

Battle Of Neighborhoods

JISHNU JAYARAJ

A solid orange horizontal bar spanning the width of the slide at the bottom.

Problem: Which Is The Best City To Have A Donut At?

Here are the 4 cities that are chosen for analysis:

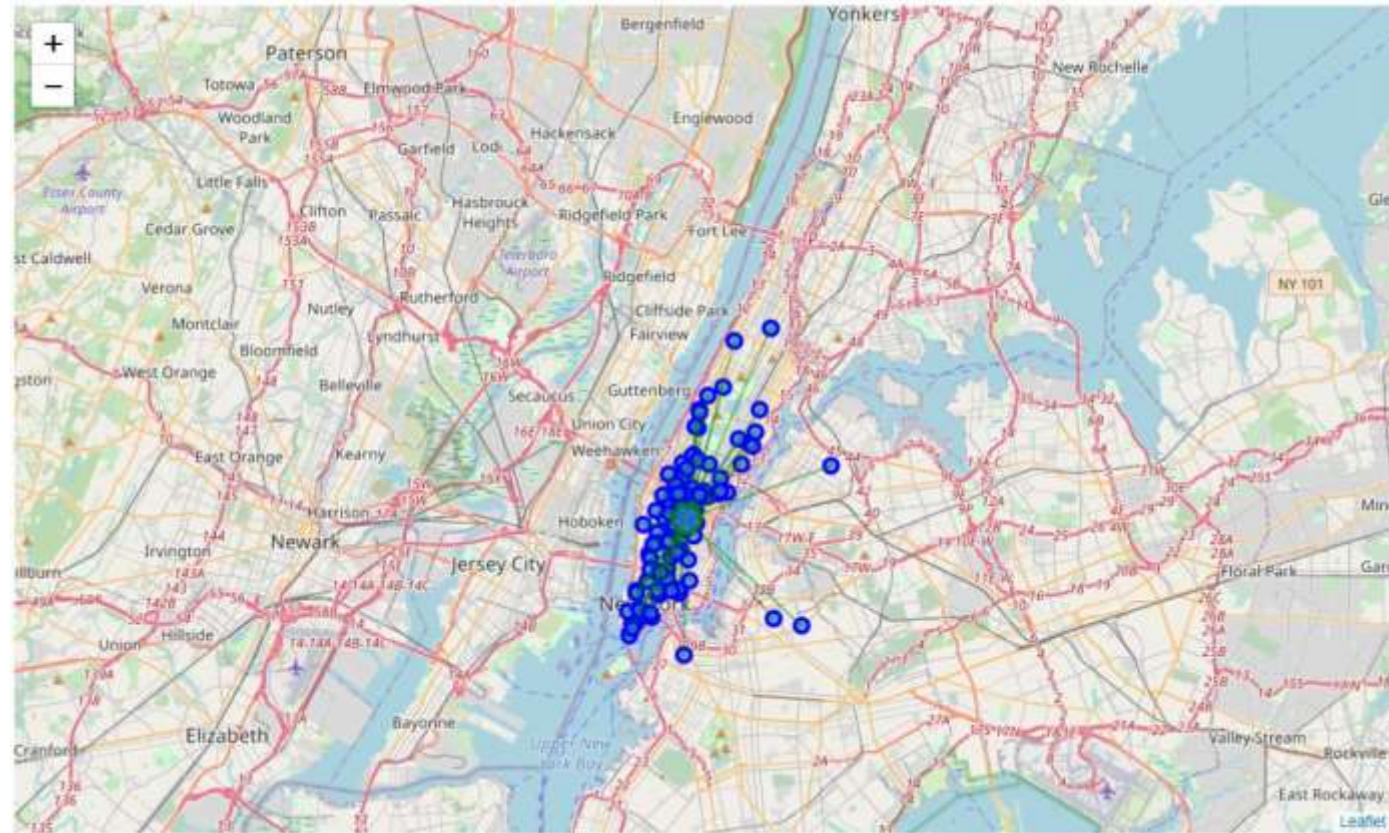
1. New York, NY
2. Chicago, IL
3. Boston, MA
4. Seattle, WA

From their maps, the answer can be found by inspection.

