Capstone Project
Battle of the Neighborhoods

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Ideal Place for a Chinese Restaurant in Toronto

Background:
- Toronto is a vibrant multicultural city
- Lots of exposure to various cultural things – particularly cuisine
- Many immigrants desire their own ethnic food

Ideal Place for a Chinese Restaurant in Toronto

Business Problem:
- There are already many Chinese restaurants in Toronto
- What is best location to open a new one?

Requirements for a Business

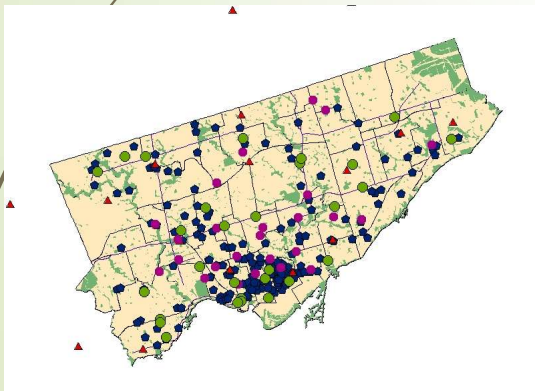The business will have an advantage if the chosen location has:
- sufficient income to spend at restaurants
- sufficient population growth to sustain and grow clientele
- dining out is popular with the population
- few Chinese restaurants to compete with

Data Required for Analysis

The first data that was required to complete the analysis was:
1. Postal codes of various neighborhoods
2. Geospatial data of Toronto neighborhoods

List of postal codes of Canada: M

From Wikipedia, the free encyclopedia

This is a list of postal codes in Canada where the first letter is M. Postal codes beginning with M (except M0R and M7R) are located within the city of Toronto in the province of Ontario. Only the first three

Canada Post provides a free postal code look-up tool on its website,[1] via its applications for such smartphones as the iPhone and BlackBerry,[2] and sells hard-copy directories and CD-ROMs. Many ve match addresses and postal codes. Hard-copy directories can also be consulted in all post offices, and some libraries.
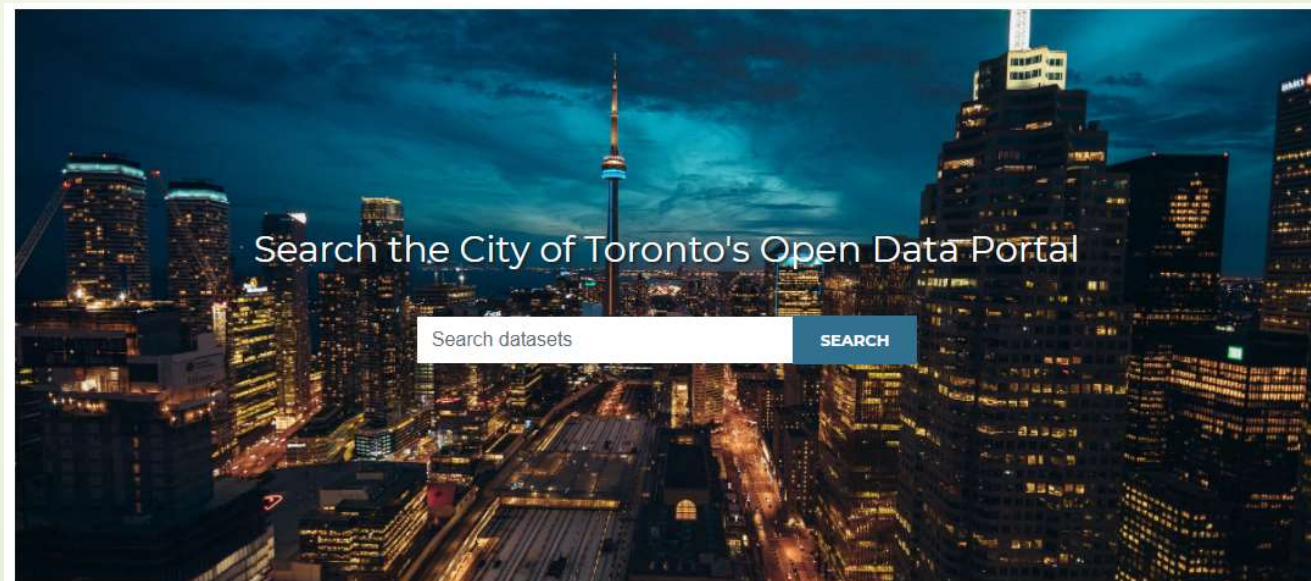
Toronto - 103 FSAs [edit]

