## **CSE332**

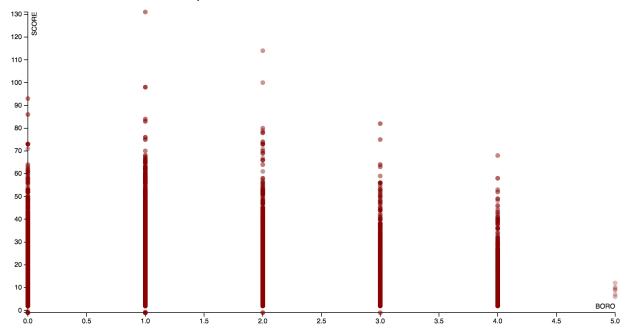
## **Data Stories**

First, let's give you a bit background of my data. My data is the result of all restaurant inspections in New York City. It's attributes contains restaurant's location, score, violation code, zip code, restaurant ID, Cuisine Description and Critical Flag.

Now, Let's look at the findings I examed from data.

Story 1:

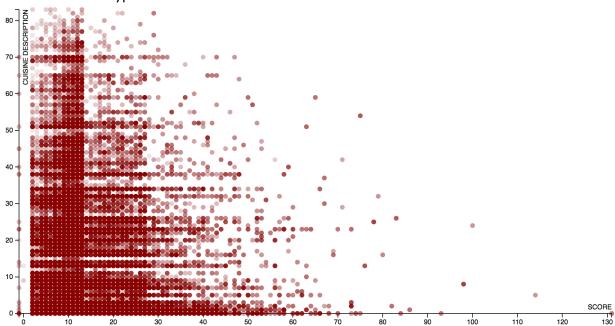
Look at Boro vs. Score scatterplot:



Among 5 BOROs (Brooklyn, Manhattan, Queens, Bronx and Staten Island), Manhattan has the highest average score. Queens scored the second. Brooklyn, Manhattan, Queens and Bronx all has one or more restaurant that scored 0 in their inspection. Manhattan also holds the highest score among all inspections.

Story 2:





The restaurant with highest score in all inspection is of seafood cuisine. We can also what are the most common restaurant from inspect the density of the inspection data. It is clear that cuisine type from 1 to 25 are the most common cuisine type in NYC. Those types are the following: American, Chinese, Latin, Mexican, Tex-Mex, Japanese, Seafood, Pizza, Café, Donuts, Hamburgers, Ethiopian, Italian, French, Hotdogs, Asian, Chicken, Greek, Sandwiches, Caribbean, Bagels, Thai, Spanish, Korean and Indian. On the other hand, Cuisine type range from 71 to 83 are the least common. Those Cuisine are Iranian, Portuguese, Pancakes/waffles, Moroccan, Creole, Nuts, Czech, Hawaiian, Californian, Polynesian and Soups.

We can also see that with all restaurant inspections cross all cuisine type, the most common scores are from 3 to 13.

Story 3: Cuisine Diversity among 5 BOROs



From this plot we can see how diverse each BORO is in terms of its cuisine type. Brooklyn, Manhattan and Queens are the most diverse boros, while Bronx and Staten Island are the less ones.

We can also see what cuisine type are missing from those boros.

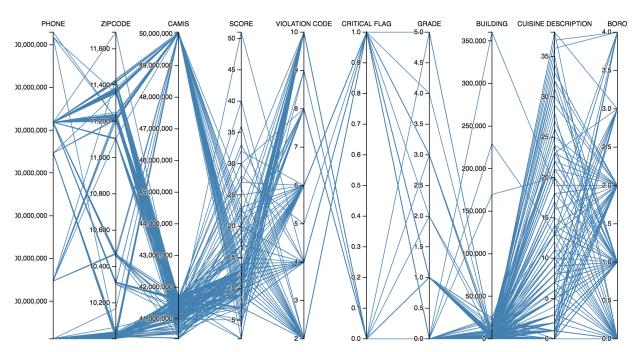
Staten Island missing: Ethiopian, French, Indian, Vegetarian, Creole, Cuban, English, Indonesian, German and Bangladeshi.

In Bronx missing: Ethiopian, French, Korean, Polish, Vegetarian, Russian, Turkish, Vietnamese/Cambodian/Malaysia, Scandinavian, Southwestern and Chilean.

We can also get what is the most common cuisine type from this plot as well, notice that all cuisine type 0 to 13 are the most common cuisine type in all boros.

Another detail we can see from the plot is that Manhattan has more restaurant than all other 4 BOROs.

Story 4: **Parallel Coordinates** 



Look at the "violation code" and "score" axis, we can see that violation code "10", "6", "4" and "2" are the most common violation code.

Violation code 10: Toilet facility not maintained and provided with toilet paper, waste receptacle and self-closing door.

Violation 6: Personal cleanliness inadequate. Outer garment soiled with possible contaminant. Effective hair restraint not worn in an area where food is prepared. / Food not protected from potential source of contamination during storage, preparation, transportation, display or service.

Violation code 2: Food not cooked to required minimum temperature. / Hot food item not held at or above 140F.

Violation code 4: Food Protection Certificate not held by supervisor of food operations. / Food worker prepares food or handles utensil when ill with a disease transmissible by food, or have exposed infected cut or burn on hand.

We can also see that inspection score range from 0 to 20 tend to have violation code "10"

We can also conclude that lower violation code is related to critical flag, that means the violation code 2 to 6 is critical violation.