Washington Data Consultants

Consultants: John Sheehan Yue Yu Zach Pollatsek

Business Problem

Figure out the optimal location to expand the Fogo de Chao franchise within the King County area.



Data Overview

- We used housing data from the King County area to better understand where to locate the new Fogo de Chao location.
- -Fogo de Chao already has a location in Bellevue, so a good fit for a second location would be within Seattle.
- -We wanted to settle on putting the restaurant in an area with high average valued houses to give Fogo de Chao the best chance at success.

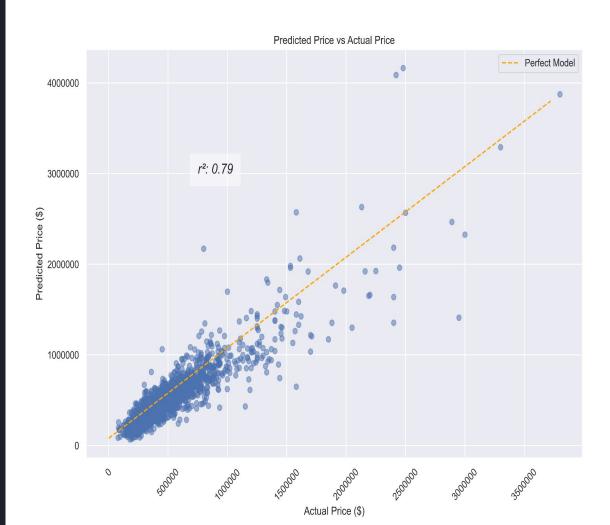
Measures of High End

- Quality:
 - Condition of the house
 - > House grade
- ❖ Size:
 - Square footage of house
 - Square footage for neighboring houses
- Location:
 - > Latitude
 - > Longitude
 - Zip Codes



High End Housing Pricing Data

- Our model predicts
 approximately 80% of the variance in home price
- Model includes location, quality, and size data



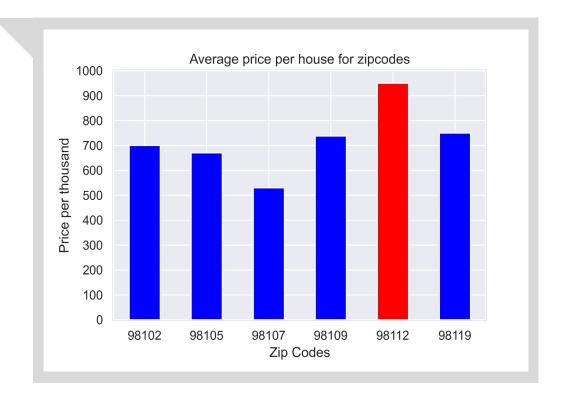
The Best Location

- We found 6 zip codes with positive relationships with price, of those 6 the 3 with the highest relationship were:
 - > Stevens, Madison Valley- 98112
 - ➤ East Queen Anne -98109
 - ➤ West Queen Anne -98119



Zip Code average price

- Stevens, Madison Valley (98112) has an average price of \$950,000 per home.
- \$200,000 more than 2nd highest.





Quality

We found a linear relationship that as grades and condition have higher ratings the price of the house rises with it.

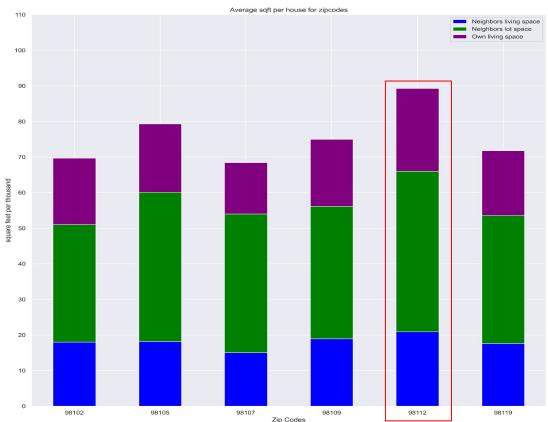
Stevens, Madison Valley (98112) has the most houses in the area with 237 houses.

♦ Of those 237 only 53 have an average grade or lower, and only 2 houses with a below average condition.



- Stevens, Madison Valley(98112)
 has the most sq footage per
 house
- Price goes up by \$211 for every1 sq ft of neighbors living space
- Price goes up by \$243 for every 1 sq ft of each individuals living space

Square Footage



Conclusion and Next Steps

- Neighborhoods for Potential Location:
 - East Queen Anne (98109)
 - Stevens/Madison Valley (98112)
 - West Queen Anne (98119)
- Best candidate:
 - Stevens/Madison Valley (98112)

Next Steps:

- Remove latitude or longitude
- Remove zip codes that are not feasible for new restaurant
- Feature engineering to improve correlation/reduce error

Thank You

Location Data Consultants: John Sheehan (<u>GitHub</u>, <u>LinkedIn</u>) Yue Yu (<u>GitHub</u>, <u>LinkedIn</u>)

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