

A low-angle, upward-looking photograph of several modern skyscrapers with glass facades, reaching towards a bright blue sky with scattered white clouds. The perspective creates a sense of height and urban density.

Effect of Neighborhoods on Housing Pricing in City of Los Angeles

Arvin Zarookian

June 2020

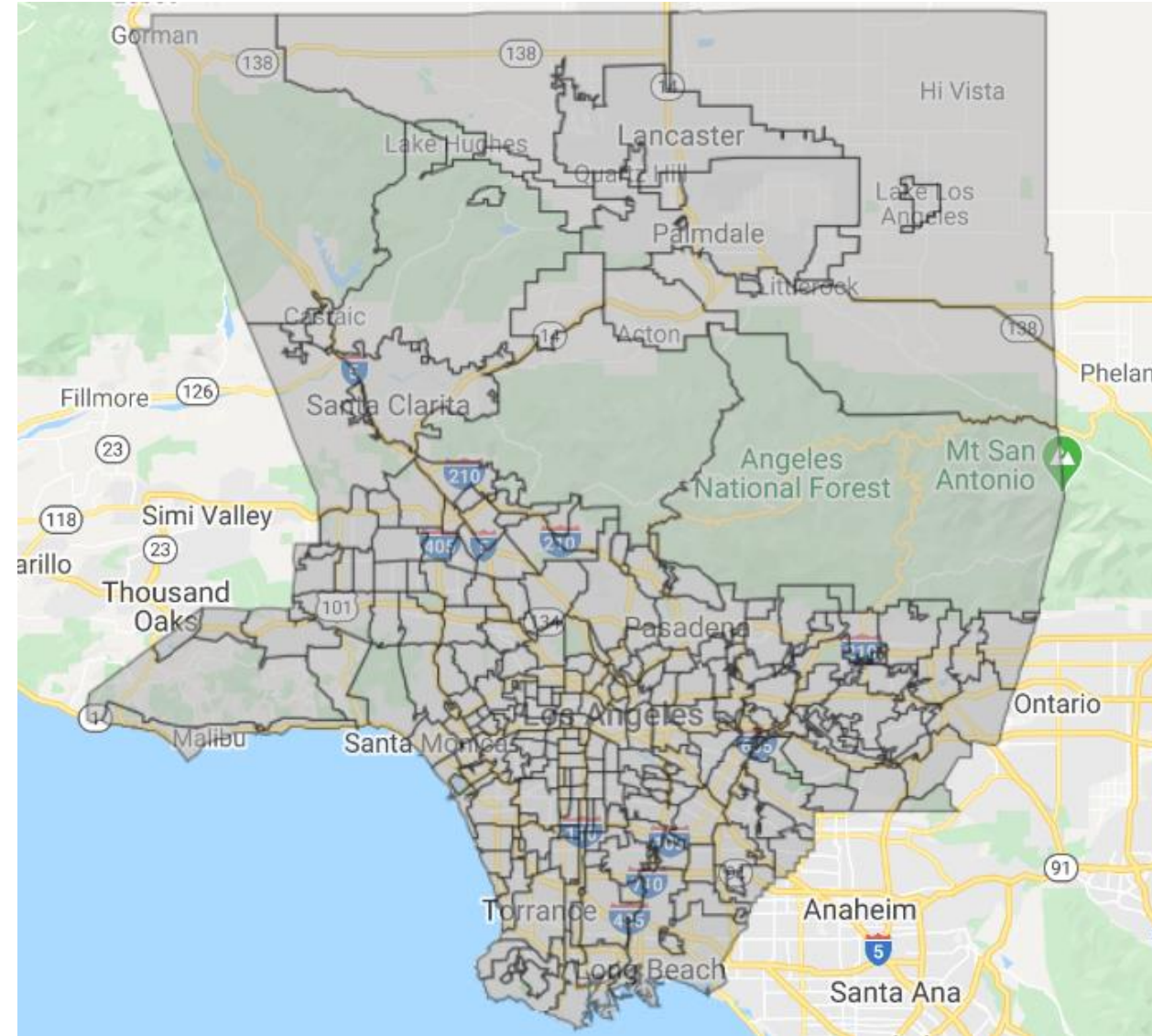
Introduction:

City Los Angeles in a glance:

- Near four million population
- 1.5 million housing units at an average density of 2,812.8 households per square mile,
- 38.2% owner-occupied vs 61.8%) rented-occupied

Los Angeles Housing Market:

- Many homes get multiple offers
- Homes sold for around list price in 43 days
- Hot Homes can be sold up to 3% above list price in 21 days



