



# GETTING FAMILIAR WITH CUSTOMERS FOR A NYC PET STORE



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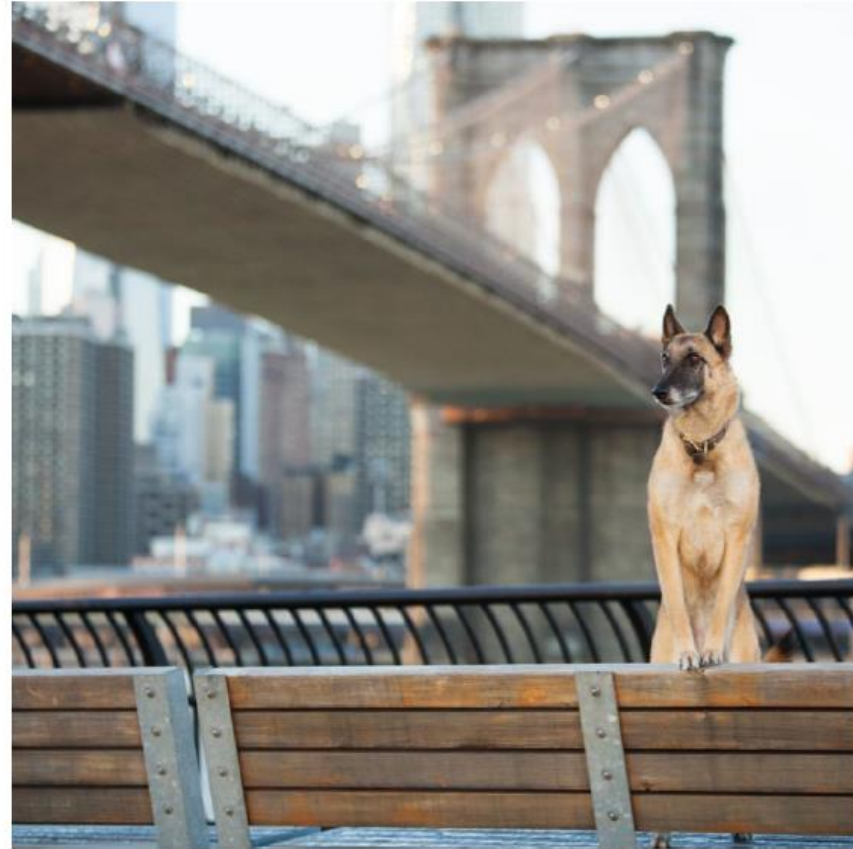
SEGMENTING AND CLUSTERING CUSTOMERS IN NEW YORK.  
LKA.CO



# WHY NYC?

The figures show that in the United States, during 2017, US \$ 69,000 million was spent on products and services for pets, mainly food and veterinary care. This country is the world leader in sales of pet food with US \$ 28,662 million annually and is also the largest market for pet products with sales of more than US \$ 46,000 million.

Moreover, there are plenty of dog-friendly locations and events for people and their furry friend to check out in the Big Apple.





# DATA ACQUISITION AND CLEANING

Dog population data from NYC Open Data page  
<https://data.cityofnewyork.us/Health/NYC-Dog-Licensing-Dataset/nu7n-tubp>

Borough Boundaries of New York City from NYC Open Data page  
<https://data.cityofnewyork.us/City-Government/Borough-Boundaries/tqmj-i8zm>

NYC zip code with corresponding borough, neighborhood, population and density from data.BetaNYC page [https://data.beta.nyc/en/dataset/pediacities-nyc-neighborhoods/resource/7caac650-d082-4aea-9f9b-3681d568e8a5?inner\\_span=True](https://data.beta.nyc/en/dataset/pediacities-nyc-neighborhoods/resource/7caac650-d082-4aea-9f9b-3681d568e8a5?inner_span=True)

Boroughs and the neighborhoods that exist in each borough as well as the the latitude and logitude coordinates of each neighborhood from NYU Spatial Data Repository <https://data.beta.nyc/dataset/pediacities-nyc-neighborhoods>

