

# Exploring the Correlation Between the Crime Rate and Avenues in NY City

Aoune Barhoumi  
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## **Objective of the Project:**

We will explore the correlation between the crime rate and the avenues in NY city

# Crime map in NYPD

<https://data.cityofnewyork.us/Public-Safety/Crime-Map-/5jvd-shfj>

data.cityofnewyork.us/Public-Safety/Crime-Map-/5jvd-shfj										
NYC OpenData										
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Crime Map! COMMUNITY										
Based on NYPD Complaint Data Current (Year To Date)										
This dataset includes all valid felony, misdemeanor, and violation crimes reported to the New York City Police Department (NYPD) for all complete quarters up to this year (2016). For additional details, please see the attached data dictionary in the 'About' section.										
More Views Filter Visualize Export Discuss Embed About										
CMPLNT_NUM	ADDR_PCT_CD	BORO_NM	CMPLNT_FR_DT	CMPLNT_FR_TM	CMPLNT_TO_DT	CMPLNT_TO_TM	CRM_ATPT_CPTD_CD	HADEVELOPT		
466502077	75	BROOKLYN	03/30/2020	17:30:00	03/31/2020	06:53:00	COMPLETED			
303191835	77	BROOKLYN	03/28/2020	19:30:00	03/28/2020	20:30:00	COMPLETED			
735488557	43	BRONX	03/29/2020	14:10:00			COMPLETED			
315962428	40	BRONX	03/29/2020	07:10:00	03/29/2020	07:16:00	COMPLETED			
165437868	114	QUEENS	03/27/2020	13:15:00	03/27/2020	14:00:00	COMPLETED			
709032439	45	BRONX	03/27/2020	10:00:00			COMPLETED			
579248512	42	BRONX	03/27/2020	00:57:00			COMPLETED			
114545671	71	BROOKLYN	03/25/2020	17:55:00	03/25/2020	17:59:00	COMPLETED			
218043957	44	BRONX	03/25/2020	12:30:00			COMPLETED			
172952393	47	BRONX	03/23/2020	17:00:00			COMPLETED			
804431848	43	BRONX	03/23/2020	21:29:00			COMPLETED			
720450114	5	MANHATTAN	03/23/2020	14:00:00			COMPLETED			
935958090	67		02/07/2014	16:20:00			COMPLETED			
764576211	40	BRONX	03/22/2020	15:15:00	03/22/2020	15:46:00	COMPLETED			
254029298	40	BRONX	03/22/2020	11:45:00	03/22/2020	15:05:00	COMPLETED			
653487266	25	MANHATTAN	03/21/2020	02:47:00			COMPLETED			