Note: There are no rural FSAs in Toronto, hence no postal codes should start with M0. However, a handful of individual special-purpose codes in the M0R FSA are assigned to Gateway Commercial Ret freepost returns to high-volume vendors such as Amazon and the Shopping Channel.[3]

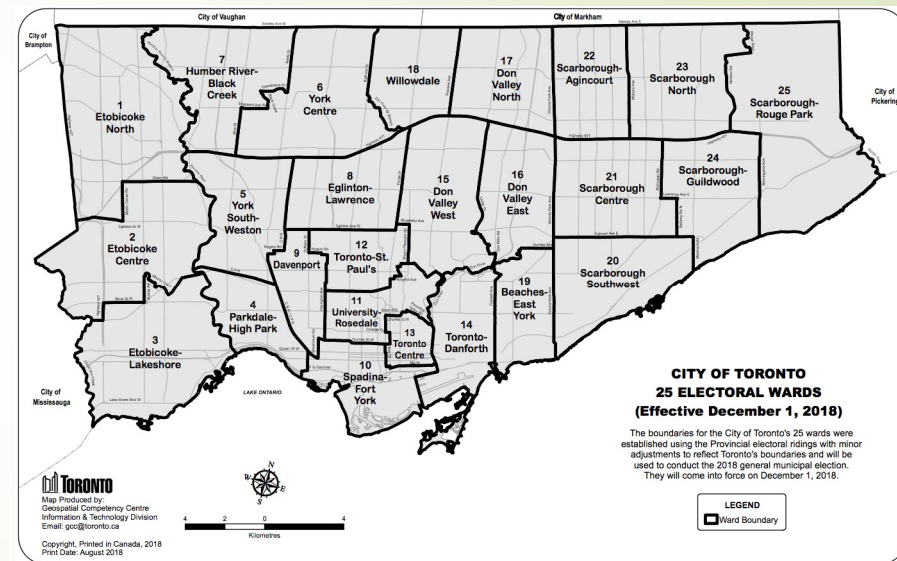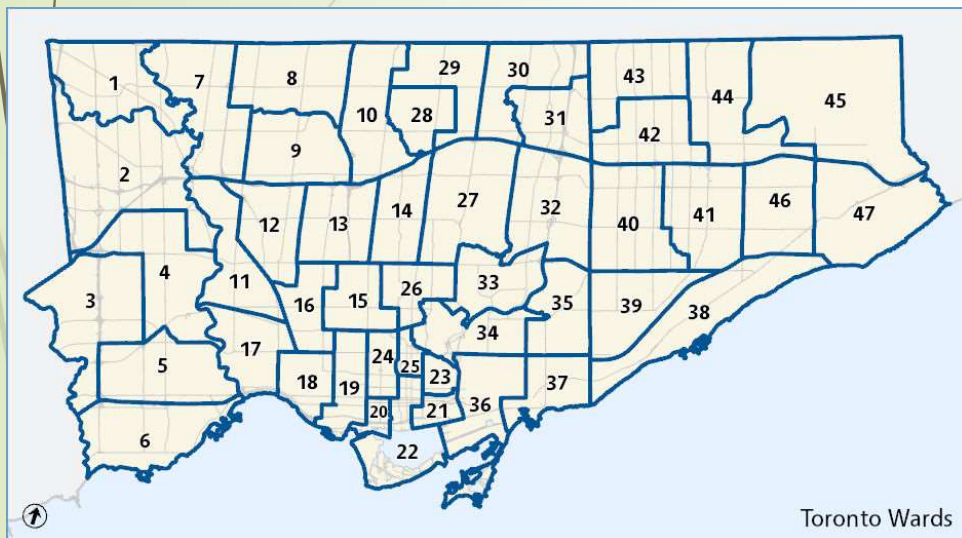| M1A	M2A	M3A	M4A	M5A	M6A	M7A
Not assigned	Not assigned	North York (Parkwoods)	North York (Victoria Village)	Downtown Toronto (Regent Park / Harbourfront)	North York (Lawrence Manor / Lawrence Heights)	Queen's Park (Ontario Provincial Gov
M1B	M2B	M3B	M4B	M5B	M6B	M7B
Scarborough (Malvern / Rouge)	Not assigned	North York (Don Mills) North	East York (Parkview Hill / Woodbine Gardens)	Downtown Toronto (Garden District, Ryerson)	North York (Glencairn)	Not assigned

Data Required for Analysis

Income and population growth data and be found in the City of Toronto's Open Data Catalogue.
The statistics were ultimately from Statistics Canada.

