Project #3: Data Visualization and Dashboards with Tableau

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Project Flow - Option 1

Step 1 - Loading the data into Tableau
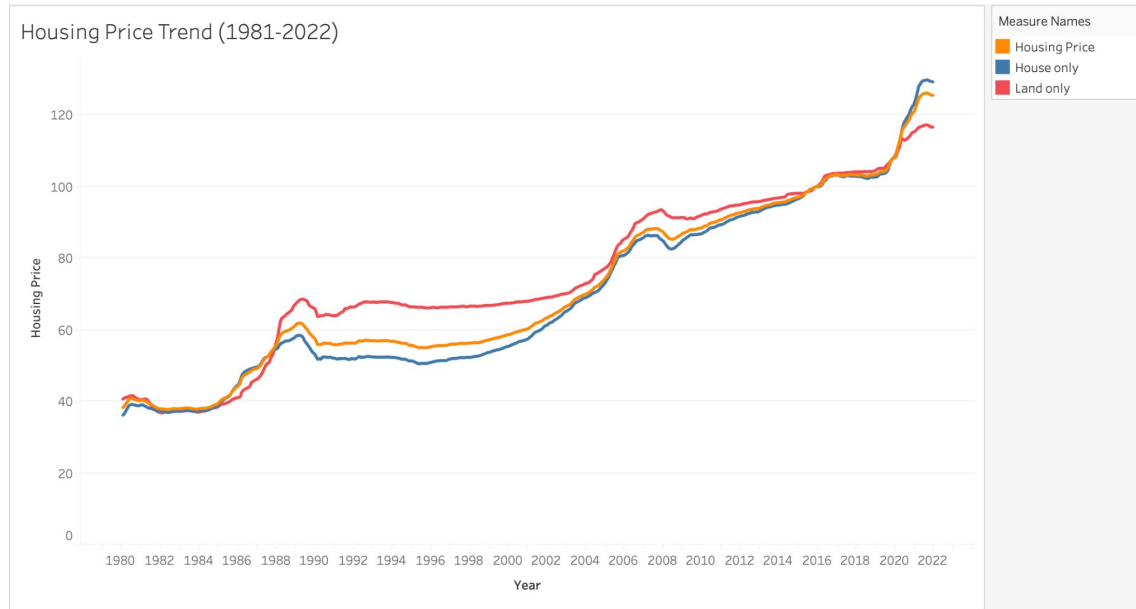
Step 2 - Understanding the datasets

