Data Visualization Using Tableau

CURTIS LO

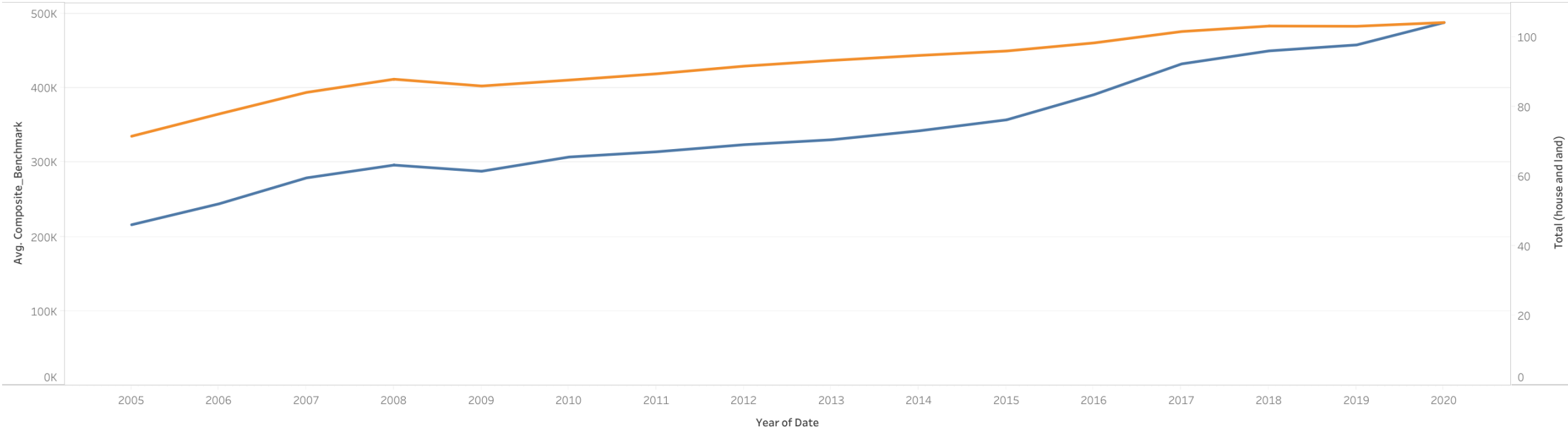
Project Flow Structure

- Connect the data source
  - Establish relationships/joins
- Establish a visual for necessary data
- Create dashboards for summary
- Summarize findings
- Challenges

From The Data

- Housing price index vs. benchmark prices
- Housing vs. Office Trend
  - Which one is getting more expensive, faster?

Housing Prices Trend vs Benchmark



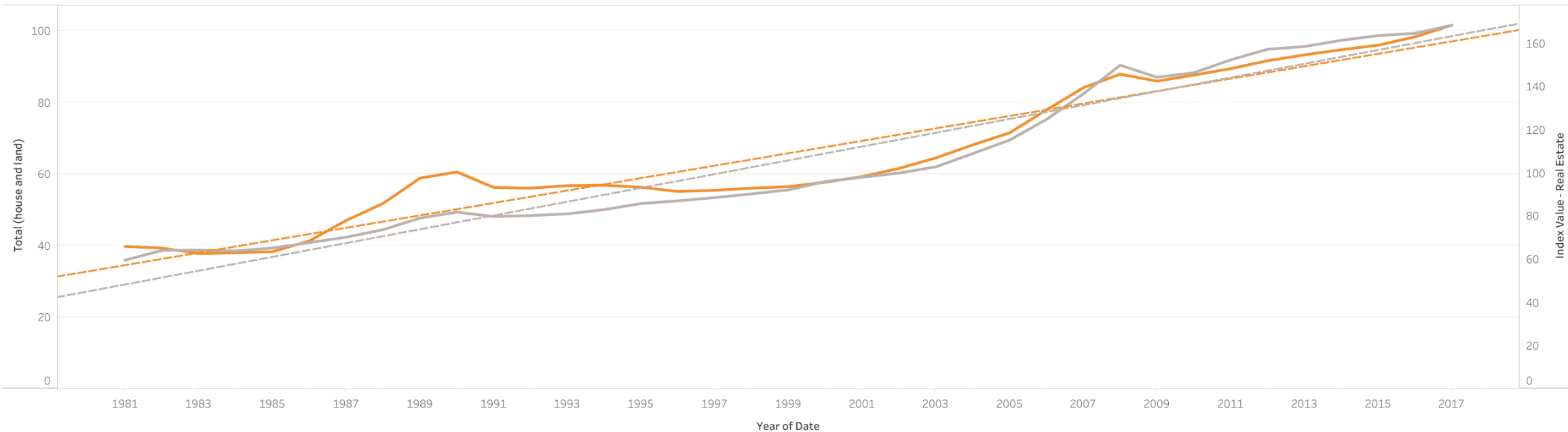
Year of Date
2005 to 2020
and Null values

