

# Coffee Shops in Toronto

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# Research Topic

Questions:

- 1) How many coffee shops are within each district of Toronto?
- 2) Does the number of coffee shops affect amenities that are available?



# Coffee Shops in Toronto

## Variables

### **Independent Variable:**

Number of coffee shops within district.

### **Dependent Variable:**

Frequency of amenities per district.

## Hypothesis

The more coffee shops there are in a district, the more frequent amenities will be.

## Null Hypothesis

There is no correlation between the number of coffee shops and frequency of amenities.

# Amenities Being Analyzed

- Wheelchair Access
  - Internet Access
  - Takeaway
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Data that we used:  
[api.geoapify](https://api.geoapify.com/)

# Findings

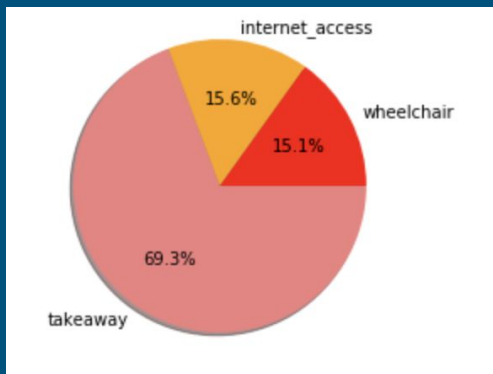
# Number of Coffee Shops Per District



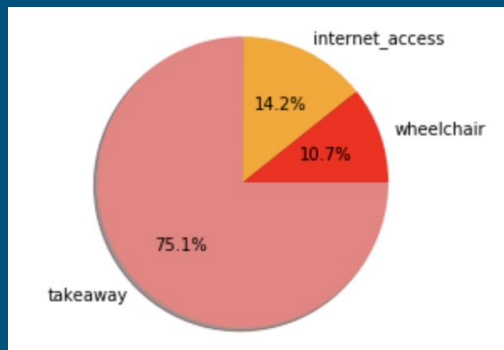
District	coffe shops
NorthYork	641
Etobicoke	358
Downtown	332
Scarborough	209
York	174
East York	167

