The Best Place for the Restaurant in Queen, New York

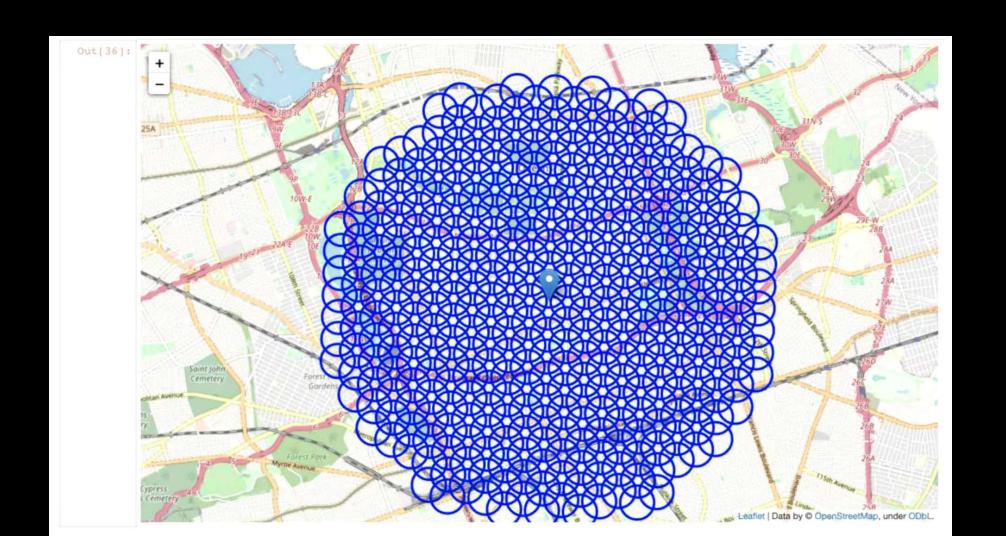


Introduction/Business Problem:

Since New York has many restaurants, we will try to find places where the restaurants are not full yet. We are also particularly interested in areas where more customers nearby. On the premise of meeting the first two conditions, we will also choose the location closer to the city center.

We will build on our data science capabilities to generate several of the most promising communities. The advantages of each area will be clearly expressed so that stakeholders can choose the best final location.

The Communities Nearby Queen

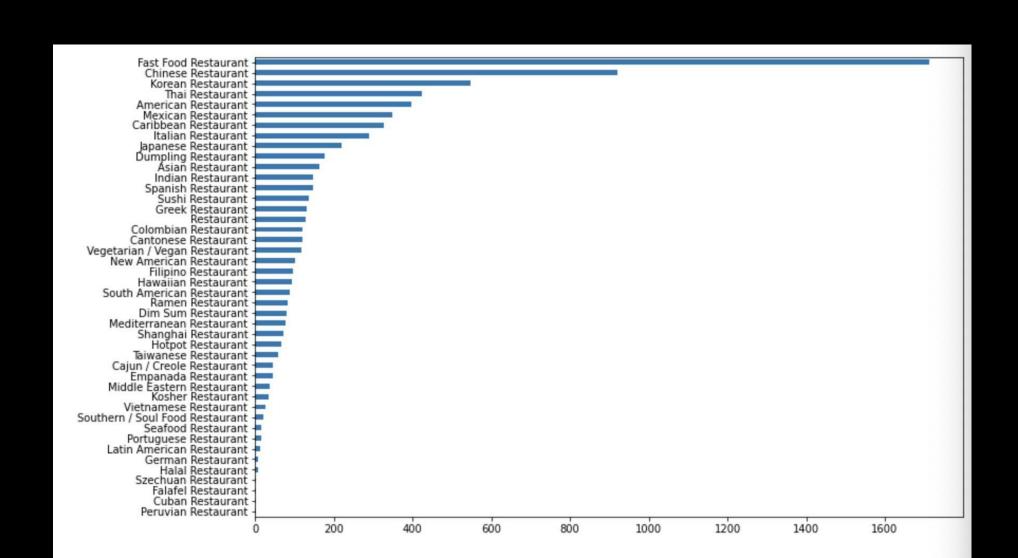


The Location of Each Communities (10 Examples)

