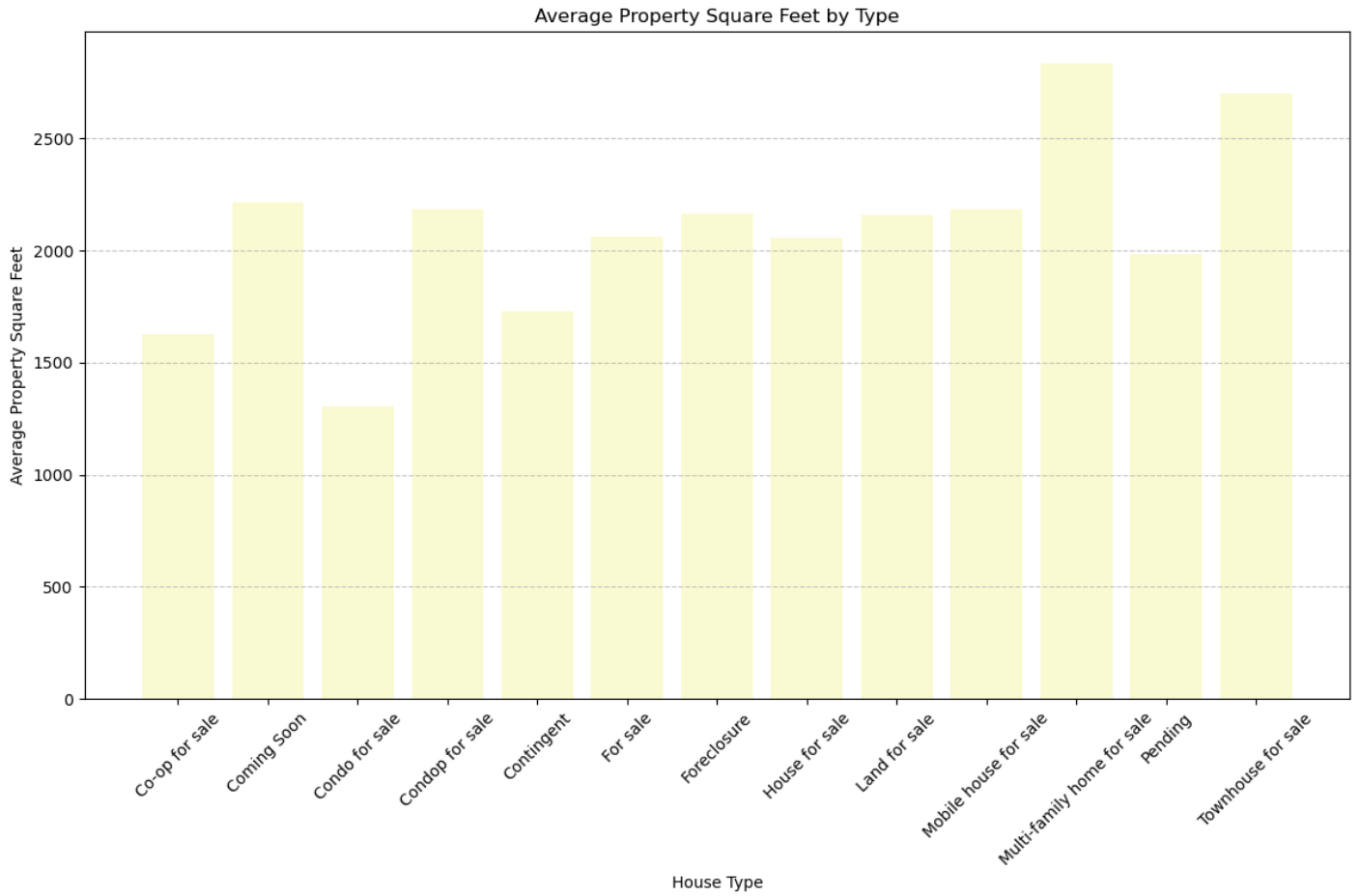
Average Bathrooms per Type of Home



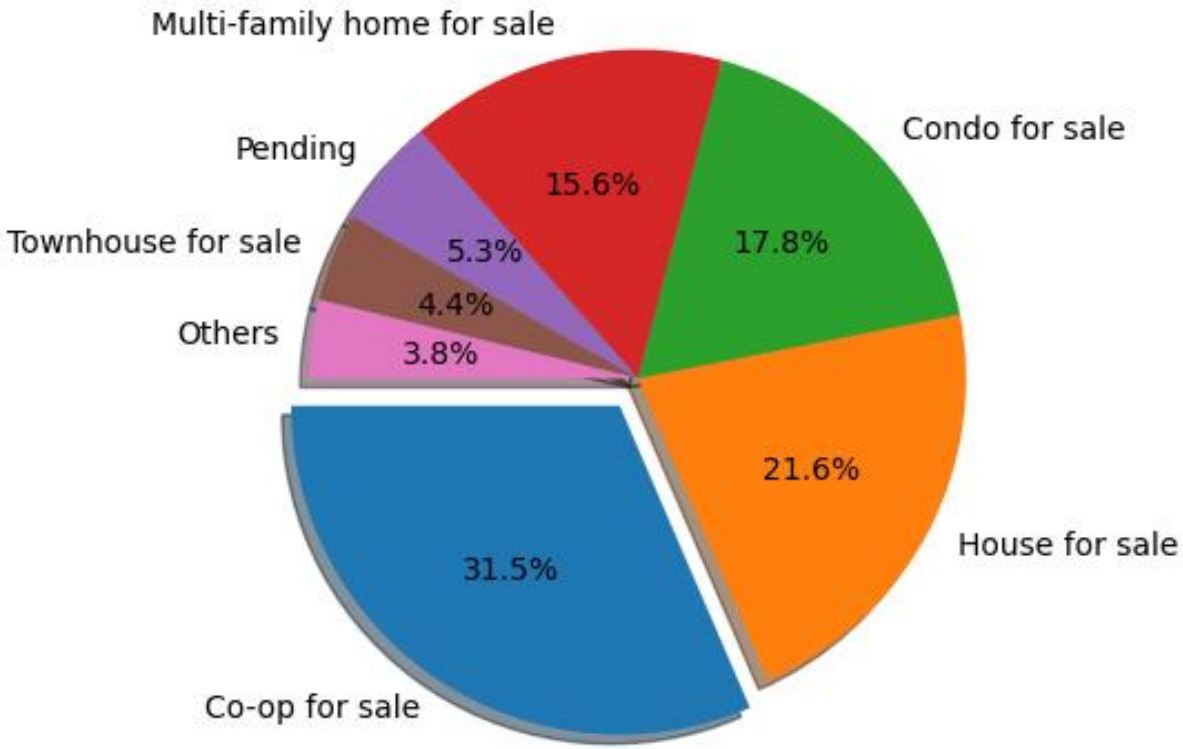
