

MORE OF THE SAME

DIVERSITY OF AMENITIES IN NEIGHBORHOODS AS A MEASURE OF
SOCIOECONOMIC WELLBEING

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QUESTION

DO A CITY'S AMENITIES IN DIFFERENT NEIGHBORHOODS SIGNIFY THE SOCIOECONOMIC WELL BEING OF THE RESIDENTS IN THAT AREA?

(TENTATIVE) ANSWER

A NEIGHBORHOOD WITH A PARK, PUBLIC SWIMMING POOL, GYMNASIUM, MUSEUM, THEATER, CINEMA AS WELL AS CAFES AND EATERIES IS 'BETTER', AND THE RESIDENTS HAVE MORE CHOICE, AND SOCIOECONOMIC WELL BEING THAN RESIDENTS WHO CAN CHOOSE ONLY BETWEEN NEAR SYNONYMOUS CATEGORIES OF EATING/DRINKING ESTABLISHMENTS ('MORE OF THE SAME')

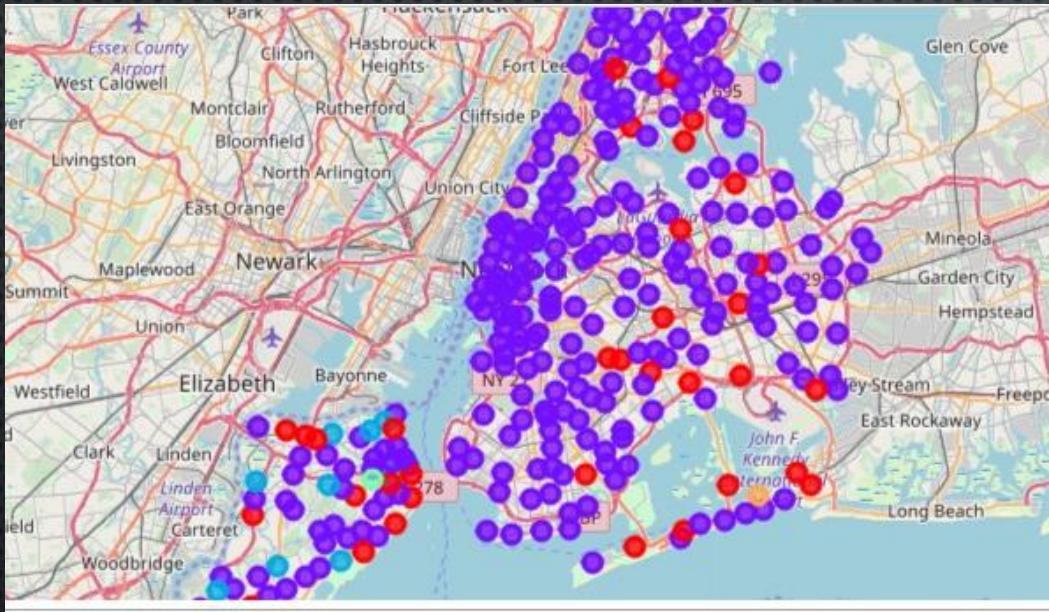
FOOD IS GOOD



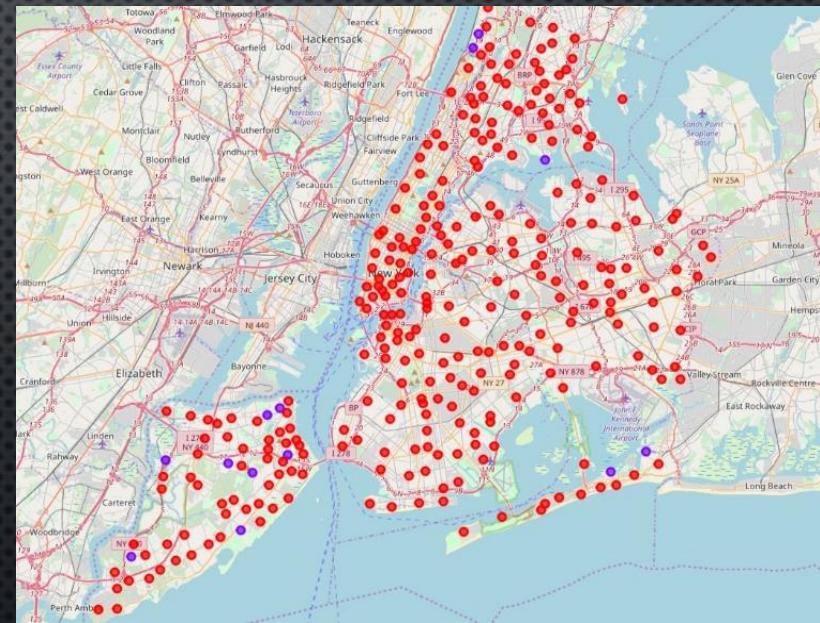
WHAT WAS THAT LAST SLIDE?

