



# Crime Data In Toronto

APPLIED DATA SCIENCE CAPSTONE

# The Problem

- ▶ You and your family are planning to move to Toronto, Ontario, and safety from crime is your main concern. Which neighborhoods have the lowest amount of crime?
- ▶ Toronto has a large population with 140 neighborhoods, and each neighborhood has their own individual crime statistics.
- ▶ We would want to find a way to compile the individual crimes of each of the 140 neighborhoods to determine the safest of them all.

# Who would use this data?

- ▶ There are 2 different reasons people could use this data:
  - ▶ 1. A family looking for the safest neighborhood in the city to live
  - ▶ 2. The city looking for a safe location for a new school or other building to be built

# Data acquisition

- ▶ List of neighborhoods: [List of postal codes of Canada: M – Wikipedia](#)
- ▶ Crime data: [Toronto Police Data | Kaggle](#)
- ▶ Toronto map geojson for choropleth: [https://github.com/jasonicarter/toronto-geojson](#)
- ▶ Venue data: I used [https://foursquare.com/developers/apps](#) for venue data

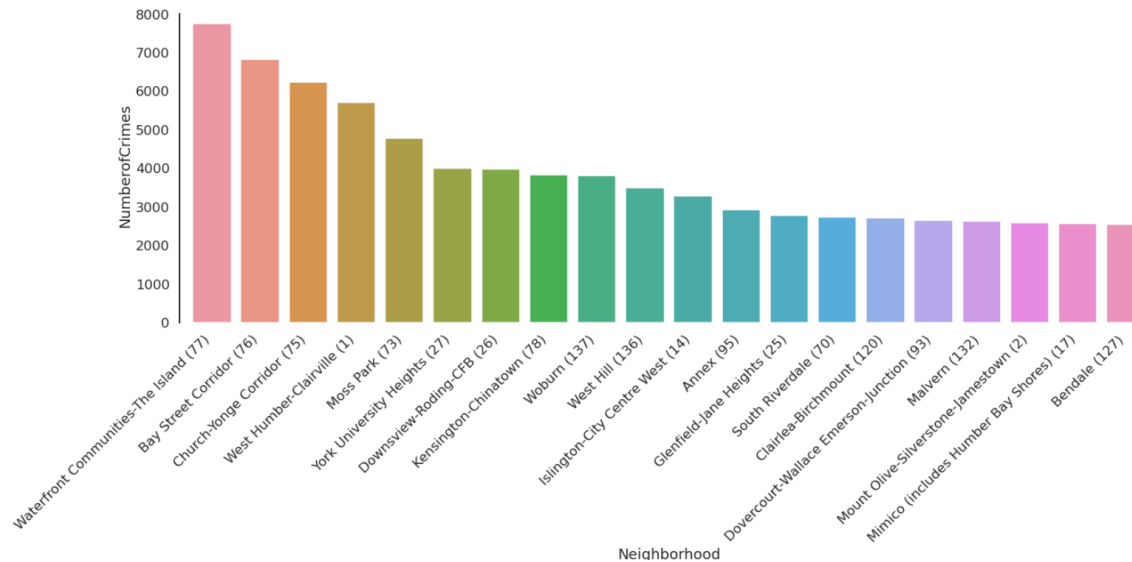
# List of Neighborhoods and Coordinates

- ▶ Using The list of Postal Codes in Canada that start with M on Wikipedia, I retrieved a list of Toronto's Neighborhoods. Afterwards, I used the Geocoders library to obtain the latitudes and longitudes of each neighborhood to display on a folium map.