Average Price per Type of Home



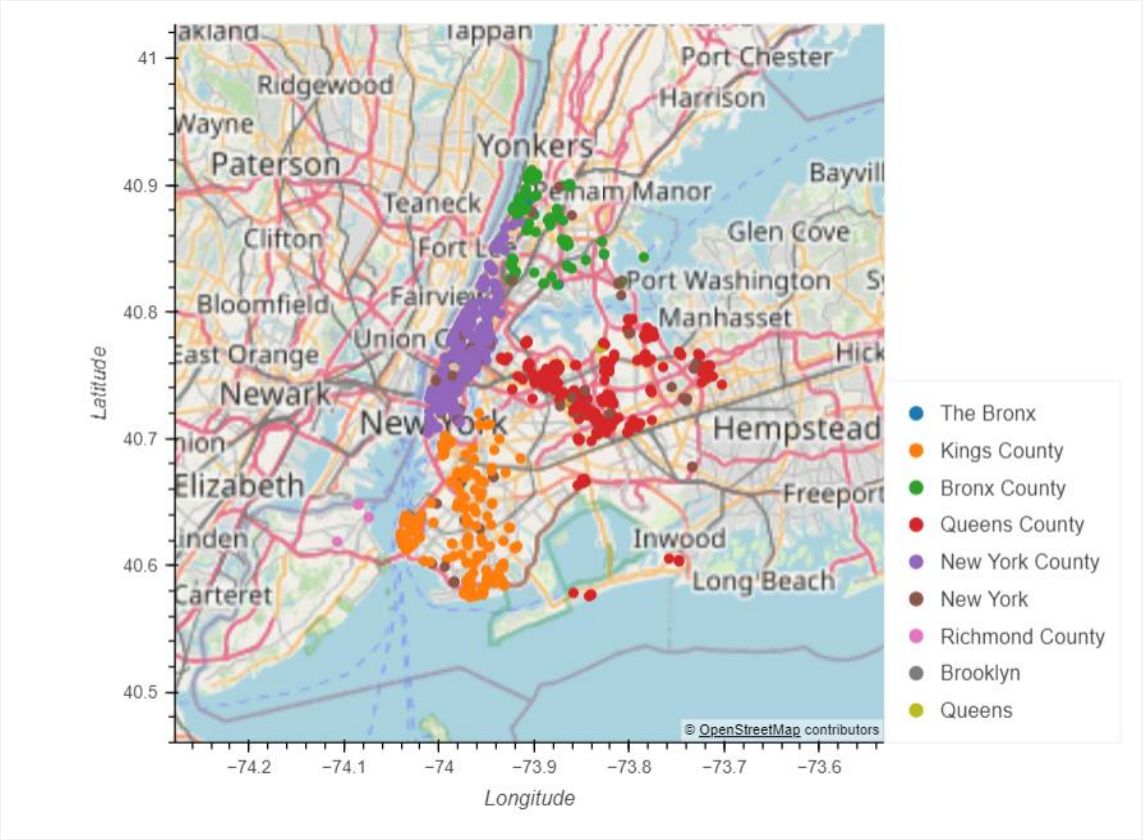
Average Property Sq. Ft. per Type of Home