10295 FOURSQUARE VENUES OF 429 DISTINCT TYPES OBTAINED FOR 306 NEIGHBORHOODS IN
ALL 5 BOROUGHS OF NEW YORK CITY

WHAT HAPPENS IF WE CLUSTER NEIGHBORHOODS BY THE MOST COMMON VENUE TYPES CLOSE BY?



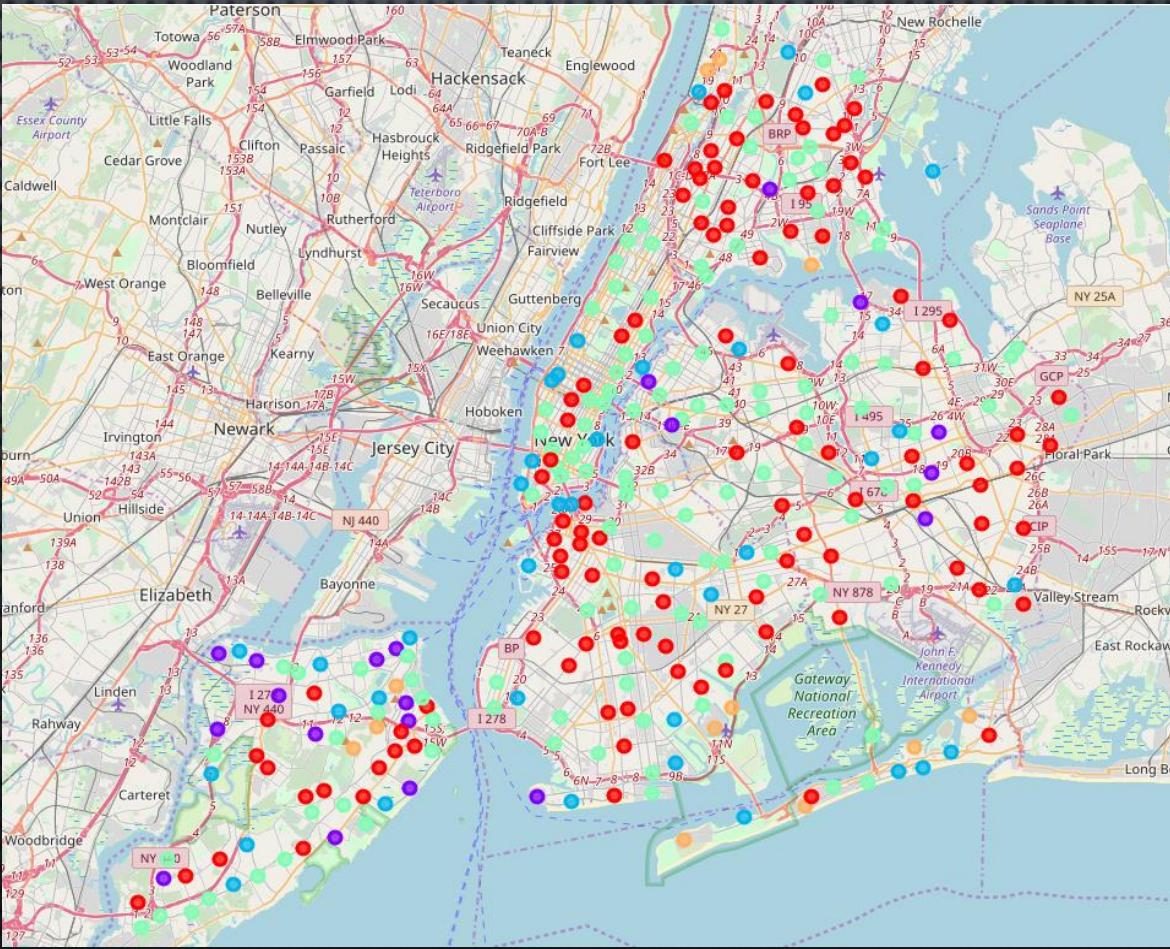
5 clusters