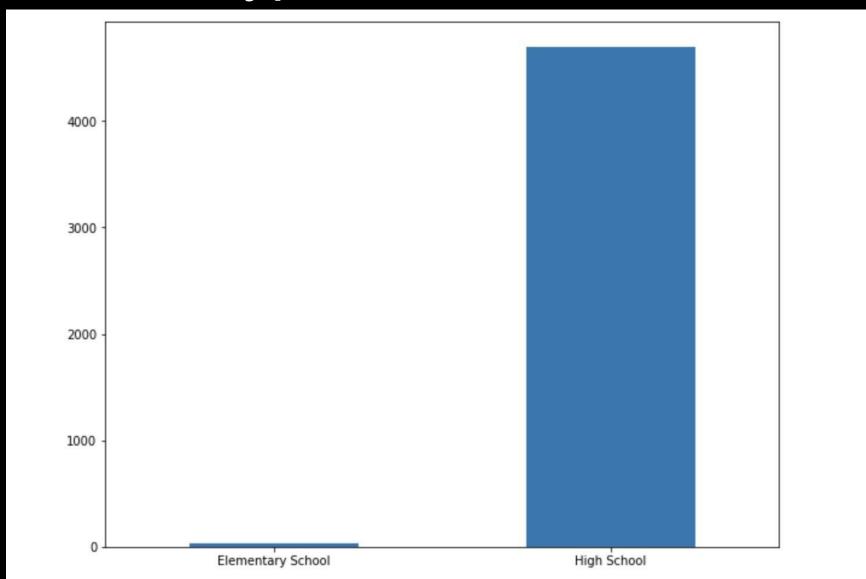
df.head(10)

	Address	Latitude	Longitude	х	У	Distance from center
0	93-46 210th PI, Queens, NY 11428	40.716520	-73.751049	-5.820665e+06	9.836718e+06	5992.495307
1	211-30 90th Ct, Queens, NY 11428	40.720054	-73.750895	-5.820065e+06	9.836718e+06	5840.376700
2	89-28 213th St, Queens, NY 11427	40.723589	-73.750740	-5.819465e+06	9.836718e+06	5747.173218
3	214-46 Whitehall Terrace, Queens, NY 11427	40.727124	-73.750586	-5.818865e+06	9.836718e+06	5715.767665
4	218-17 Grand Central Pkwy, Queens, NY 11427	40.730659	-73.750431	-5.818265e+06	9.836718e+06	5747.173218
5	220-24 Hartland Ave, Queens, NY 11427	40.734194	-73.750276	-5.817665e+06	9.836718e+06	5840.376700
6	220-72 77th Ave, Queens, NY 11364	40.737730	-73.750122	-5.817065e+06	9.836718e+06	5992.495307
7	204-12 100th Ave, Queens, NY 11423	40.711321	-73.755302	-5.821565e+06	9.837237e+06	5855.766389
8	93-52 Francis Lewis Blvd, Queens, NY 11428	40.714855	-73.755149	-5.820965e+06	9.837237e+06	5604.462508
9	90-21 208th St, Queens, NY 11428	40.718389	-73.754995	-5.820365e+06	9.837237e+06	5408.326913