	PostalCode	Borough	Neighborhood	Latitude	Longitude
0	M3A	North York	Parkwoods	43.75245	-79.32991
1	M4A	North York	Victoria Village	43.73057	-79.31306
2	M5A	Downtown Toronto	Regent Park, Harbourfront	43.65512	-79.36264
3	M6A	North York	Lawrence Manor, Lawrence Heights	43.72327	-79.45042
4	M7A	Queen's Park	Ontario Provincial Government	43.66253	-79.39188
5	M9A	Etobicoke	Islington Avenue	43.66263	-79.52831
6	M1B	Scarborough	Malvern, Rouge	43.81139	-79.19662
7	M3B	North York	Don Mills North	43.74923	-79.36186
8	M4B	East York	Parkview Hill, Woodbine Gardens	43.70718	-79.31192
9	M5B	Downtown Toronto	Garden District, Ryerson	43.65739	-79.37804
10	M6B	North York	Glencairn	43.70687	-79.44812
11	M9B	Etobicoke	West Deane Park, Princess Gardens, Martin Grov...	43.65034	-79.55362



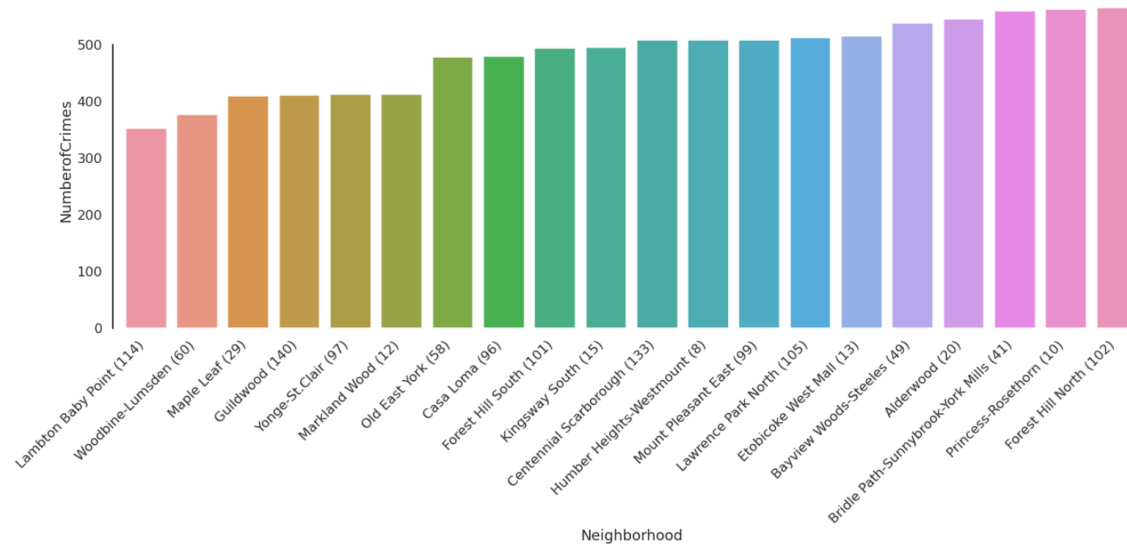
	Neighborhood	NumberofCrimes
122	Waterfront Communities-The Island (77)	7747
6	Bay Street Corridor (76)	6817
23	Church-Yonge Corridor (75)	6232
124	West Humber-Clairville (1)	5702
79	Moss Park (73)	4786
138	York University Heights (27)	3989
33	Downsview-Roding-CFB (26)	3974
62	Kensington-Chinatown (78)	3823
132	Woburn (137)	3798
123	West Hill (136)	3497



# Top Ten Highest Crime Neighborhoods

Waterfront Communities- The Island, Bay Street Corridor, and Church-Yonge Corridor have the 3 highest numbers of crime in Toronto from 2014-2019 with 7747, 6817, and 6232 crimes in each neighborhood respectively.