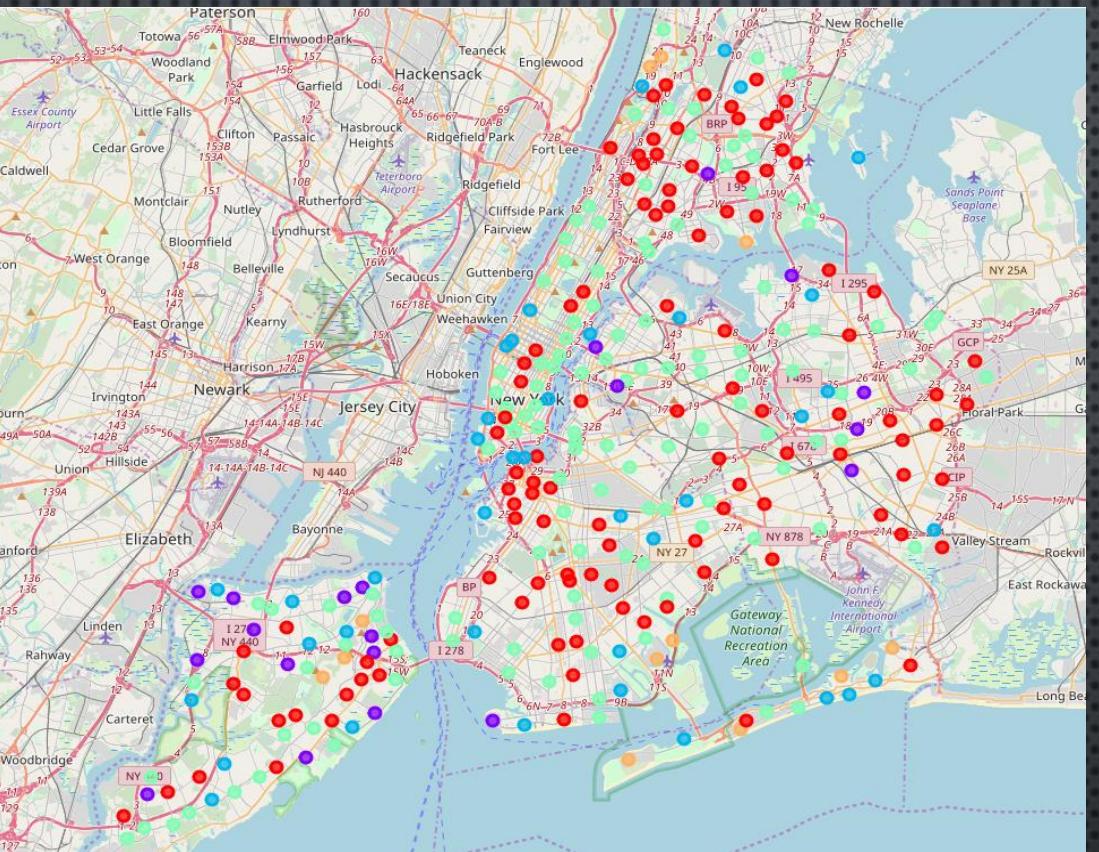
2 clusters

HOW ABOUT CLUSTERING BY THE TOP-LEVEL CATEGORY OF THE VENUES?

- 'FOOD',
- 'SHOPS',
- 'PARKS_OUTDOORS',
- 'TRAVEL',
- 'ARTS_ENTERTAINMENT',
- 'NIGHTLIFE',
- 'EDUCATION',
- 'BUILDING',
- 'EVENT'