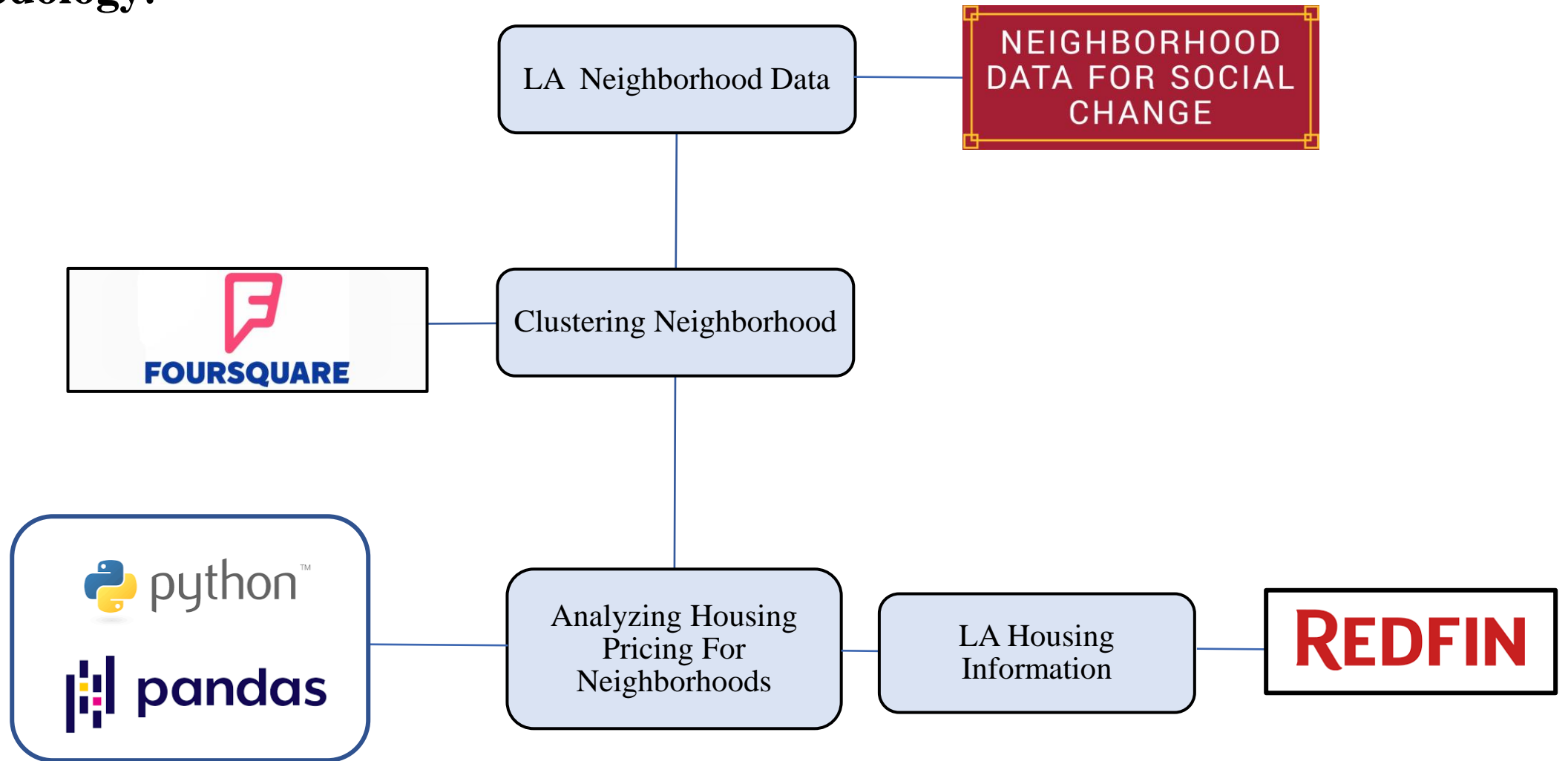
Problem:

- Evaluating housing price is very important
- Different factors such as housing type (single family residential, condo or townhouse), neighborhood, property square footage, number of beds and baths, etc.... will effect on housing pricing.
- While evaluating each of mentioned factors requires a separate study, here we will focus on how housing price is related to its neighborhood. The goal is to answer this question

