Project 1:
Real Estate Investing in Texas

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Where in Texas has the greatest ROI for Airbnb?

Questions:

1. What are the top 20 cities in Texas based on Airbnb Rentals?
2. Does the amount of Airbnb's available affect the Airbnb occupancy rate?
3. What size house should we buy (based on bedrooms)?
    a. What is the average occupancy rate per bedrooms?
    b. What is the Average rental income for each bedroom size?
4. How much does SQFT effect the home cost?
5. Average home cost per city?

Process:

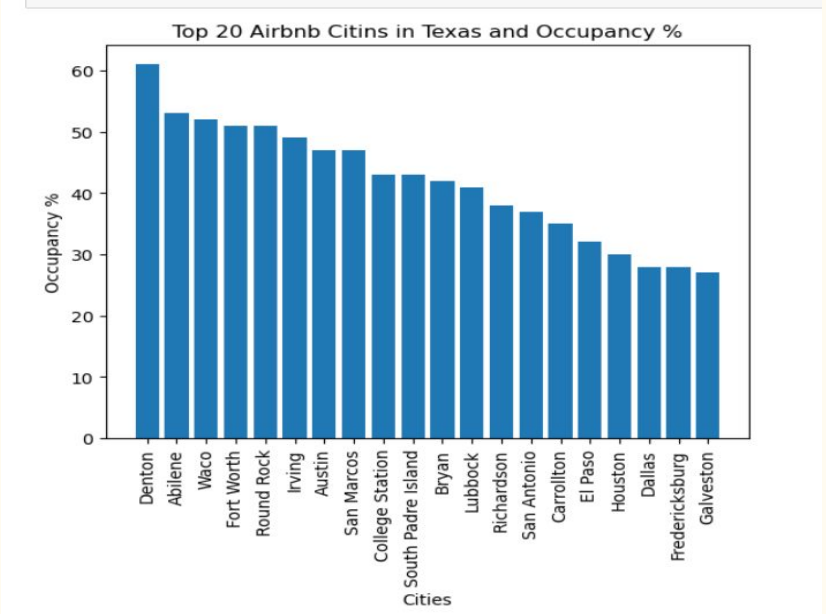
- Data for Airbnb was pulled from Mashvisor via RapidAPI
- Property information was pulled from Zillow.com via RapidAPI

Limitations:

- Relied on the third party Airbnb API to have the correct data for occupancy rate
- We only pulled 40 properties for the top 20 cities and suburbs. THen we filtered it down to only the 20 cities.

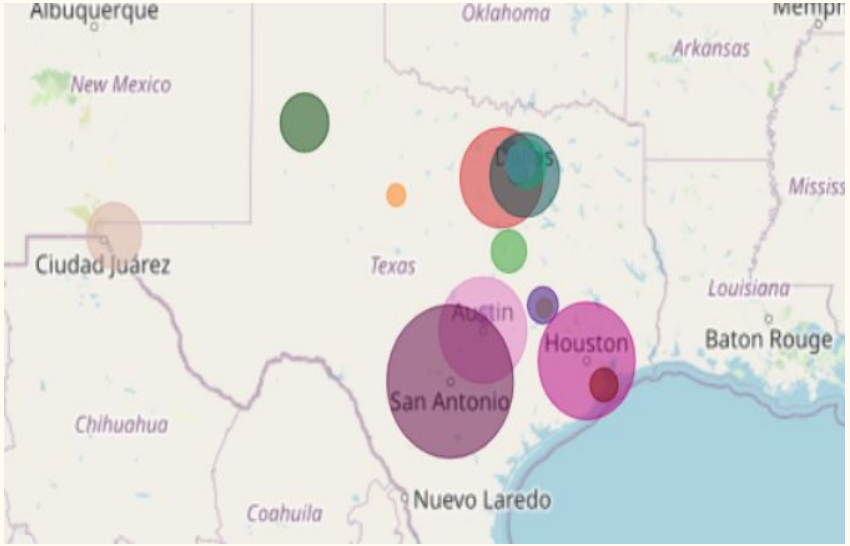
Results:

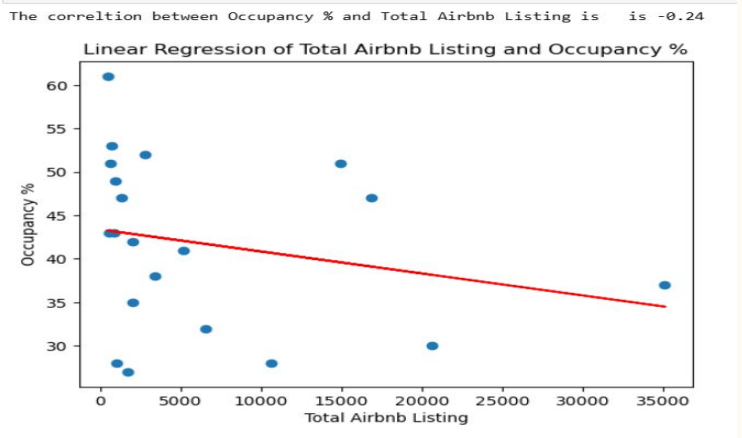
1. We found that Denton - a suburb of Dallas, had the highest occupancy rate of 61%, but the lowest amount of Airbnb listings at 451.



Results

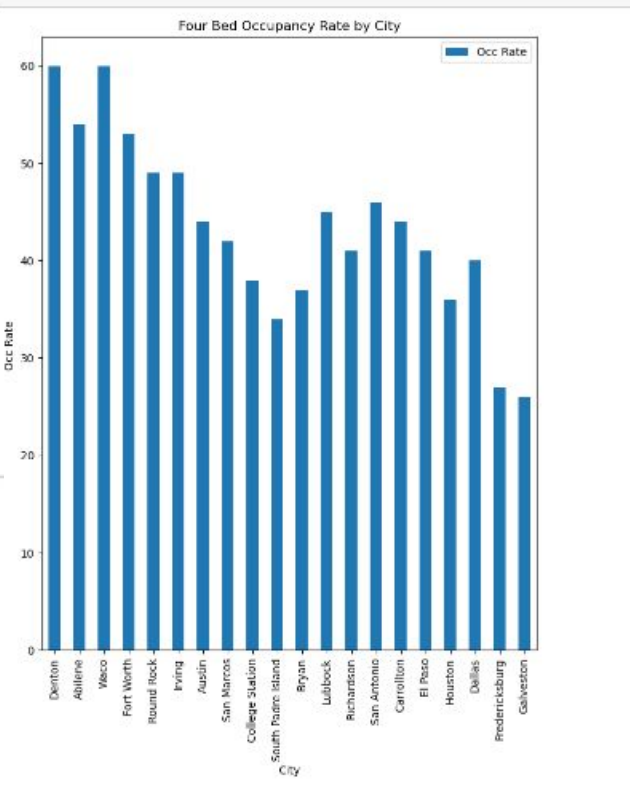
- City market share of Airbnb listings
- San Antonio has the highest Airbnb listings at 35,115 but is the 14th highest occupancy at 37%. Whereas Denton has the lowest total Airbnb listings at 451. Does the total Airbnb's available affect the occupancy rate? We found this not to be necessarily the case as the correlation is -0.24





Results Cont.

- Average occupancy rates by room seemed to be relatively equal with Studio being slightly higher at 47.4 . However, for average monthly rental rate four bedrooms is $3,507.90
- South Padre Island had the highest average monthly rental rate for four bedrooms, but the lowest occupancy rate of four bedrooms



Use T-test to compare Zestimate and Price

-The t-test results indicate that there is no significant difference between the mean values of the "Price" and "Zestimate"

-The t-statistic of 0.33 suggests that the difference between the means of the two columns is not very large.

-The p-value of 0.739 is greater than the significance level of 0.05, indicating that there is no strong evidence to reject the null hypothesis that the means of the price and Zestimate is equal.

Results Cont.