Types of Properties

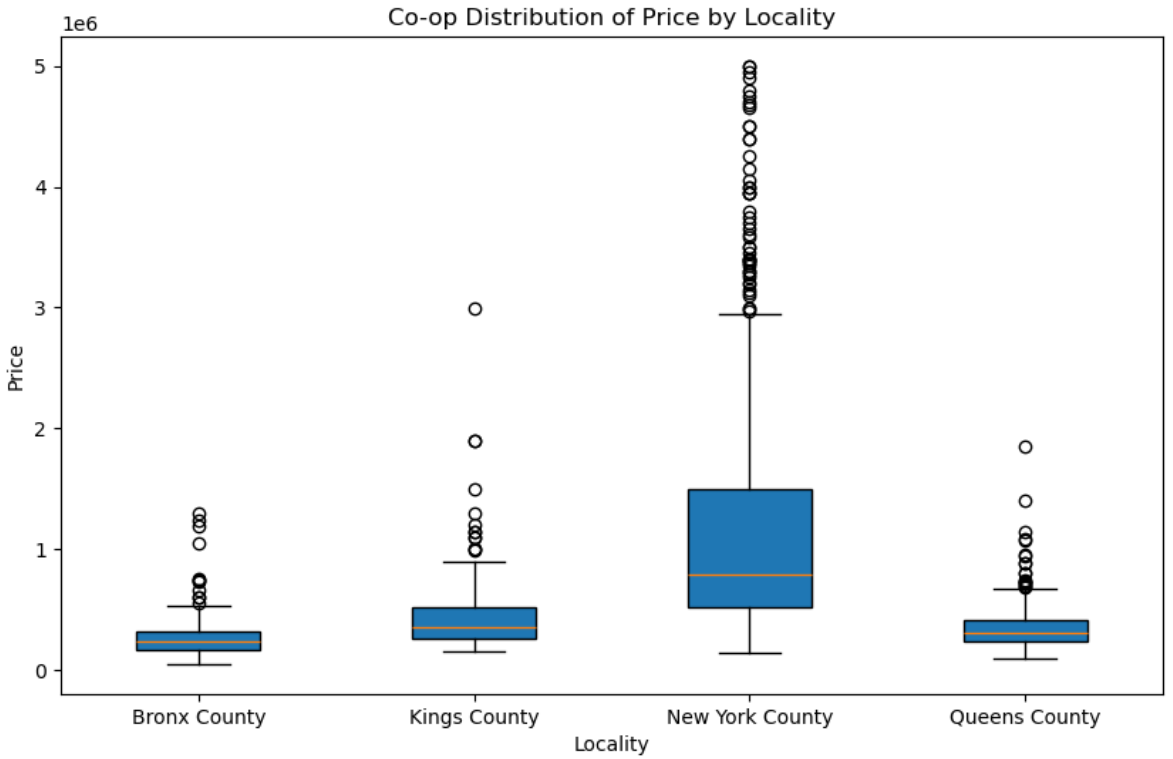


All Co-Ops Properties in New York Area

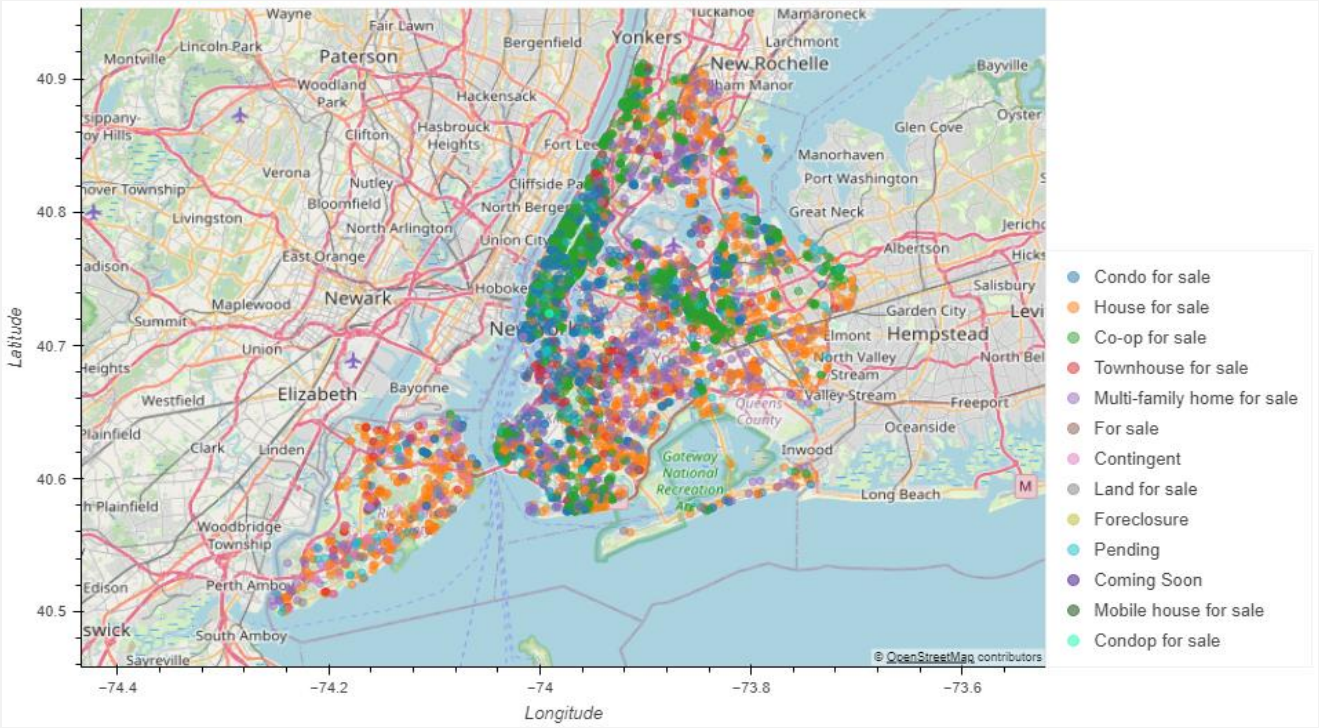


https://github.com/LizHepler/Project_1/blob/main/output/AllCoOps.html

Box Plots of Co-Ops

