## Most Dog Friendly Neighbourhoods in Toronto

## **Business Problem:**

Having a dog is a serious responsibility and it definitely alters your lifestyle in order to provide the proper care for your pup. Even the smallest dogs should be going outside and it makes life easier for dog owners if their neighbourhood caters to that. They are as important as any other member of a family and keeping them happy and healthy is something all good dog owners strive to do. This translates into living in neighbourhoods that has a lot of parks and trails so your pup can get out and explore.

With this project we had to use Foursquare API to solve a problem and I wondered where in Toronto would be good place to live with a dog? For this analysis, I assumed that good target areas would have a large population, a large number of pets registered in the area and parks/dog run places.

To do this analysis, we will use the following information:

- the number of pets in each area in Toronto (using Forward Sortatation Areas (FSAs)) (estimated by the number of new dog/cat licenses issued per FSA)
- the neighbourhood name of each FSA (retrieved from Wikipedia)
- the population of each each FSA from the 2016 census
- the foursquare api to retrieve the current number of pet stores/services and dog-runs per FSA

## **Data Sources:**

- → Population by FSA from Census 2016:
  - https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/hlt-fst/pd-pl/comprehensive.cfm
  - this information will be used to calculate the proportion of pet ownership per FSA
  - this data set has 3 columns of interest: FSA / Province / Population, 2016
  - We will filter this data set to only include the FSAs located in Toronto
- → Toronto Open Data: Licensed Dogs and Cats Reports for 2013 and 2017 https://www.toronto.ca/city-government/data-research-maps/open-data/open-data-catalogue/community-services/#a666d03a-bafe-943a-e256-3c2d14b07b10
  - this information includes the number of dog and cat licenses issued per FSA in 2017.
    Also planning ot look at same file for 2013 to look at which areas are experiencing growth in pet ownership
  - this data has four columns: FSA / # Cat Licenses Issued / # Dog Licenses Issued / Total Licenses
- → FourSquare Api:
  - o to get number of pet stores/services and Dog-Runs per FSA

 $^{\circ}~$  specifically, this query will be filtered to look for only the following two categoryIds: 5032897c91d4c4b30a586d69=pet~services , 4bf58dd8d48988d100951735=~pet~stores , 4bf58dd8d48988d1e5941735=~dog-run

## **→** geopy:

- $^{\circ}~$  to get lat/long coordinates for each FSA, which is used when calling Foursquare API for each FSA
- → Wikipedia: https://en.wikipedia.org/wiki/List\_of\_postal\_codes\_of\_Canada:\_M
  - to get neighbourhood names for each FSA