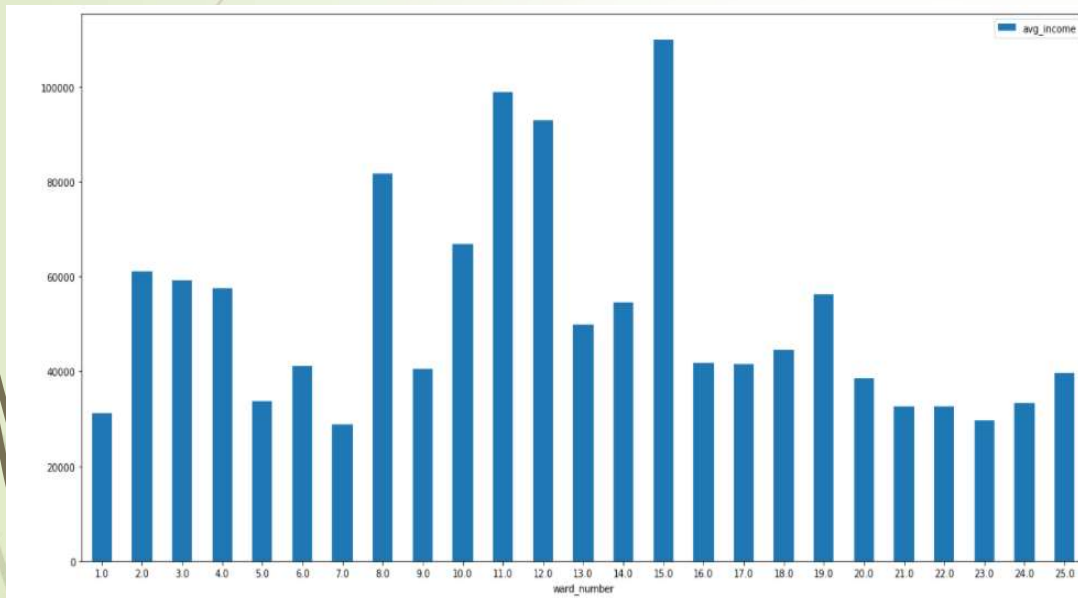Search the City of Toronto's Open Data Portal

Toronto Area

It should be noted that Toronto originally consisted of 47 wards until 2018, when the city was condensed to 25 wards.

Because the most up-to-date data was based on 25 wards, the analysis was also based on 25 wards. The disadvantage was a loss in resolution of the data.

Income Data

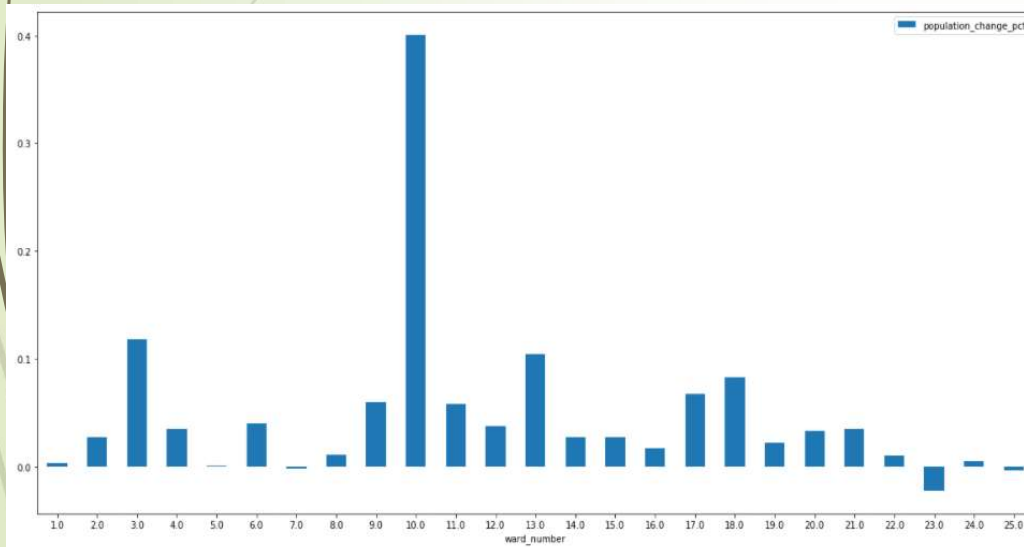After extracting and reorganizing the data, it was easy to determine wards that had favourable conditions.