Measure Names
Avg. Composite_Benc..
Total (house and land)

Year of Date
1979 to 2020
and Null values

Measure Names
Index Value - Real Est..
Total (house and land)

Office vs House Price Trend



From The Data

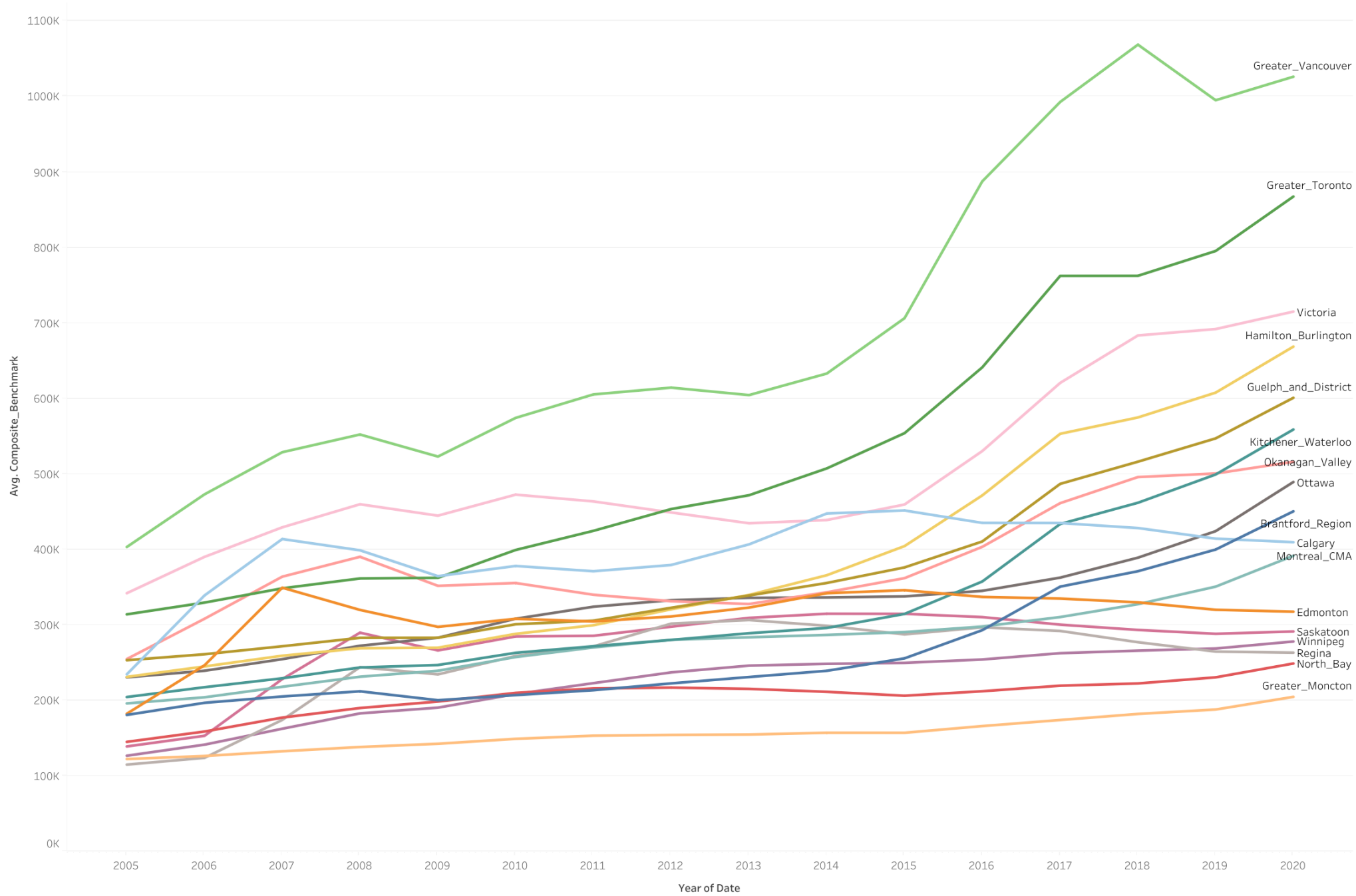
- Heatmap
  - Are the price differences between different districts increasing?