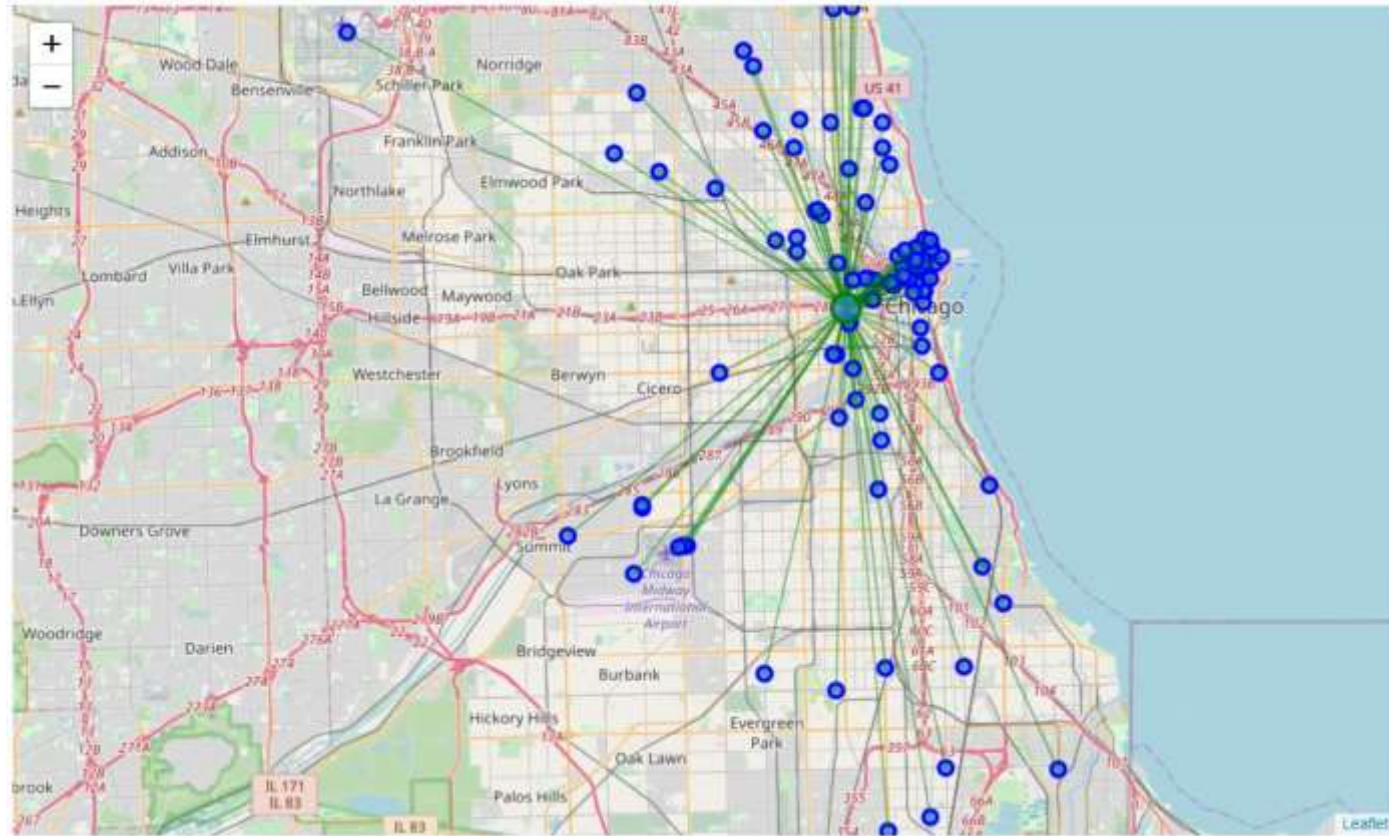
Methodology

1. First step is use Foursquare API through the venues channel to get the different venues in the 4 different cities which are New York, NY, Chicago, IL, Boston, MA, and Seattle, WA.
2. This step is done for the 4 different cities.
3. Next step is to calculate the center coordinate and the mean distance of each venue from the center coordinate to find the city with the shortest mean distance.
4. The city with the least distance is the best city to eat at a donut shop.

