Report: Selling Fried Chicken in New York City
By Carl Natale

Introduction

In 2019, Popeyes and Chick-fil-A went to battle over who had the best chicken sandwich. That war cooled down when the COVID-19 pandemic hit in 2020. But [McDonald's and Burger King introduced their new chicken sandwiches](#) in February 2021.

Those heavyweights see an opportunity in fried chicken. If a New York City borough lacks venues offering fried chicken, there could be opportunities to open a venue specializing in fried chicken. This report identifies the New York neighborhoods where relatively few of those restaurants are open.

Target Audiences

This report is written for entrepreneurs who are looking for a neighborhood in New York City that doesn't have established fried chicken providers. These neighborhoods would be worth considering as a home to a restaurant serving fried chicken.

Also, established restaurants in these neighborhoods may consider adding fried chicken dishes to their menus.

Data

This analysis relies on three types of datasets:

- New York City boroughs and neighborhoods: The dataset contains all New York City boroughs, each neighborhood in each borough and the latitude-longitude of the neighborhoods' center coordinates. The data is downloaded from https://cocl.us/new_york_dataset
- Foursquare API: The data retrieved from Foursquare includes the names of venues serving food, their latitude-longitude coordinates and the specific type of food category.
- Geocoded data:
  - The geometric coordinates for all five boroughs is downloaded from https://data.cityofnewyork.us/api/geospatial/tqmj-j8zm?method=export&format=GeoJSON
  - The geometric coordinates for each neighborhood is downloaded from https://data.cityofnewyork.us/api/geospatial/cpf4-rkhq?method=export&format=GeoJSON

Methodology

1. Load the libraries needed to work with the data and map it.
2. Create functions that can be used to work with data
3. Access the neighborhood data
4. Access the Foursquare data of venues that serve food

5. Match the two datasets
6. Calculate the density of chicken fried joints compared to restaurants in the boroughs
7. Visualize the density data using chloropeth maps of the boroughs and neighborhoods

What I found out

Fried chicken joints (FCJs) is the category that Foursquare uses for restaurants specializing in fried chicken dishes. These include national fast food chains (KFC and Popeye's for example) and independent restaurants. And there aren't many of them.

By using the number of FCJs divided by the number of venues in Foursquare's food category, we can create a fried chicken density (FCD) metric. For the five boroughs of New York City, here are their FCD rankings:

- Staten Island: 0.586166
- Manhattan: 1.064639
- Queens: 2.064007
- Brooklyn: 2.647944
- Bronx: 4.194260
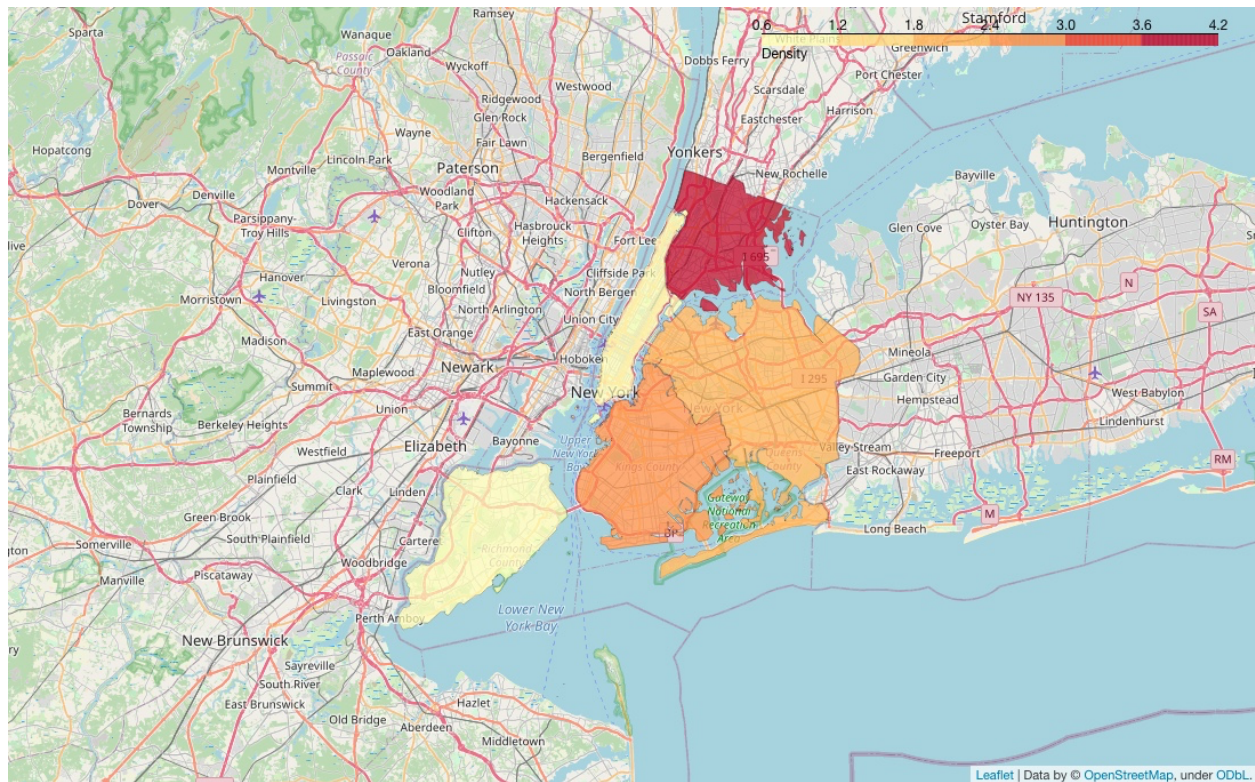
From this analysis, Manhattan and Staten Island have the fewest number of FCJs compared to the total number of food venues in those two boroughs.

