CAPSTONE PROJECT

ANALZYING NZC AND ITS RESTAURANTS

PROBLEM

▸ People in Manhattan often eat outside

▸ Fast-food or Fingerfood as lunch

▸ High demand on Restaurants, Food trucks, Diners

GOAL

▸ Find Business opportunity to open a new restaurant

▸ Find the kind of restaurant

▸ Find possible neighbourhoods which lack of this kind

▸ Visualize the results

DATA SELECTION

▸ Using Data from Dingqi Yang (based on Foursquare)

DATA SELECTION

▸ Filter Data on restaurants only

▸ Sort ascending by Number of visitors

▸ German restaurants in top 20

▸

Category	Nb of Visitors
American Restaurant	567
Mexican Restaurant	430
Fast Food Restaurant	169
Italian Restaurant	162
Chinese Restaurant	145
Vegetarian / Vegan Restaurant	114
French Restaurant	103
Sushi Restaurant	102
Asian Restaurant	87
Seafood Restaurant	79
Korean Restaurant	59
Restaurant	52
Thai Restaurant	48
Tapas Restaurant	47
Japanese Restaurant	43
German Restaurant	36
Latin American Restaurant	34
Cuban Restaurant	31
Falafel Restaurant	29
Spanish Restaurant	29

DATA METHODOLOGY

▸ Filter Data set on the category „Restaurant" only

▸ Visualize all of the restaurants

▸ Calculate the midpoints between each German restaurant

▸ Therefor use Haversine Formula

▸ Focus on a specific area (circle) around each midpoint

▸ Count the number of Visitors for each restaurant with the circle

DATA METHODOLOGY
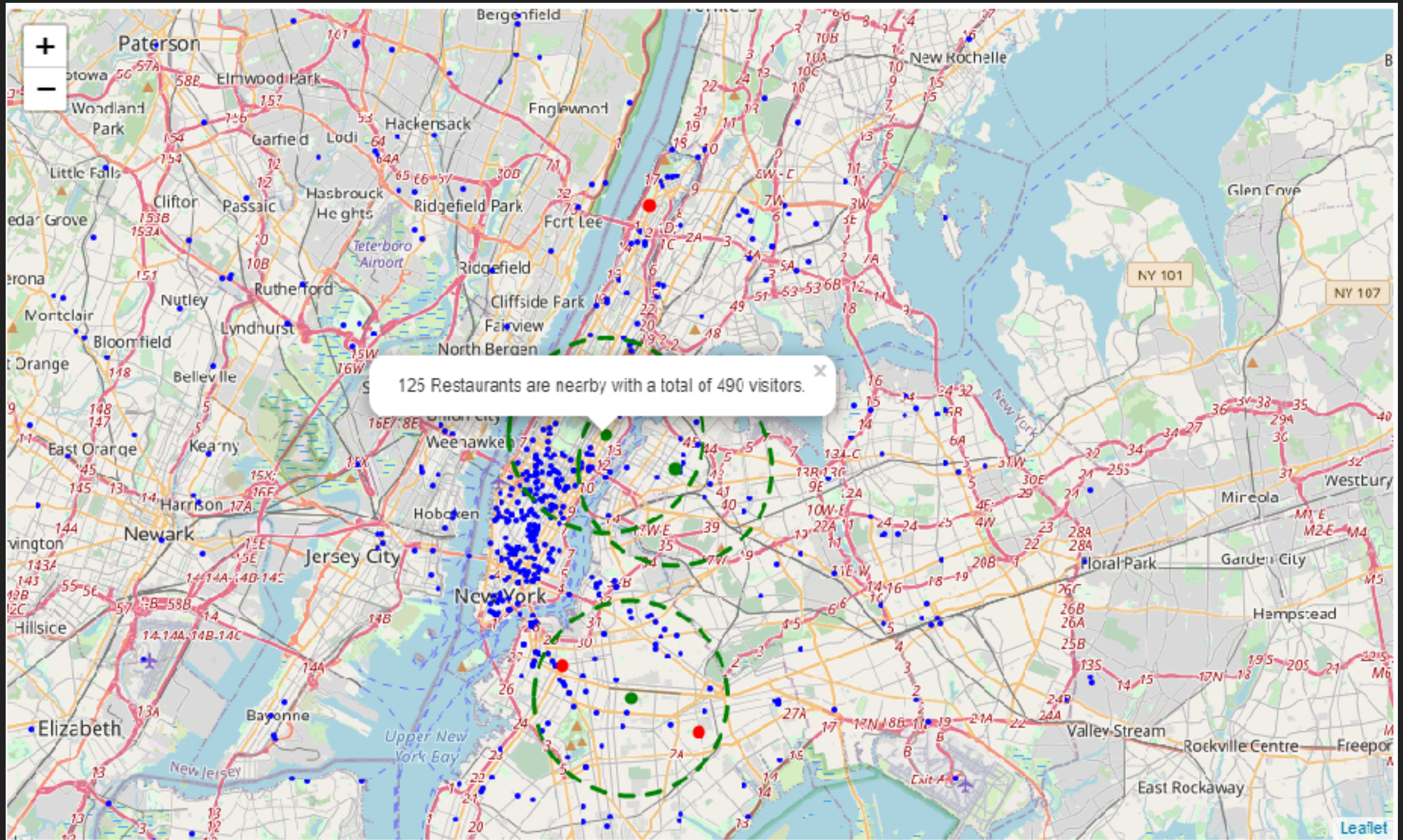
RESULTS

▸ Based on the used Data there clearly are business opportunities

▸ The marked Midpoint above shows the best neighbourhood to open a German restaurant/ food truck