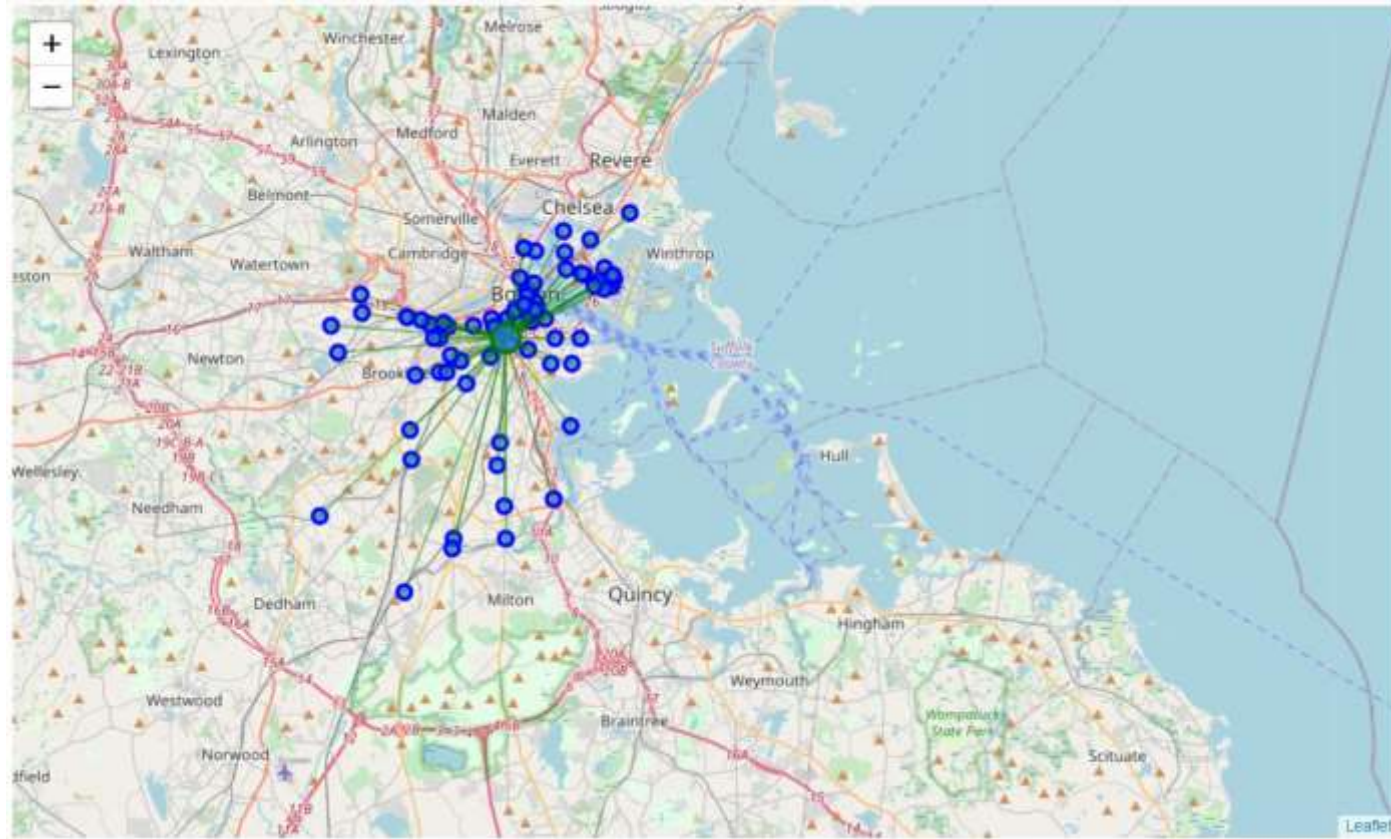
New York:



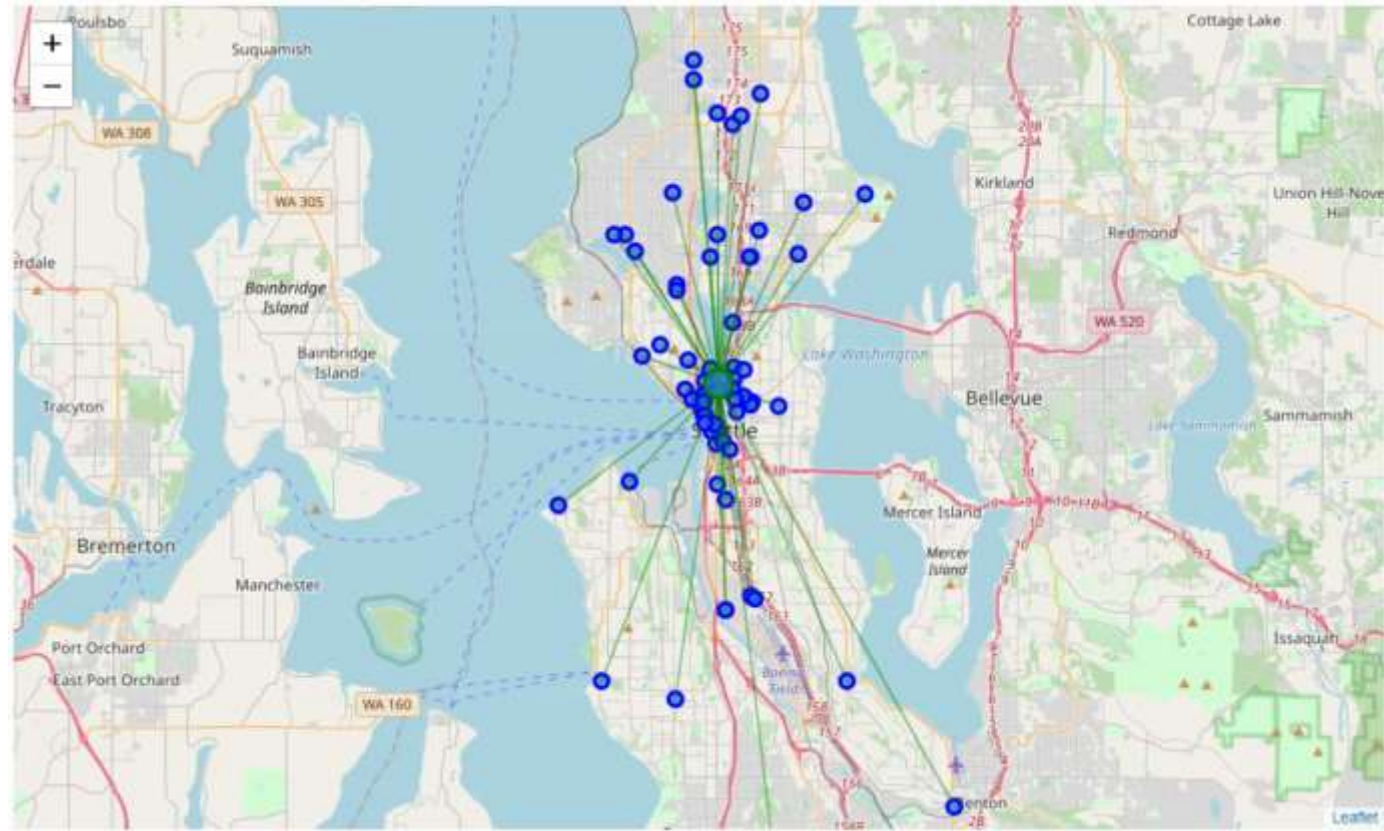
Chicago:



Boston:



Seattle:



Result And Conclusion:

The best city to have a donut is the one with the least mean distance.

```
New York, NY
Mean Distance from Mean coordinates
0.024721982130958282
Chicago, IL
Mean Distance from Mean coordinates
0.0695156334252791
Boston, MA
Mean Distance from Mean coordinates
0.037789975421072194
Seattle, WA
Mean Distance from Mean coordinates
0.045180032770001086
```

It is clear that New York is the best city with the least mean coordinate and is also dense with a large number of donut shops.

THANK YOU
