

# ABC Car Cleaning

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## Introduction

As an owner of a large Car Wash company in the New York State area, trying to open new locations, We are curious to see where to focus on, to open new locations.

It is important for us not to open new locations where there is already a lot of Car Washes, So we are looking to open in locations with the minimum amount of Car Washes, So we can be exclusive in that area.

## Data

To do our analysis, we will first need to get a list of all counties in New York from the US Census Bureau with their Latitude and Longitude,

Example of the data here

state_abbr	geoid	name	latitude	longitude
NY	36001	Albany County	42.588240	-73.974010
NY	36003	Allegany County	42.247853	-78.026153
NY	36005	Bronx County	40.848711	-73.852939
NY	36007	Broome County	42.161977	-75.830283
NY	36009	Cattaraugus County	42.239099	-78.662332

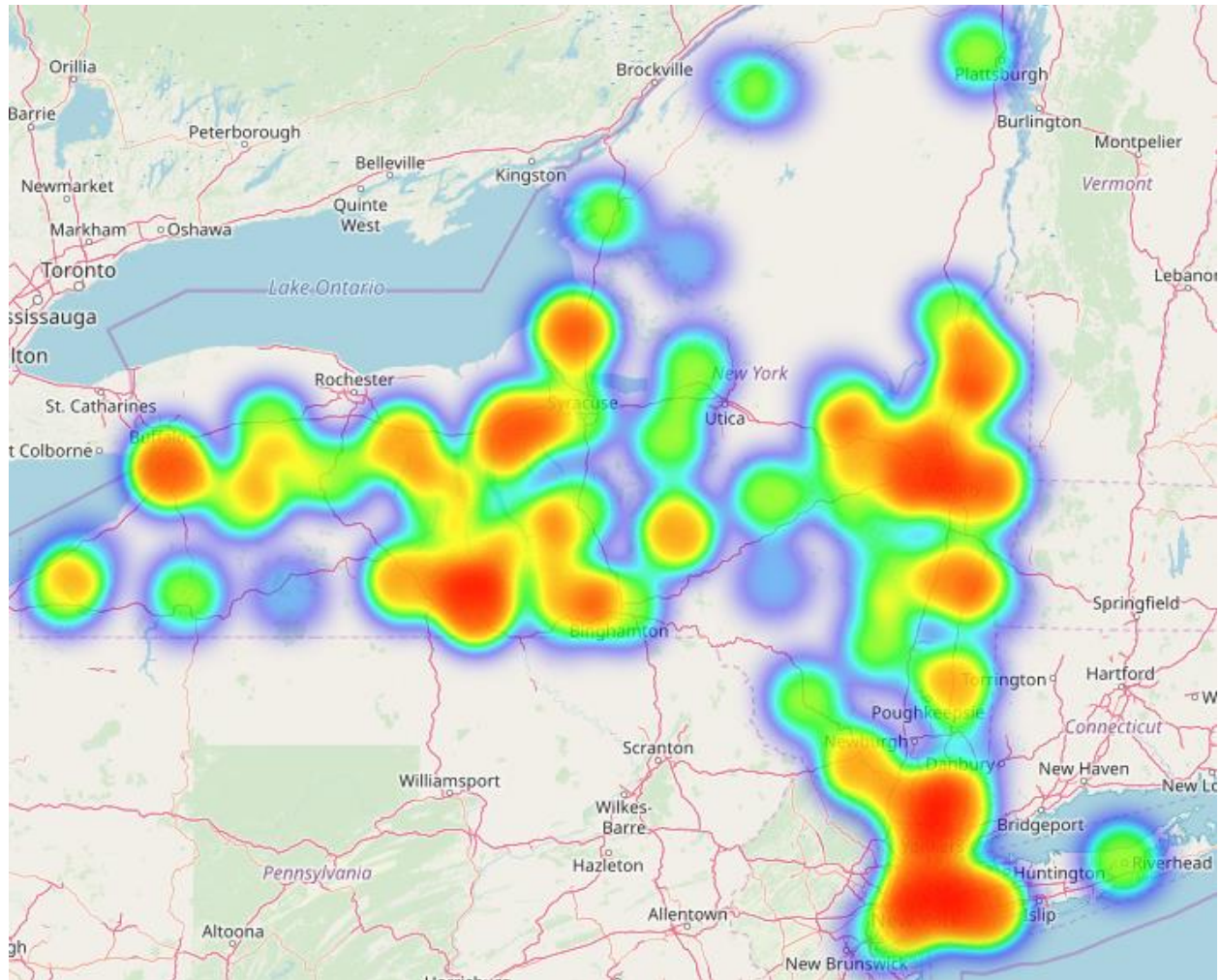
And then we will use the Foursquare API to get all the locations where there is already a Car Wash

