



# The best place for investment in income residential property in Toronto

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# Initial data

- ▶ **Open Data Catalogue:** <https://open.toronto.ca/catalogue/?search=neighbourhood&sort=score%20desc>;
- ▶ **Toronto Neighborhoods:** <https://open.toronto.ca/dataset/neighbourhoods/> (the data related to neighborhoods names and latitude and longitude will be used);
- ▶ **Wellbeing Toronto - Economics:** <https://open.toronto.ca/dataset/wellbeing-toronto-economics/> (the information about businesses, child care spaces, debt risk score, home prices and local employment by neighborhood);
- ▶ **Wellbeing Toronto - Demographics:** <https://open.toronto.ca/dataset/wellbeing-toronto-demographics/> (information about total population, population by age ( 0-14 and 15-24 years);
- ▶ **Neighborhood Profiles:** <https://open.toronto.ca/dataset/neighbourhood-profiles/> (the data by neighborhoods related to Average household size, Couples with children, Total income by household, Private households by tenure (owner, renter));
- ▶ **Wellbeing Toronto - Safety:** <https://open.toronto.ca/dataset/wellbeing-toronto-safety/> (the data by neighborhoods related to breaks and enters);
- ▶ **Wellbeing Toronto - Environment:** <https://open.toronto.ca/dataset/wellbeing-toronto-environment/> (the data by neighborhoods related to green spaces);
- ▶ **Foursquare** Developers Access to venue data: <https://foursquare.com/> (the data related to nightclub and bars, parks, restaurants, theaters, etc.);

# Stages and purposes

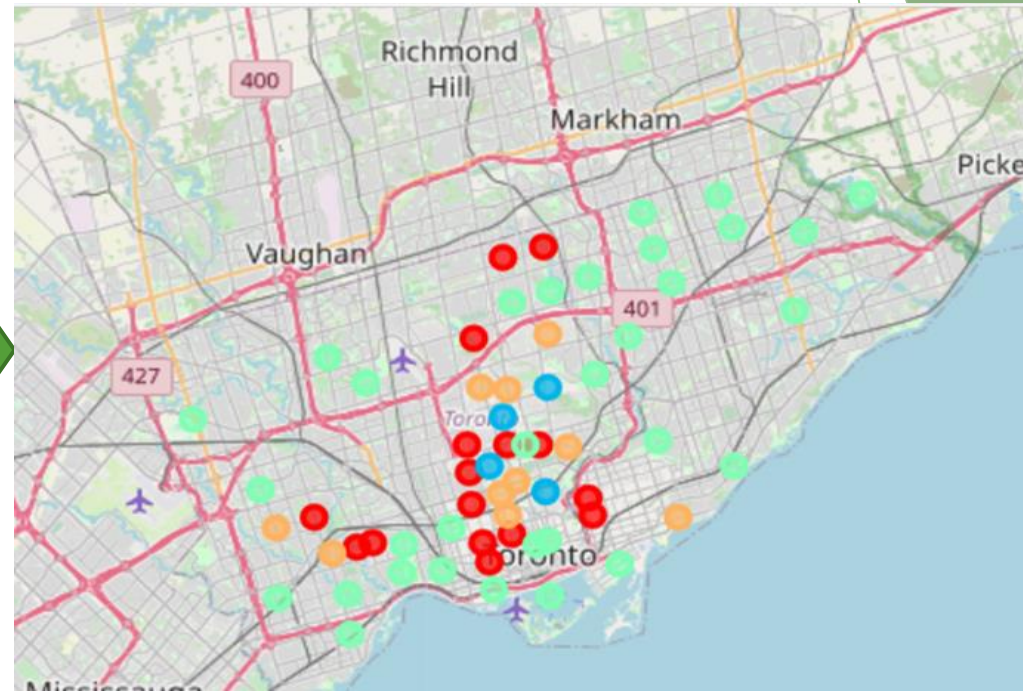
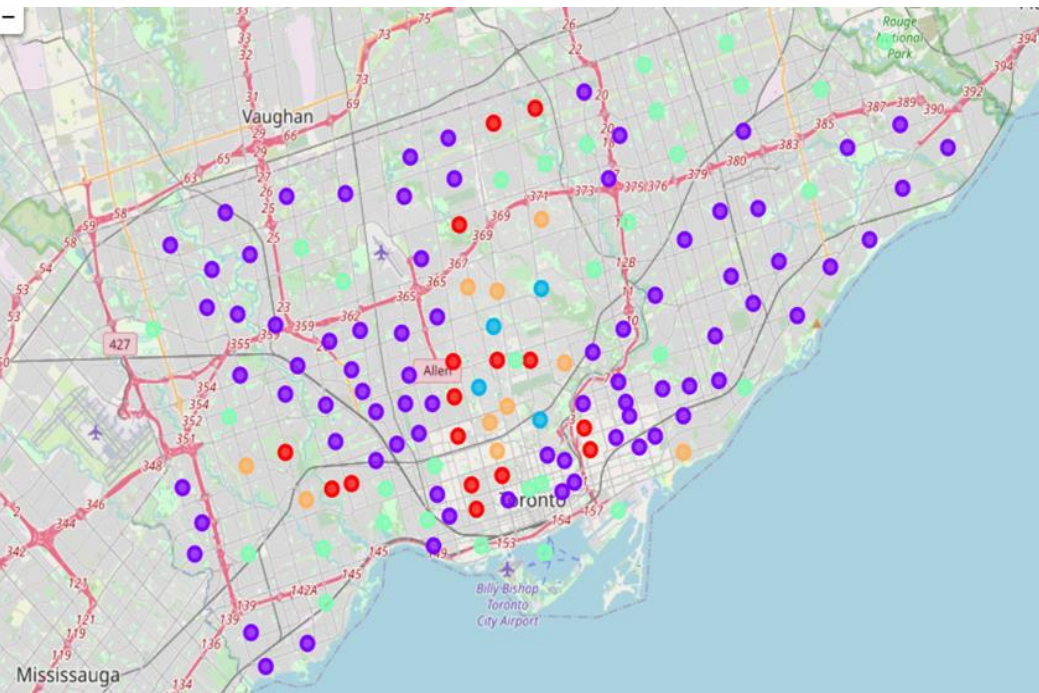
- ▶ 1<sup>st</sup> stage: Checking the data important for investors in order to find out the clusters of neighborhoods good enough for investment in residential property for rent.
- ▶ 2<sup>nd</sup> stage: Finding the clusters of neighborhoods that are the best from family perspective (the potential tenants) - neighborhoods with more families with kids, green spaces and child care spaces.
- ▶ 3<sup>rd</sup> stage: From the 140 neighborhoods at the beginning of the study only the neighborhoods that met the criteria above have been clustered based on the Foursquare data (with less pubs and bars and more gardens, garden centers and playgrounds in order to finalize this research.

