



BATTLE OF THE NEIGHBORHOODS

Choosing where to open Zumba Center
In New York City

IBM Capstone Project – Sedera Rasoanaivo

CONTEXT



MAIN OBJECTIVE

Where to open
Zumba center in
New York City?



CONDITION 1

Not crowded with
gymnasium or other
sports venues.

NO Zumba Fitness
Club in vicinity



CONDITION 2

High percentage of
Hispanic/Latino
population



CONDITION 3

Medium to Low
Unemployment rate

Medium to high
average income

Medium to Low
average rent price

DATA



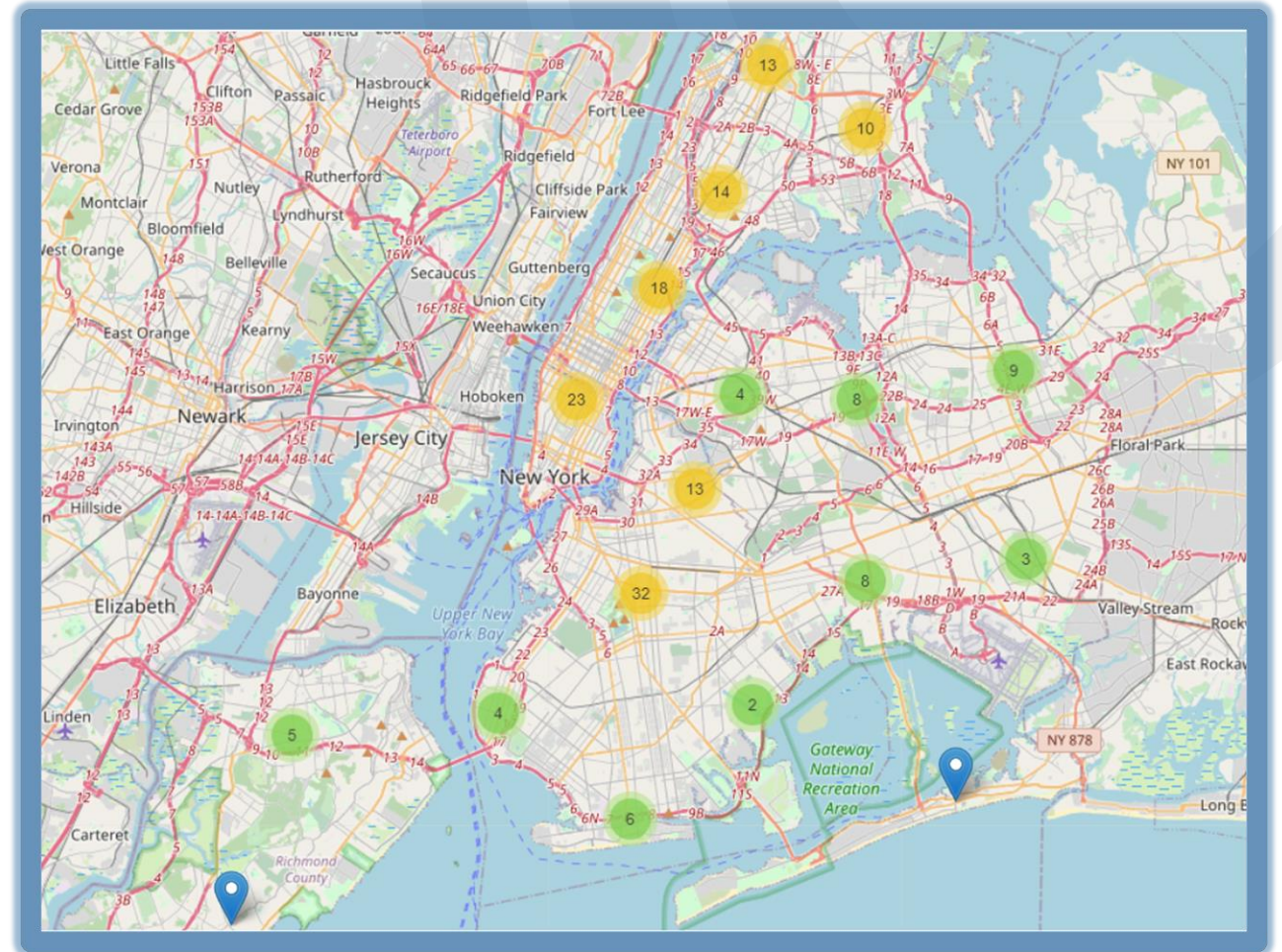
Data was collected from
Foursquare,
CoreData.nyc,
Infoshare Online,
UC Berkeley Library



