



ARTISANAL COFFEE SHOP

An ideal location for
opening an artisanal
coffee shop in
Toronto

BACKGROUND

The Daily Grind Coffee Company (hypothetical) wishes to open a new artisanal coffee shop in Toronto, which will be their foray into the Canadian market. They plan to offer their signature cozy and comfortable space to sit down, relax, catch up with a friend or talk business while enjoying a well crafted brew or you could always take out if you are in a hurry. The motto is high quality coffee at a reasonable price.

An ideal Toronto neighborhood for them would have the following key features:

- A strong sustainable demand ideally driven by office/business workers
- A neighborhood with a robust population of working age with disposable income
- An area with a low density of coffee shops, especially craft coffee shops

The Daily Grind Coffee Company as a data driven company strongly believes in leveraging available data to make an informed decision about the location of their first coffee shop in Toronto

DATA SOURCE

Accurate data is the key to making the best possible recommendation for a ideal neighborhood. Because of this reason, there is no better source than Toronto Open Data Portal (<https://open.toronto.ca/>) that hosts official data for public use. The following data features were used from Toronto Open Data Portal:

- Neighborhood names, latitude, longitude, working age population & average income

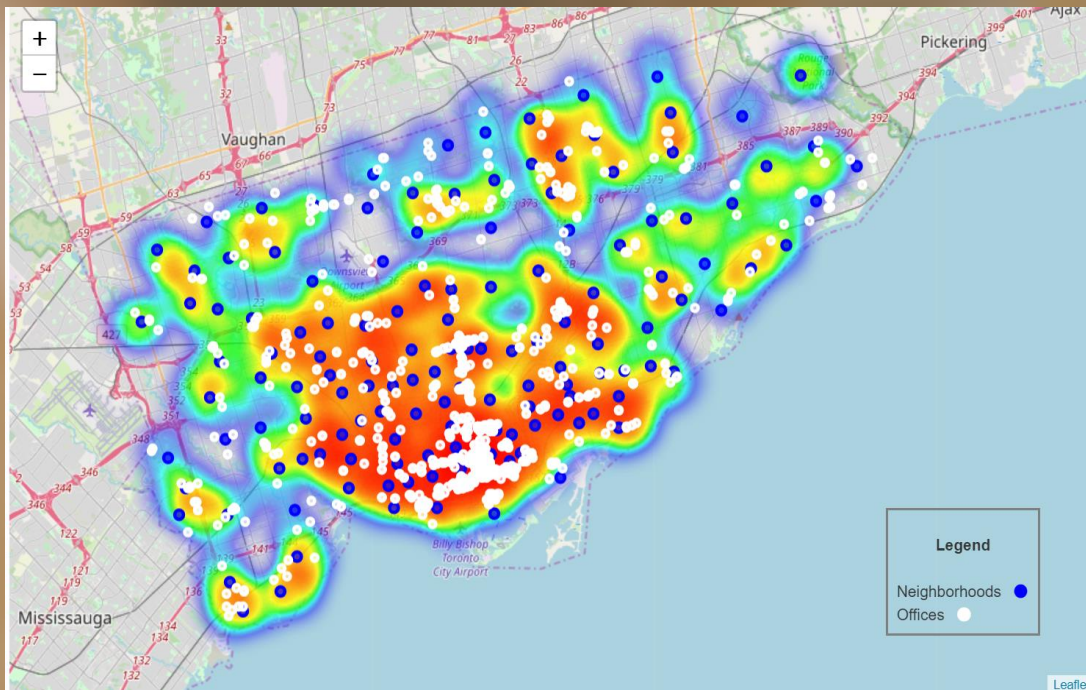
Another robust source of data is the Foursquare API for venue related data in each neighborhood (using coordinates). The data extracted will be limited to Coffee Shops/Cafes, Offices & Colleges. The following data features were pulled from Foursquare.

- Venue names, Venue latitude, Venue longitude and Venue category

This will give us all the data that we need to identify a neighborhood that fits the bill

ANALYSIS - NEIGHBORHOODS

A visual look at the Foursquare data show concentrations of coffee shops with a view of neighborhoods and offices near them.