Avg Prices Across Canada

Price Differences between Districts

Table Name
All

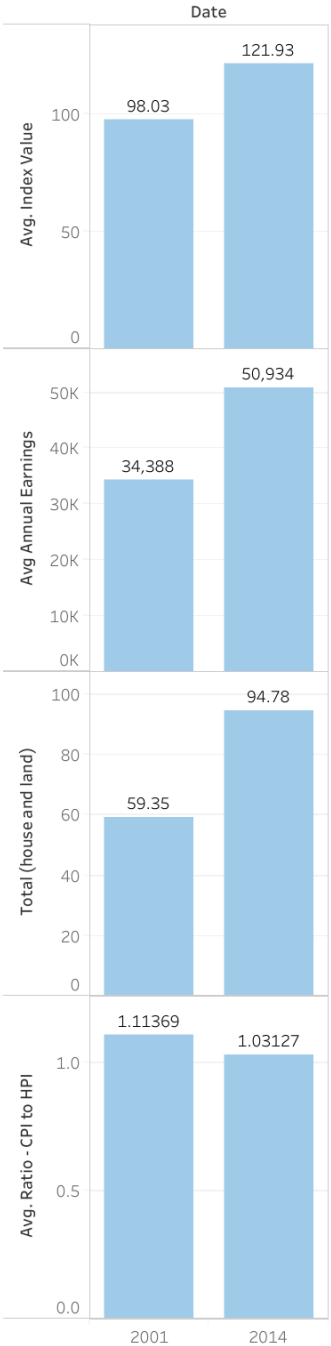
Table Name
- Greater_Vancouver
- Greater_Toronto
- Victoria
- Calgary
- Hamilton_Burlington
- Okanagan_Valley
- Guelph_and_District
- Ottawa
- Kitchener_Waterloo
- Edmonton
- Montreal_CMA
- Saskatoon
- Brantford_Region
- Regina
- Winnipeg
- North_Bay
- Greater_Moncton



