London Housing - Beyond the Price Tag
Affordable Housing and Social Inequality in London

? Problem

What are the economic and social issues that have shaped the London housing market over the past three decades, from the Tony Blair era to the Ukraine war?

As a think tank, our aim is to:
● uncover the real stories behind the Real Estate Price tag &
● help policy makers prioritize their efforts?

Target audience:

Policy makers
such as Local councils

Metric:

Housing Average Price

Features:

**Earnings
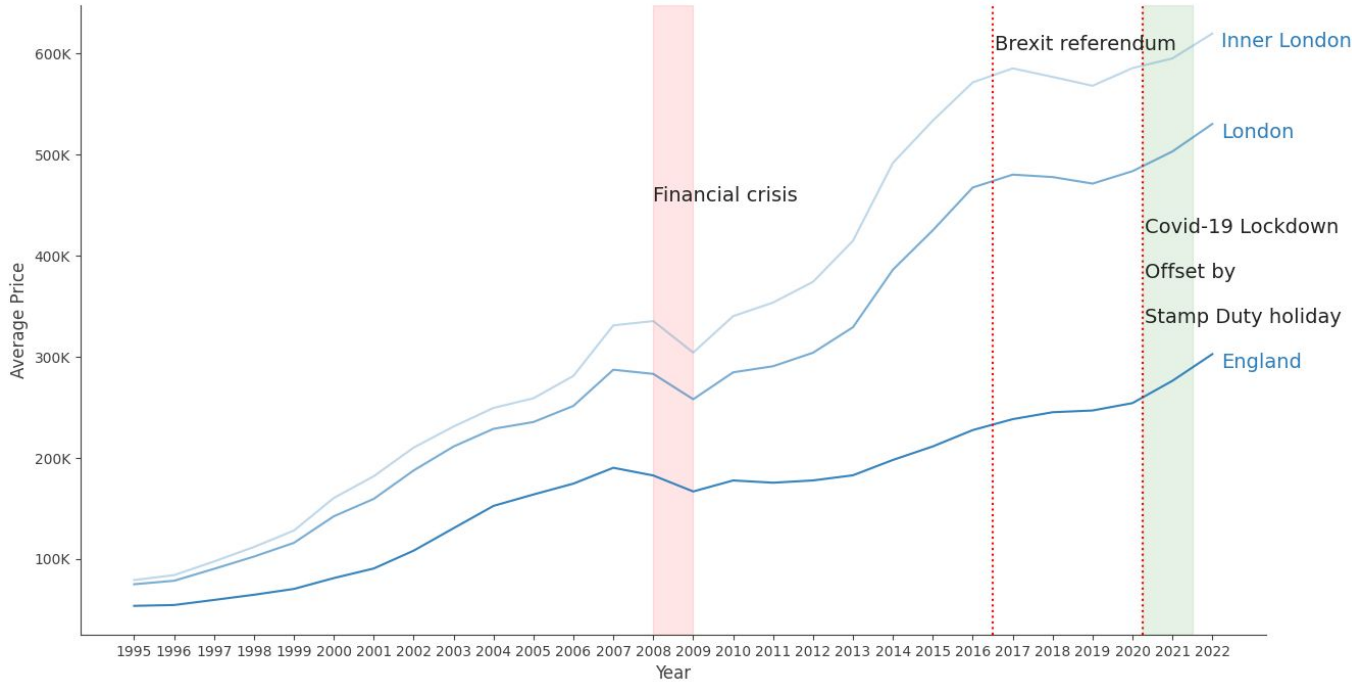Demographics
Interest rate
Inflation
Employment rate
etc.**

