# Best Maui Neighborhood to buy a property.

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#### 1. Introduction

# 1.1 Background

Hawaii, United Stated is one of the top places in the United Stated to visit as a tourist. It has good weather all year round, beautiful nature and hospice people. There are four main islands which welcome many tourists every day: Big Island, Oahu, Maui and Kauai. I'll focus my exploratory analysis on Maui island as I believe it has the most potential for an investment property. It's less rural than Kauai and not overpopulated as Oahu.

#### 1.2 Problem

One might not be very familiar with cities and neighborhoods of an island in the Pacific ocean, but we can try to explore and investigate data available online in order to find the best neighborhood (most population, most values, quality of venues). This project is to find the best place for an investment property (Airbnb or similar).

#### 1.3 Interest

Investors are always interested to know more about a neighborhood in which they plan to buy a property.

#### 2. Data

#### 2.2 Data Source

There are many ZIP code pages available online. I used the one that has population added to every ZIP code. I created a csv file with data and added it to github. I then created a dataframe with a pandas library.

## 2.3. Data cleaning

I removed all cities that have population less then 5000 people. I also removed cities that are Maui county, but located on small islands around Maui as we're not interested in those. I then added longitude and latitude value to every city The final dataframe was:

Table 1: Data after cleaning.

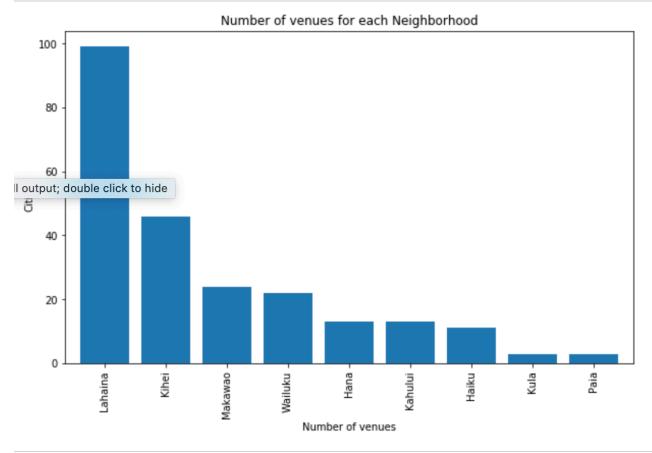
	City	Latitude	Longitude	
0	Haiku	20.914390	-156.322960	
1	Hana	20.757399	-155.987985	
2	Kahului	20.874771	-156.452983	
3	Kihei	20.747626	-156.454990	
4	Lahaina	20.873877	-156.677678	
5	Makawao	20.853916	-156.310393	
6	Paia	20.902457	-156.372721	
7	Kula	20.792026	-156.323712	
8	Wailuku	20.890544	-156.503093	

# 3. Exploratory Data Analysis

# 3.1 Exploring data with Foursquare API.

Using longitude and latitude values, I was able to get venues in radius of 500 meters (limit 100 v enues per City). 234 venues were returned by Foursquare. To get a better idea, I created a bar p lot with and sorted cities by most venues first. Here is the result:

Table 2: Bar Plot for all venues returned by Neighborhood (City).



# 3.2 Exploring quality of venues returned

We can see that first three or four neighborhoods are probably the best for the investment, but I wanted to explore it further and see what types of venues are returned. I used one hot encoding in order to sort all neighborhoods by 5 most common venue types. Here is the result.

Table 3: 5 most common venues for each neighborhood

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue
0	Haiku	Food Truck	Martial Arts Dojo	Mediterranean Restaurant	Café	Sushi Restaurant
1	Hana	Hotel	Hawaiian Restaurant	Beach	Ice Cream Shop	Resort
2	Kahului	Big Box Store	Coffee Shop	Food Truck	Cosmetics Shop	Mobile Phone Shop
3	Kihei	Pizza Place	Fast Food Restaurant	Japanese Restaurant	Rental Car Location	Mexican Restaurant
4	Kula	Other Repair Shop	Dry Cleaner	Garden	Yoga Studio	Food Truck
5	Lahaina	Ice Cream Shop	Seafood Restaurant	Art Gallery	Clothing Store	Café
6	Makawao	Home Service	Coffee Shop	Arts & Crafts Store	Restaurant	Boutique
7	Paia	Garden Center	Home Service	Basketball Court	French Restaurant	Cosmetics Shop
8	Wailuku	American Restaurant	Hostel	Asian Restaurant	Pharmacy	Boutique

## 4. Results and Discussion

As I already mentioned, Hawaii is one of the best places in the United States (or even in a word?) to visit as a tourist. I've limited my investigation to Maui island only because I believe it has more potential than other islands. It's less rural than Kauai and not overpopulated as Oahu.

According to the data I analyzed, these three neighborhoods, *Lahaina, Kihei, and Wailuku* should be good to buy an investment property (Airbnb rent or similar). They have the most population, conveniently located and have many venues within 500 meters of a city's center.

Maui is one of the top places for tourism in the United States, and therefore it's a good place for property investment. Even if you're not ready to buy it yet, visit Hawaii for fun! It has many interesting venues to explore.

# Aloha!