AGAIN

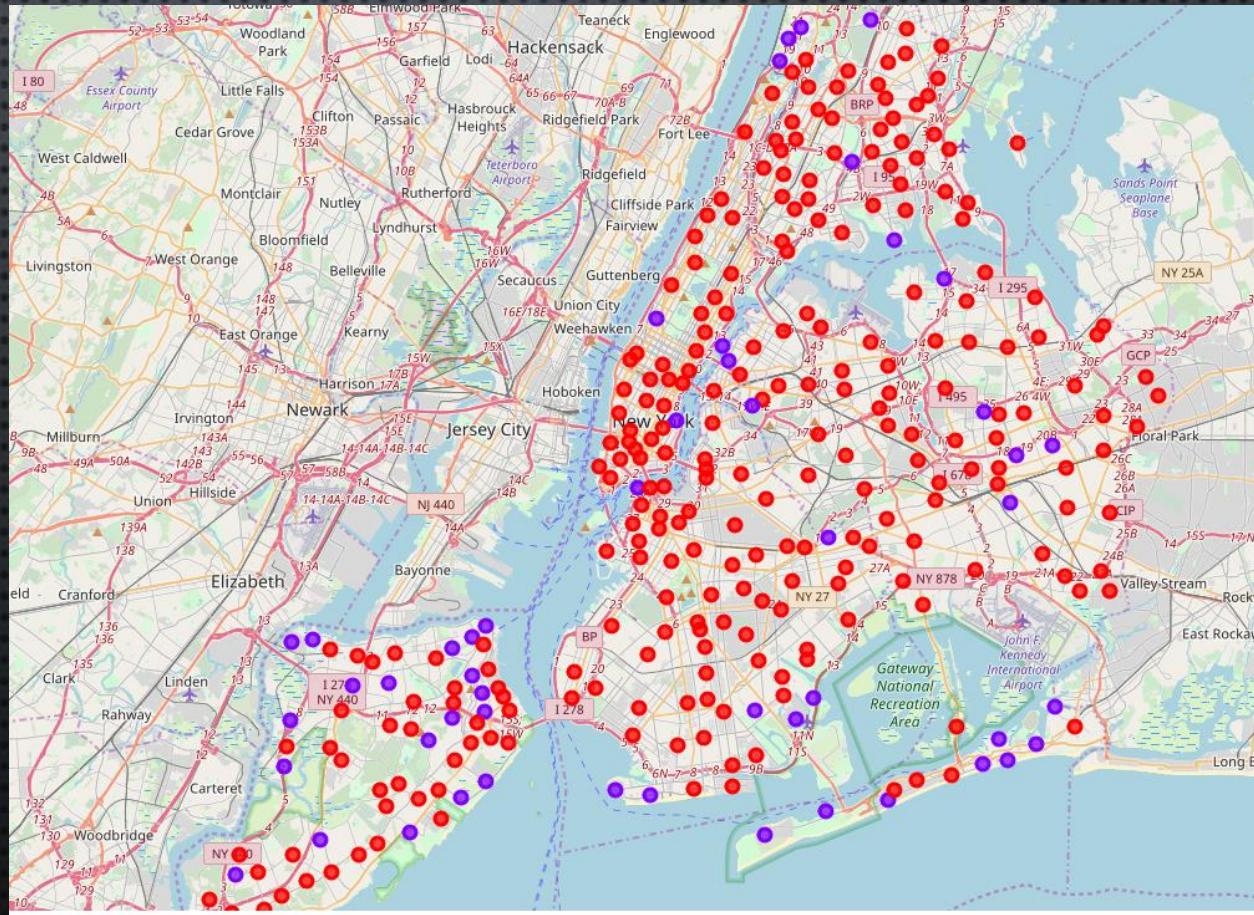


- CLUSTER 0. RED MARKER. GEOGRAPHICALLY NOT CONCENTRATED IN ONE AREA. RANKING OF VENUES -- (BY QUICK INSPECTION) FOOD, SHOPS, NIGHTLIFE, PARKS.
 - CLUSTER 3. CYAN MARKER. AS WIDESPREAD AND NUMEROUS AS LABEL 0, SOMEWHAT CONCENTRATED IN MANHATTAN. TOP VENUES INCLUDE 'BUILDING' (E.G. GYMS) AND 'TRAVEL' (E.G. HOTELS) IN ADDITION TO FOOD AND SHOPS.
 - CLUSTER 4. ORANGE MARKER. THIS CLUSTER APPEARS CLEARLY CORRELATED WITH COASTAL/RIVERSIDE/ISLAND LOCATIONS GEOGRAPHICALLY. IT MAKES SENSE THAT TRAVEL AND NIGHTLIFE VENUES APPEAR AMONG THE TOP RANKING.
 - CLUSTER 1. VIOLET MARKER. THIS CLUSTER APPEARS MOSTLY IN QUEENS AND STATEN ISLAND. IT IS PROMINENTLY ABSENT FROM MANHATTAN. TRAVEL, PARKS AND EVENT SPACES APPEAR TO RANK HIGH. IT COULD BE THESE VENUES ARE NOT PROMINENT IN THE DENSELY CONSTRUCTED AND SETTLED PARTS OF THE CITY.
 - CLUSTER LABEL 2. BLUE MARKERS. THESE APPEAR TO BE CONCENTRATED AROUND COASTS/RIVERFRONT NEIGHBORHOODS. PARKS STAND OUT AS A PROMINENT VENUE.