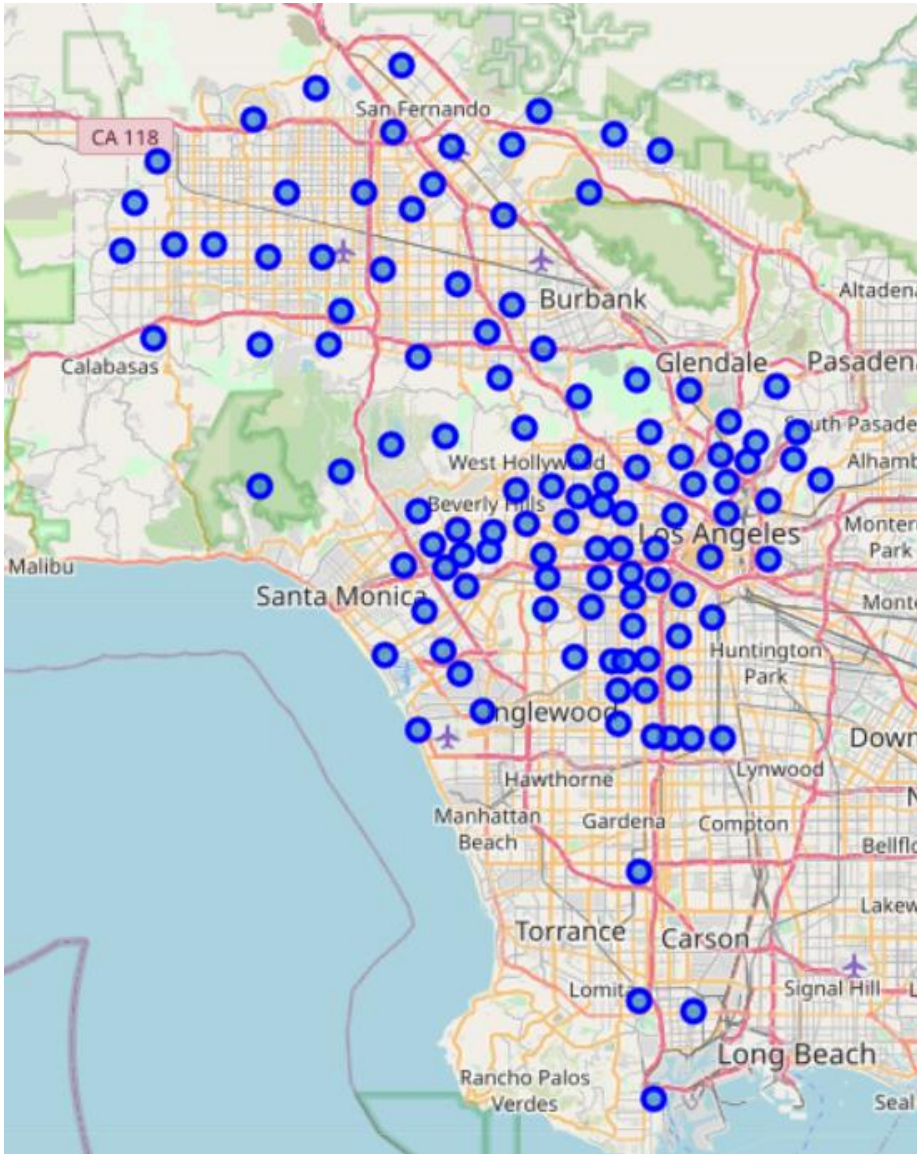


“Do similar neighborhoods have same average selling price per square footage?”

Methodology:

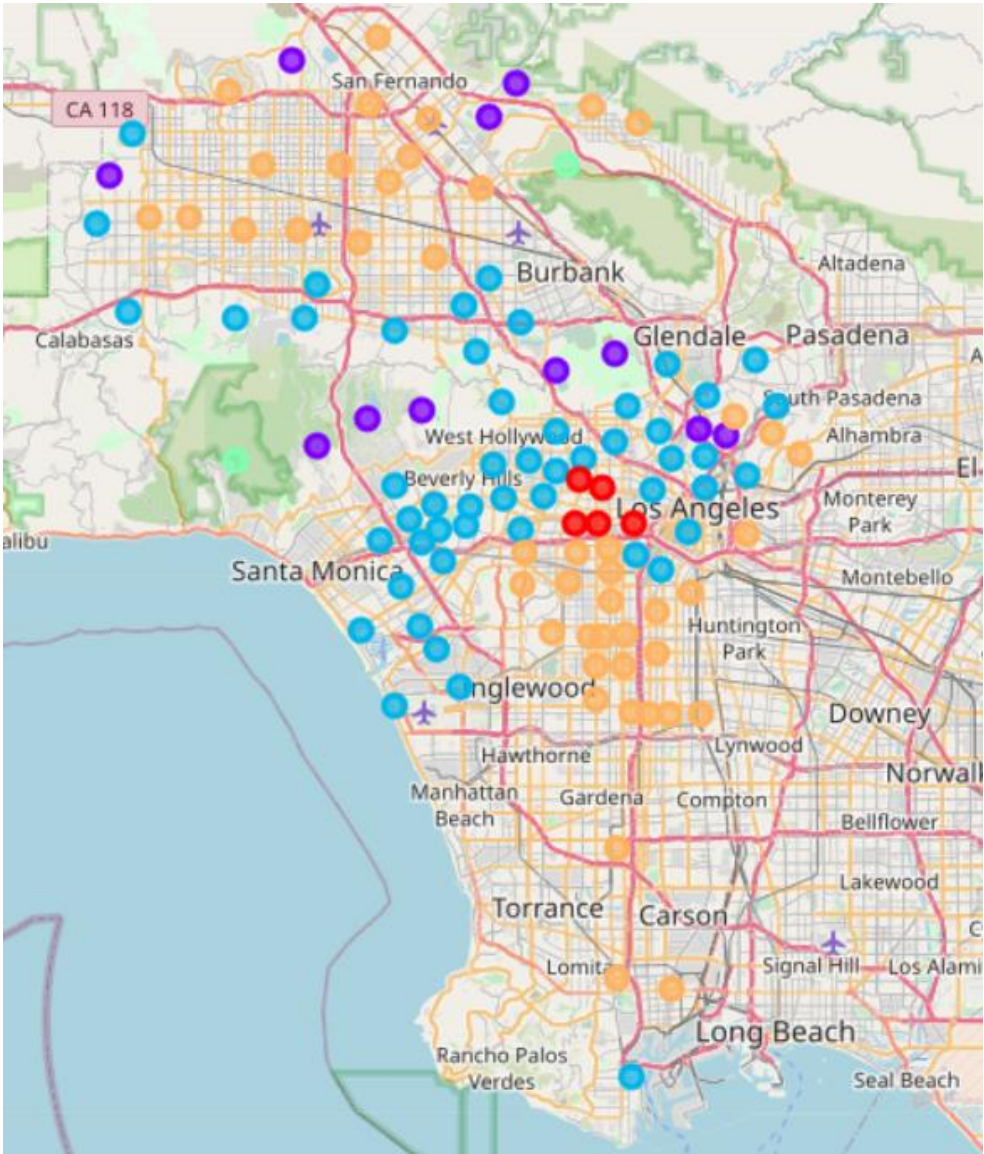


LA Neighborhoods:



Before Clustering

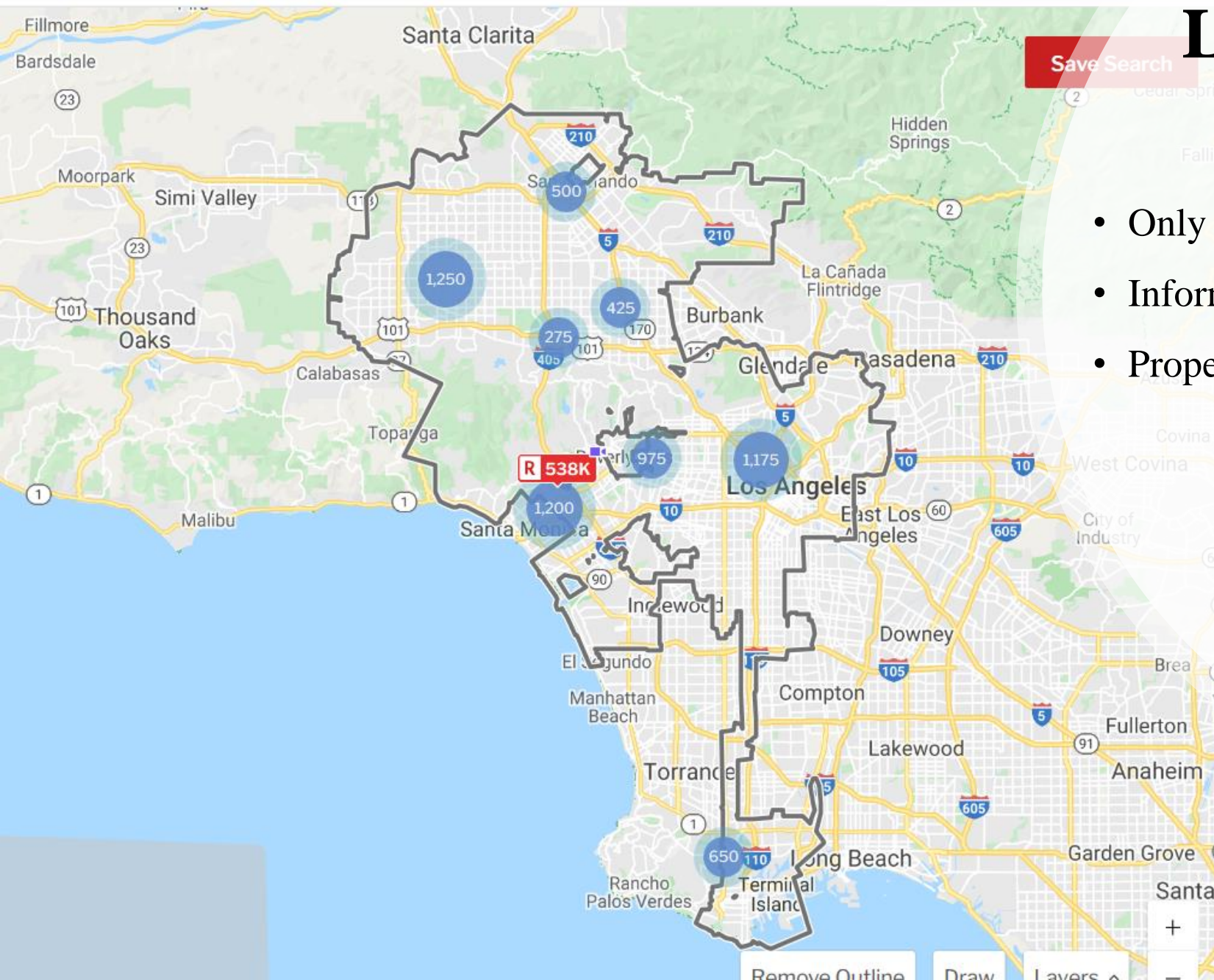
(Total 114 Neighborhood)



After Clustering, k=5

LA Housing Prices:

- Only Properties sold in last one year
- Information only for condos and town homes
- Properties up to 2,000 square-feet.