Step 3 - Creating the visualizations

Step 4 - Finding patterns and trends
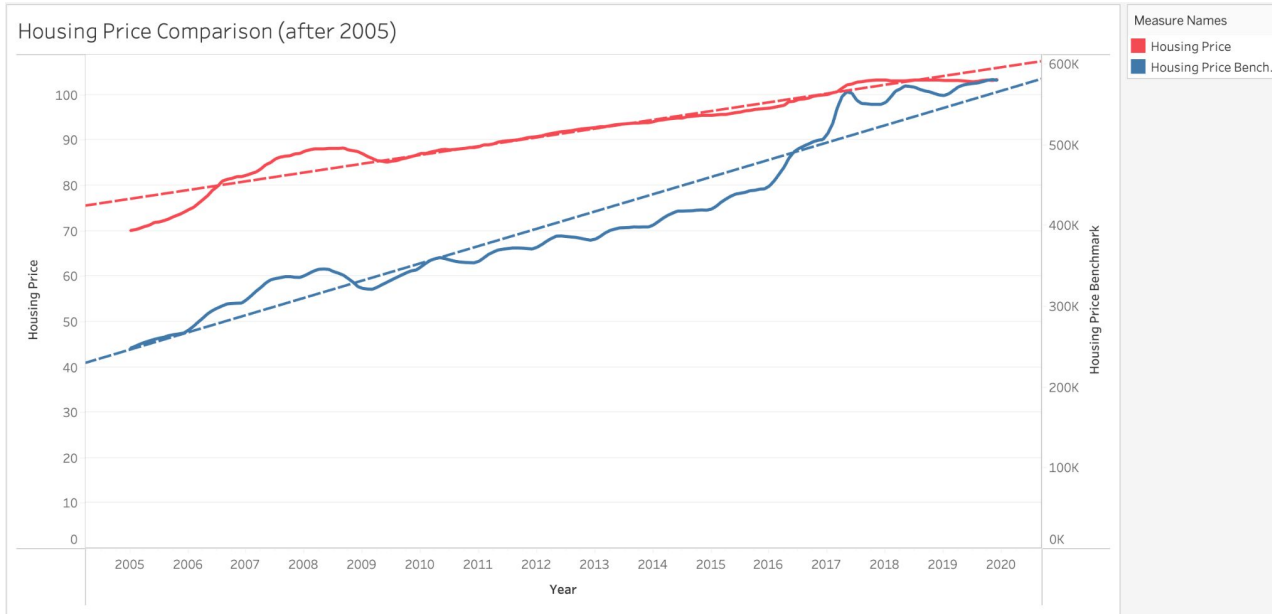
Step 5 - Drawing conclusions
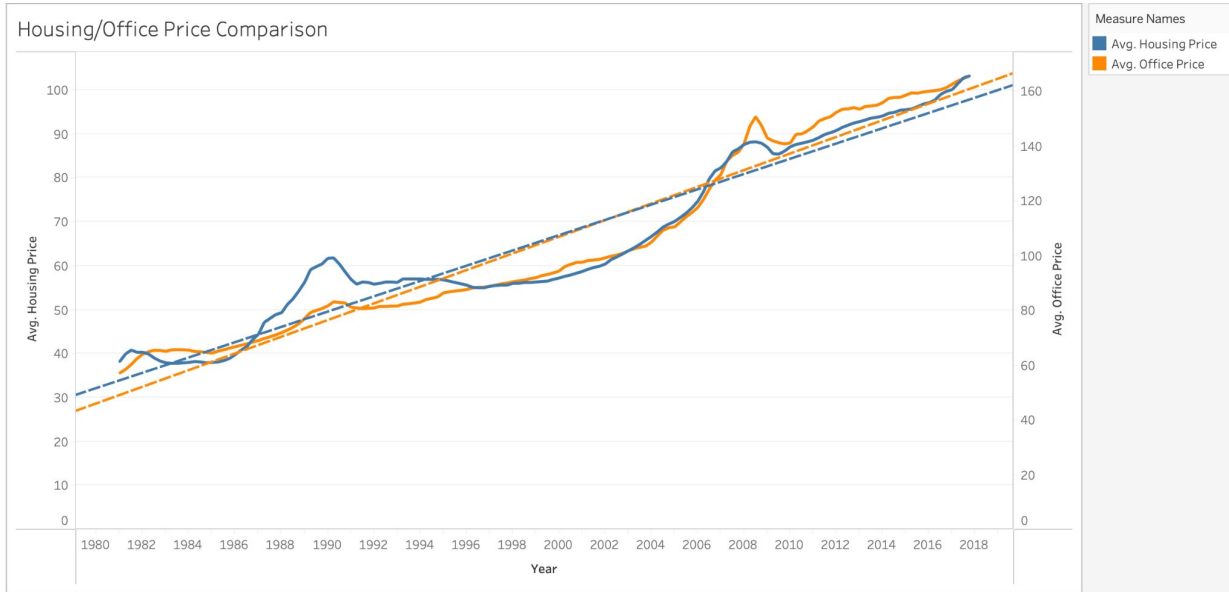
Housing Price Trend

The price indexes show that the prices are increasing at a faster rate.
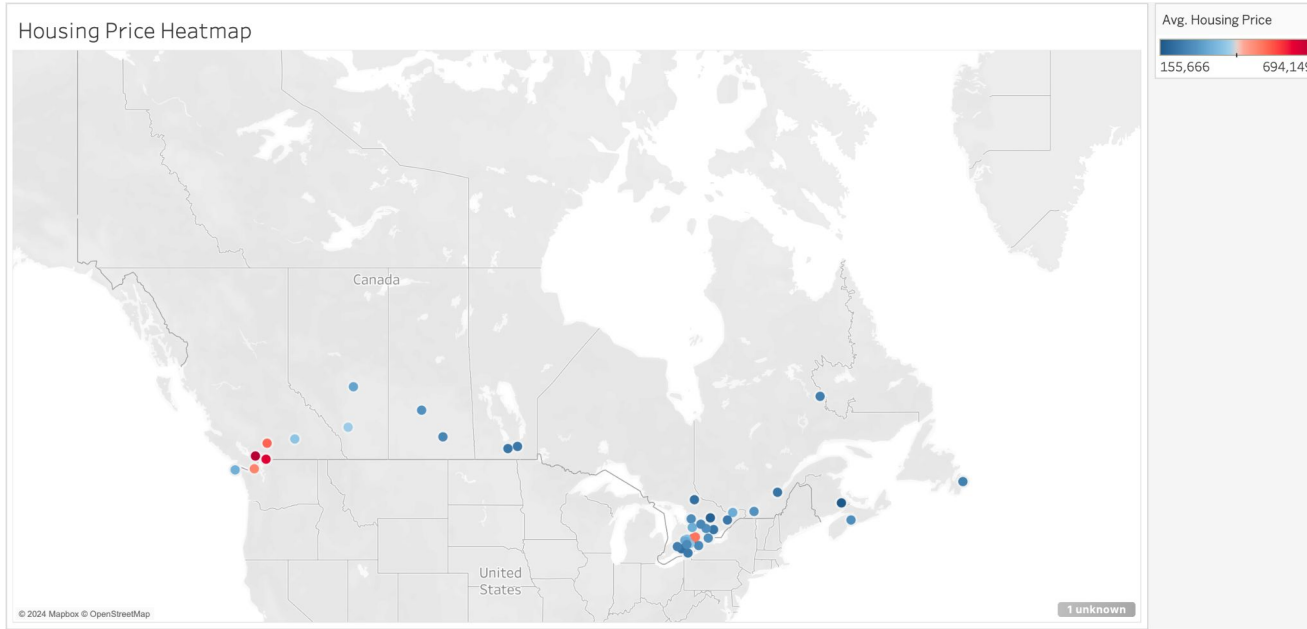
Housing Price Comparison