	Neighborhood	NumberofCrimes
66	Lambton Baby Point (114)	353
134	Woodbine-Lumsden (60)	377
74	Maple Leaf (29)	410
47	Guildwood (140)	411
137	Yonge-St.Clair (97)	412
75	Markland Wood (12)	413
93	Old East York (58)	479
21	Casa Loma (96)	480
44	Forest Hill South (101)	494
64	Kingsway South (15)	496

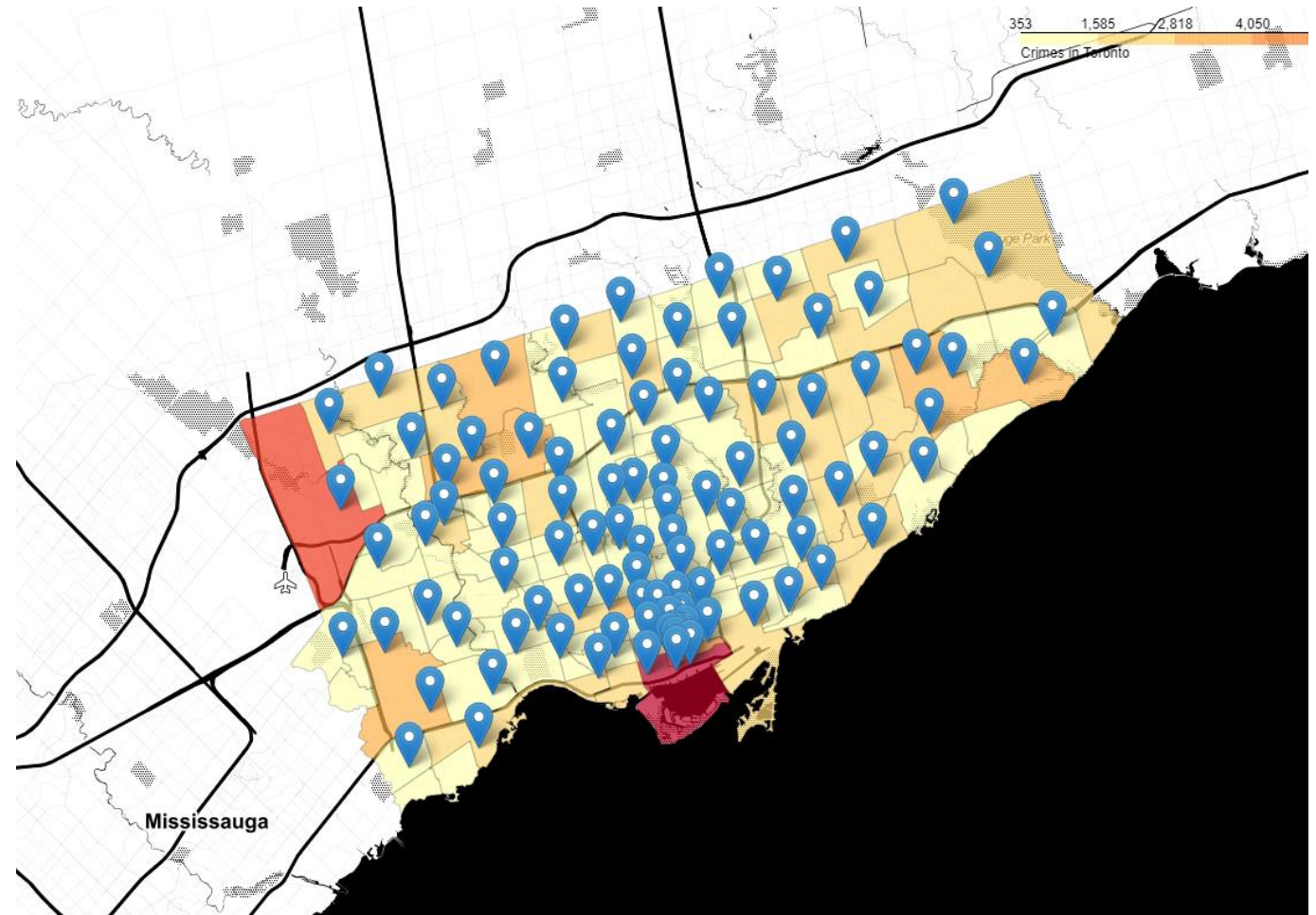


## Top Ten Lowest Crime Neighborhoods

Lambton Baby Point, Woodbine-Lumsden, and Maple Leaf have the 3 lowest numbers of crimes in Toronto from 2014-2019 with 353, 377, and 410 crimes in each neighborhood, respectively.