Price No min ▾ to No max ▾

Showing 20 of 8450 Homes • Condo, townhouse, 0-2k-sqft, sold 1yr

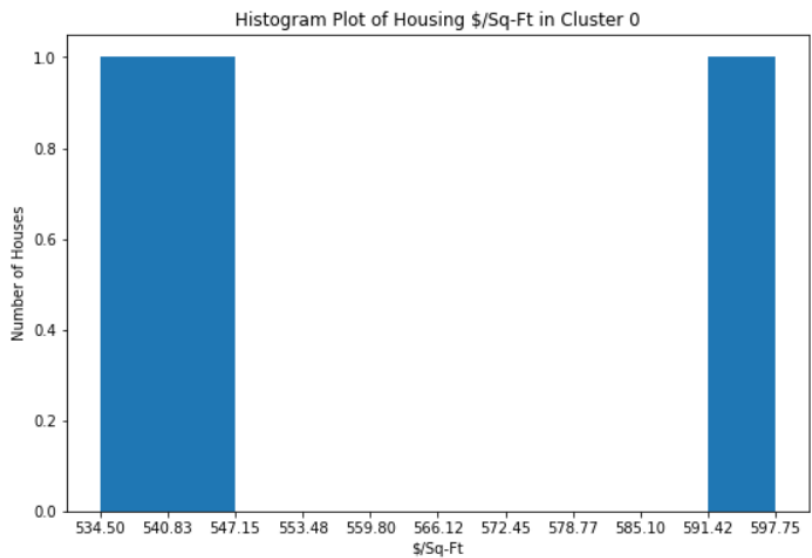
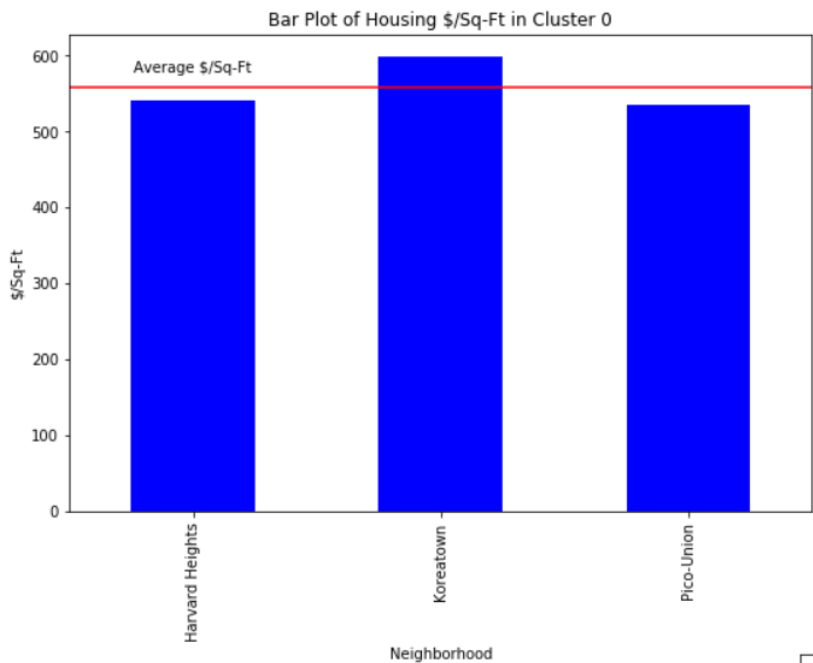
\$538,000

1154 S Barrington Ave #...
Los Angeles, CA 90049

1 Bed | 1 Baths | 709 Sq. Ft.

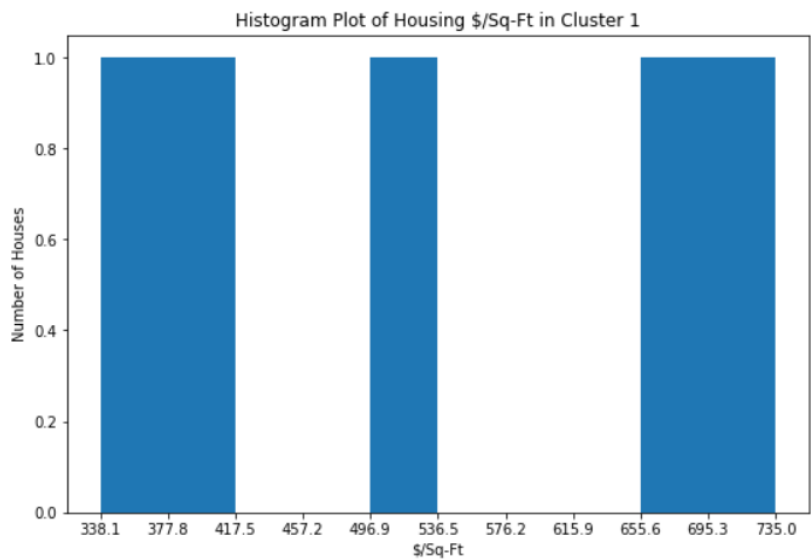
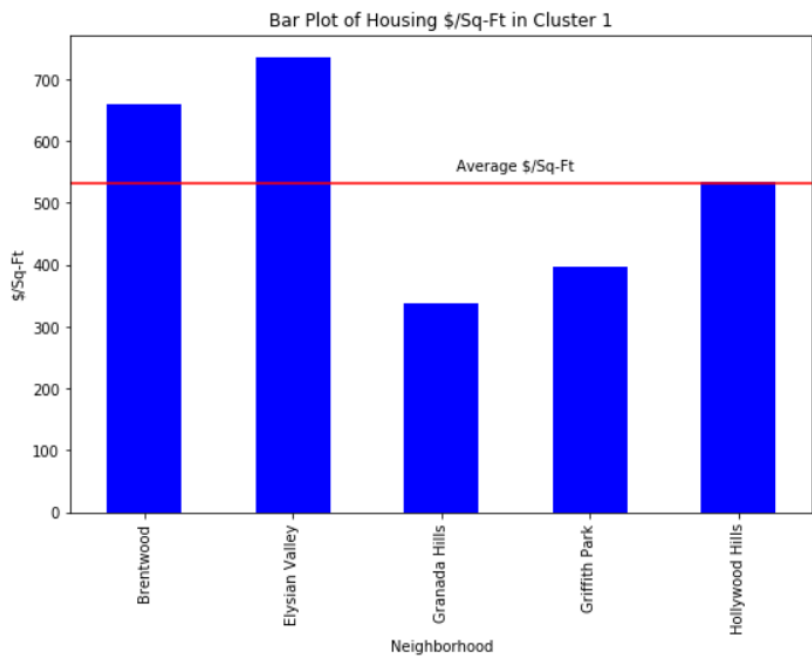
| Address | Location | Price | Beds | Baths |
|----------------------|------------------|-----------|------|-------|
| R 1154 S Barringt... | Brentwood | \$538,000 | 1 | 1 |
| R 1155 S Grand A... | C42 - Downt... | \$910,000 | 2 | 2 |
| R 18550 Hattera... | TAR - Tarzana | \$473,000 | 2 | 2.5 |
| R 5457 Hermitag... | VVL - Valley ... | \$549,000 | 2 | 3 |

