

The key data for this project is the Toronto neighborhoods data, and the health data.

For this, we will use Urban HEART data

(<http://www.torontohealthprofiles.ca/urbanheartattoronto.php>). Urban HEART stands for "Urban Health Equity Assessment and Response Tool." Urban HEART is a framework that a variety of organizations with diverse mandates can use together to maximize their collective impact on equity. This framework provides opportunities for collaboration while allowing organizations to continue to focus on their unique roles and mandates. Urban HEART can shed light on where, why and how our diverse initiatives are/aren't converging to produce real change.

More precisely, the metrics we will use are the number of gym, parks, and pools, to assess the availability of sport activities for each neighborhood, and also the Walk Score from the Urban HEART dataset, which is a coefficient that indicates the "walkability" of each neighborhood, and also the diabetes prevalence in each neighborhood, which is a great indicator of the need for physical activity.

We will also need the number of fast food restaurants in each neighborhood to have another indicator of the general unhealthiness of each neighborhood.

The number of gyms, parks, fast food restaurants, and pools in each neighborhood are found by using the Foursquare API, using neighborhood latitude and longitude that was provided by the geopy package.

This data will be used to cluster the neighborhoods in order to find the optimal gym location, ie the unhealthiest neighborhood with the least amount of gyms, parks, and pools.

Neighborhood	Walk score	Diabetes	Latitude	Longitude	Gyms	Parks	FastFood	Pools
Agincourt North	66.0	9.5	43.808038	-79.266439	0	0	4	0
Alderwood	70.0	8.5	43.601717	-79.545232	1	0	1	1
Annex	94.0	5.5	43.670338	-79.407117	3	3	4	1
Banbury-Don Mills	67.0	6.5	43.751672	-79.370169	0	1	0	0
Bathurst Manor	61.0	8.5	43.665519	-79.411937	7	2	5	1
Bay Street Corridor	99.0	5.1	43.672798	-79.390734	21	6	7	8
Bayview Village	71.0	6.0	43.769197	-79.376662	0	0	2	0
Bayview Woods-Steeles	57.0	7.1	43.798127	-79.382973	0	0	0	0
Bendale	64.0	11.5	43.753520	-79.255336	0	2	1	0
Black Creek	62.0	12.7	45.622607	-77.156242	0	0	0	0