Ward 15:
>$100,000 average income

Possibly indicates higher disposable income to spend on dining

Population Change

After extracting and reorganizing the data, it was easy to determine wards that had favourable conditions.
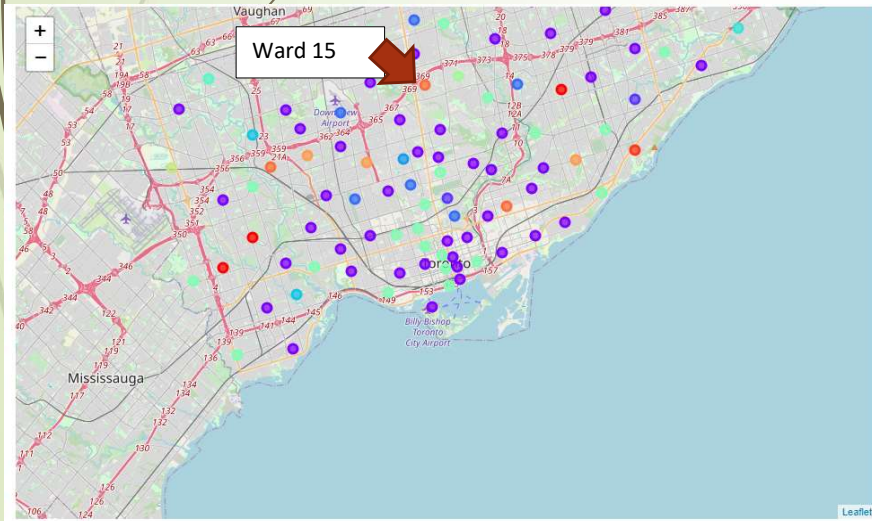

Ward 10:
Close to 4% growth in population

Possibly indicates a same proportion increase in potential customers

Clustering

Clustering analysis shows a high percentage of restaurants in Ward 15.
It also shows that it contains two neighborhoods that have a top restaurant type that is considered close to the business we want to start.

Cluster Ward 15 (Chosen Based on Income)

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cluster_ward_15=toronto_w_clusters_res.loc[toronto_w_clusters_res['ward_number'] == 15]
cluster_ward_15
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	postal_code	ward_number	Postal Code	Borough	Neighborhood	Latitude	Longitude	population_change_pct	avg_income	Cluster Labels	1st Most Common Restaurant Type	2nd Mo Commo Restaura Typ
14	M2L	15	M2L	North York	York Mills, Silver Hills	43.757490	-79.374714	0.0269485	109887	9	Martial Arts School	Yoga Stud
17	M4G	15	M4G	East York	Leaside	43.709060	-79.363452	0.0269485	109887	1	Coffee Shop	Sportir Goods Sh
78	M4H	15	M4H	East York	Thorncliffe Park	43.705369	-79.349372	0.0269485	109887	1	Indian Restaurant	Yoga Stud
83	M4N	15	M4N	Central Toronto	Lawrence Park	43.728020	-79.388790	0.0269485	109887	1	Dim Sum Restaurant	Pa
88	M2P	15	M2P	North York	York Mills West	43.752758	-79.400049	0.0269485	109887	13	Park	Convenien Sto
91	M4P	15	M4P	Central Toronto	Davisville North	43.712751	-79.390197	0.0269485	109887	1	Pizza Place	Breakfa Sp

Conclusions & Assumptions

Conclusion:

Based on this analysis, the best place to start a Chinese restaurant would be in Ward 15, namely in neighborhoods Thorncliffe Park and Lawrence Park.

Ward 15 has a high average income and also it appears dining out is a popular option (excluding fast food, coffee shops, etc.)

Assumptions:

It is assumed that each neighborhood in the same ward experiences the same population growth and same average income. Most likely neighborhoods within a certain ward will have disparity within each other.