Data consists of:
Geospatial data
Sports related venues,
Hispanic/Latino population,
Unemployment rate,
Average Income,
Average price of rent

LOCATIONS OF VENUES

- Athletics & Sports
 - Dance Studio
 - Gym
 - Gym / Fitness Center
 - Yoga Studio
-
- **TOTAL: 199 venues**



DISTRIBUTION OF VENUES

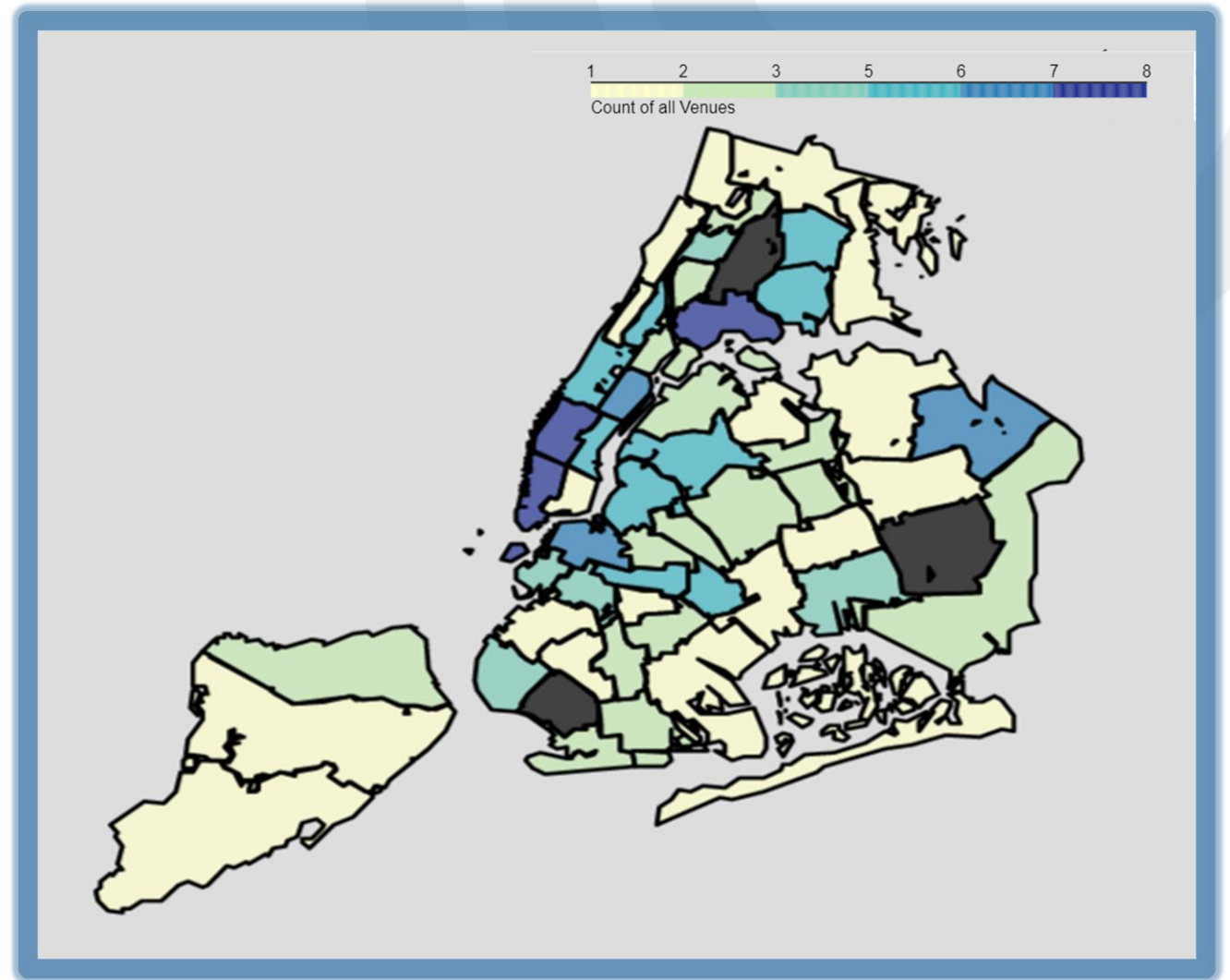
This shows the areas of New York City with the number of sports venues for each area.

