

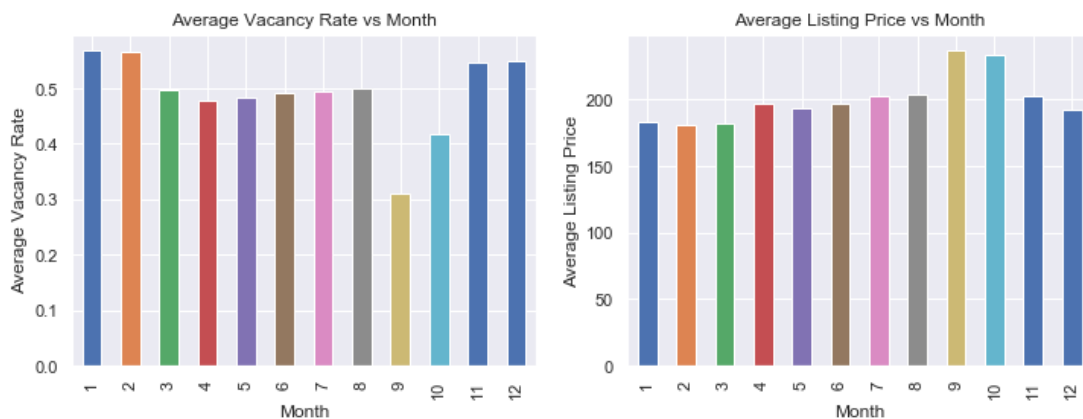
Three Tips for Airbnb users to Boston



The data sets of Airbnb describing the listing activity of homestays in Boston, MA are both available on [Kaggle](#) and [Airbnb Websites](#). After a detailed data exploration and price modeling, there are three findings and tips I would like to share with you, if you are interested in visiting the beautiful city of Boston and prefer an Airbnb homestay. The three tips are related to the following:

1. The busiest times of the year to visit Boston and price changes
2. The most expensive neighborhoods in Boston
3. What property-related features affect the listing price and which customers pay special attention to?

