

# Comparison of Toronto and Vancouver Neighborhoods

Daniel Easley

September 29, 2019

## Predicting the Chinese immigration impact on Vancouver is important for the Restaurant industry

- Can we determine a shift in the restaurant venues, impacted by the Chinese immigration?
- The 1997 handover of Hong Kong back to China, has caused a surge of Chinese immigration
- The Global Livability Ranking study selected Vancouver as 6<sup>th</sup> and Toronto as 7<sup>th</sup>
- The cities are 2090 miles (3364 km) apart

## Data Acquisition and preparation

- The livability rankings can be found at [Global Livability Ranking](#)
- Population and Ethnic Diversity, based on the 2016 Canadian census for [Toronto](#) and [Vancouver](#)
- Postal codes will be scraped from the wikis: [Toronto](#) and [Vancouver](#)
- [Geocoder](#) will use ArcGis for neighborhood coordinates
- All venue information will be sourced from the [Foursquare](#) REST API
- Toronto will have 1748 venues and 210 distinct venue categories
- Vancouver will have 854 venues and 187 distinct venue categories

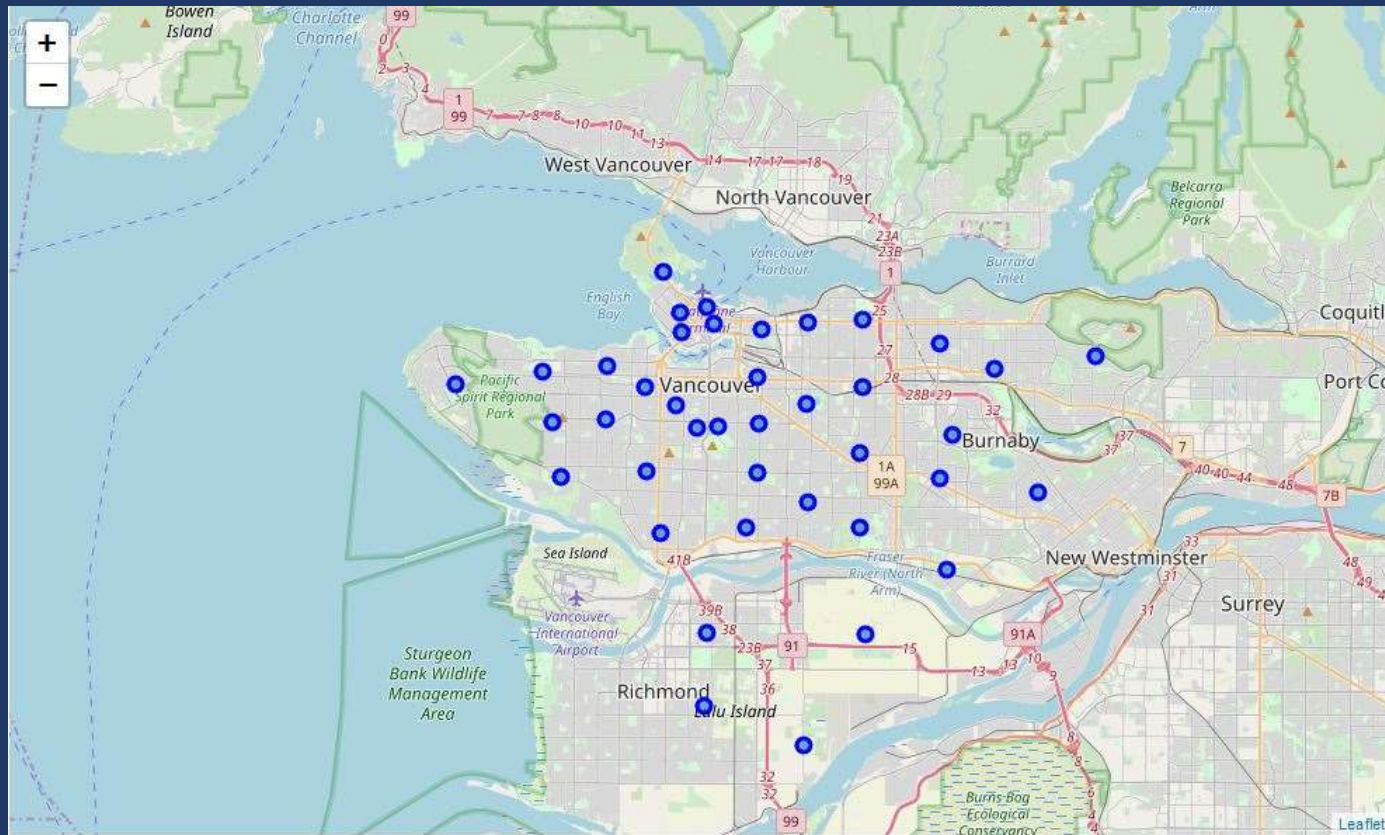
## City Comparison

City	Location	Population (2016 census)	Ethnic Diversity (2016 census)
Vancouver	British Columbia (Pacific Time Zone)	631,486	48.9% European (white) 19.6% Chinese 12.0% South Asian
Toronto	Ontario (Eastern Time Zone)	2,731,571	47.7% European (white) 12.6% South Asian 11.1% Chinese