# Percentage of Amenities Per District

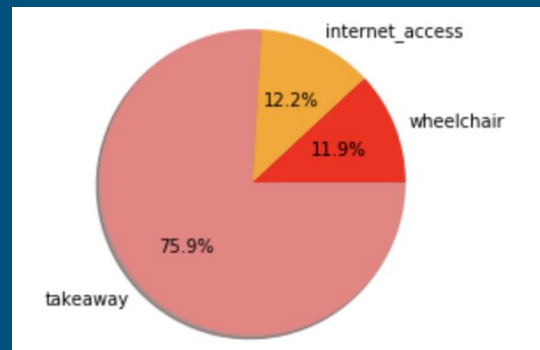
## East York



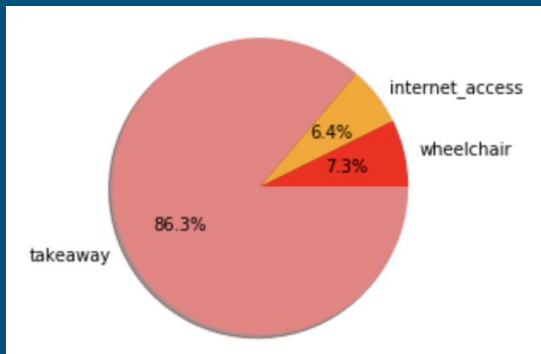
## Etobicoke



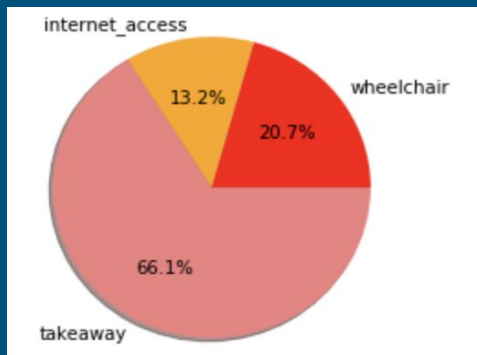
## North York



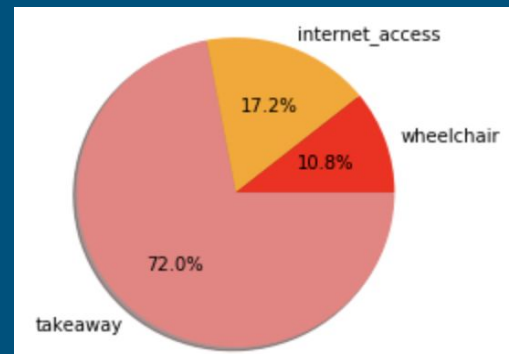
## Scarborough



## Downtown, Toronto



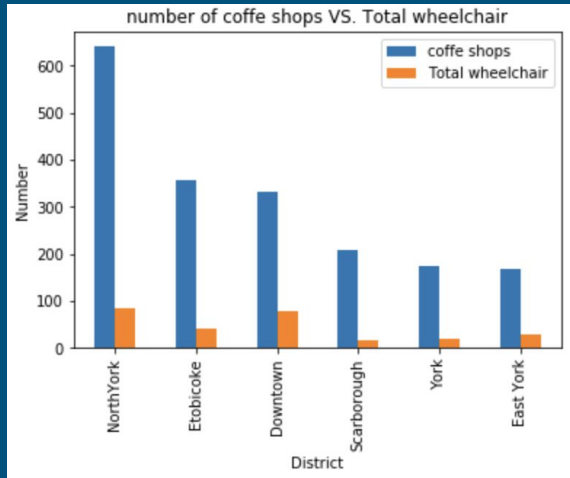
## York



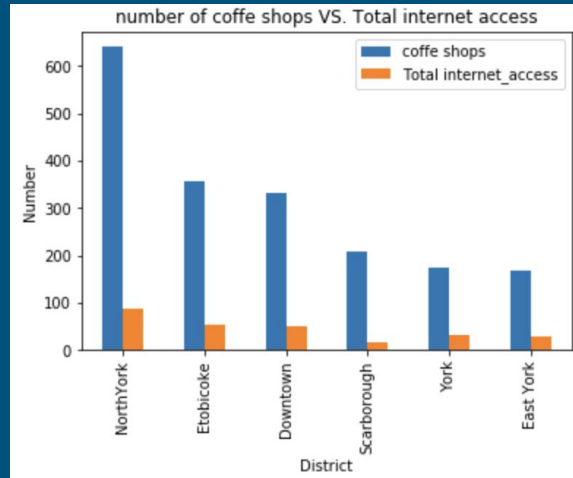


# Comparison of Amenity vs. Number of Coffee Shops Per District

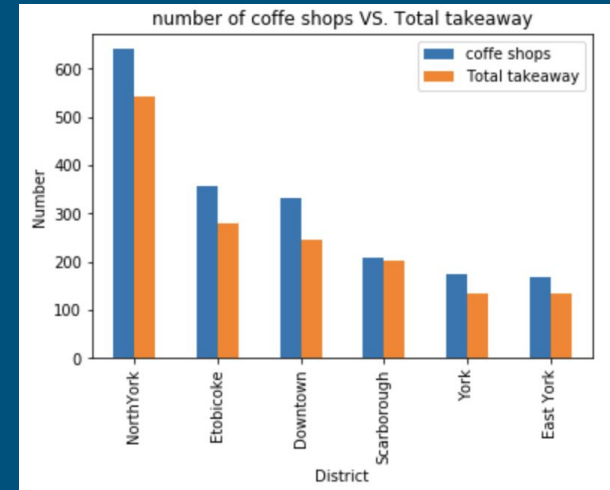
## Wheelchair



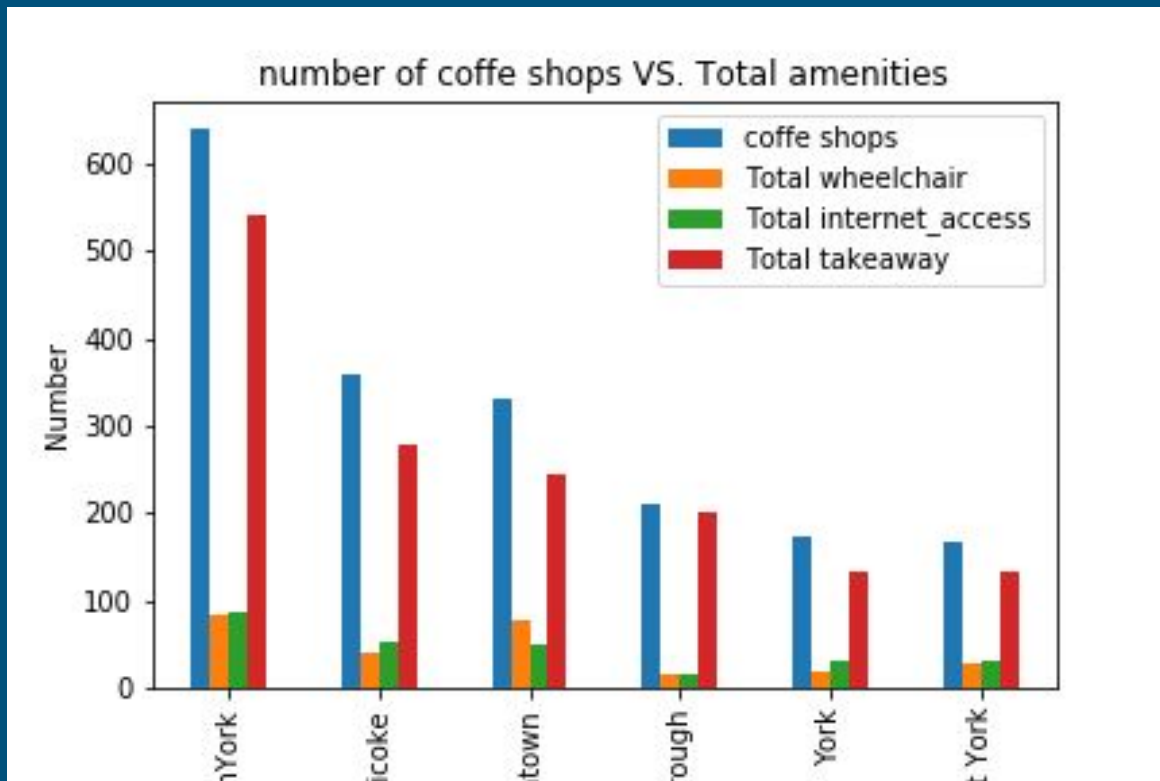
## Internet Access



## Takeaway



# Comparison All Amenities in One Graph



# Conclusions

- North York has most coffee shops out of all districts
  - All districts display high percentage of takeaway option
  - Downtown Toronto has the highest wheelchair access percentage
