

Battle of the Neighborhoods - Part 2

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Introduction

- Torbjorn Magnusson wants to open a new restaurant in New York City, inspired by local cuisines and preferences.
- The restaurant has to be in a safe and family freindly location.
- He wants to know which borough and which neighborhood to choose.



New York City Traffic (i)

- The traffic collision data was accessed to determine the safest neighborhood in terms of collisions.

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borough                        622 non-null object
contributing_factor_vehicle_1  996 non-null object
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contributing_factor_vehicle_3  61 non-null object
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number_of_motorist_killed       1000 non-null int64
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number_of_pedestrians_killed    1000 non-null int64
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on_street_name                  756 non-null object
time                           1000 non-null object
unique_key                      1000 non-null int64
vehicle_type_code1              993 non-null object
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vehicle_type_code4              11 non-null object
vehicle_type_code5              4 non-null object
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memory usage: 265.7+ KB
```



New York City Traffic (ii)

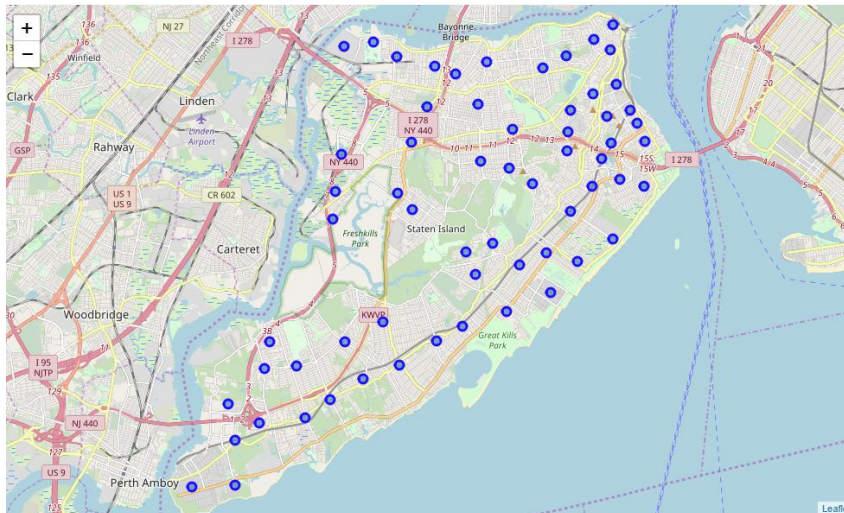
- Staten Island had the lowest number of collisions by a factor of five, compared to the next best borough.

STATEN ISLAND	Alcohol Involvement	1
	Backing Unsafely	5
	Driver Inattention/Distracted	3
	Following Too Closely	2
	Illness	1
	Passing or Lane Usage Improper	2
	Reaction to Uninvolved Vehicle	1
	Turning Improperly	1
	Unspecified	5
BROOKLYN	197	
QUEENS	182	
MANHATTAN	121	
BRONX	101	
STATEN ISLAND	21	
Name: borough, dtype: int64		



New York City Boroughs

- Using the new York City dataset, the borough of Staten Island was isolated and neighborhoods were analysed to find a potential venue for Torbjorn's restaurant.



Staten Island Neighborhoods

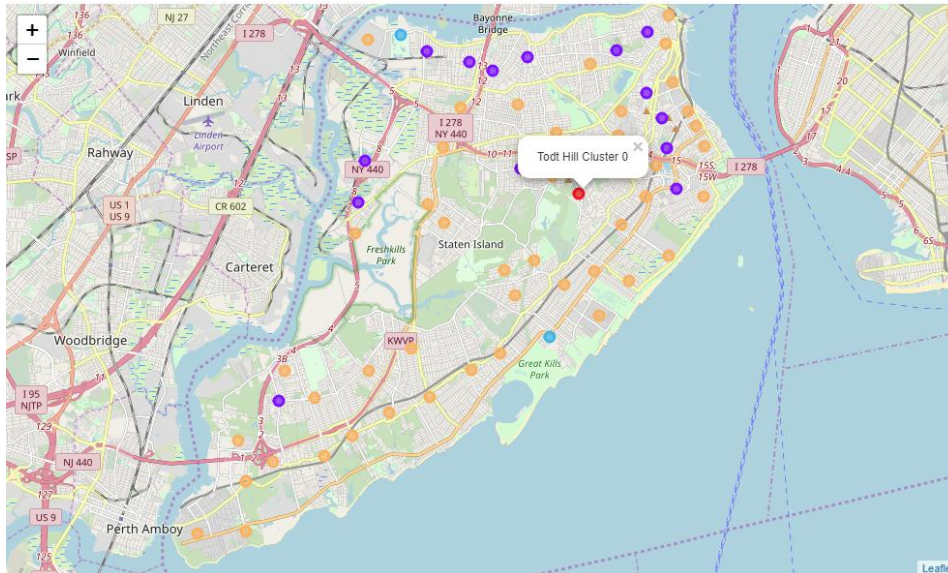
- Prior to clustering the neighborhoods, we have the list of most common venues for all neighborhoods.

	Neighborhood	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
0	Annadale	Pizza Place	Dance Studio	Cosmetics Shop	Bakery	Park	Diner	Restaurant	Sports Bar	Train Station	American Restaurant
1	Arden Heights	Pool	Coffee Shop	Playground	Pizza Place	Pharmacy	Wings Joint	Donut Shop	Filipino Restaurant	Fast Food Restaurant	Falafel Restaurant
2	Arlington	Bus Stop	Grocery Store	American Restaurant	Intersection	Food	Boat or Ferry	Wings Joint	Food & Drink Shop	Flower Shop	Filipino Restaurant
3	Arrochar	Bus Stop	Deli / Bodega	Italian Restaurant	Bagel Shop	Cosmetics Shop	Hotel	Food Truck	Pizza Place	Middle Eastern Restaurant	Supermarket
4	Bay Terrace	Italian Restaurant	Supermarket	Donut Shop	Plaza	Insurance Office	Salon / Barbershop	Sushi Restaurant	Liquor Store	Shipping Store	Wings Joint
5	Bloomfield	Recreation Center	Discount Store	Theme Park	Bus Stop	Donut Shop	Flower Shop	Filipino Restaurant	Fast Food Restaurant	Falafel Restaurant	Event Space
6	Bulls Head	Bus Stop	Pizza Place	Chinese	Japanese	Pharmacy	Deli / Bodega	Grocery	Baseball Field	Mattress	Fast Food



Staten Island - Clustered Neighborhoods

- Once the clusters were completed, it was a matter of looking at the most common restaurants in various neighborhoods.



Discussion and Conclusion

- Neighborhoods of Port Ivory and Oakwood had a preference for Eastern European restaurants.
- Neighborhoods of New Dorp, Great Kills, Eltingville and Annadale had a preference for Italian cuisine.
- Torbjorn can choose to open his restaurant in these neighborhoods and style his cuisine accordingly.
- Italian inspired Swedish cuisine appears to be the best way to go.

