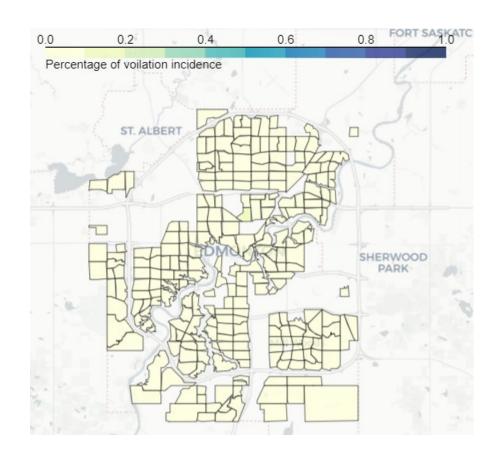
# Opening a restaurant in Edmonton

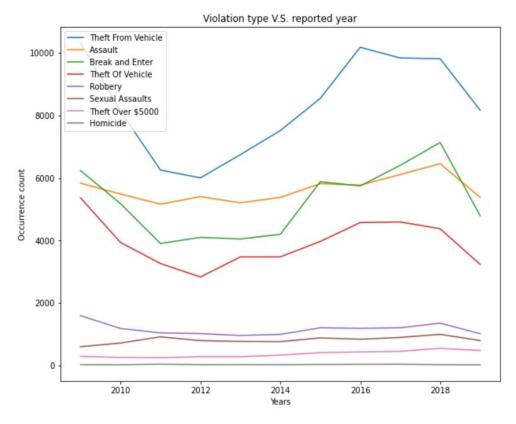
#### Data acquisition and cleaning

- Geographical coordinates and relative information of the neighborhoods are scraped from the City of Edmonton open data bank
- Information about the distribution of population by their age, sex, income, education, religion, race are scraped from City of Edmonton and Statistic Canada open data bank
- location and other information about various venues in Edmonton are scraped from Foursquare, Yelp and Zomato explore API
- Only focused on neighbourhood within developing, established, and mature areas (includes central core areas and downtown area)
- Consist neighborhoods with different names in time period

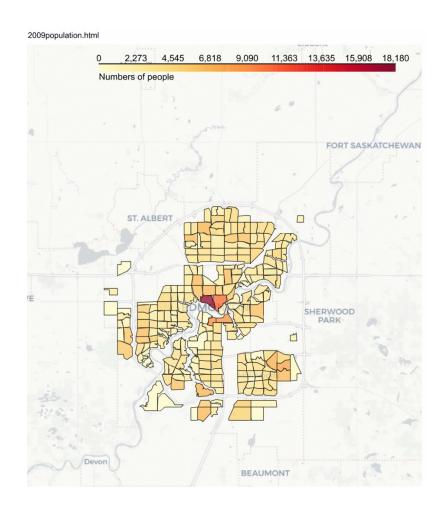
## Is it a safe place to startup a business?

Yes! Low violation incident rate and decreasing violation incident number.

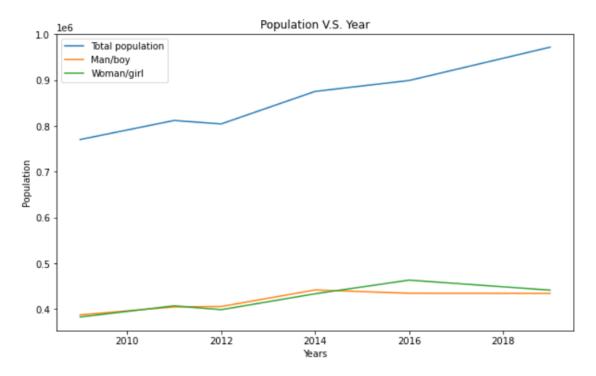




## Is it a proper place to startup a business?



Yes! There are **increasing** numbers of people **moving in**to this city.