▸ According to the numbers of visitors, there is a demand on restaurants

▸ No German restaurant within the circle

RESULTS

▸ Proof of assumption by using most actual data from foursquare

▸ Four new German restaurants did open in the last 8 years

▸ Three of them in the predicted area

	id	name	categories	location.address	latitude	longitude	Distance to midpoint	Postal Code	City	State	Address	Street
8	5357ee88498ee81170010971	German House	German Restaurant	NaN	40.752988	-73.967148	2374	NaN	New York	NY	[New York, NY, United States]	NaN
25	3fd66200f964a5207ae51ee3	Rolf's German Restaurant	German Restaurant	281 3rd Ave	40.737974	-73.983516	4514	10010	New York	NY	[281 3rd Ave (at E 22nd St), New York, NY 1001...	at E 22nd St
26	4d5b3dd522ad2d430a63e695	Hofbräu Bierhaus NYC	German Restaurant	712 3rd Ave	40.752631	-73.973304	2681	10017	New York	NY	[712 3rd Ave (45th St), New York, NY 10017, Un...	45th St
29	526c2d4011d252b42d12e22e	Germany's Bratwurst	German Restaurant	NaN	40.759687	-73.987746	3125	NaN	New York	NY	[8th Ave, New York, NY, United States]	8th Ave

RESULT
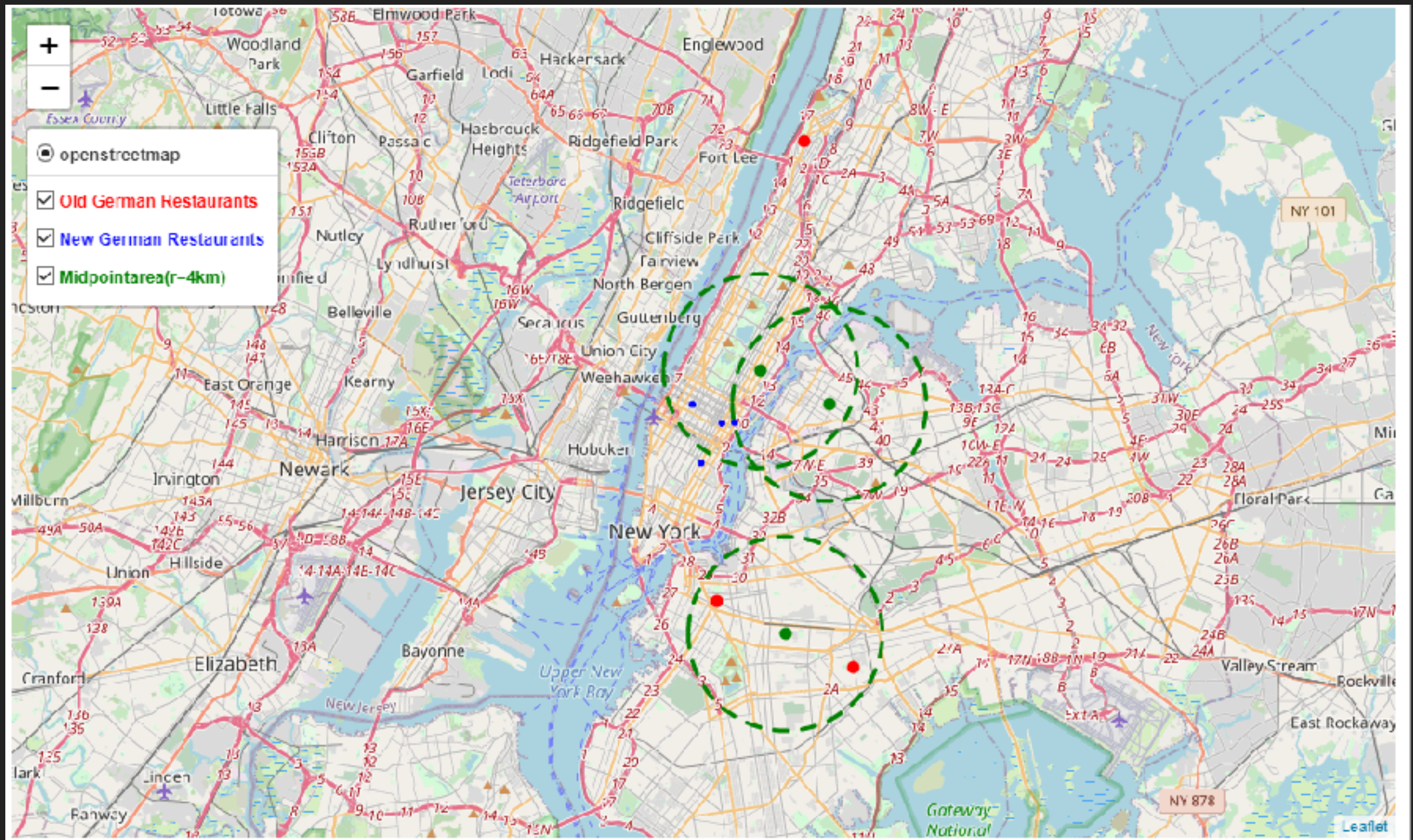
CONCLUSION AND OUTLOOK

▸ Proof of assumption made up with data from 2012, proven with data of 2020

▸ Sadly no up-to-date Data including number of visitors

▸ Same analysis as soon as data is available

▸ If there is free data of price per square meter, include them to get a more precise overview of inexpensive neighbourhoods

▸ Price-data could also decide whether to open a restaurant or maybe a food truck to sell fingerfood like ‚Bratwurst'