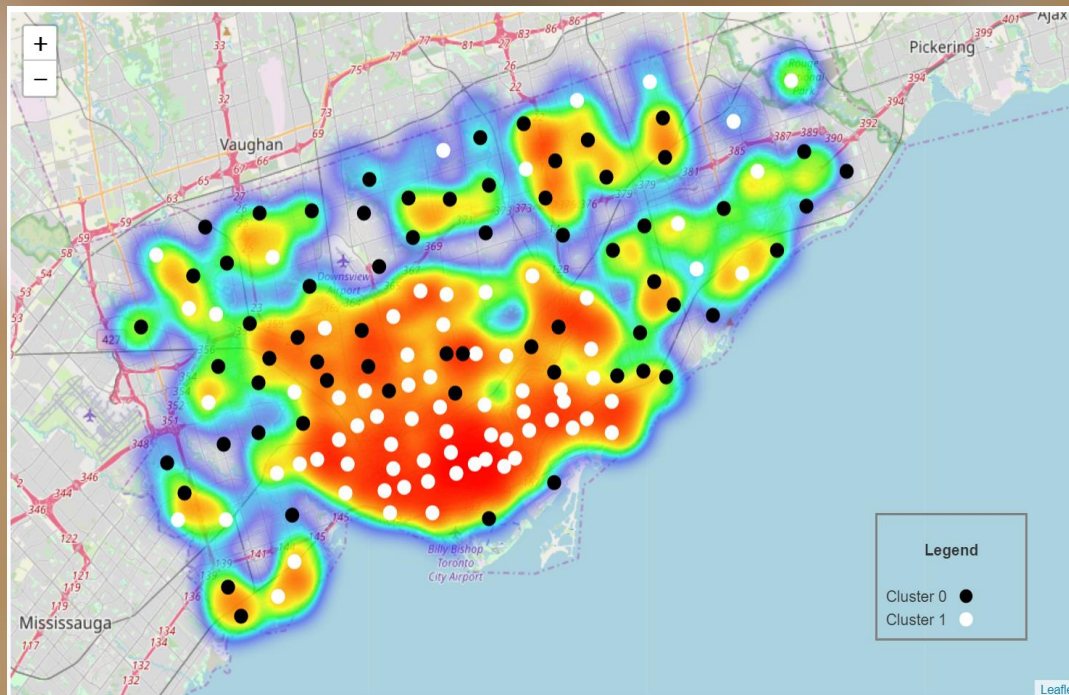


Observations:

- Unsurprisingly, most coffee shops and businesses/offices are in downtown Toronto
- There seems to however be potential in areas just outside of the hotspots that maybe ideal for our purposes
- A clustering algorithm will help group neighborhoods for further analysis

ANALYSIS - CLUSTERS

Clustering using K-Means (into 2 clusters) reveal a distinct breakdown of two types of neighborhoods.



Observations:

- Cluster 0 represent neighborhoods that have lower density of coffee shops or are on the fringes of high density areas
- Cluster 0 is an ideal cluster for further analysis as it also features higher density of offices (which is the first criteria)
- Lets now identify an ideal candidate for neighborhood within the cluster

ANALYSIS — IDEAL NEIGHBORHOOD

To satisfy the second criteria, let's sort the neighborhood cluster to find the neighborhood which has the highest weighted score* for a combination of working age population and income (higher the better). The top neighborhood was Waterfront Communities-The Island

	Neighborhood	Latitude	Income	Work Age Pop	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	
0	Waterfront Communities-The Island	43.633880	70,600	45,105	0	Office	Coffee Shop	Café	Tech Startup	College Academic Building	College Library	General & University
1	Yonge-St.Clair	43.687859	114,174	5,960	0	Office	Coffee Shop	Café	College Academic Building	Campaign Office	College Classroom	General & University
2	Willowdale East	43.770602	45,326	25,850	0	Office	Café	Coffee Shop	College Administrative Building	Business Service	College Classroom	Cowork Space
3	St.Andrew-Windfields	43.756246	100,516	6,800	0	Office	College Academic Building	University	College Quad	College Classroom	College Communications Building	College Engineering Building
4	Edenbridge-Humber Valley	43.670886	101,551	5,940	0	Office	Coffee Shop	Real Estate Office	University	College Quad	College Classroom	College Community Building
5	Mount Pleasant West	43.704435	57,039	17,100	0	Office	Coffee Shop	Café	College Academic	Tech Startup	General College & University	School