● Tip 1: The Busiest Time of Year

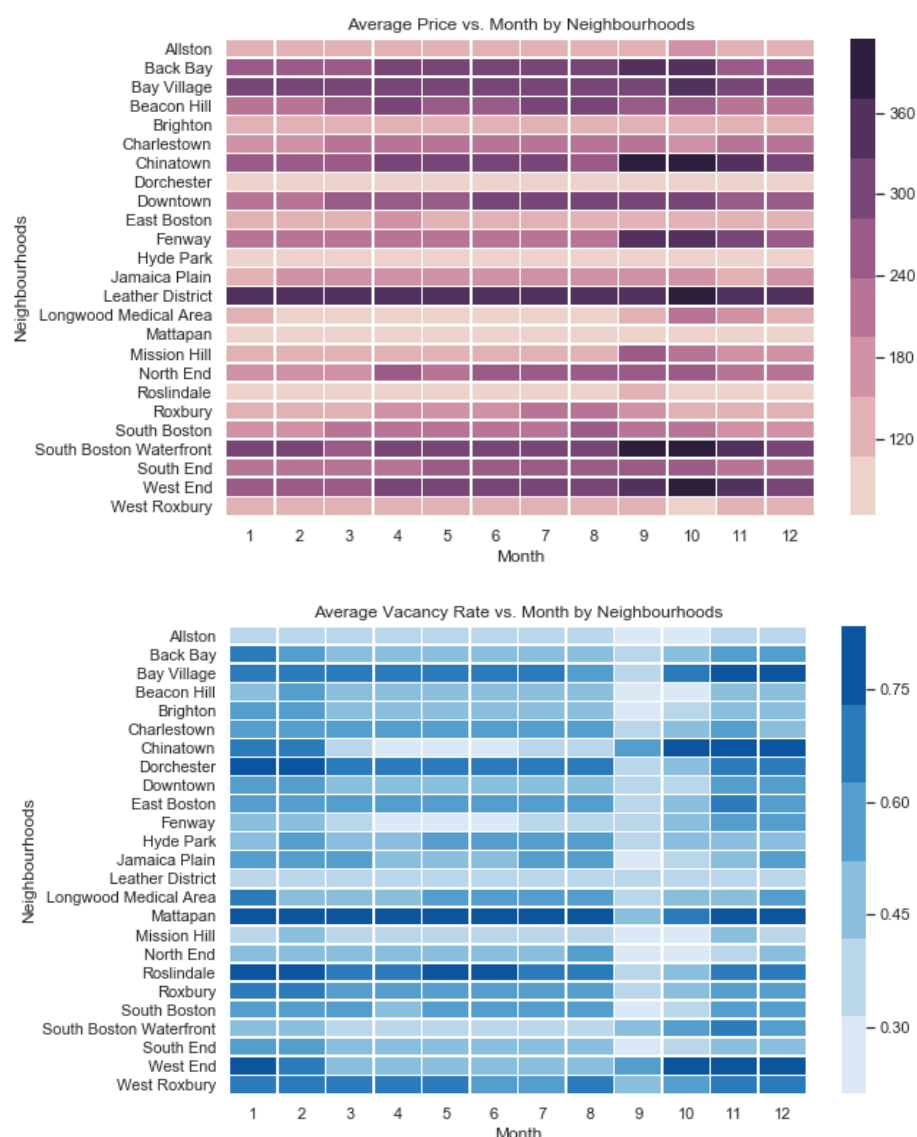


Based on the two figures above, the average vacancy rate in winter (January, February, November

and December) are the highest over the year; from March to August, the average vacancy rate remains slightly below 0.5. In September, the vacancy rate drops drastically to 0.3 and then increases a little to 0.4 in October. Correspondingly, the average listing price in September is the highest over the year, while in October the price drops slightly. Therefore, September is the busiest time of the year, followed by October. The price in September and October increase about 20% than August and November.

The underlying reasons for the busy September and October might be: a) the nice weather in September and October attracts tourists; b) Boston is full of famous universities, and fresh college students and their parents visit Boston in September; c) international festivals or conferences, etc.

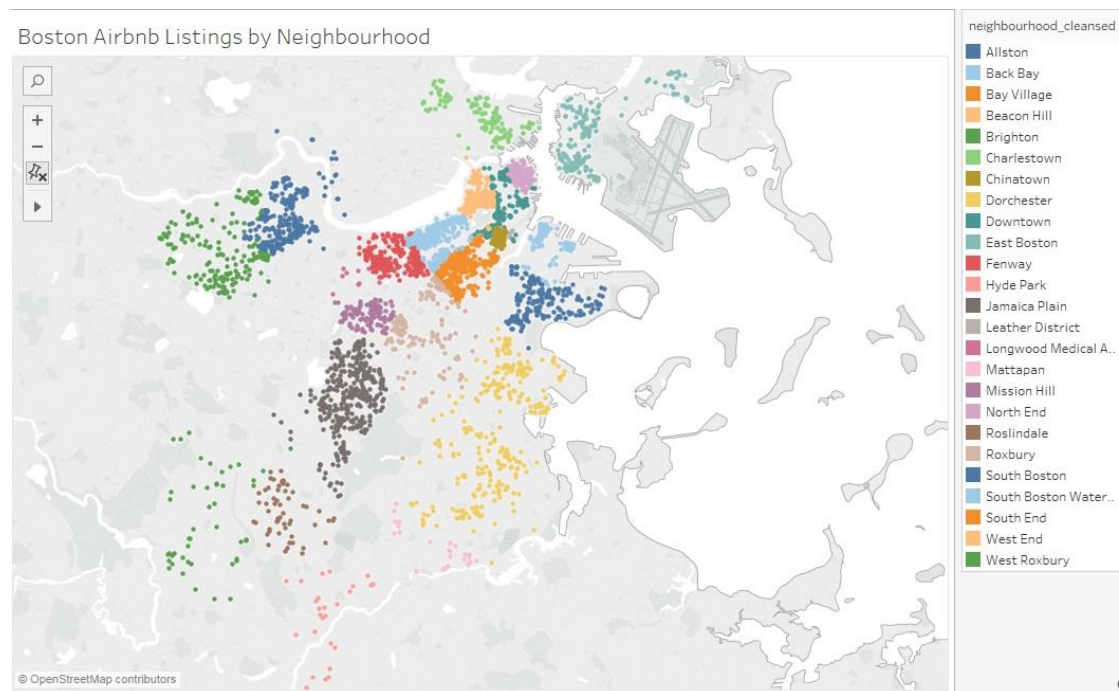
- **Tip 2: the most expensive neighborhoods**