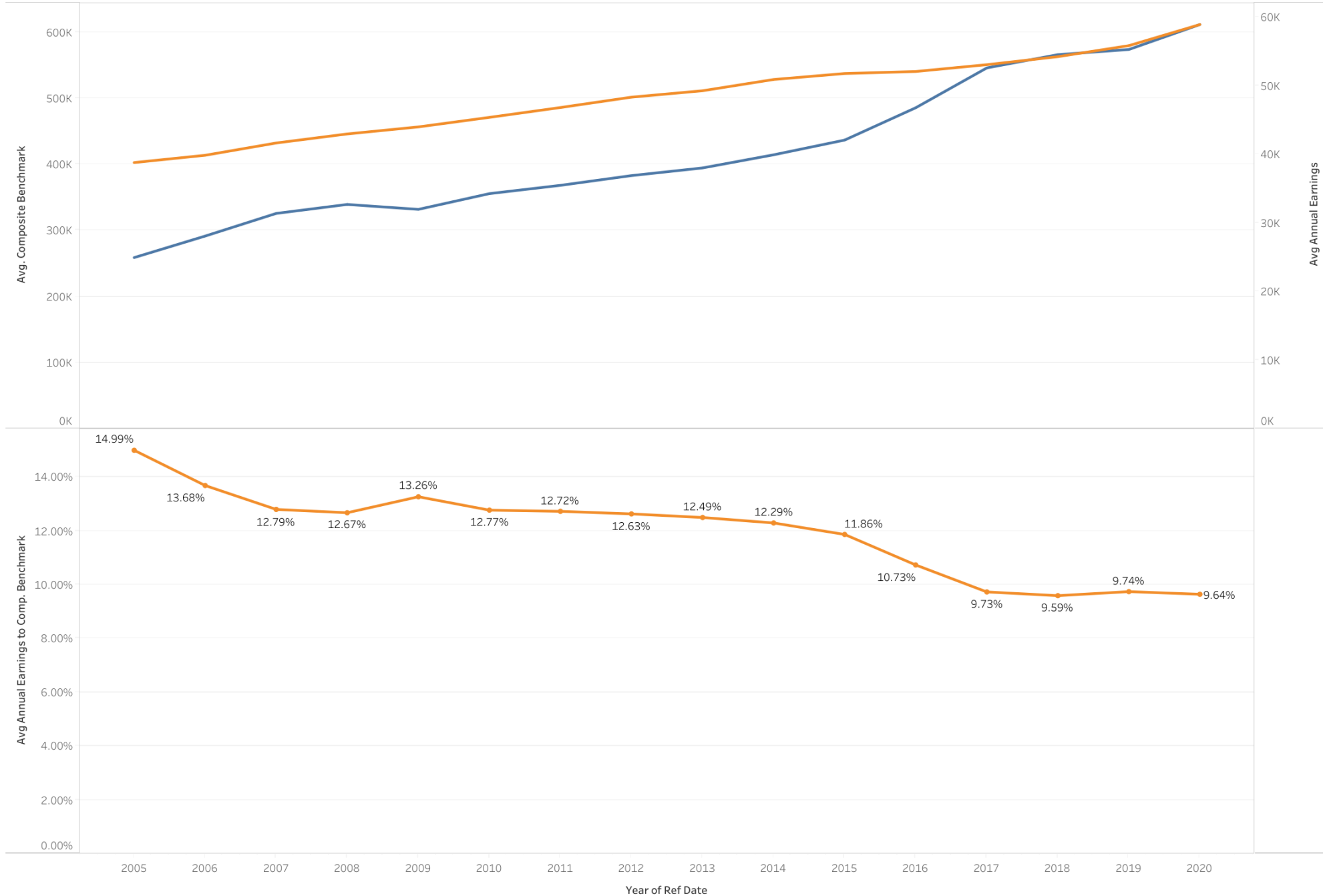
From The Data

- House prices vs earnings
  - Did people spend more of their earnings in 2014 than in 2001?

