# Unit 4: London Calling Summary

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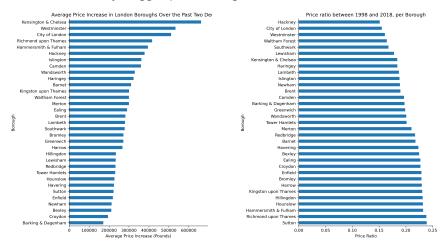
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# Overall Findings

- Determining where prices have risen the most is not straightforward
- Housing prices have increased over the last two decades
  - ▶ The average prices increase ranges from  $\sim$ 170K pounds  $\sim$ 662K pounds
  - ▶ The ratio of of 1998 prices to 2018 prices ranges from 0.151 0.239
  - ▶ The order of boroughs differs between these two lists
- The complication arises because the starting price, ending price and rate of change impact these numbers and are variable for all of the boroughs.

#### Average increase and ratio

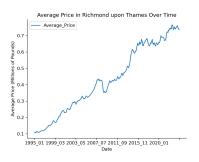
#### Plots are ordered by 'bigger price change'.



Note: Richmond upon Thames is near the top when looking at the average price increase, but near the bottom when looking at the price ratio.

Note: the price ratio gets smaller the larger the 2018 price is, so smaller ratios indicate a bigger price difference.

## Looking at increase over time





Westminster ranks 'high' on both charts. It has a higher starting price and higher. On both plots, the rate (slope of the line) is variable over time, though by eye looks slightly steeper in parts on the Westminster plot.

# How I got here

- It was clearly important to look at the data in different ways
  - ▶ the 'average' change doesn't take rate, or starting/stopping values into account.
  - ▶ The individual borough plots were quite useful. This made clear that the rate of change both varied over time, and varied (slightly less so) between boroughs.
  - ▶ The ratio of of prices over a 2 decade span was also useful- but again a bit of a 'snapshot' that captures slightly different information than the mean average price does.

## Main challenges

- Really getting the data cleaned appropriately is critical.
- Sometimes understanding the wording of the questions was a bit challenging.

### Next steps

I think it would be interesting to look at this data on a map. In particular, trying to correlate price changes to nearby features (schools, distance to a tube stop, etc) may be useful for getting a better handle on understanding why the differences vary so much.