# Toronto Postal Codes



# Vancouver Postal Codes



## Unique Vancouver venues

Australian Restaurant  
Cantonese Restaurant  
Filipino Restaurant  
Hawaiian Restaurant  
Himalayan Restaurant  
Japanese Curry Restaurant  
Kosher Restaurant  
Lebanese Restaurant  
Portuguese Restaurant  
Shanghai Restaurant  
South Indian Restaurant

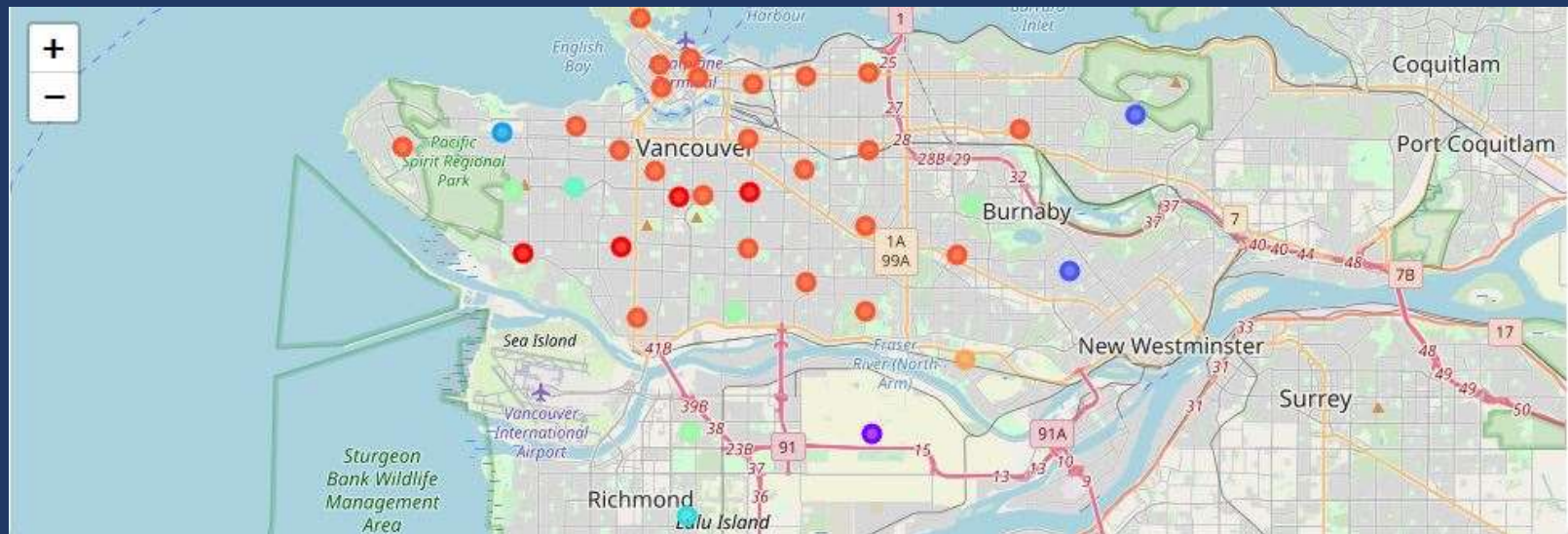


# Toronto Clusters





# Vancouver Clusters



# Conclusions

Reviewing the largest cluster for each city, we find that these clusters contain many restaurant locations. To compare these clusters, I then focused on the top 4 venues for each cluster to see if they contained a 'Chinese Restaurant'.

- Toronto
  - Postal codes within the cluster: **28**  
Boroughs that have 'Chinese Restaurant' in the top 4 most common venues: **0**
- Vancouver
  - Postal codes within the cluster: **23**  
Boroughs that have 'Chinese Restaurant' in the top 4 most common venues: **7**
- Based on these results we can say that the Chinese immigration has heavily affected the restaurant venues in Vancouver. The restaurant industry in Vancouver should shift their product mix towards the Chinese market.