From 2017, the housing price index shows that the housing price was getting close to the benchmark.

Housing/Office Price Comparison

Housing/Office Price Comparison

Based on these indexes, the housing price and the office price are pretty close, but the average office price is increasing slightly more than the average housing price.
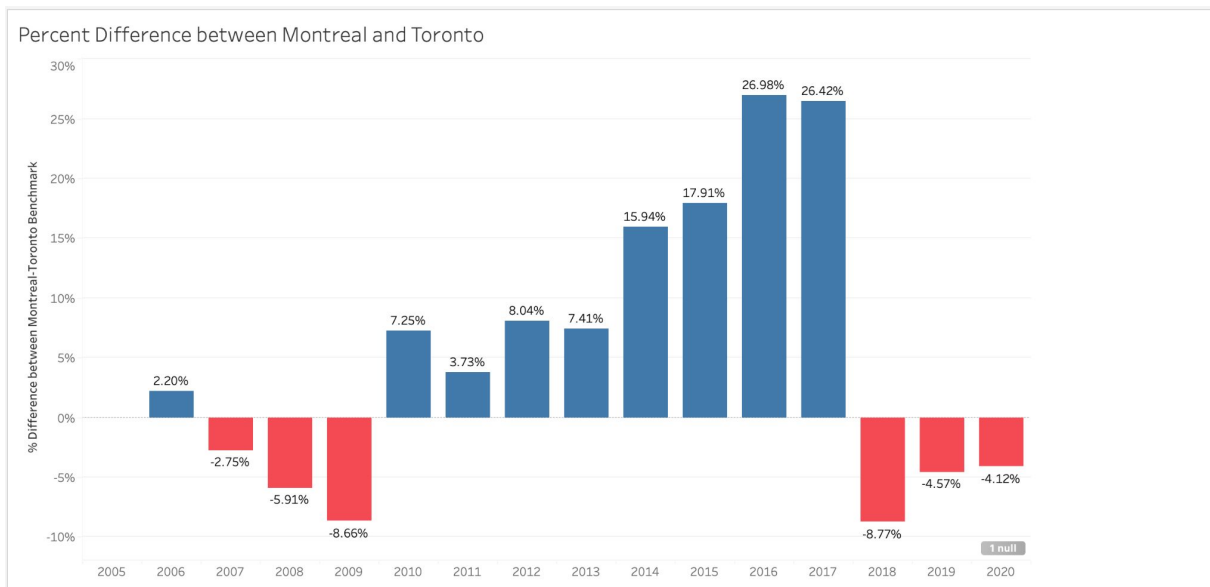
Housing Price Heatmap

The darker red spots indicate the cities with a higher average housing price like the Greater Vancouver area and Toronto.

