## Introduction

I like to eat sushi as well as make sushi. So I want check if I open a sushi restaurant in New York, in which county my restaurant should be located.

The location of a restaurant is very important, it plays a great role in the success of the whole business. A restaurant is more than buy a bottle of water in the shop, because you need to invest lots of money and time in it.

The business would benefit a lot if the location is good selected. If the location is not in a safe place, or not close to target customer, or the transportation facilities is not so convenient, it would push the restaurant in a dangerous situation.

There are in total 62 counties in New York and I can not just pick up one by looking at few information in the internet. A systematic analysis is needed to make the help the restaurant starting with a good location.

## **Data**

To choose the optimal locations, I need to consider following points:

- Household income
- Competitors nearby(sushi restaurant)
- Non-sushi restaurant
- Crime rates
- Transportation facilities (Parking place, bus station, train station)
- Entertainment (cafe shops, bars, cinema, hotels, Museum, theater, etc.)

To get the data for this study, following data sources are used:

1. Household income

Household income and density

(https://en.wikipedia.org/wiki/List of New York locations by per capita income)

2. Competitors nearby(sushi restaurant)

From foursquare

3. Non-sushi restaurant

From foursquare

4. Crime rates

Crime rates in New York

(https://www.criminaljustice.ny.gov/crimnet/ojsa/countycrimestats.htm)

- 5. Transportation facilities (Parking place, bus station, train station) From foursquare
- 6. Entertainment (cafe shops, bars, cinema, hotels, Museum, theater,etc.) From foursquare