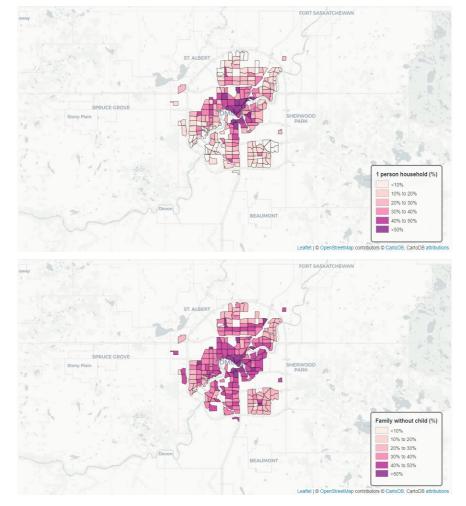


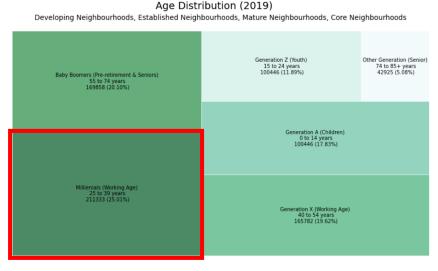
#### Who will the target customers be?

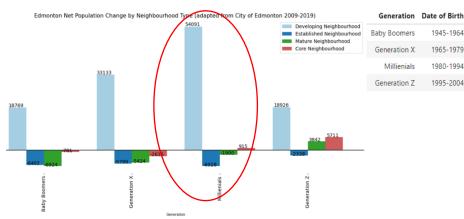
#### 1. Single or no child

#### **Millennials**

2. Middle income class, with university+ education







55-74

25-39

30-44

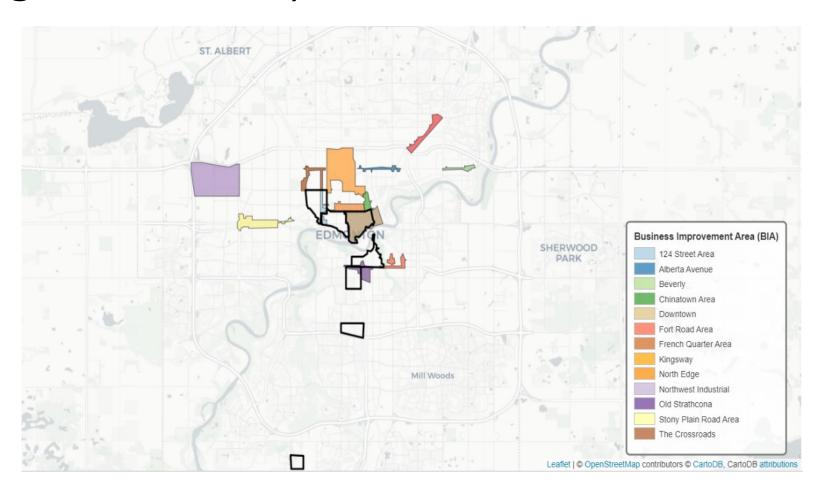
15-29

## Where can you serve your guests?

			≥8		≥45% ≥40% ≥40% ≥40%										
	Neighbourhood	Millennials Per Net Residential Hectare	Commercial Lot Size (㎡)	Commercial Assessment Number	2019 LRT Passanger Boarding/Alighting	University+	Middle- class (%)	1 person household (%)	Without children (%)	Dwelling owned (%)	Household with Mortgage (%)	Dwelling Occupied (%)	Classification		
0	Abbottsfield	9.2	57798.98	1	0.0	18.1	22.24	55.36	15.46	25.84	75.6	86.65	Suburban		
1	Allard	12.7	11205.74	1	0.0	53.5	78.51	41.06	29.32	55.29	92.0	89.34	Rural		
2	Allendale	8.5	62485.16	42	0.0	38.6	55.30	47.49	41.54	35.69	58.0	79.48	Suburban		
3	Bannerman	8.3	27407.08	1	0.0	13.9	52.66	45.10	33.71	60.85	58.7	91.61	Rural		
4	Blue Quill	11.0	24868.10	3	28609.0	51.8	39.69	44.80	33.33	29.01	54.5	95.82	Rural		
5	Boyle Street	16.4	136240.94	269	25032.0	26.8	25.72	46.44	51.85	8.26	57.8	88.24	Urban		
6	Brintnell	10.8	81031.83	105	0.0	29.2	75.73	45.69	28.06	62.07	88.5	95.91	Rural		
7	Callaghan	13.0	0.00	0	0.0	49.6	67.40	40.97	38.15	66.12	83.2	95.33	Rural		
8	Callingwood South	17.1	97532.32	6	0.0	27.4	40.07	44.23	36.10	16.48	56.4	89.24	Rural		