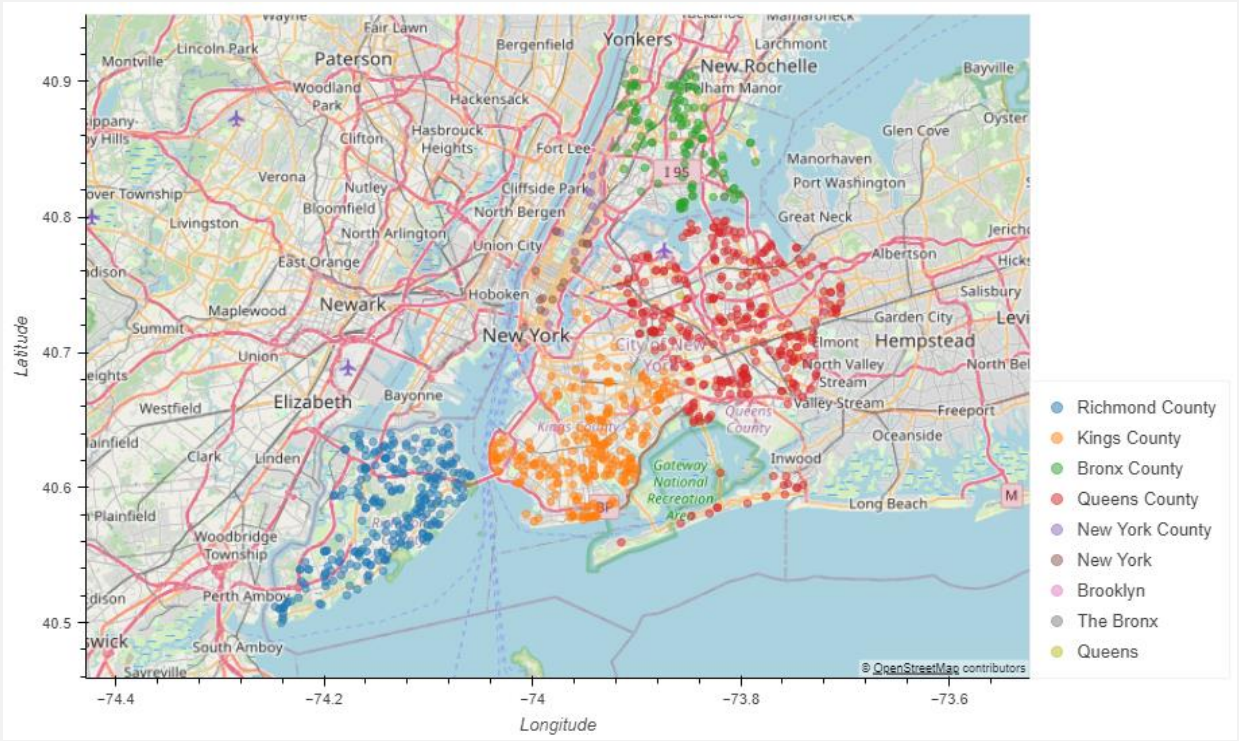


All Properties by Types



https://github.com/LizHepler/Project_1/blob/main/output/AllTypes.html

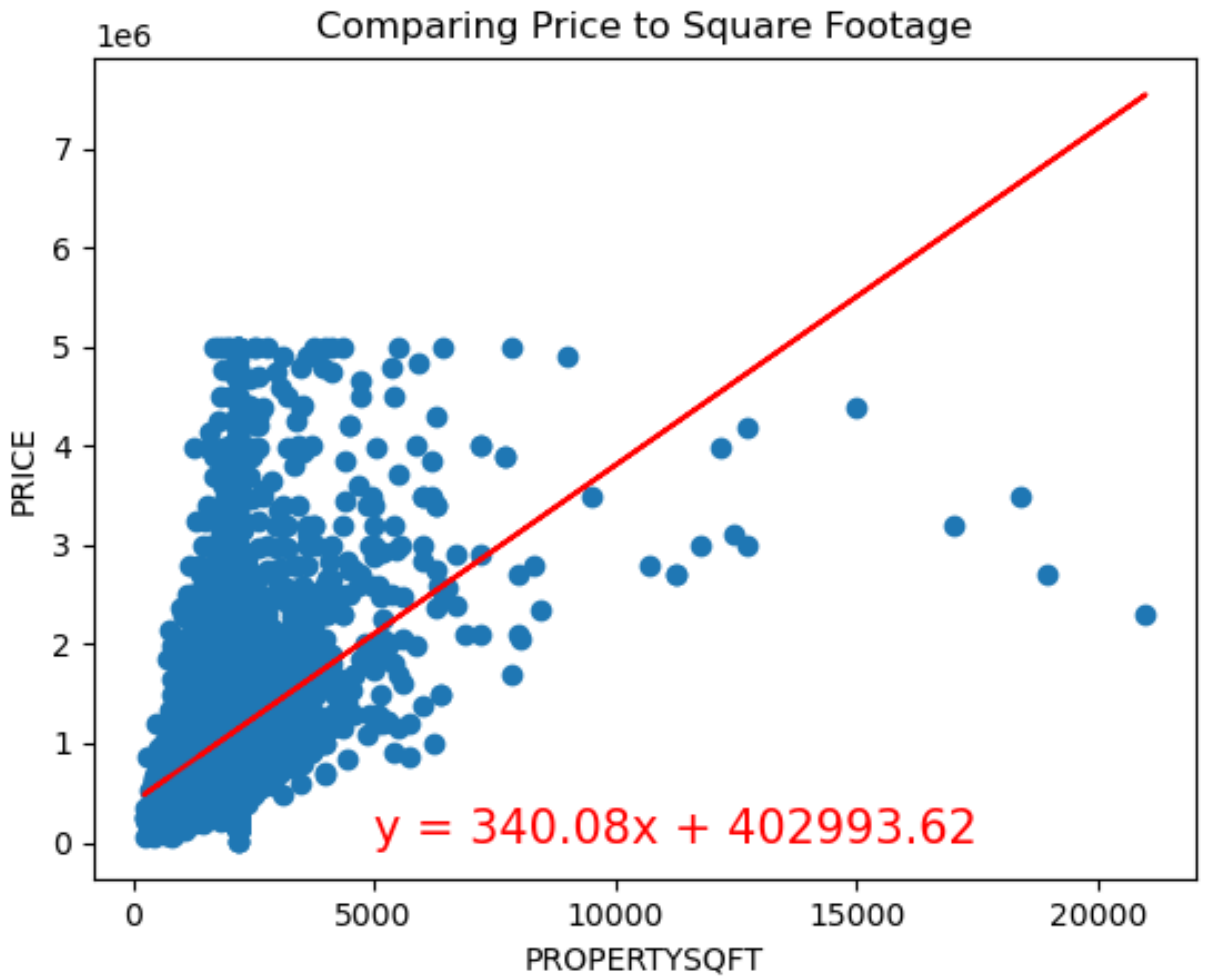
Houses for Sale by Sub-locality



https://github.com/LizHepler/Project_1/blob/main/output/AllHouses.html