- **We pulled 20 properties listed for sale in a 10 mile radius of the twenty cities**
- **We wanted to see how much the SQ ft affected the price.**
- **There is a 0.52 correlation between price and square feet**

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plt.savefig("Output/PriceSQFT.png")
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The correltion between SQ FT and Price is 0.52
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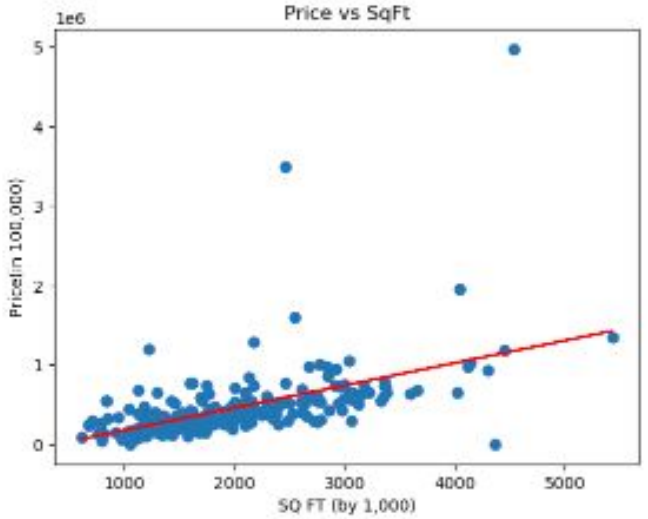
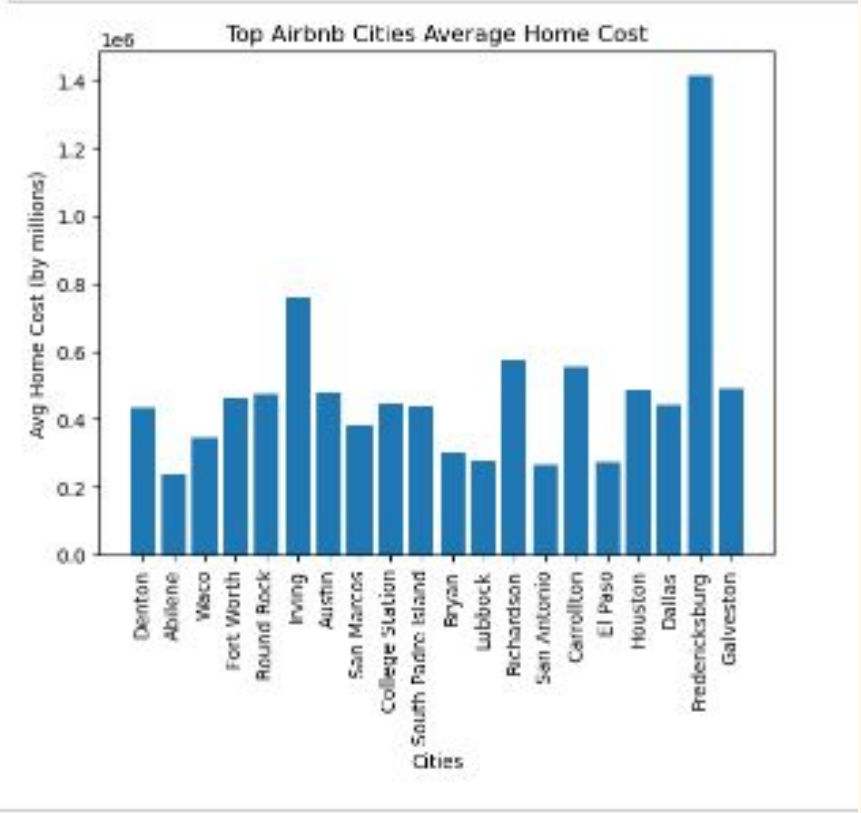


Results Cont.

- **We then filtered the data down to include only those 20 cities & narrowed the data down to the average home cost per city.**
- **Abilene has the lowest average home cost at $236,850**



Conclusion

As Abilene, Tx has the lowest average home cost and the second highest occupancy rate at 53%. We found that you would get the highest ROI, if you purchased a home in Abilene. Since the occupancy rate for a Four bedroom is relatively the same as that as the the others, but the monthly average rental amount is much higher at $3,507. You should look at purchasing a 4 bedroom home to rent on Airbnb