  - East York has most coffee shops with internet access
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# Confirm or reject hypothesis

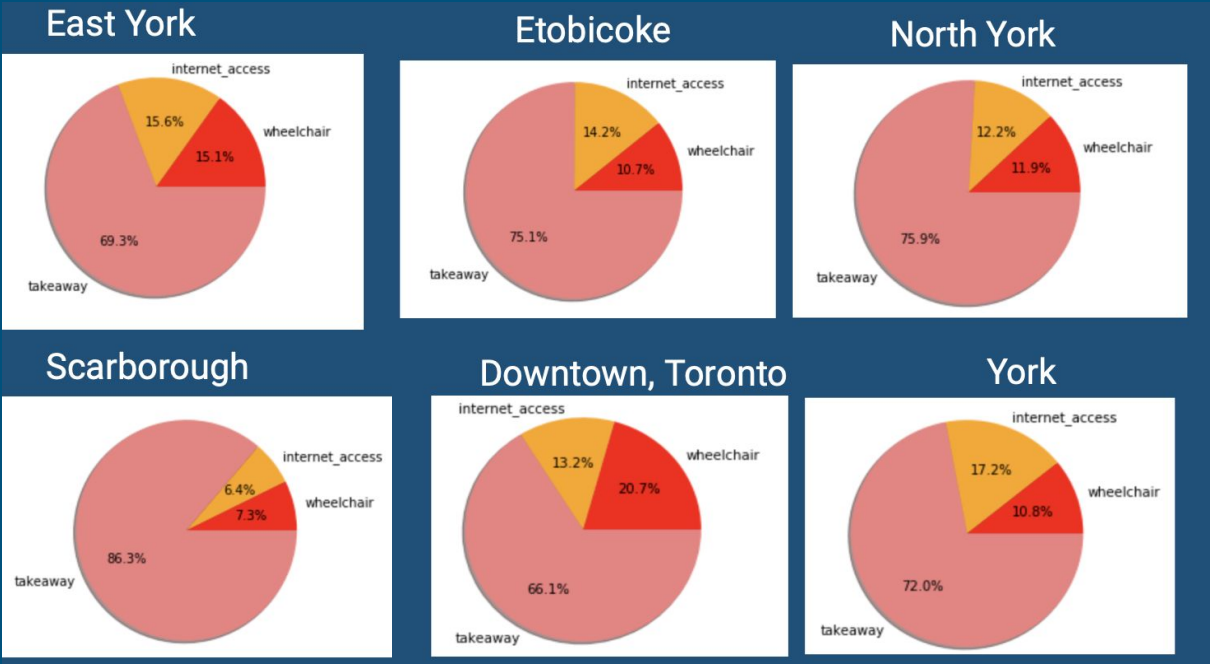
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## Null hypothesis: accepted

- There is no direct correlation between number of coffee shops within a district and available amenities



District	coffe shops
NorthYork	641
Etobicoke	358
Downtown	332
Scarborough	209
York	174
East York	167



# Limitations of the data



## Overlap between districts

Geoapify uses radius when finding places, whereas area of each district is by square kilometres. True area of each district may not have been fully covered.



## Missing Data

Many coffee shops in districts did not have data on all amenities, especially wheelchair and internet access.





Thank you for being a part of our  
presentation!