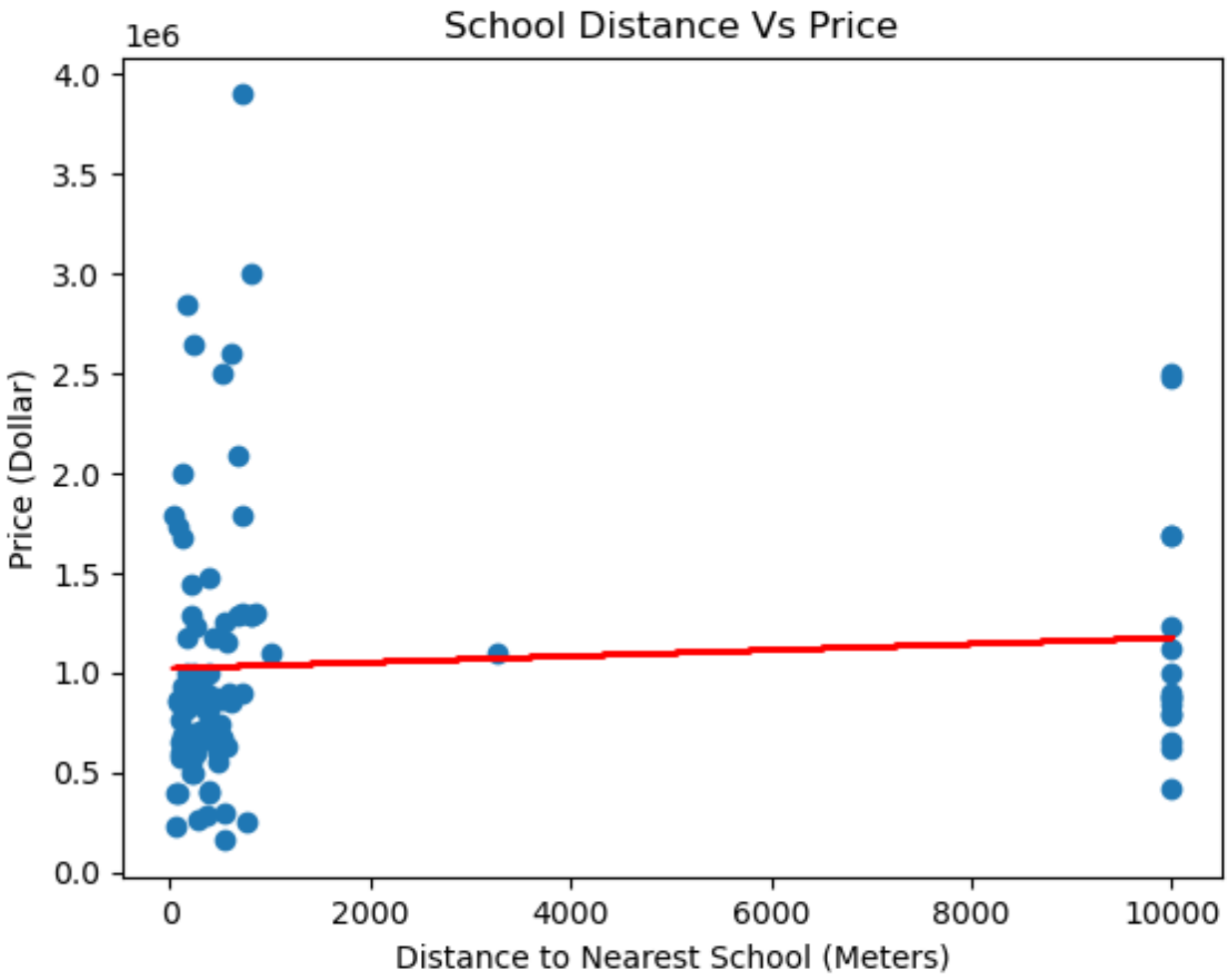
Comparing Price to Square Footage

R-Square = 0.20102486344432638



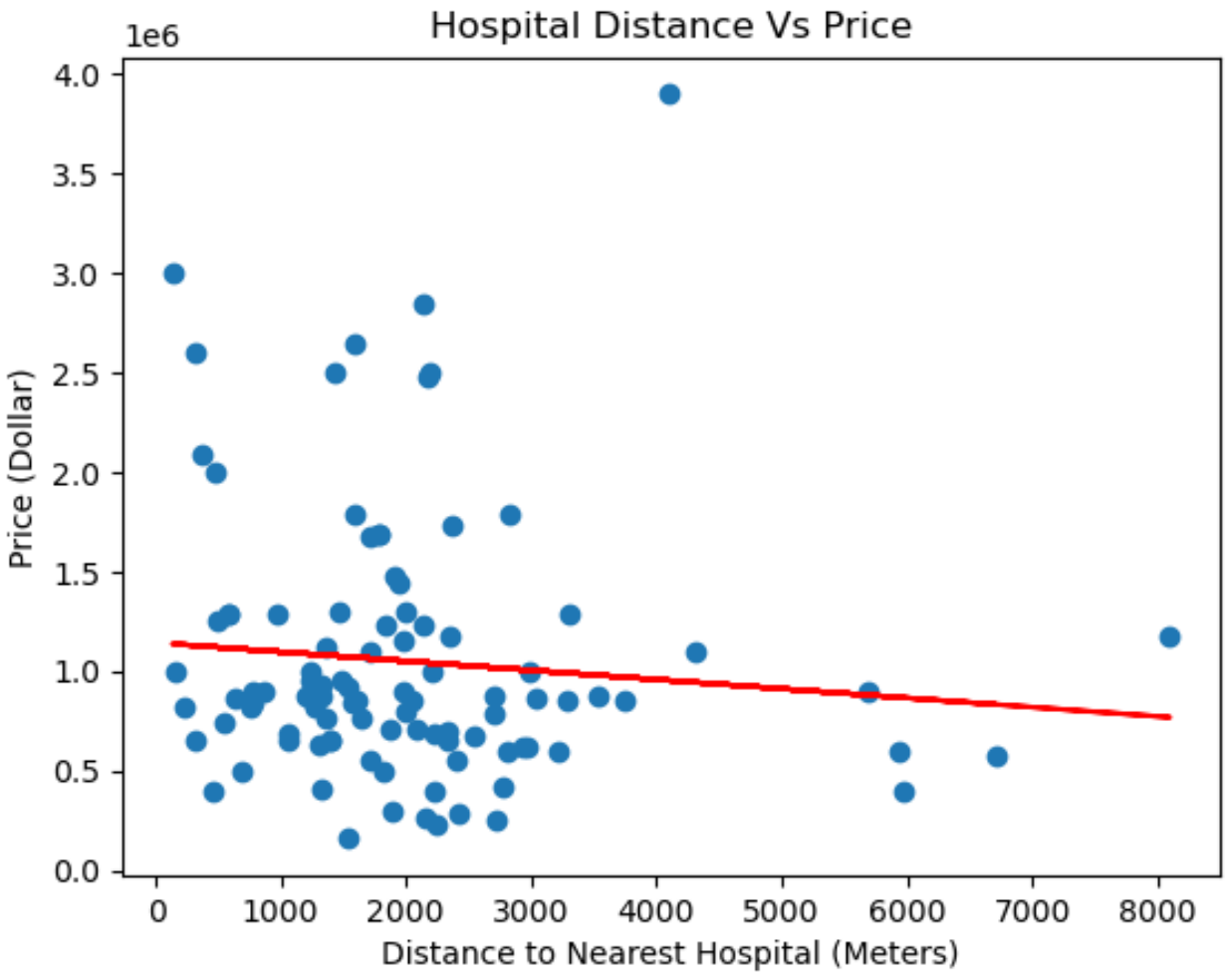
School Distance VS Price

R-Square = 0.0067638071791547 5



