## The Battle of Neighborhoods

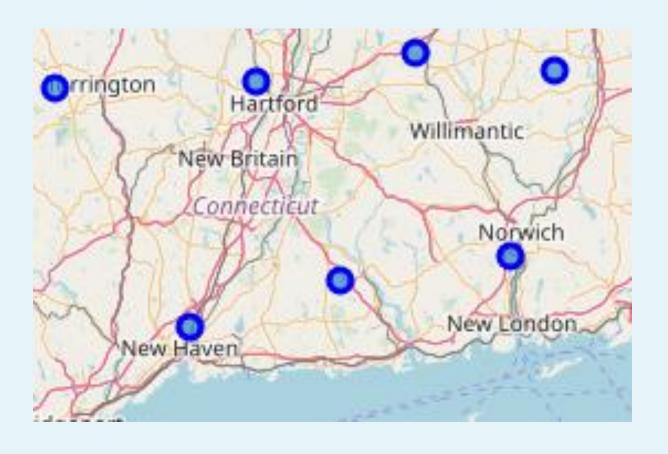
Where is it worth opening an Italian restaurant in Connecticut, US? Let's consider:

- Location data of Connecticut and its counties
- Demographic data of Italian-American population
- Foursquare location data of venues and Italian restaurants

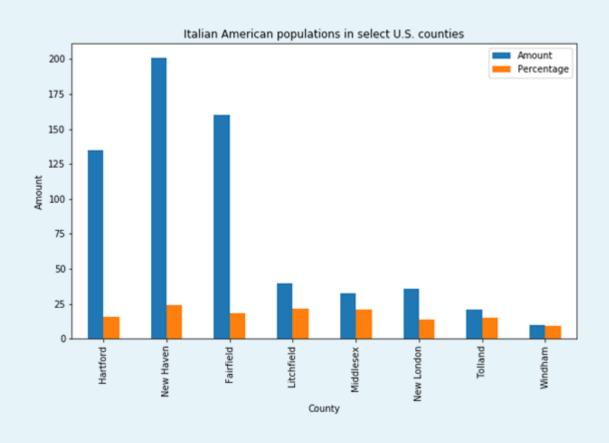
## Methodology:

- Segmenting and K-means clustering of neighborhoods in New Haven, CT
- Groupby view
- Correlation

### 8 Counties of Connecticut



# Italian-American population of the counties

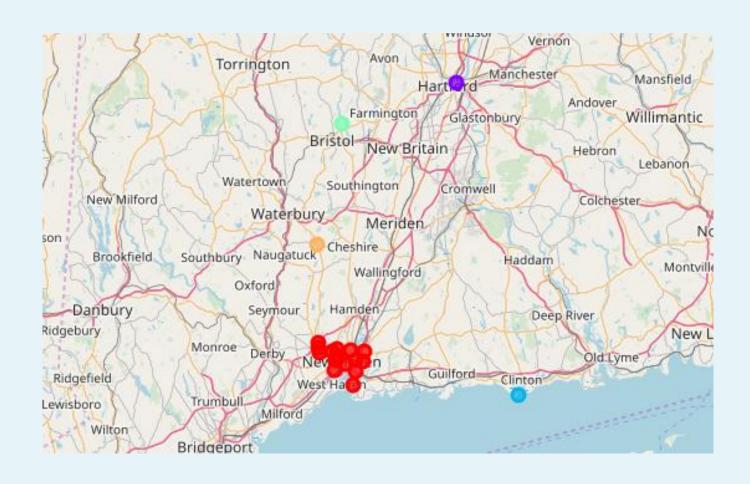


- New Haven and Fairfield have the highest number of Italian-American population
- Foursquare location data for the two counties' Italian restaurants
- New Haven 62 versus Fairfield 15

<pre>it_venues.groupby('Neighborhood').count()</pre>					
Neighborhood Latitude	Neighborhood Longitude	Venue	Venue Latitude	Venue Longitude	Venue Category
15	15	15	15	15	15
62	62	62	62	62	62
	Neighborhood Latitude	Neighborhood Latitude Neighborhood Longitude  15 15	Neighborhood Latitude Neighborhood Longitude Venue	Neighborhood Latitude  Neighborhood Longitude  Venue Latitude  15 15 15	Neighborhood Latitude Neighborhood Longitude Venue Venue Latitude Venue Longitude  15 15 15 15 15

Let's explore the neighborhoods of New Haven

### Clusters of New Haven



#### Results:

- New Haven has Italian restaurants as the top 1 most common venue in the majority of its neighborhoods
- Downtown New Haven is the Central Business District with the venue business service returned by Foursquare
- Downtown New Haven's venues:
  - □ Several grocery stores and a Farmer's Market
  - □ Baseball stadiums, golf course, parks
  - □ Hotel
  - ☐ Art Gallery, Art Museum, Theatres, Movie Theater
- There is a positive direct correlation between the population of Italian origin and the number of Italian restaurants.

### Conclusion:

New Haven Downtown can be recommended for opening a new Italian restaurant given the nearby venues, the high number of Italian-American residents, the neighborhood being the Central Business District and the available fresh ingredients that could be provided by the grocery stores and the market.

#### Sources:

- countyct\_37800\_0000\_2010\_s100\_census\_1\_t.csv
- https://www.niaf.org/culture/statistics/italian-american-populations-in-select-u-s-counties/
- https://github.com/CT-Data-Haven/nhv2016/blob/487ebd54288008f3ecd48a80 a2303c136ba68894/public/data/2016\_nhv\_display.c
- Foursquare location data