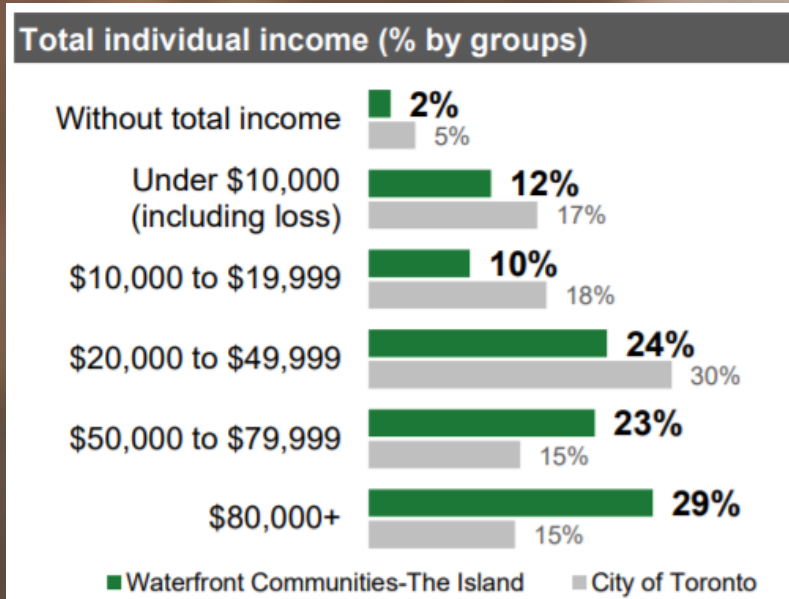
* Methodology described in more detail in report

RESULT — IDEAL NEIGHBORHOOD

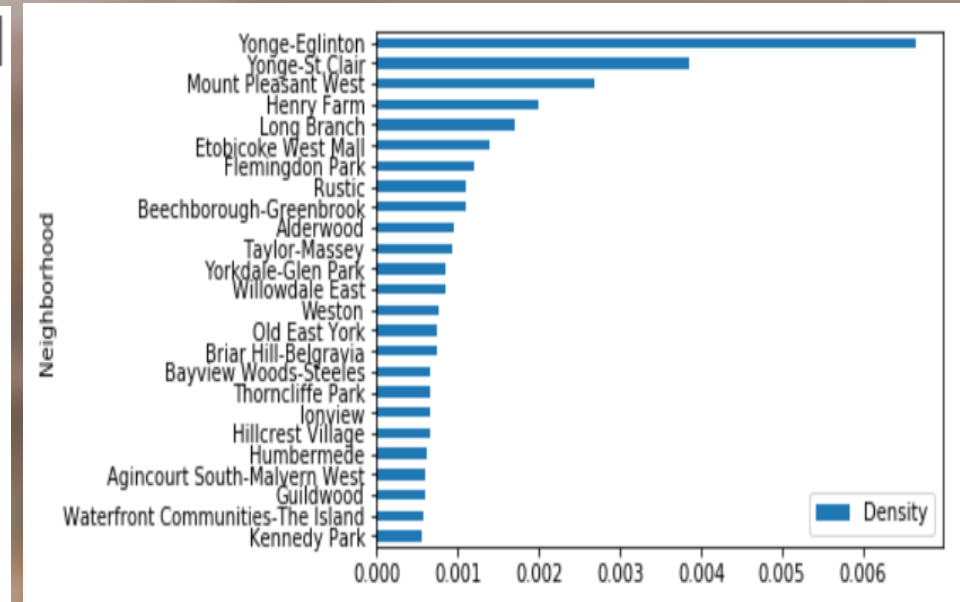
The top neighborhood (Waterfront Communities-The Island) is the ideal choice as it combines as the most common venue is offices, it has a strong working age population, higher than average income and low density of coffee shops (which is the third criteria). This is hence the recommendation from this exercise.

Population	Neighbourhood	Toronto
Population	65,913	2,731,571
Population change	+52.0%	+4.5%
Male	50.5%	48.1%
Female	49.5%	51.9%
Male/female ratio	101.9	92.6
Children Age 0-14	5.5%	14.6%
Youth Age 15-24	11.9%	12.5%
Working Age 25-64	75.6%	57.3%
Seniors Age 65+	7.0%	15.6%
Dependency ratio	16.6	55.1

Neighborhood Population*



Neighborhood Income*



Coffee Shop Density

DISCUSSION

While demand, population and competition were taken into consideration to make the recommendation, there are other critical factors that may also need to be considered like rent, availability of the right property and prevailing market conditions (which were not part of this analysis).

Another consideration may be the menu selection, which should be to the liking of Torontonians, which also requires further analysis.

CONCLUSION

The data indicates that **Waterfront Communities-The Island** is an ideal neighborhood to open an artisanal coffee shop in Toronto. The following criteria laid out by the client have been met with this location.

- Strong demand - The neighborhood has enough businesses/offices to support a loyal clientele plus this neighborhood features high foot traffic areas, which is another advantage
- A robust population - The neighborhood has 45,000+ working age residents with a high average income
- Limited competition - The area has a low density of coffee shops compared to similar neighborhoods, but not so low as to create any doubts about the viability of an artisanal coffee shop in this area

Overall, Waterfront Communities-The Island is an ideal location to open a new artisanal coffee shop that meets all of the client's criteria and some more. Perhaps, a good location within the neighborhood is Queen's Quay Terminal (marked below), which could be further explored.

THANK YOU