	Neighbourhood	Millennials density score	Business score	LRT score	Education level score	Middle- class score	Single score	Without children score	Dwelling Ownership score	Dwelling mortgage score	Dwelling occupied score	Urban score	Total Score
0	Downtown	2.0	2.00	2.00	2.44	1.43	1.51	2.43	0.16	0.19	0.89	0.75	15.80
1	Oliver	4.0	1.78	0.60	2.05	1.32	1.31	2.26	0.23	0.15	0.88	0.75	15.32
2	Strathcona	2.0	1.01	2.00	2.37	1.47	1.31	1.87	0.24	0.15	0.91	0.75	14.08
3	Queen Alexandra	1.0	1.44	0.41	2.40	1.40	1.55	1.86	0.25	0.16	0.92	0.75	12.14
4	Empire Park	1.0	1.08	1.90	1.81	1.40	1.46	1.34	0.08	0.18	0.87	0.75	11.88
5	Westmount	1.0	1.31	0.00	1.81	1.53	1.30	1.49	0.44	0.16	0.88	0.75	10.67
6	Paisley	1.0	0.00	0.00	2.00	2.51	1.21	1.26	0.61	0.24	0.91	0.25	9.99

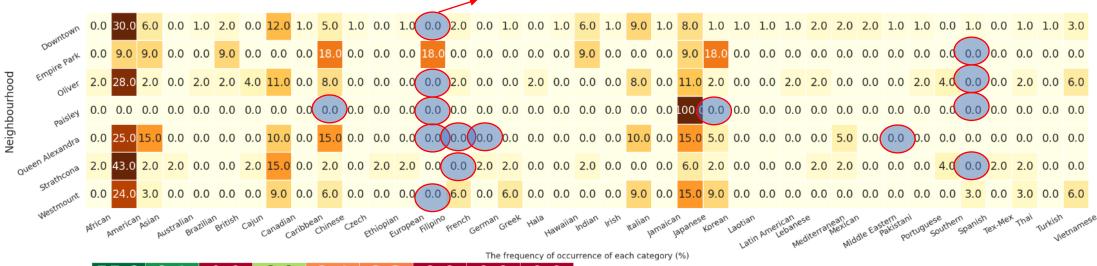
## Where can you serve your guests? (Neighborhood)



#### What will you offer them?

#### **Ethnic cuisines**

The least competition for the new upcoming restaurant in corresponding neighborhood



 55.2
 9.1
 0.0
 6.9
 2.4
 2.3
 0.0
 0.0
 0.0

 59.8
 2.8
 0.0
 2.8
 3.7
 2.8
 0.0
 0.0
 0.0

 63.3
 7.3
 2.7
 2.3
 0.0
 2.3
 0.0
 0.0
 0.0

 68.9
 2.7
 0.0
 0.0
 0.0
 0.0
 2.4
 2.0
 2.3

 69.5
 2.5
 0.0
 2.1
 0.0
 2.0
 2.2
 0.0
 0.0

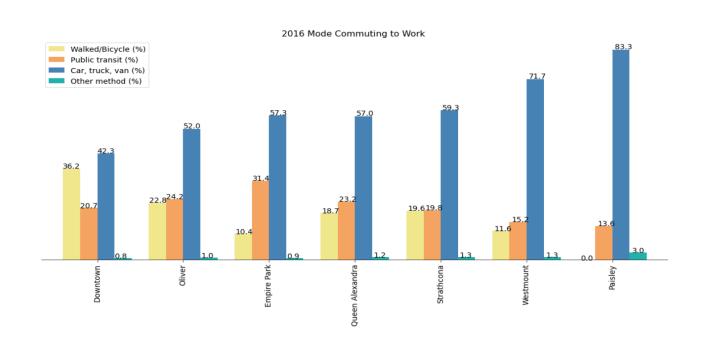
 72.5
 1.8
 0.0
 0.0
 0.0
 2.1
 2.8
 2.2
 0.0

 79.2
 0.0
 1.4
 1.3
 0.0
 1.3
 2.3
 0.0
 0.0

### When will they come to your restaurant?

**Paisley**: weeknights, weekends, and holidays. It will be better for the restaurant provide both eat in and takeaway services.

Downtown, Oliver, Strathcona, Queen Alexandra, Empire park, and Westmount: lunch hours, weeknights, weekends, and holidays. It would be a good idea to offer business lunches and setup afternoon happy hours.



#### Conclusion and future directions

- Construct visualizations to select target customer segment
- Built useful models to evaluate neighborhoods of Edmonton
- Explore the venues in neighborhoods of Edmonton