Yellow = Low (of our interest)

Green = Mid

Purple = High

- **Total Area of Interests: 18**



DISTRIBUTION OF HISPANIC POPULATION

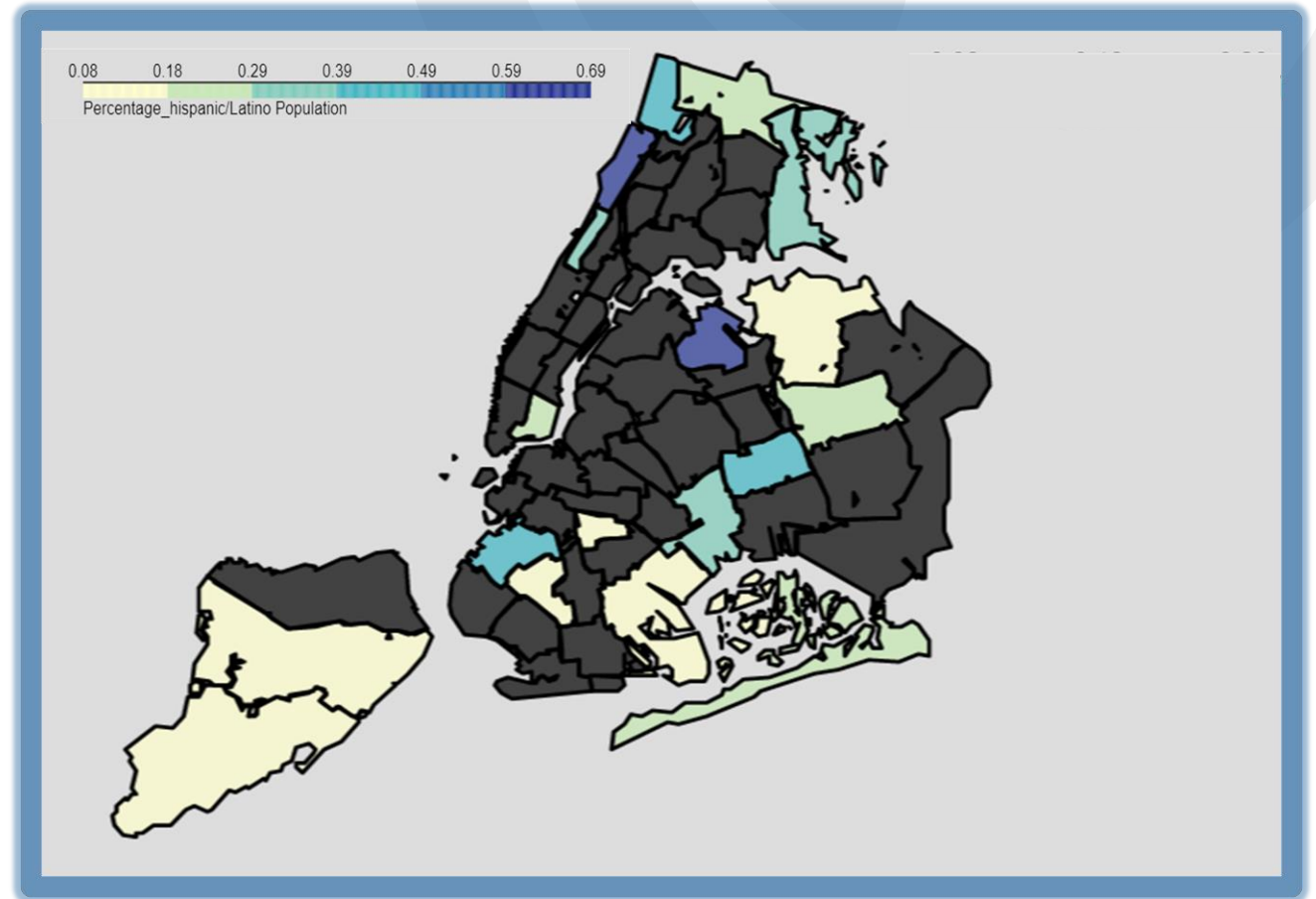
This shows the percentage of Hispanic/Latino population for each area.