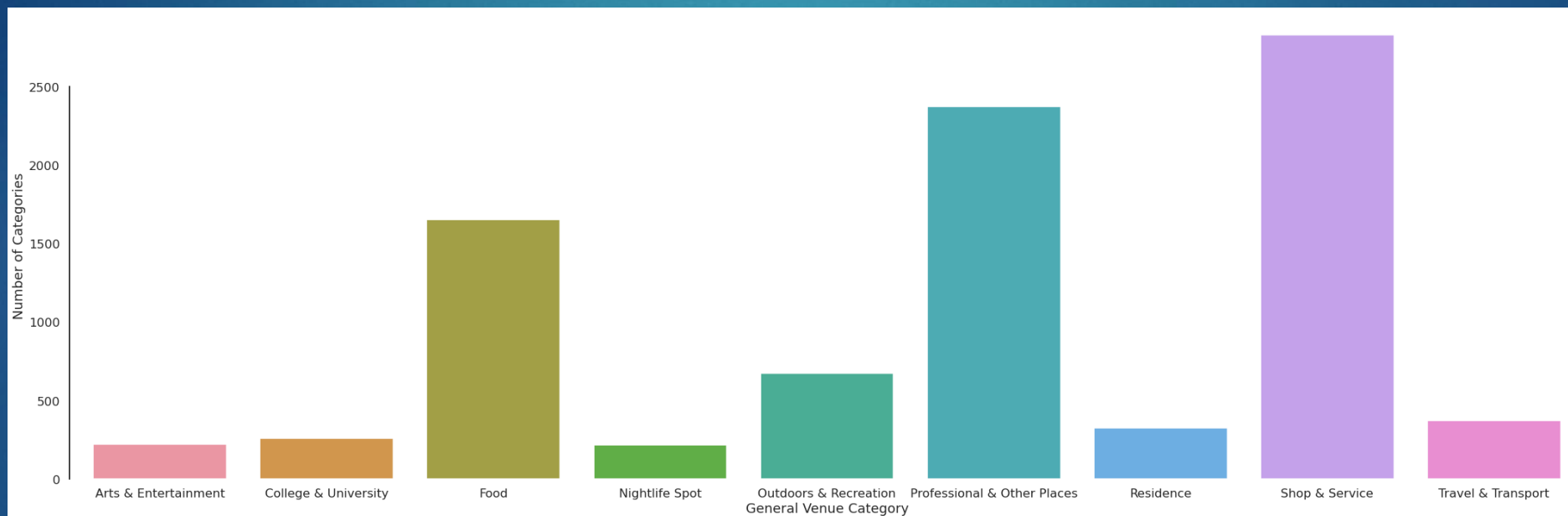
## Crime Choropleth Map Sorted by Neighborhood

- ▶ This map represents the crime in Toronto's neighborhoods, yellow being the lowest, and red being the highest.
- ▶ On the data section of this project ([link](#), use nbviewer.jupyter.org to view maps if they don't display in GitHub), you can click on the map markers to see which neighborhoods they represent.