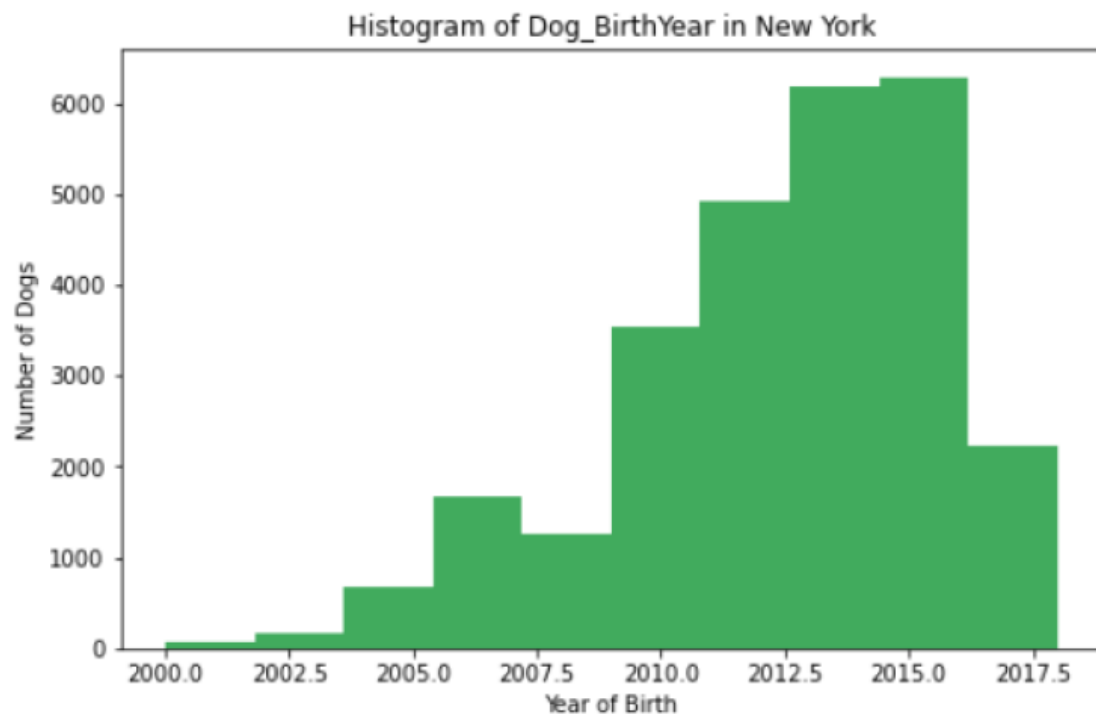
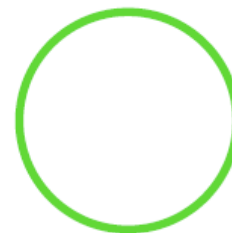
- ✓ In total, 342,394 rows and 15 features in the raw dataset.
- ✓ Duplicate, highly similar or highly correlated features were dropped.
- ✓ Cleaned data contains 26,977 rows.
- ✓ 5 features was selected to run the K-Means.



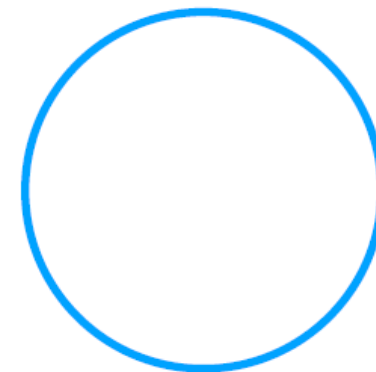




# HOW OLD ARE NYC DOGS?



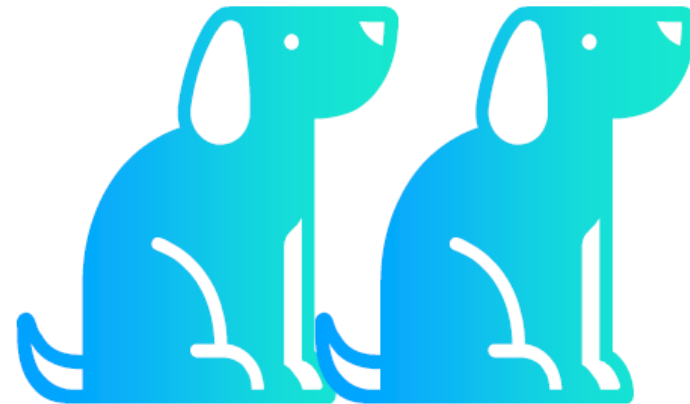
Most of them are in the range of 5 - 10 years old.