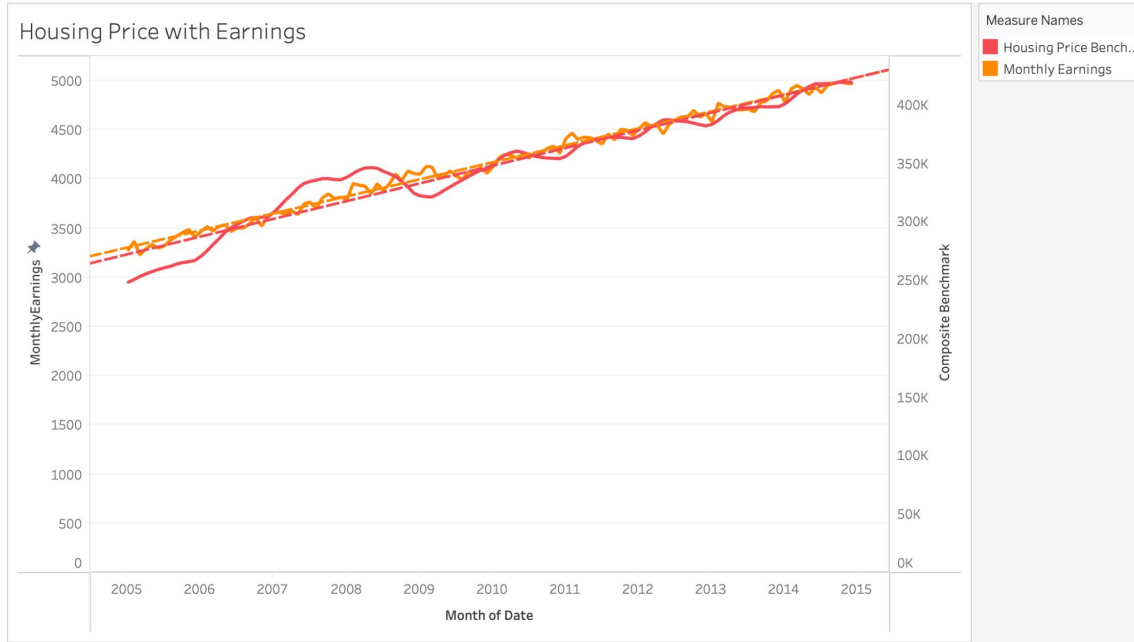# Price Difference between Montreal and Toronto

Percent Difference between Montreal and Toronto

Overall, using Montreal as the base price, as the years go by, Toronto has been increasing at a faster rate, but in recent years, Montreal has been closing the gap between the housing prices.
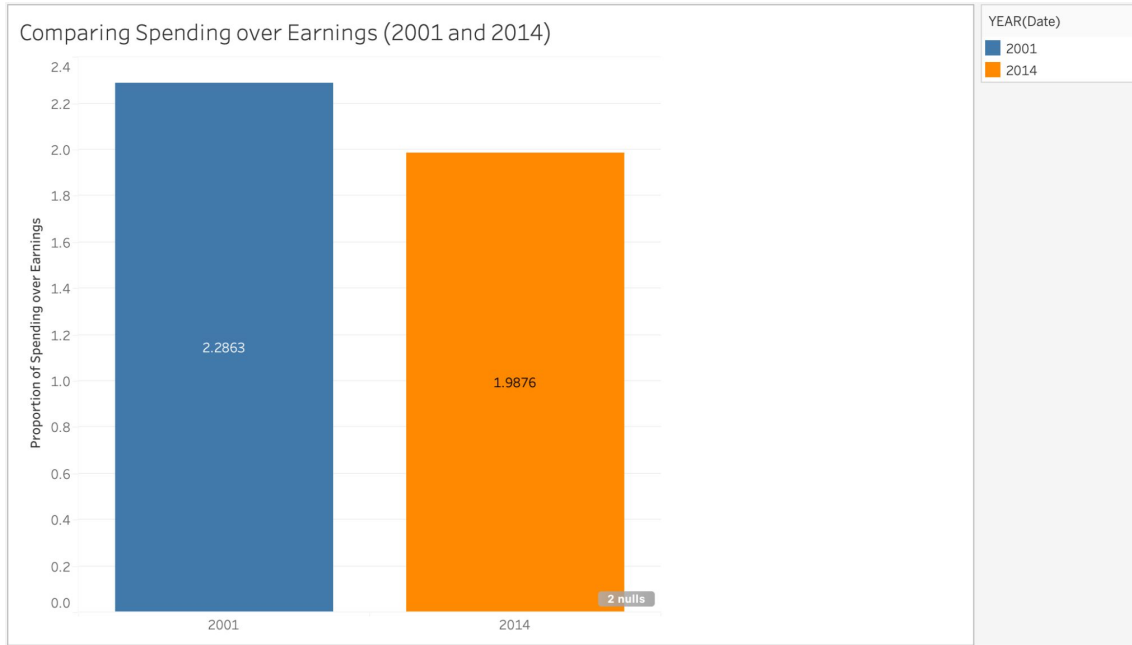
Housing Price vs. Earnings