AND WITH ONLY 2 CLUSTERS RIVERFRONT AND COASTAL AREAS SHOW UP

RED: MORE GENERIC
VENUES

BLUE: MORE PARKS



NEW YORK CITY

- NO CLEARLY OUTSTANDING GEOGRAPHICAL ISOLATION BY VENUE TYPE
- CITY IS WELL SERVED BY DIVERSE AMENITIES

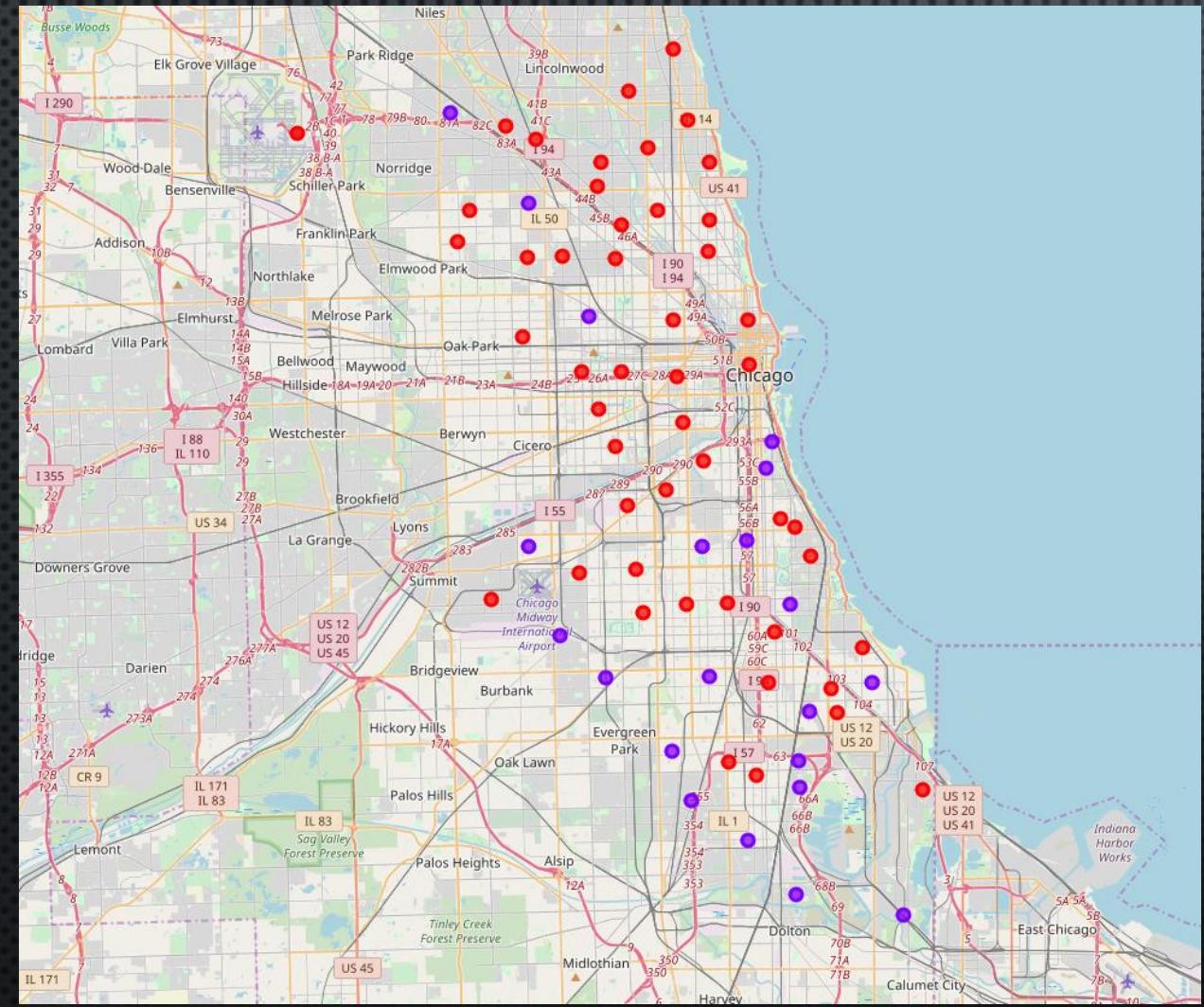
CHICAGO

- COMPARE CLUSTERING OF NEIGHBORHOODS ON AMENITIES CLOSE BY AS WE DID FOR NEW YORK TO CLUSTERING ON SOCIOECONOMIC INDICATORS