# MALE DOGS VS. FEMALE DOGS

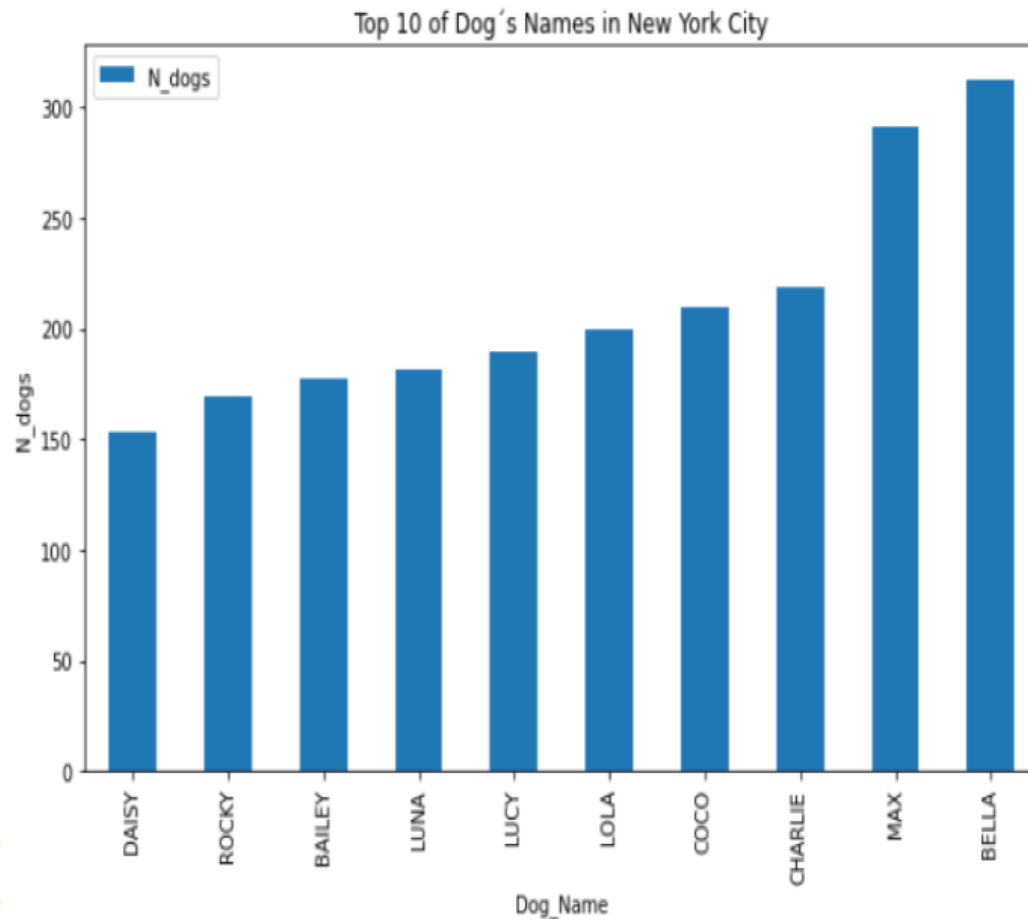
12577 females

14400 males



# MOST POPULAR DOG NAMES IN NEW YORK CITY

If you own one of the 26,977 -plus dogs that are licensed in New York City, chances are rather good your pup is either named Bella or Max.