Yellow = Low

Green = Mid

Purple = High (of our interest)

- **Total Area of Interests: 3**



CLUSTERING BASED ON SOCIO-ECONOMIC DATA

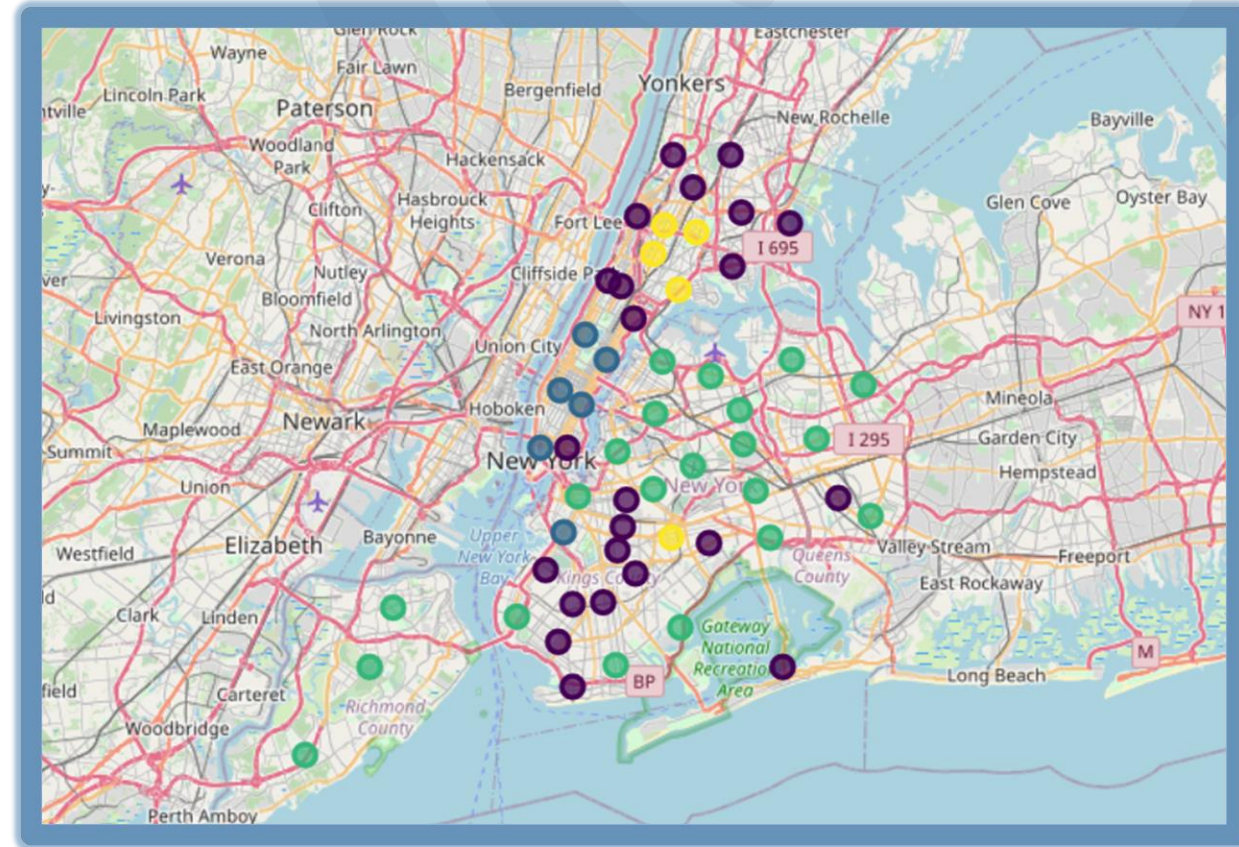
	Labor force participation rate	Unemployment rate	Median household income	Median rent, all
Clus_km				
0	0.618321	0.074625	50544.425321	1266.927045
1	0.727545	0.037209	127262.970867	2310.913803
2	0.644337	0.047801	71417.577654	1564.953681
3	0.576035	0.154471	26140.806926	1052.292926

Group1: Medium to High unemployment rate, Medium to Low income, medium to Low rent price (Color wine)

Group2: Low unemployment rate, High income, High rent price (Yellow)

Group3: Medium to Low unemployment rate, Medium to High income, medium rent price (Green)

Group4: Low unemployment rate, High income, High rent price (Blue)



RESULTS

The optimal area from the data analysis is **Jackson Heights** . This sub-borough has:

- only **one** sports venue in its vicinity
- **67%** of its population are of Hispanic/Latino origin
- **4%** unemployment rate 4%,
- **65%** Labor force participation rate
- **\$57680.44** of median household income
- **\$1533.702** Median rent price

In general, New York City has few sports related venues: many areas present opportunities for creating business related to those activities.