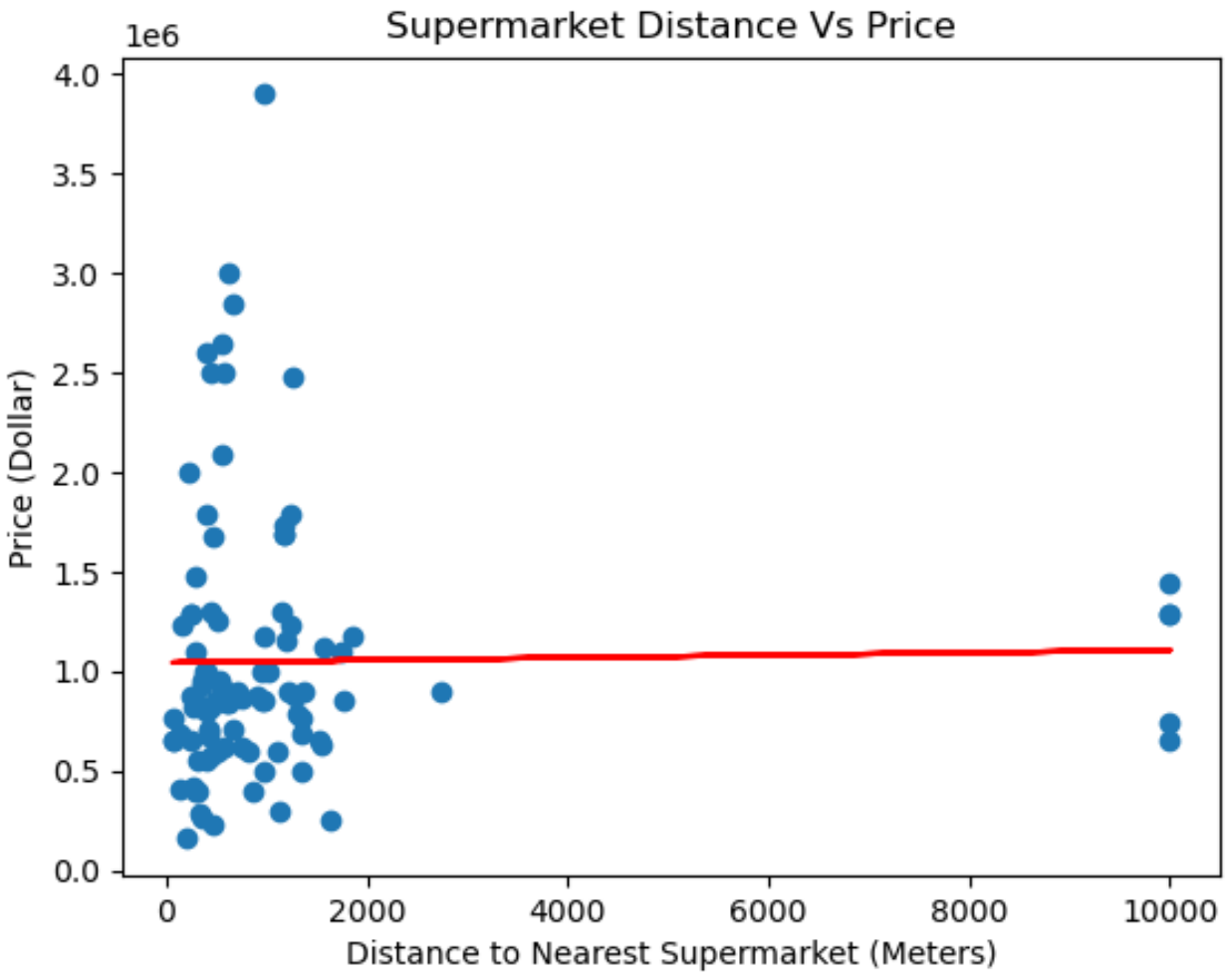
Hospital Distance VS Price

R-Square = 0.0092442052858007



Supermarkets Distance VS Price

R-Square = 0.00039595816767380715



Conclusion

- The analysis indicates that square footage significantly impacts the price, demonstrating a clear positive relationship between the two variables.
- The analysis suggests that the distance to nearby services does not have a significant impact on price, indicating no clear relationship between these factors.

- Townhomes with larger square footage tend to be the most expensive.
- The two house types with the highest number of bedrooms are mobile homes and multi-family homes for sale.

References

- Kaggle ‘New York Housing Market’ Dataset
- Geoapify API