# NEW YORK CITY'S TOP DOG BREEDS



**3RD**

CHIHUAHUA



**2ND**

SHIH TZU



**1ST**

YORKSHIRE TERRIER

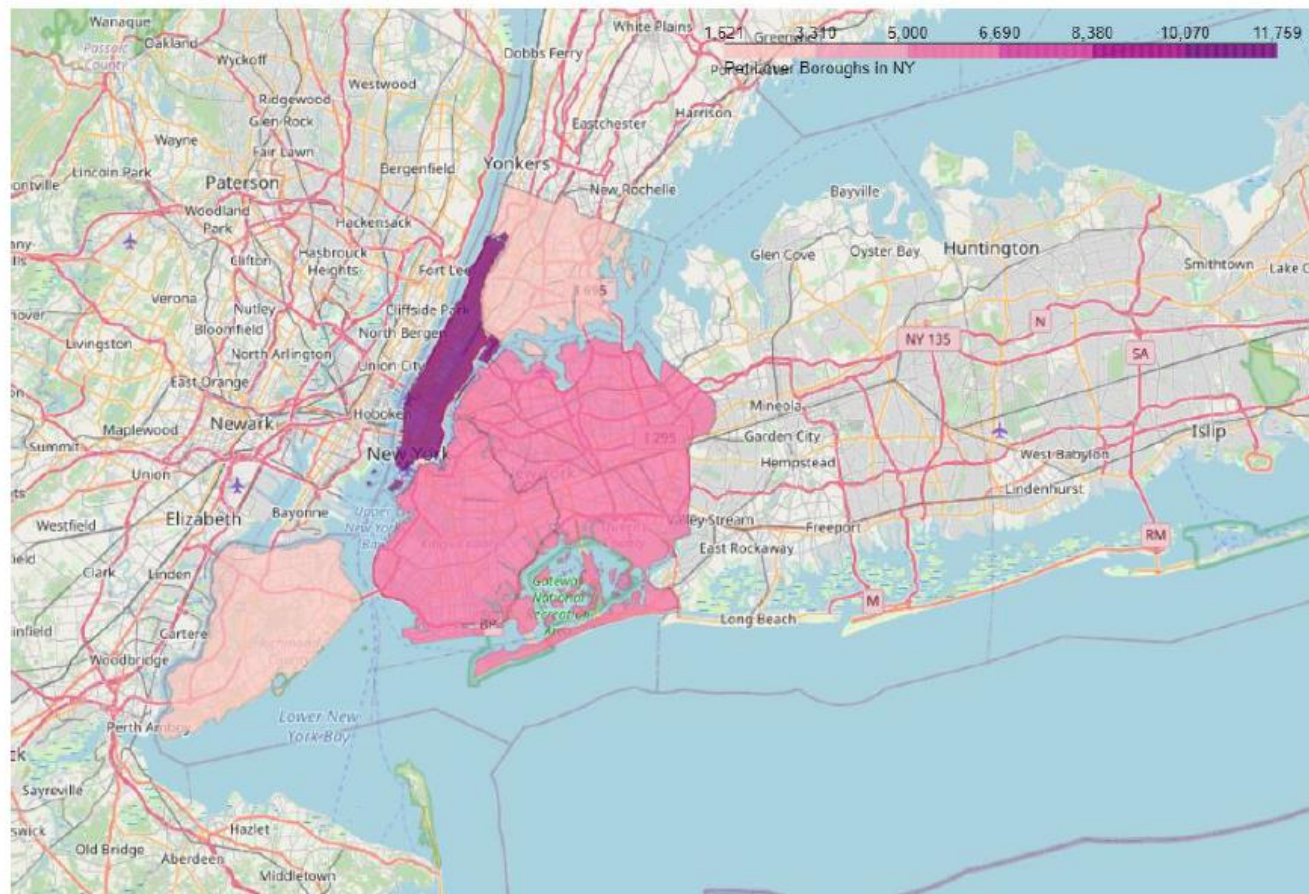


| Breed_Name                           | N_dogs |
|--------------------------------------|--------|
| Havanese                             | 517    |
| American Pit Bull Terrier/Pit Bull   | 534    |
| American Pit Bull Mix / Pit Bull Mix | 736    |
| Maltese                              | 748    |
| Labrador Retriever Crossbreed        | 842    |
| Poodle                               | 1000   |
| Labrador Retriever                   | 1087   |
| Chihuahua                            | 1140   |
| Shih Tzu                             | 1236   |
| Yorkshire Terrier                    | 1239   |

# NYC PET LOVER BOROUGHS



| Borough       | N_dogs |
|---------------|--------|
| Staten Island | 1720   |
| Bronx         | 2017   |
| Queens        | 5129   |
| Brooklyn      | 6451   |
| Manhattan     | 11660  |







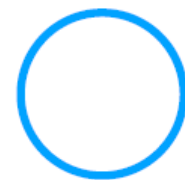
# NYC PET LOVER NEIGHBORHOODS



| Neighborhood                  | N_dogs | Borough       |
|-------------------------------|--------|---------------|
| South Shore                   | 795    | Staten Island |
| Northwest Queens              | 902    | Queens        |
| West Queens                   | 932    | Queens        |
| Greenwich Village and Soho    | 951    | Manhattan     |
| Gramercy Park and Murray Hill | 1147   | Manhattan     |
| Lower East Side               | 1342   | Manhattan     |
| Chelsea and Clinton           | 1815   | Manhattan     |
| Upper East Side               | 1916   | Manhattan     |
| Upper West Side               | 2045   | Manhattan     |
| Northwest Brooklyn            | 2100   | Brooklyn      |

"Northwest Brooklyn" is not a Neighborhood but amount of neighborhoods in Brooklyn.

On the other hand, there is a lot of dogs in Manhattan. Thus, it would be interesting to analyze it deeper.



# BEST NEIGHBORHOOD IN MANHATTAN TO OPEN A PET STORE



| Neighborhood                  |
|-------------------------------|
| Central Harlem                |
| East Harlem                   |
| Lower Manhattan               |
| Inwood and Washington Heights |
| Greenwich Village and Soho    |
| Gramercy Park and Murray Hill |
| Lower East Side               |
| Chelsea and Clinton           |
| Upper West Side               |
| Upper East Side               |

The pet store can focus on 3 clusters in Manhattan as you can see on this map.





THANK YOU.