The housing price and earnings' trendline are very close to each other, but the housing price benchmark line is slowly increasing at a higher rate than the earnings.
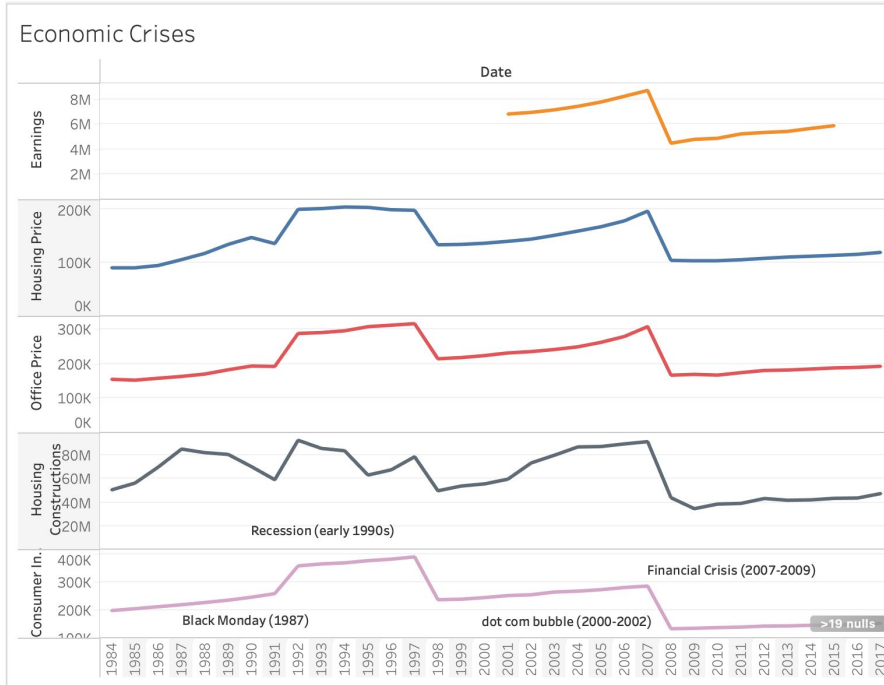
Earning vs. Spending

Comparing Spending over Earnings (2001 and 2014)
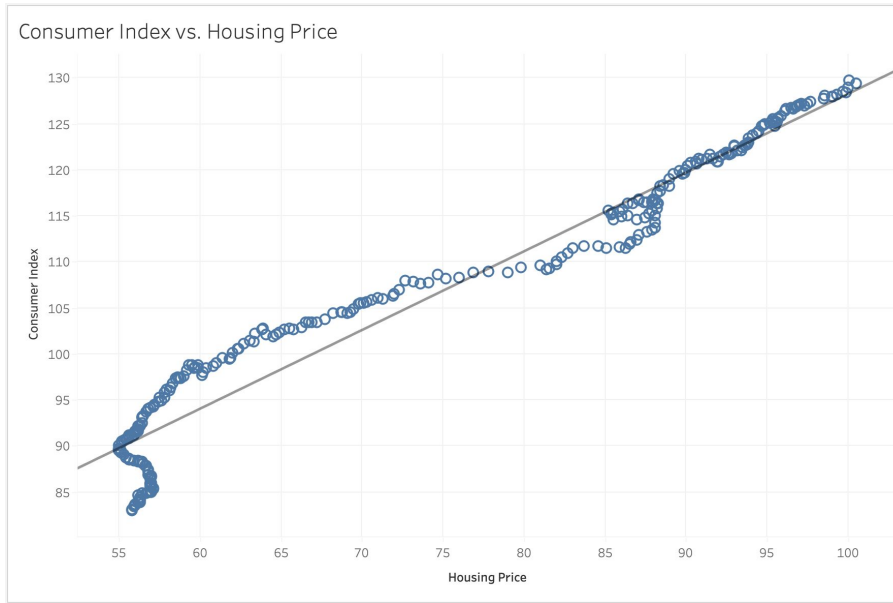
YEAR(Date)
- 2001
- 2014

Comparing the proportion of spending over earnings, the proportion is dropping so either the spending dropped or the earnings increased over the years.

Economic Crises

Economic Crises

During the financial crisis from 2007-2009, you can see a clear decline in all variables.

Housing Price vs. Consumer Index

Consumer Index vs. Housing Price

Index Value = 0.854891*Total (house and land) + 42.7371
R-Squared: 0.949522
P-value: < 0.0001

Based on the regression model, we can predict consumer index from the housing price index as this model explains 94.95% of the data.

Challenges

- Understanding the dataset
- Converting the JSON file into Tableau
- Manipulating Tableau

If I had more time...

- Work on creating a dashboard that is easier to read and more visually appealing to better present my findings

Thank you!