

# Capstone Project - The Battle of Neighborhoods

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# Applied Data Science Capstone

Peer-graded Assignment: Capstone Project - The Battle of  
Neighborhoods

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## Introduction/Business Problem

This study aims to help people who are planning to open a new restaurant in Toronto to choose the right location by providing data about each neighborhood's income and population and the competitors already present in the same regions.

# Data

To provide the stakeholders with the necessary information, I'll be combining Toronto's 2016 Census with population, the average income per Neighborhood with Toronto's Neighborhoods shapefile, and Foursquare API to collect competitors in the same neighborhoods

Toronto's Census data is publicly available at this **website**

Toronto Neighborhoods' shapefile is publicly available at this **website**

## Data Collection

Based on definition of our problem, factors that will influence our decision are: \* number of existing restaurants in the neighborhood (any type of restaurant) \* number of and distance to Italian restaurants in the neighborhood, if any \* distance of neighborhood from city center

# Methodology

For this report, I used a few different maps that could help a new investor to decide the best neighborhood to open a restaurant in Toronto, based on its income, population, and available competitors. To do that, I've used the 2016 Census information combined with choropleth maps to visually display the wealthier and more populational neighborhoods and Foursquare data to display the current restaurants in each region.

# Results

Comparing the maps, we can notice most of the restaurants grouped on main streets and the south of the city, although some of the wealthiest neighborhoods are up to the north. Also, the areas with a dense population don't reflect the number of restaurants.

## Discussion

When I first decided to create this study, I was expecting to find clusters of restaurants in certain regions, and the final result didn't meet that expectation.

## Conclusion

This report may help someone plan to open a Toronto restaurant by comparing the current offers and neighborhood profiles. However, it may not cover all variables such as access to public transportation or even the restaurant profiles, so it shall not be used as a single decision-making tool.