CPI/HPI to Earnings



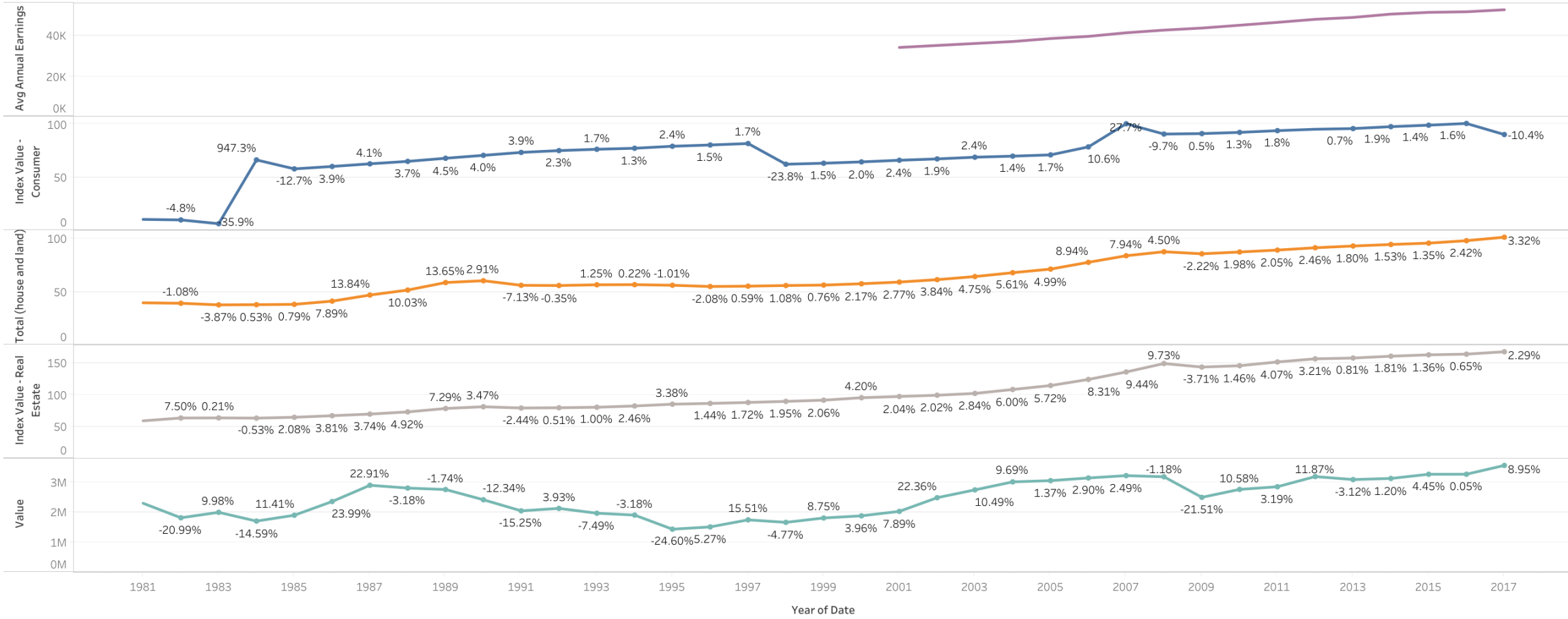
Trend of Earnings to House Prices



From The Data

- Effect of crises
- CPI/HPI
  - Predict CPI from HPI?

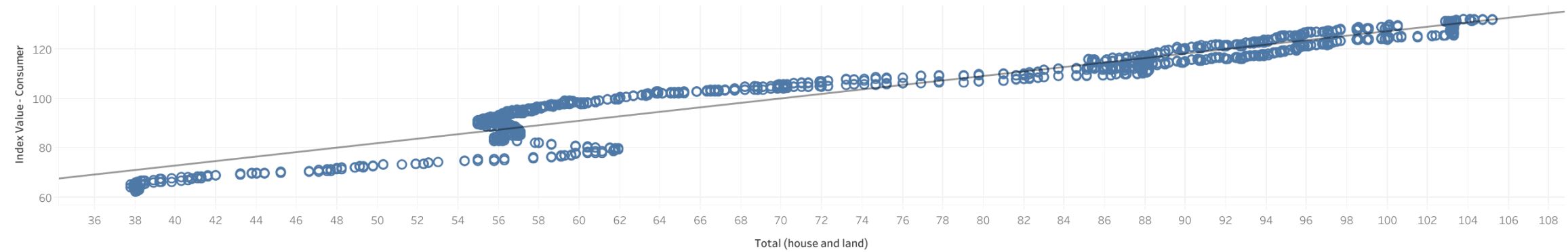
Economic Crises



Year of Date
1979 to 2020
and Null values

Measure Names
- Total (house and land)
- Index Value - Real Estate
- Index Value - Consumer
- Value
- Avg Annual Earnings

Consumer Index vs Housing Price Index



Final Thoughts

- Challenges
  - Overthinking
  - Understanding which tables need to be joined
  - Selecting the proper visualizations
  - Compiling via Tableau Public
- More time
  - Ensure all the charts/graphs align with each other (filters on dashboards link properly)
  - Match units for a better apples-to-apples comparison (e.g. units of measurement, indices, etc…)
  - Use different variations of graphs
  - Identity specific points/trends on the visual to tell a better story
  - Explore using Tableau Story