

## 2. DATA

### 2.1 Sources

We will be using data from a variety of sources to get the information required;

- Wikipedia( [https://en.wikipedia.org/wiki/List\\_of\\_neighbourhoods\\_in\\_Calgary](https://en.wikipedia.org/wiki/List_of_neighbourhoods_in_Calgary)) : Using the data we will be able to get the neighbourhoods, population and population density.
- Foursquare API: Using the information from foursquare we will get the venues, restaurants for the neighbourhoods.
- Income Data: For all intensive purposes we will use the data from Great News (<https://great-news.ca/demographics/>) and assume the information is representative of median household income in Calgary.

### 2.2 Cleaning

Data will need to be scraped from the sources mentions in section 2.1 and combined. Missing data or incomplete data was present for some of the income figures related to neighbourhoods. We will make a few assumptions;

- Only neighbourhoods with assigned data will be processed.
- Neighbourhoods missing data will be dropped.
- Income values from given year will be used to characterize neighbourhood spending.

Examples of Data;

Name <sup>[9]</sup>	Quadrant	Sector <sup>[10]</sup>	Ward <sup>[11]</sup>	Type <sup>[10]</sup>	2012 Population Rank	Population (2012) <sup>[9]</sup>	Population (2011) <sup>[9]</sup>	% change	Dwellings (2012) <sup>[9]</sup>	Area (km <sup>2</sup> ) <sup>[10]</sup>	Population density
Abbeyle	NE/SE	Northeast	10	Residential	82	5,917	5,700	3.8	2,023	1.7	3,480.6
Acadia	SE	South	9	Residential	27	10,705	10,615	0.8	5,053	3.9	2,744.9
Albert Park/Radisson Heights	SE	East	10	Residential	75	6,234	6,217	0.3	2,709	2.5	2,493.6
Altadore	SW	Centre	11	Residential	39	9,116	8,907	2.3	4,486	2.9	3,143.4
Alyth/Bonnybrook	SE	Centre	9	Industrial	208	16	17	-5.9	14	3.8	4.2
Applewood Park	SE/NE	East	10	Residential	69	6,498	6,404	1.5	2,215	1.6	4,061.3

Fig 2.2.1 : Neighbourhood Data

Community	Newsletter Name	Median Household Income	Median Age	Population 2014	Dwellings 2014	City Quadrant	Median Home Sale Price
Abbeyle	-	\$55,345	34	6,071	2,031	SE	\$305,000
Acadia	Acadia	\$46,089	42	10,969	5,067	SE	\$447,000
Albert Park / Radisson Heights	-	\$38,019	37	6,529	2,936	SE	\$349,900
Altadore	The Source	\$53,786	37	9,518	4,537	SW	\$925,000
Applewood Park	-	\$65,724	33	6,864	2,228	SE	\$380,000

Fig 2.2.2 : Neighbourhood Income data