	name	location.lat	location.lng
	Advanced Car Wash	42.653310	-73.926680
	The Employer Alliance for Affordable Health Care	42.613623	-73.973587
	Office Ala Carte	42.614497	-73.972085
	Capital Care	42.630079	-73.894420
	Carl's Hearth Services	42.578463	-73.880506
	capital care family practice slingerlands	42.630060	-73.894419
	Sounds And Motion Car Audio	42.656670	-73.928864
	CapitalCare Medical Group Family Medicine Slin...	42.628465	-73.885717
	Bethlehem Foot Care	42.605220	-73.870080
	Advanced Carwash Systems	42.653396	-73.924499
	American Carpet	42.654026	-73.929337
	Elaine VanDeCarr - State Farm Insurance Agent	42.628907	-73.864694
	Belmont Car Wash	42.224974	-78.028064
	Friendship Car Wash/Laundry Mat	42.203198	-78.144891
	Big White House With All The Cars	42.225391	-78.039196

## Methodology

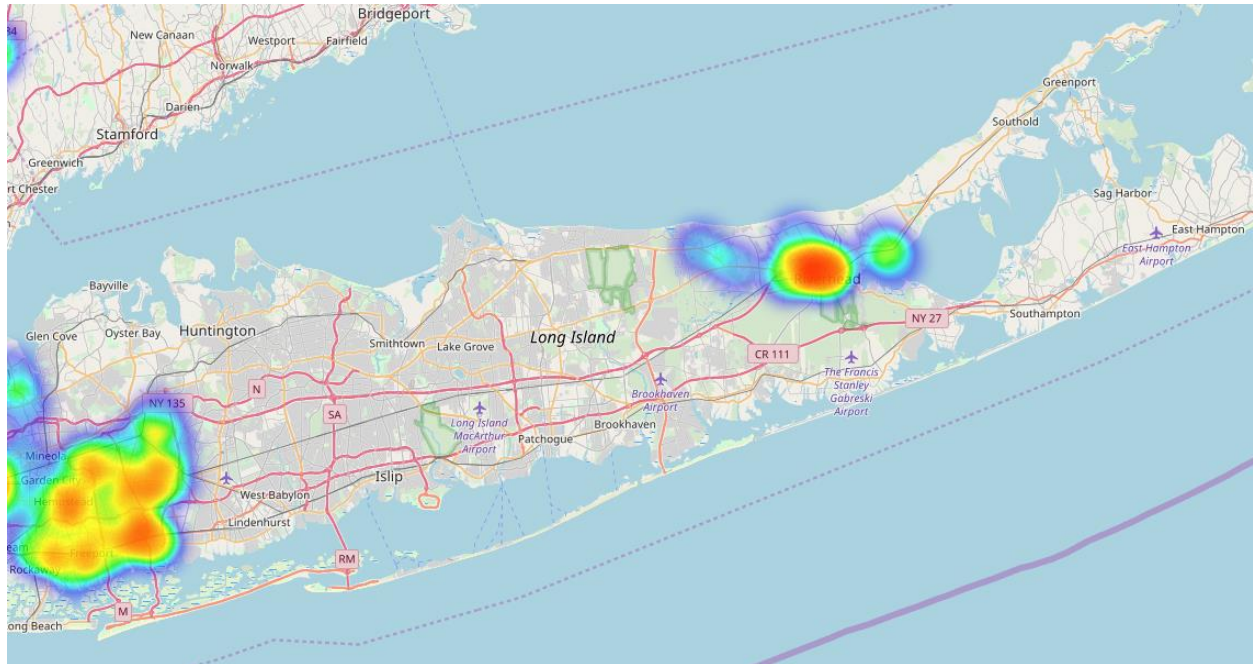
Having this data, we went and computed a heat map to see which areas have the least amount of Car Washes in New York State,

The Folium library was used to generate the map and to visually see all neighborhoods with how much Car Washes are in there,



## Results

After viewing the heat map, we can clearly see that in Long Island there is a nice part of where there is no Car Wash, as well as more in Upstate NY above Lake George there is also not a lot of Car Washes



## Discussion

Tacking all that in consideration, there is one thing to note, that obviously there might be a factor to it,

So as an extra layer of analysis might be to get vehicle registration data from the New York DMV to compare the number of cars per area with the amount of Car Washes

## Conclusion

Based on our analysis, we can highly recommend to open new Car Washes in Long Island, However, for the Upstate NY area we will do farther analysis conclude if there is such a need there.