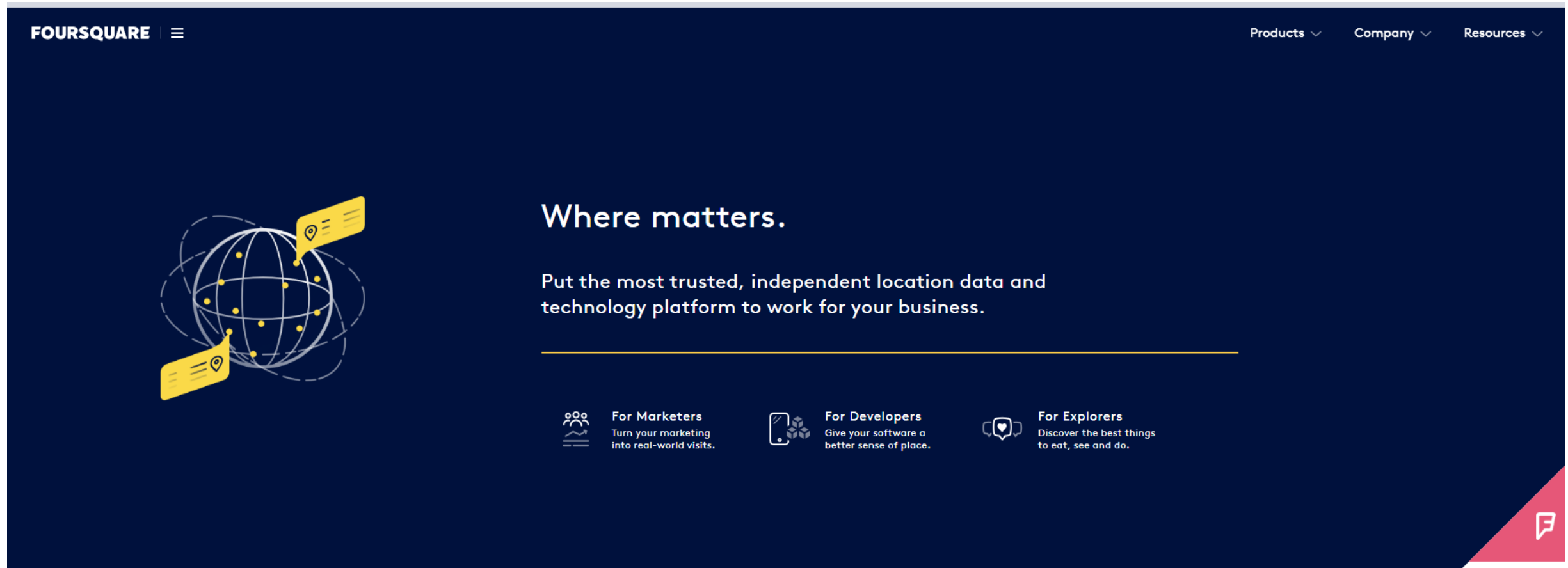
This dataset includes all valid felony, misdemeanor, and violation crimes reported to the New York City Police Department (NYPD) for all complete quarters from 1974 till 2020.

# Total Number of Crimes in NY Boroughs

Total_Number_of_Crimes	
BROOKLYN	31028
MANHATTAN	26911
BRONX	23409
QUEENS	22097
STATEN ISLAND	4535

NY city 5 boroughs ranked based on the total number of committed crimes between the years 1974 and 2020

# Foursquare



Foursquare is a location technology platform

# Boroughs Venues

	Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
Neighborhood						
BRONX	25	25	25	25	25	25
BROOKLYN	23	23	23	23	23	23
MANHATTAN	30	30	30	30	30	30
QUEENS	5	5	5	5	5	5
STATEN ISLAND	5	5	5	5	5	5

Total number of venues in the 5 boroughs when searched with the boroughs coordinates.

# Boroughs Venues

	Brooklyn	Manhattan	Bronx	Queens	Staten Island
Pizza Place	130.0	85.0	98.0	89.0	57.0
Coffee Shop	98.0	143.0	14.0	36.0	19.0
Bar	84.0	59.0	16.0	48.0	16.0
Deli / Bodega	68.0	33.0	47.0	71.0	40.0
Italian Restaurant	64.0	112.0	39.0	38.0	42.0
Bakery	63.0	70.0	23.0	56.0	8.0
Grocery Store	57.0	33.0	35.0	38.0	19.0
Chinese Restaurant	53.0	41.0	37.0	57.0	18.0
Mexican Restaurant	49.0	57.0	23.0	32.0	13.0
Ice Cream Shop	48.0	39.0	14.0	24.0	14.0
Café	48.0	86.0	6.0	25.0	6.0
American Restaurant	45.0	71.0	9.0	21.0	13.0
Park	43.0	71.0	23.0	25.0	15.0
Sandwich Place	41.0	53.0	37.0	43.0	20.0
Bagel Shop	40.0	25.0	3.0	23.0	22.0
Pharmacy	40.0	18.0	47.0	49.0	21.0
Donut Shop	38.0	12.0	45.0	52.0	17.0
Bank	37.0	10.0	33.0	46.0	17.0
Caribbean Restaurant	35.0	11.0	13.0	19.0	1.0
Sushi Restaurant	29.0	45.0	2.0	23.0	11.0

Total number of venues in the 5 boroughs when searched with the neighborhoods coordinates.

# Conclusion

Even though we determined the crime rate in the five NY boroughs as well as the venues categorized based on type we could not see a clear correlation between the two

Further analysis could required to tease out any correlation between crime rate and venues