Results:

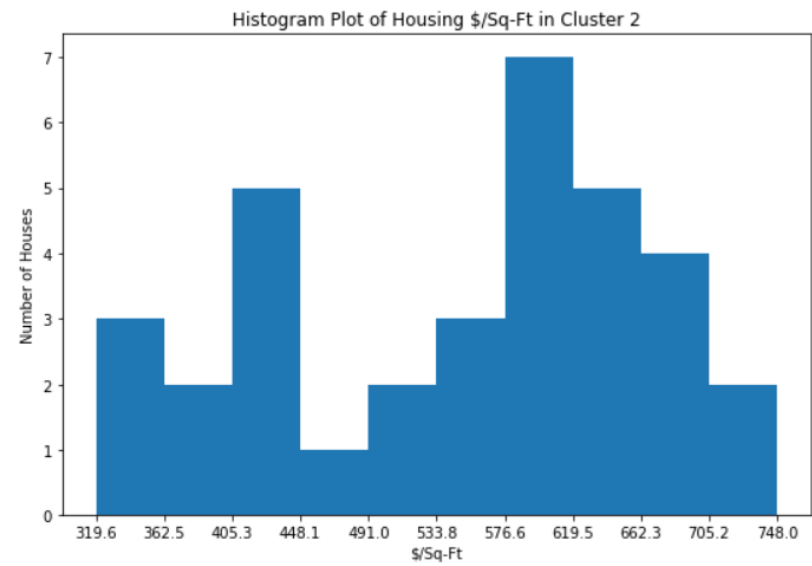
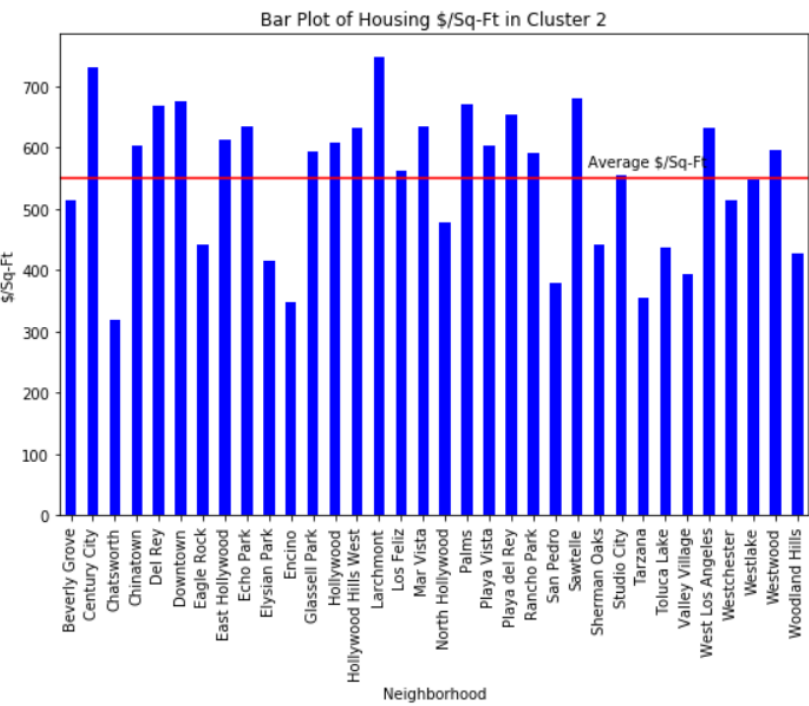


