

# ANALYSIS OF CHILD CARE SERVICES IN THE NEIGHBORHOODS OF EDMONTON, AB

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# Introduction

- Planning Child care services in a city is very crucial to ensuring sustainable services for families in different communities.
- It is also essential to support the children development by ensuring that the child care services are accessible, less crowded, and properly managed.
- In this exploratory exercise, I will explore and analyze different neighborhoods in the city of Edmonton, AB, to identify which areas are possibly underserved when it comes to child care.

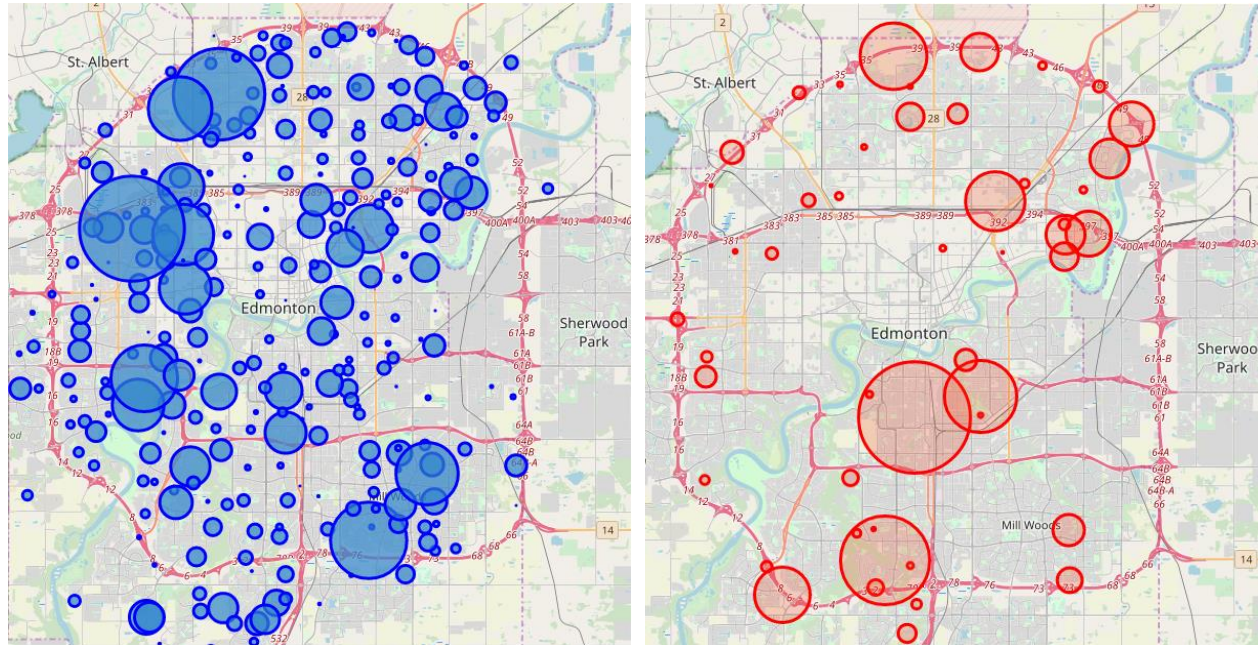
# Data acquisition and cleaning

- Data preparation:
  - ***Dataset 1: Edmonton City Neighborhoods boundaries data – City of Edmonton***, which contains the following columns: Neighborhood, Longitude, and Latitude. To access the dataset, [click here](#).
  - ***Dataset 2: Edmonton Population data – City of Edmonton***, which contains the following columns: Neighborhood, Population (Age 0-4), Population (Age 5-9), Population (Age 10-14). To access the dataset, [click here](#).
  - ***Dataset 3: Child Care Information Dataset - Government of Alberta***, which contains the following columns: Type of Program, Program Address, Program City, Postal Code, Neighborhood, Phone Number, Capacity, Accreditation Status. To access the dataset, [click here](#).
  - Remove duplicates, unnecessary columns, and perform calculations needed for the mapping.

# Methodology

- Exploratory Analysis:
  - *Explore the children (age 0 to 4) population in each neighborhood.*
  - *Explore child care services in each neighborhood – using foursquare maps – returned no results.*
  - *Explore child care services in each neighborhood – using the government of Alberta dataset.*
  - Create the maps for the population analysis and for the child care services analysis.
  - Visually identify clusters of neighborhoods that are underserved and need more attention (potential candidates for child care services business investment).

# Results & Discussion



- We can visually identify clusters of neighborhoods where there is a large children population, especially age 0 to 4, but does not have the capacity in the current daycare business.
- Such neighborhoods, mainly in the northwest, the southwest, and the southeast part of the city are good candidates to start a new daycare business.

# Conclusions

- In this study, I analyzed the child care services in the neighborhoods of the city of Edmonton, AB, in relation to the population of children, age 0 to 4 years old, in order to identify neighborhoods that are underserved or overserved, and to identify future child care business opportunities for investors.
- I also tried to highlight the fact that a larger young population means a need for planning other services and family oriented facilities in the area to support healthy living and child development.
- In terms of datasets, foursquare maps can improve their database on businesses in Edmonton, AB.

