



BUSINESS EXPANSION ANALYSIS

TORONTO

INTRODUCTION

A successful food truck vendor in Toronto is seeking to expand with another truck, but would like to know which location within the city would be the best for expanding business.

This type of project would also be of interest to:

- Entrepreneurs looking to launch a new business and need to know an ideal location for their services
- City planners trying to identify areas in a city lacking certain amenities or to better understand centers of gravity for certain amenities when evaluating development applications



PROBLEM STATEMENT

Identify the best Toronto neighborhood for a successful Food Truck vendor in the Downsview, Toronto neighborhood to expand business by staging a second truck in another city neighborhood.



ABOUT THE DATA



WIKIPEDIA

Postal codes, boroughs, and associated neighborhood names of Toronto



GEOSPATIAL CSV

CSV file of Toronto postal codes and their related latitude and longitude



FOURSQUARE API

Foursquare API places data about Toronto venues



FOLIUM MAPS

Folium map tile sets for displaying results

METHODOLOGY

Grouped all 102 Toronto neighborhoods by postal codes (joining dataframes), and then compared Top 10 Venues per postal code.

Evaluated the Top 10 venues across all neighborhoods by a **knn clustering algorithm** to **identify groups and themes**.

Identified neighborhood cluster with **highest commonality of Food Trucks (Downsview)**.



ANALYSIS

In **Downsview**, where “**Food Truck**” as a category from Four Square API data is the **second most common category**, the **first most common category** is “**Baseball Field.**”

Research indicates that food truck location is critical to success, and locations such as sports venues are commonly profitable.

Knn cluster results identify two postal codes in Toronto where the **first most common category** is “**Baseball Field,**” yet the “Food Truck” category is not listed in the Top 10 Venues listing, identifying market opportunity for expansion.



CORRELATION OBSERVATION FROM CLUSTER ANALYSIS

	Neighborhood	Borough	Cluster Labels	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
5	HUMBERLEA, EMERY	North York	5.0	Baseball Field	Furniture / Home Store	Women's Store	Dim Sum Restaurant	Diner	Discount Store	Distribution Center	Dog Run	Doner Restaurant	Donut Shop
11	OLD MILL SOUTH, KING'S MILL PARK, SUNNYLEA, HU...	Etobicoke	5.0	Baseball Field	Construction & Landscaping	Women's Store	Diner	Discount Store	Distribution Center	Dog Run	Doner Restaurant	Donut Shop	Drugstore
70	DOWNSVIEW	North York	5.0	Baseball Field	Food Truck	Women's Store	Diner	Discount Store	Distribution Center	Dog Run	Doner Restaurant	Donut Shop	Dessert Shop

Nearly 100% similarity in venues AND degree of venue commonality between Downsview in **North York** and Old Mill South+ **Etobicoke** neighborhoods.

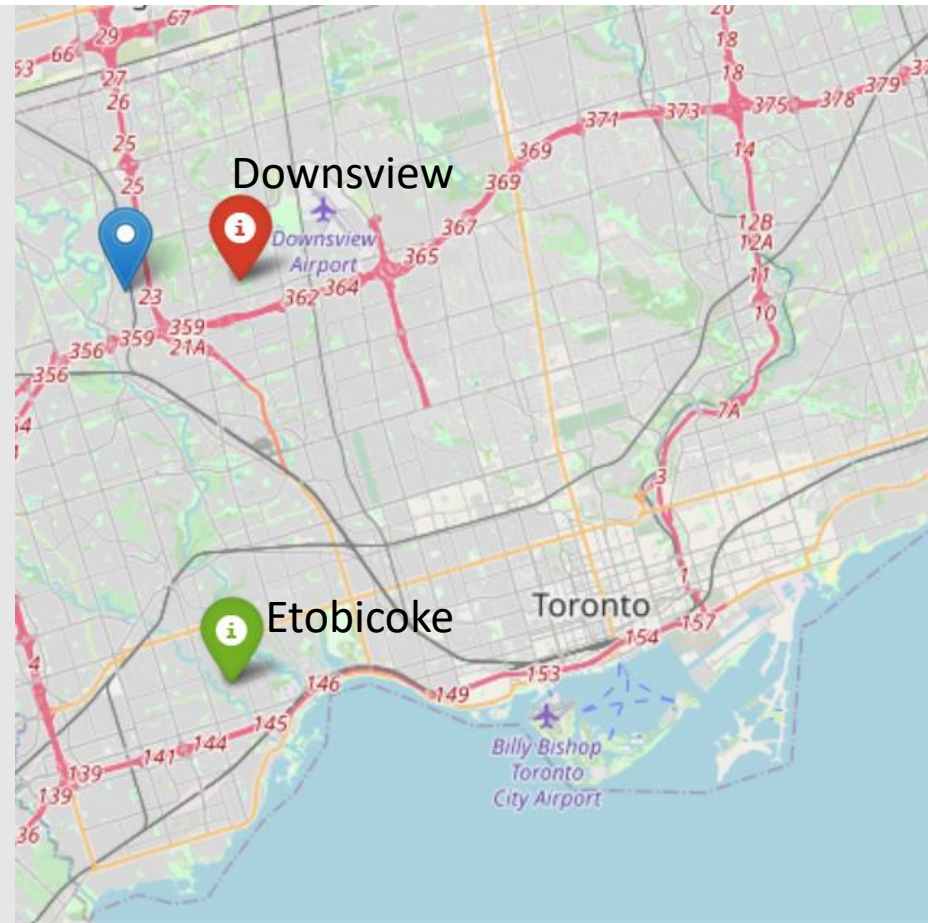
CONCLUSION



ETOBICOKE

Postal code neighborhoods covered by M8Y (OLD MILL SOUTH, KING'S MILL PARK, SUNNYLEA, HUMBER BAY, MIMICO NORTHEAST, QUEENSWAY EAST, ROYAL YORK SOUTHEAST, KINGWAY PARK SOUTHEAST) in the Etobicoke Borough of Toronto feature “Baseball Field” as the first most common venue.

This location appears to have the highest potential for new market expansion.



NORTH YORK

Postal code neighborhoods covered by M9M (HUMBERLEA, EMERY) also feature “Baseball field” as the first most common venue.

Comparing the locations on the map, it's clear that **this location is closest to the current location and therefore less likely to be profitable for expansion**, given the high number of Food Trucks nearby (“Food Truck Central”).

RECOMMENDATION

The top Etibicoke Borough in Toronto for Food Truck expansion are the neighborhoods near baseball fields in postal code M8Y