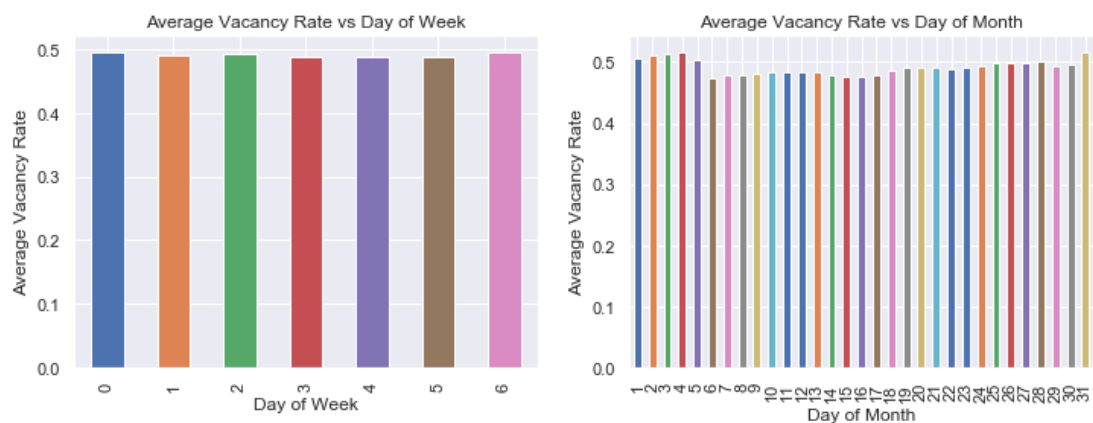
Based on the two plots above, prices do vary against neighborhoods and month. Leather District has the highest average listing price, followed by South Boston Waterfront and Bay Village. The

booking spike occurs in September and then in October, which echoes our findings above. In September and October, Chinatown has the most drastic price increase, and Mission Hill and North End are the most occupied neighborhoods.

If you are not familiar with Boston, the following geographic map with all the Airbnb listings by different neighborhoods can give you a better idea of Boston.



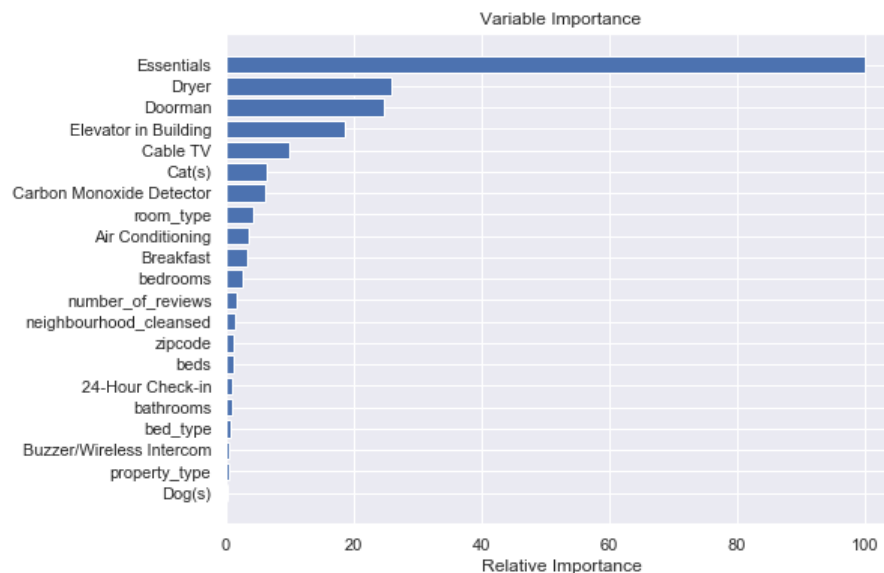
So try to avoid Leather District in September and October, and find the nearby neighborhoods as alternatives, such as Beacon Hill or Downtown.



Based on the figures above, the average vacancy rate maintains very stable with respect to day of week. The average vacancy rate for Thursday, Friday and Saturday is slightly smaller than that of other days in a week, which might be due to the weekend activities.

Regarding the vacancy rate with respect to day of month, the average vacancy rate at the beginning and the end of each month is at the highest, indicating fewer activities in Boston during this period.

- **Tip3 : Features Affecting the Listing Price**



As far as the feature importance, the feature of essentials is highly related to the listing price, followed by features such as dryer, doorman, elevator, etc. If you do not care about the essentials, dryer, doorman or elevator much, you might be able to get a better deal.

Conlusions

Based on all the analysis above, there are three tips for Airbnb customers visiting Boston to take away:

1. **Time**: September is the busiest time in town and the price spike by 20%. Try to avoid this period. In addition, you have better visit Boston on weekdays and in the beginning of each month to secure a better deal.
2. **Neighborhood**: Leather District has the highest average listing price, followed by South Boston Waterfront and Bay Village. Try to avoid these neighborhoods, and go to the nearby districts as alternatives.
3. **Features**: the features of essentials, dryer, doorman and elevators highly increase the price. Try not to select the properties with these amenities, if you do not particularly care about these.