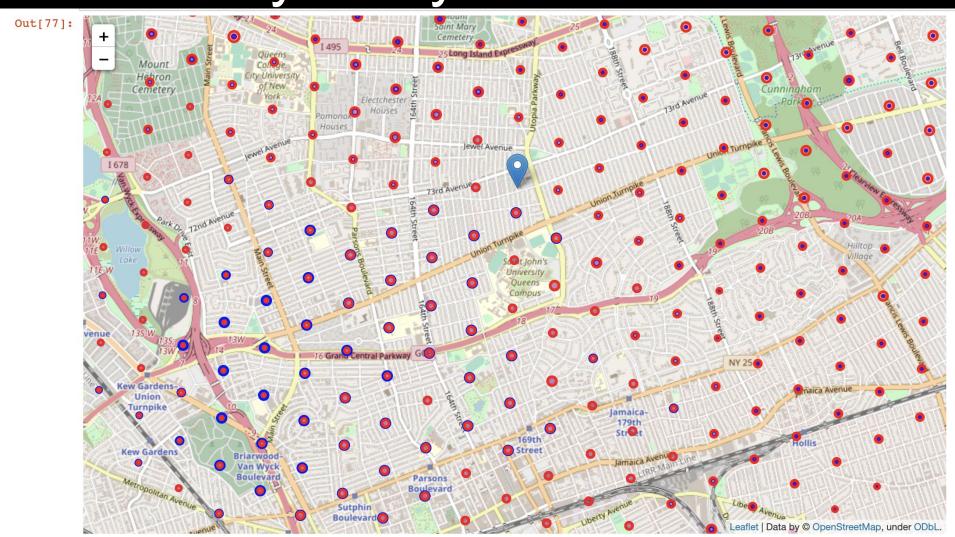
Food Store Type in Queen



School Type in Queen

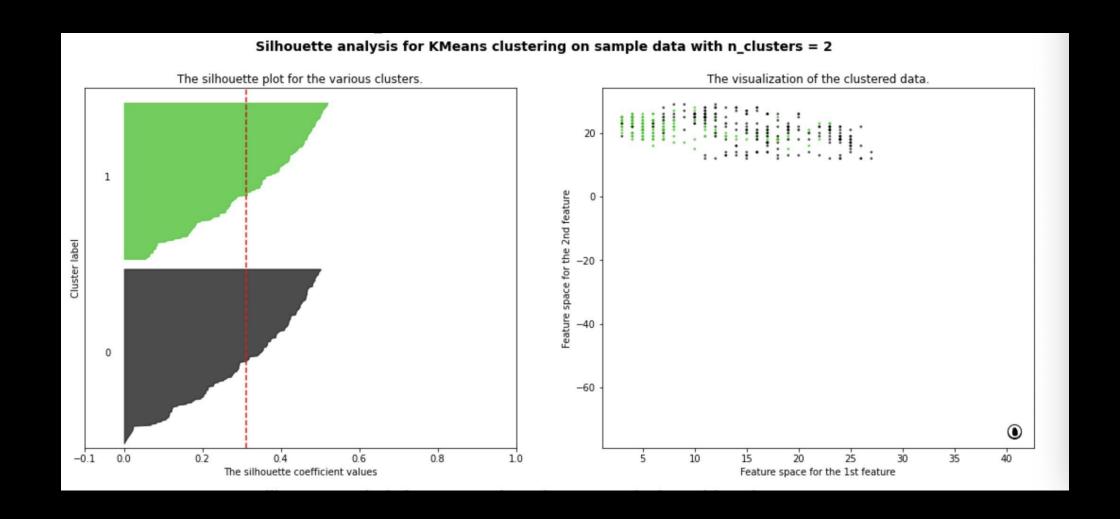


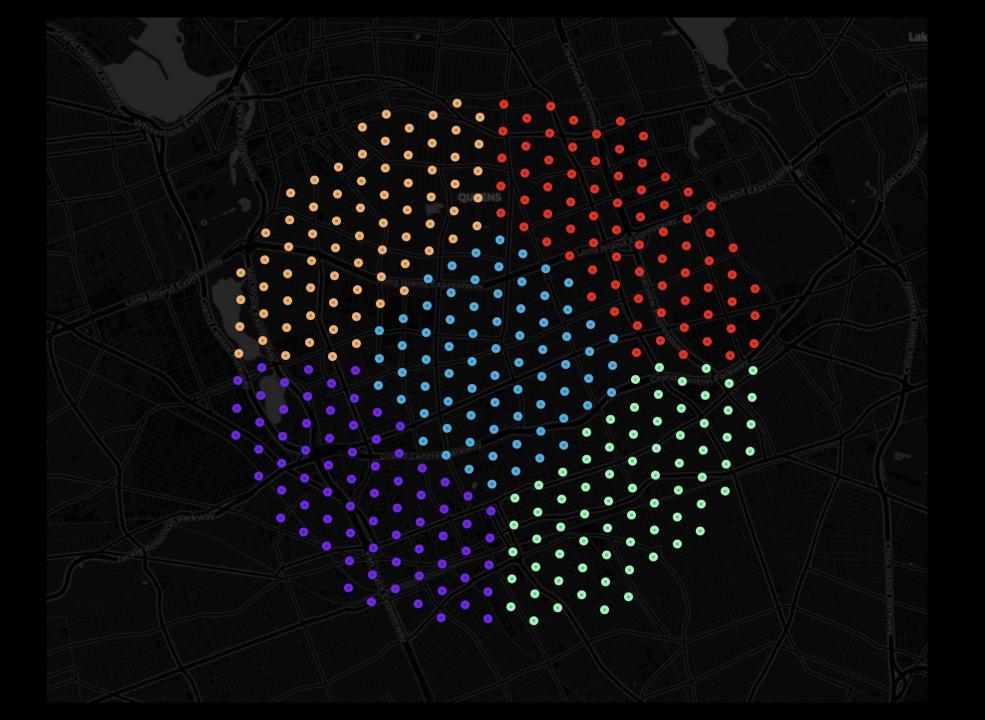
Community Analysis



The more schools, the larger blue circle. The more restaurants, the larger red circle.

Silhouette Analysis for KMeans Clustering on Sample Data





Final Analysis

 Based on the above analysis, I think first of all, our preferred restaurant type is the fast food restaurant, because the fast food restaurant is the most popular in Queen. Second, we should look for areas with more schools and fewer fast food restaurants to open new stores, so Western is our best choice.