Pricing Information for Cluster 0

Pricing Information for Cluster 1

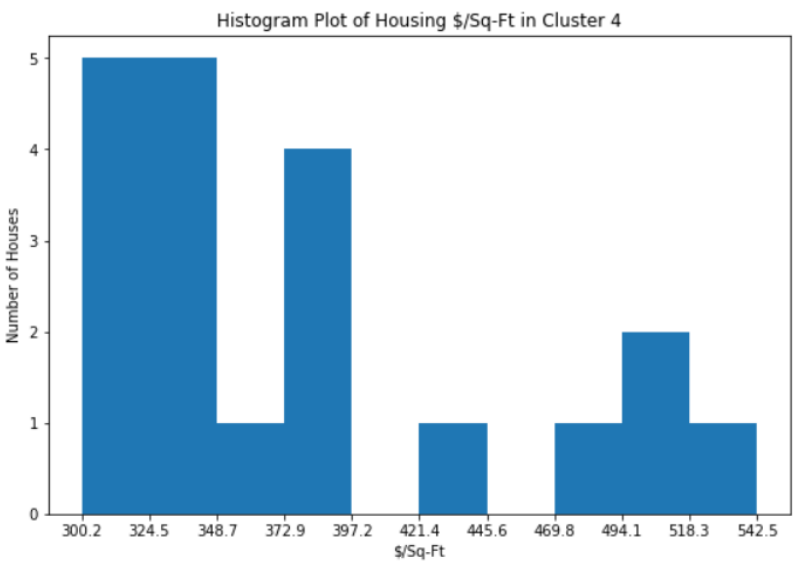
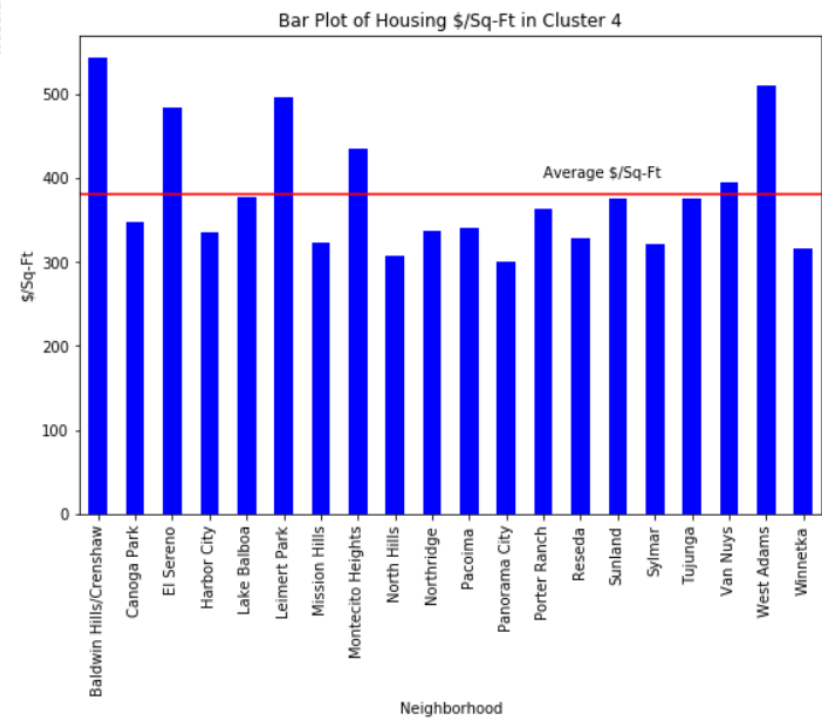


Results:

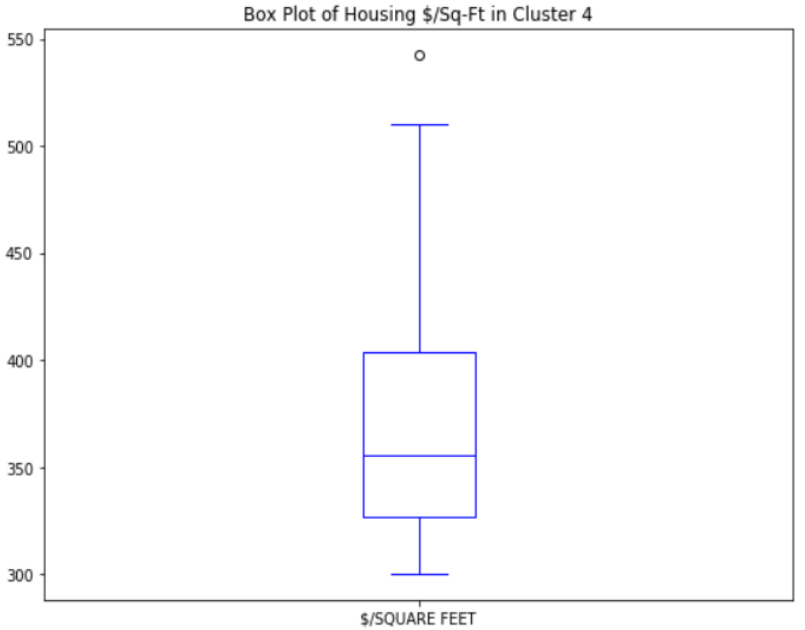
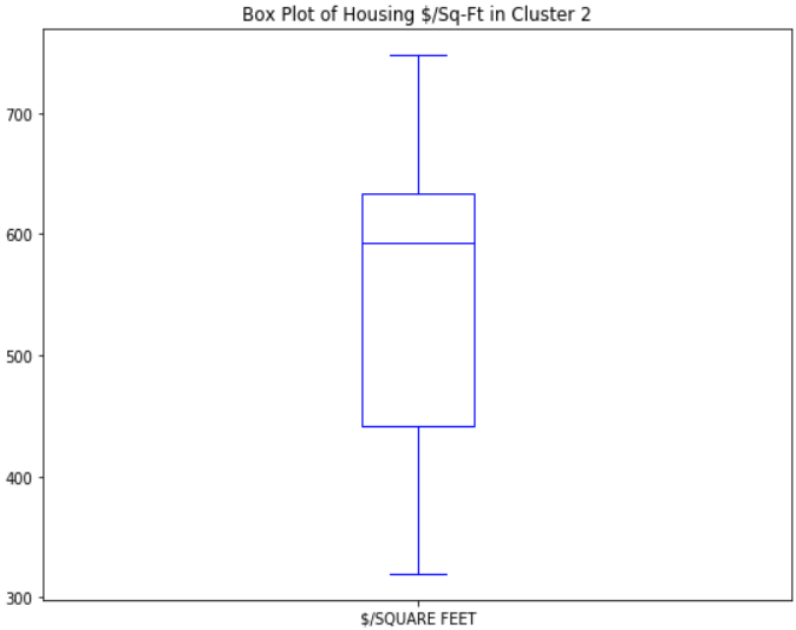
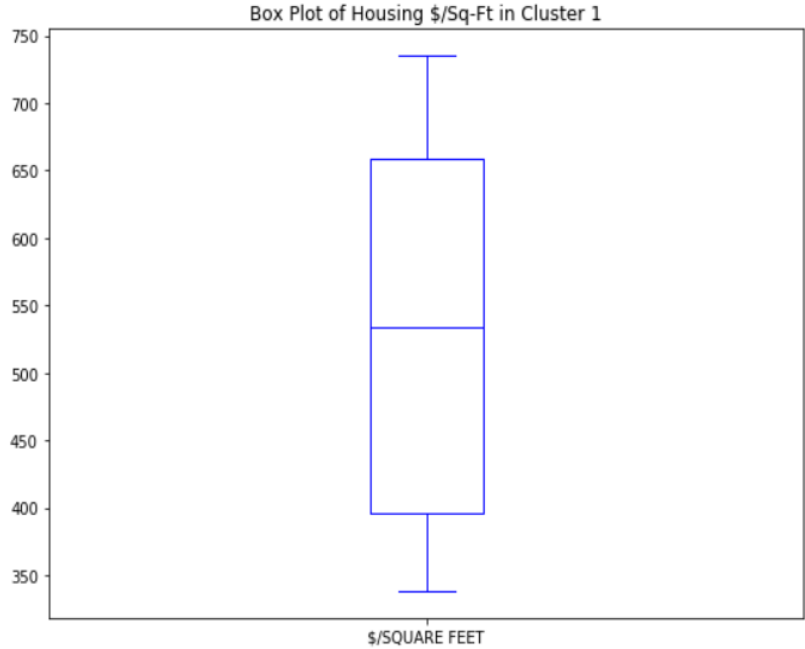
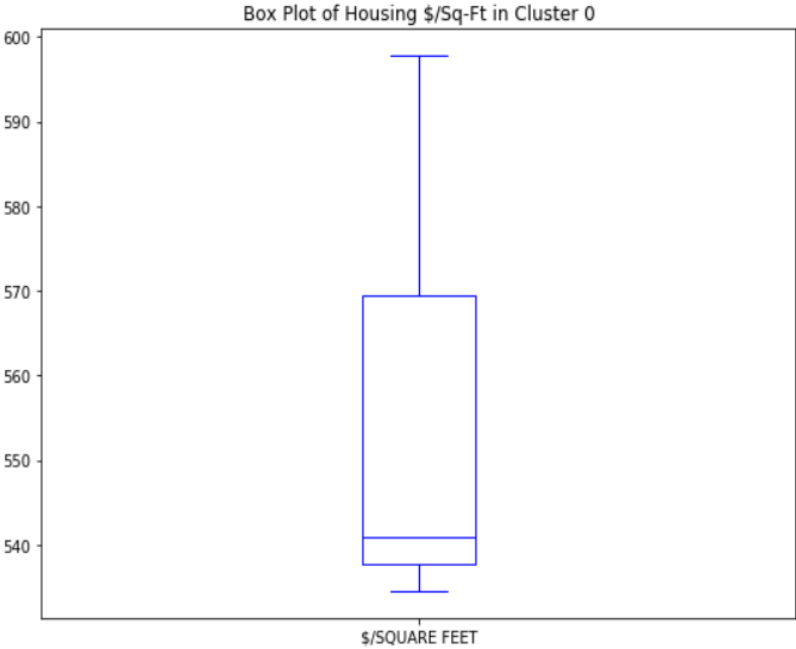


Pricing Information for Cluster 2

Pricing Information for Cluster 4



Results:



Discussion and Conclusion:

- Cluster 0 and 4: small standard variation, prices closer to cluster average
- Cluster 1 and 2: larger standard variation. pricings spread over a wider range

| Cluster | Number of Neighborhoods | Average \$/Sq-Ft | Standard Deviation |
|---------|-------------------------|------------------|--------------------|
| 0 | 3 | 557.25 | 34.79 |
| 1 | 9 | 481.59 | 143.60 |
| 2 | 14 | 682.61 | 74.85 |
| 3 | 37 | 548.88 | 123.53 |

Improvement and Future Study Ideas

- Improving clustering by adding more variables, i.e. school districts
- Expanding neighborhood list to other cities in LA County
- Adding Single Family Residentials to housing database