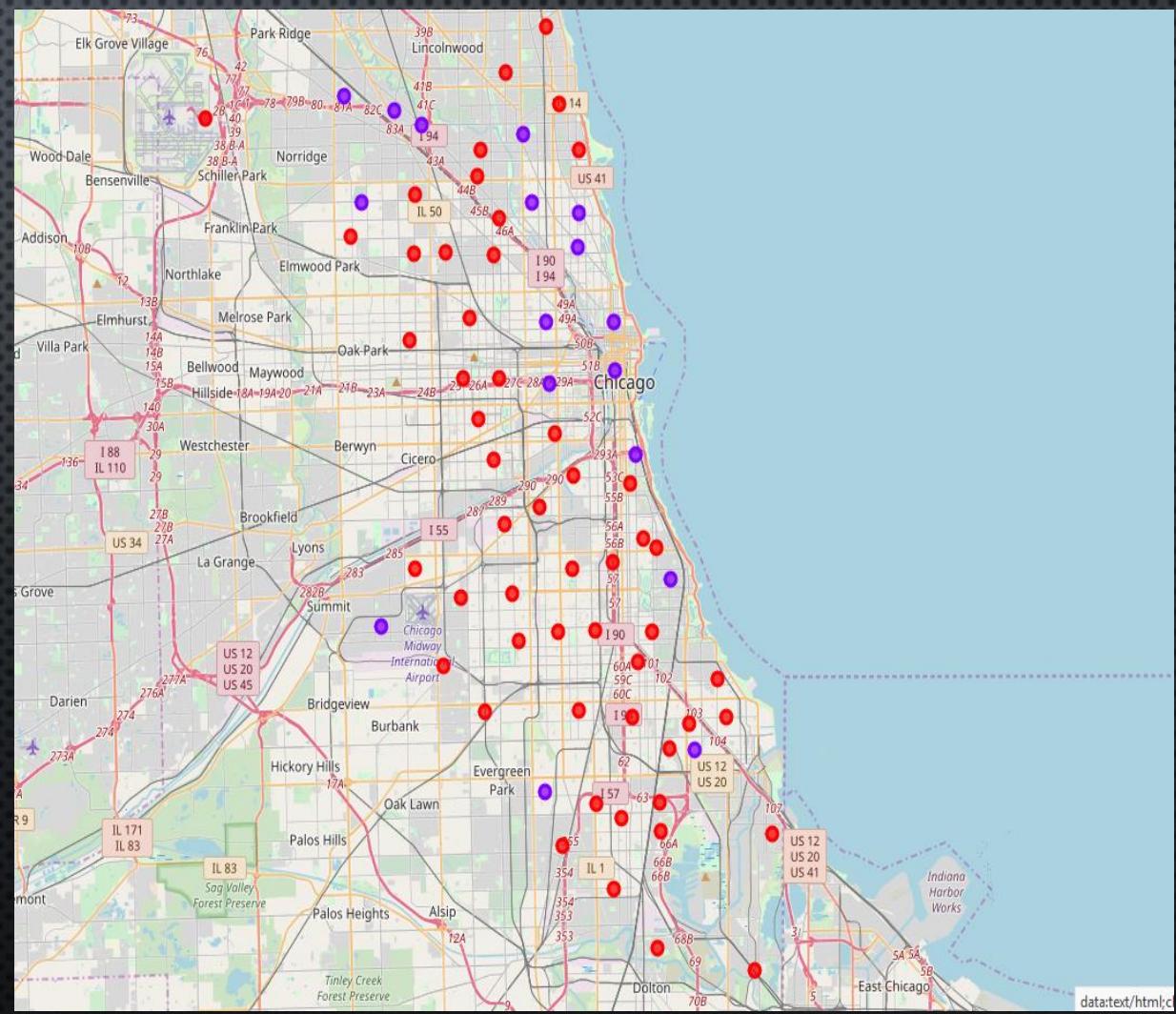
CHICAGO SOCIOECONOMIC FEATURES

- CRIME RATE
- ECONOMIC/SOCIAL HARDSHIP INDEX
- SCHOOL PROGRESS REPORT

Foursquare venues data



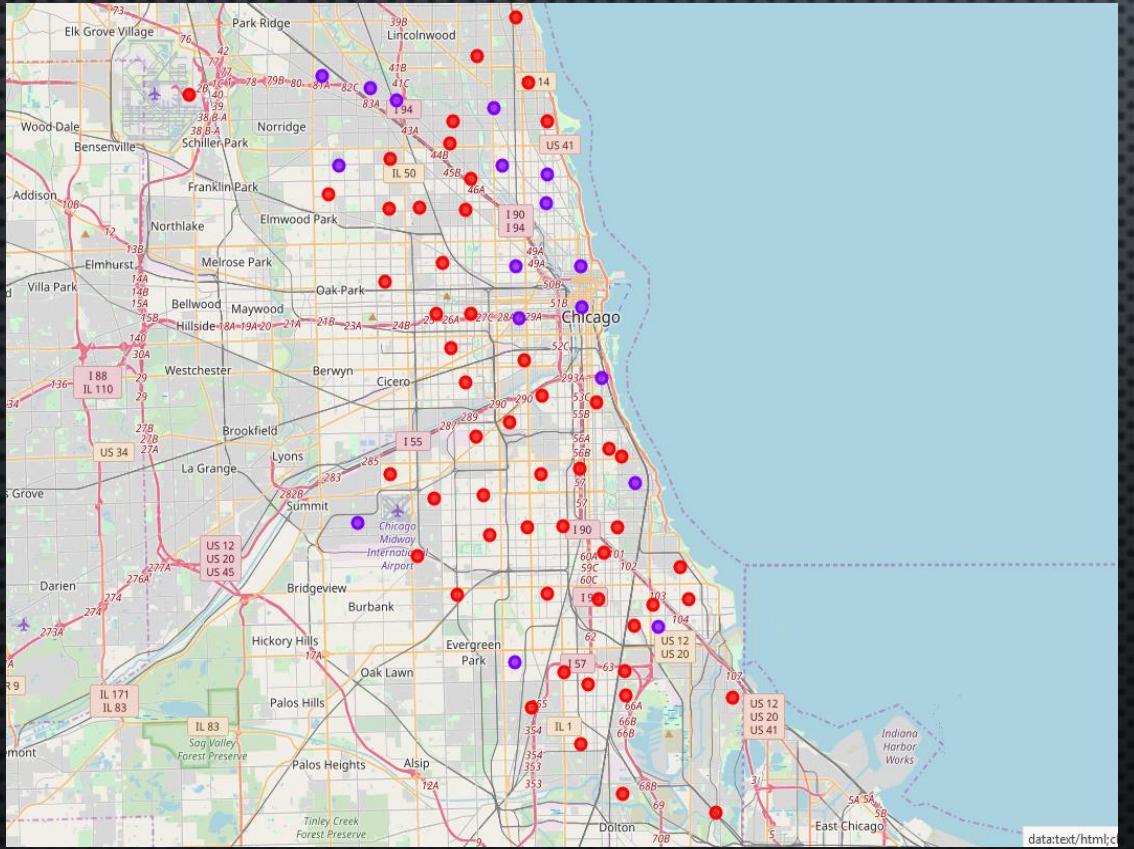
Socioeconomic data



A CLEAR GEOGRAPHIC CORRELATION

- CONCLUSIONS: PERHAPS THERE IS A CORRELATION BETWEEN TYPES VENUES AVAILABLE AND OTHER INDICATORS OF WELLBEING

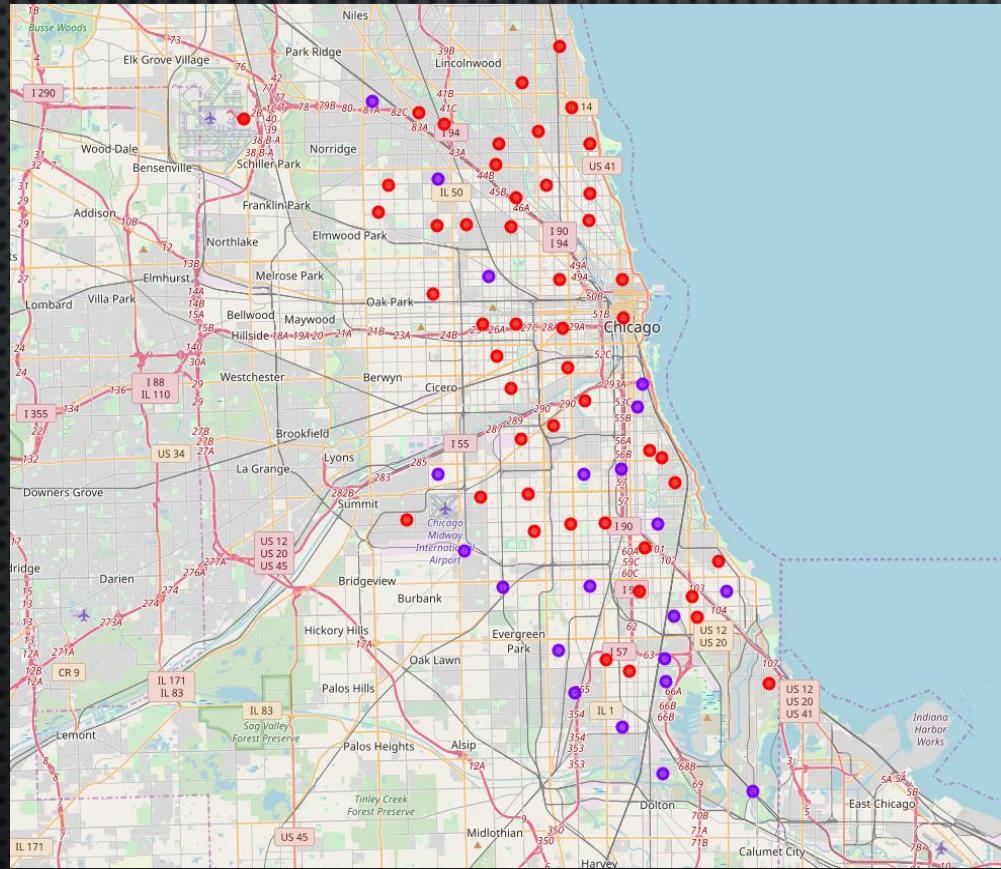
SOCIOECONOMIC



	School	Crime	Hardship
Cluster 0 (Red)	0.9550	7.358	60.302
Cluster 1 (Blue)	0.485	5.706	14.353

The bigger the number, the worse off the community

AMENITIES



Focusing on most common venue,
-the main cluster (0, red markers) is dominated by food venues,
-the other cluster (concentrated in the south geographically)
has more shops, parks and other diverse amenities.

This leads to the opposite conclusion
from our hypothesis that the more
socially and economically
disadvantaged neighborhoods will
have less diversity of amenities.

TO BE EXPLORED IN FUTURE

- WHAT TYPES OF 'FOOD' VENUES OR 'EVENT' SPACES OR 'SHOPS'
 - WE WENT FROM DETAILED TO HIGHER LEVEL VIEW
 - IT WILL BE GOOD TO GO IN THE MIDDLE AND ASK MORE QUESTIONS
- EXPLORE OTHER DATA (E.G. EPIDEMIOLOGY AT NEIGHBORHOOD LEVEL)
- EXPLORE OTHER CITIES (ESP. SOME PERSISTENTLY SEGREGATED OR STRATIFIED CITIES)