Neighborhood analysis

Those two boroughs have the following neighborhoods with FCJs:

Neighborhood	FCD	FCJs
East Village	1.030928	1
Stuyvesant Town	1.06383	1
Battery Park City	1.123596	1
Tudor City	1.136364	1
Murray Hill	1.149425	1
Turtle Bay	1.149425	1
Washington Heights	1.176471	1
Financial District	1.190476	1
Lower East Side	1.190476	1
Morningside Heights	1.204819	1
Elm Park	1.492537	1
Chelsea	2.061856	2
Westerleigh	2.173913	1
Port Richmond	2.222222	1
Midtown South	2.352941	2
Manhattan Valley	2.380952	2
East Harlem	2.5	2
Inwood	2.564103	2
Hamilton Heights	3.26087	3
Manhattanville	3.26087	3
Grant City	3.389831	2
New Dorp	3.636364	2
Marble Hill	4.166667	2
Clinton	4.597701	4
Hudson Yards	4.597701	4
Central Harlem	7.608696	7
New Dorp Beach	7.692308	2
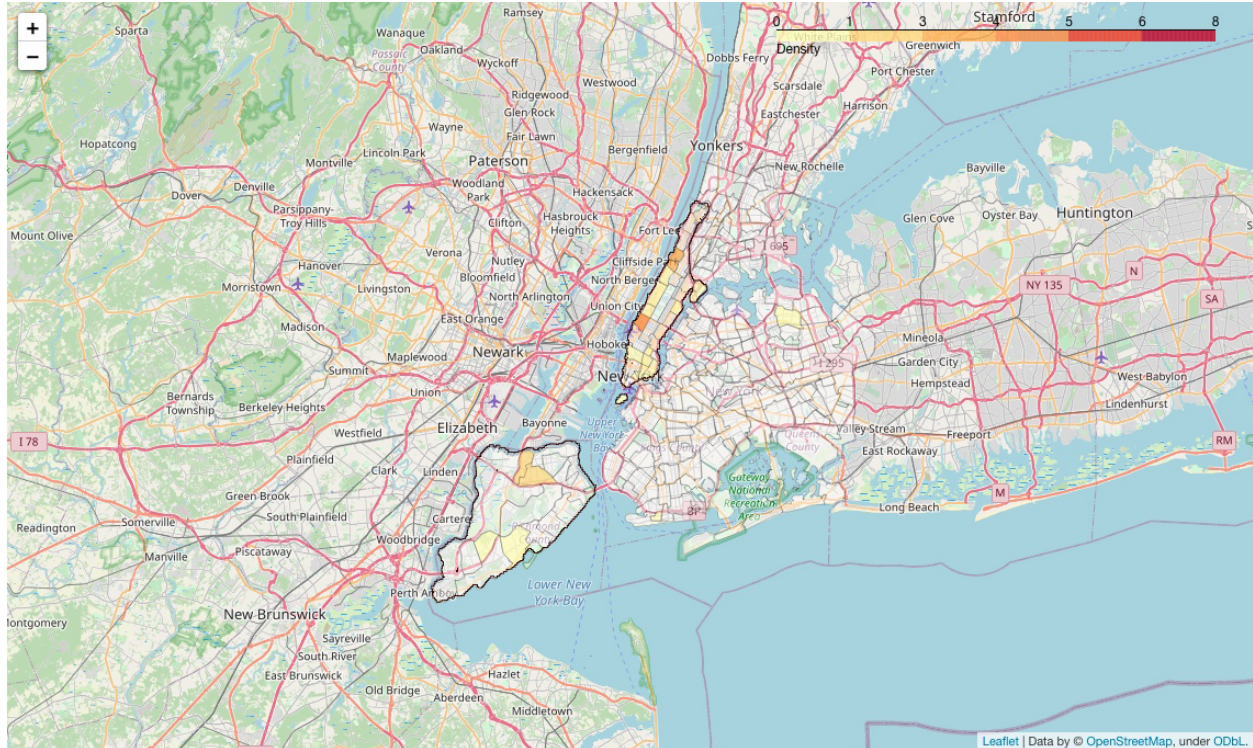
You can see where the FCJs are and are not in Staten Island and Manhattan.

Conclusion

We're going to take the amount of marketing that fast food chains (Chick-fil-A, Popeyes, McDonald's and Burger King for example) are dedicating to spicy and regular chicken sandwiches as a sign of strong demand for fried chicken. Fried chicken joints (as defined by Foursquare) can capitalize on that demand by opening in underserved neighborhoods. Staten Island has no fried chicken joints so it has great potential.