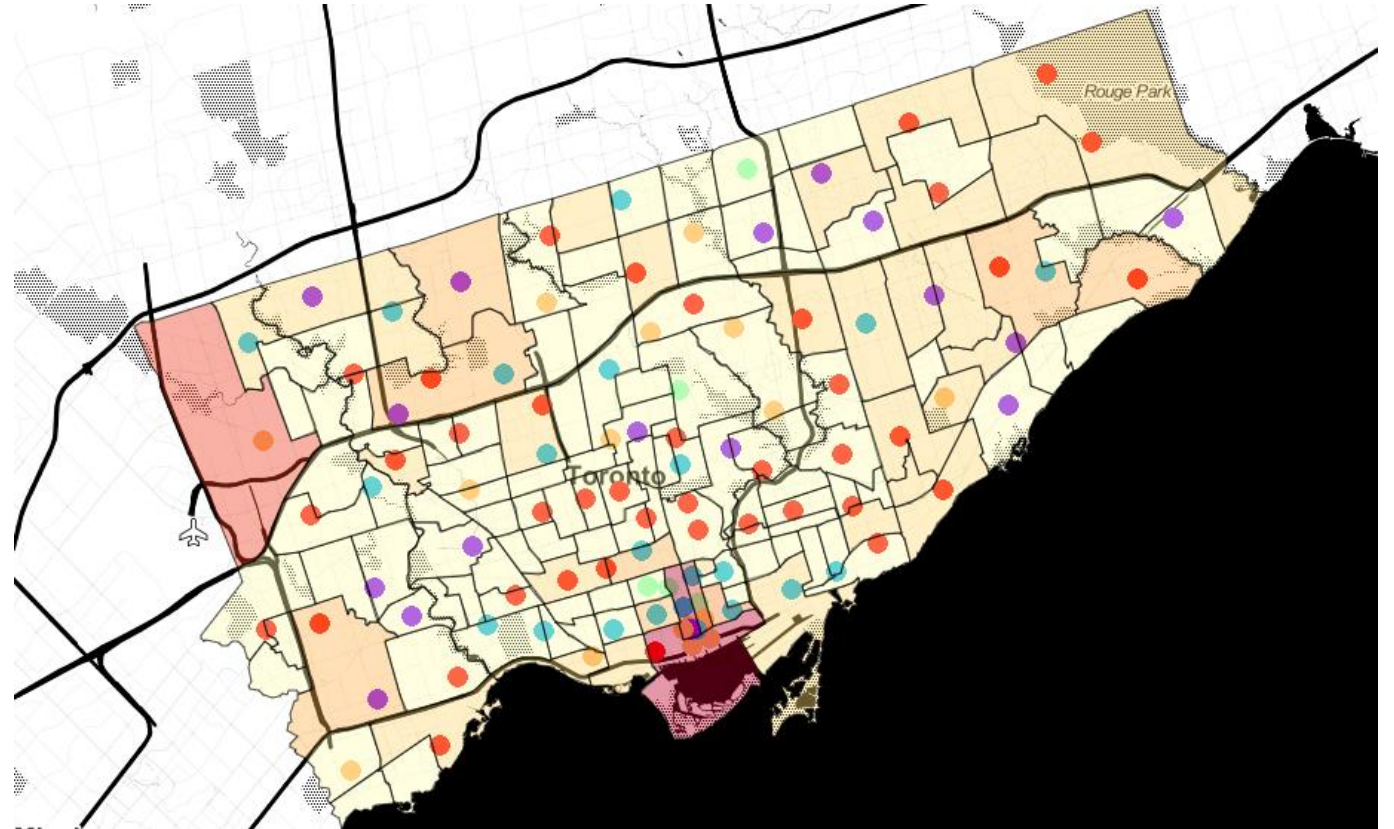


# Venue Data: Shops and Service is the most common venue in Toronto



# Venue and Crime Map

- ▶ This map simultaneously displays venues and crime data to help determine your decision.



# Conclusion

- ▶ Neighborhoods Lambton Baby Point and Forest Hill South are, in my opinion, 2 of the safest options for moving.
- ▶ Both are within the top 10 lowest crime neighborhoods.
- ▶ Both are rich in venues.
- ▶ Due to low crime, they are safe, good locations for raising a family, and houses in the area would have a good resale value.