# First stage: Segmenting the neighborhoods from investors perspective

- ▶ The key purpose - to help the potential property investor in their strategy of targeting these specific groups of profitable neighborhoods. In order to segment the 140 neighborhoods, only the data related to debt risk, local employment jobs, average income, house prices and breaks and enters is been used. The key question that has to be answered is "Which neighborhood/s is/are the best for residential property investment?".
- ▶ After k-mean clustering algorithm was applied the neighborhoods from cluster 1 have been excluded (as not good enough for investment).

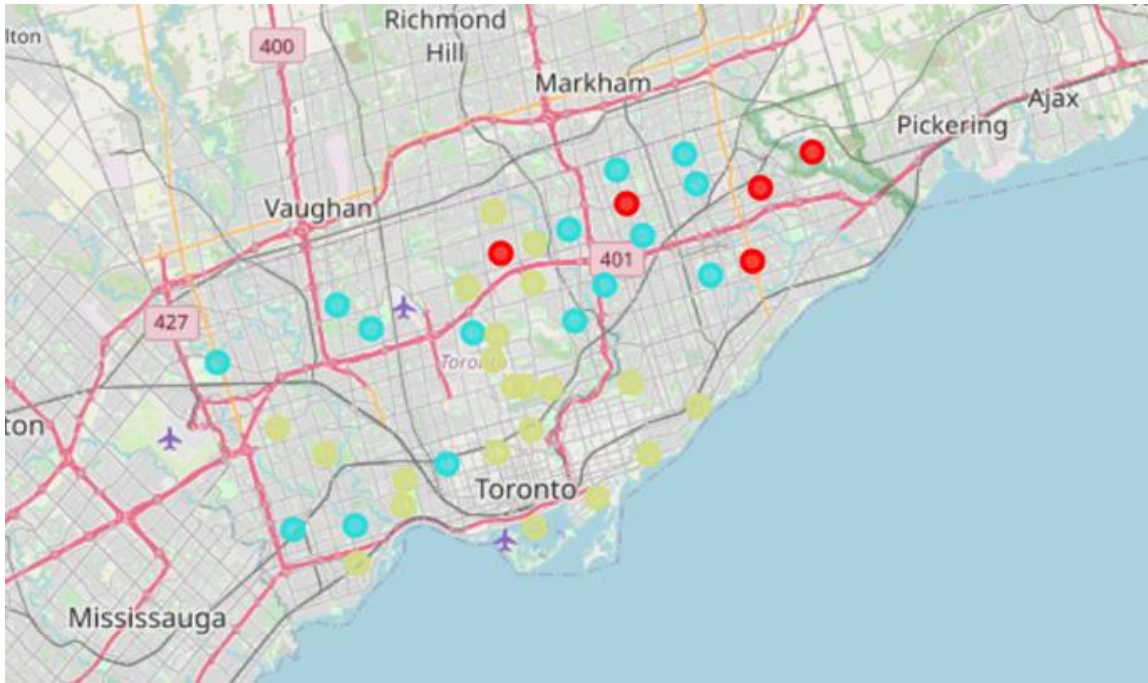


# Results



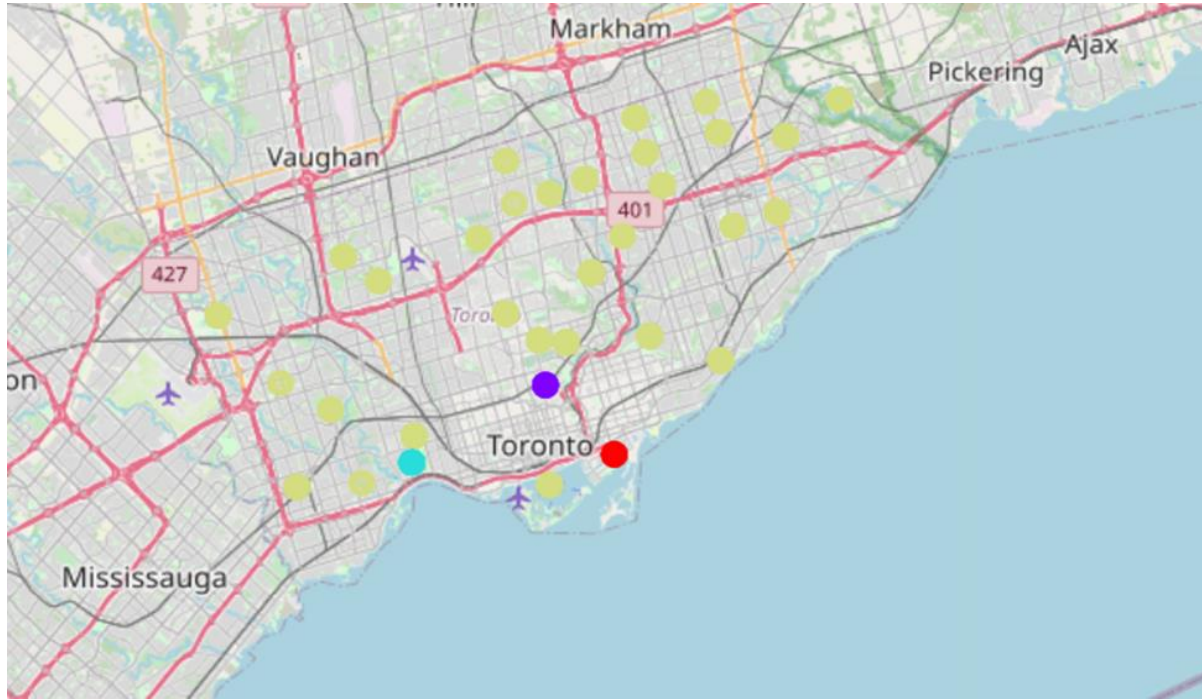
## 2<sup>nd</sup> stage: Segmenting the neighborhoods from family perspective

- ▶ At this stage, the data related to couples with kids, green spaces and child care spaces in each neighborhood has been analyzed and k-mean clusters algorithm has been used again in order to find the clusters considered good enough from family perspective (clusters 0,1,3). Families - potential tenants
- ▶ Result:



## 3<sup>rd</sup> stage - exploring the reduced number of neighborhoods using Foursquare

- ▶ At this stage, the Toronto's neighborhoods have been clustered based on the Foursquare data. The neighborhoods with less pubs and bars and more gardens, garden centers and playgrounds have been found in order to finalize this research.
- ▶ Final result:





# Conclusion

- ▶ At the 1<sup>st</sup> stage, the 140 neighborhoods in Toronto has been reduced initially with 78 neighborhoods which has been considered worst place for investment in residential property to rent, due to the bigger competition, the lowest average income of the future tenants and the lack of businesses and local employment jobs.
- ▶ At the 2<sup>nd</sup> stage, the neighborhoods were reduced once more, excluding the ones without satisfactory amount of green spaces, kids and young people, couple with children and child care spaces. The number of the neighborhoods, considered good from family perspective was 42.
- ▶ At the 3<sup>rd</sup> sage, from these neighborhoods 7 more were dropped, due to having bars and pubs according the Foursquare database.
- ▶ The final list of neighborhoods where the investors can put their money less risky contained 33 neighborhoods (Agincourt North, Banbury-Don Mills, Bayview Village, Bendale, Birchcliffe-Cliffside, Don Valley Village, Downsview-Roding-CFB , Edenbridge-Humber Valley, Glenfield-Jane Heights, High Park North, High Park-Swansea, Islington-City Centre West, L'Amoreaux, Lansing-Westgate, Lawrence Park South, Leaside-Bennington, Malvern, Millike, Mount Pleasant East, Newtonbrook East, O'Connor-Parkview, Parkwoods-Donalda, Rosedale-Moore Park, Rouge, South Riverdale, Steeles, Stonegate-Queensway, Tam O'Shanter-Sullivan, Waterfront Communities-The Island, West Humber-Clairville, Willowdale East, Willowridge-Martingrove-Richview, Woburn).