Overview

- Housing Price over time

- Macroeconomic indicators

Average house price over time

1995-2005 : steady increase

2005-2008 : greater increase

2008-2009 : downturn due to the financial crisis

2009-2016 : substantial recovery

2016-2019 : slight dip following Brexit referendum result

2019-2022 : upward trend in spite of Covid-19 pandemic

Interest rate vs Inflation

Figure 12: Largest contributions to CPI inflation rate from housing and household services, and food and non-alcoholic beverages
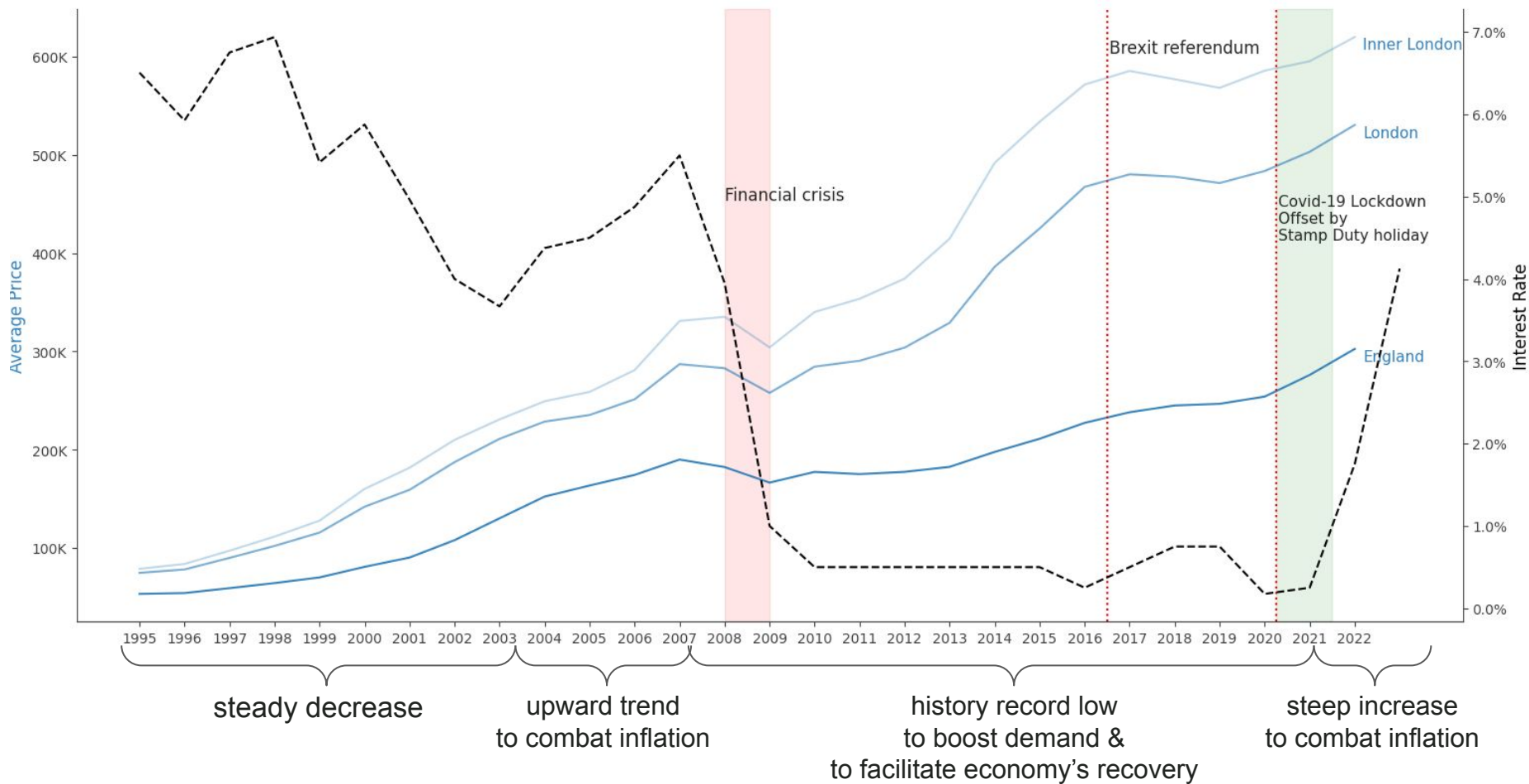
Contributions to the annual CPI inflation rate, UK, February 2021 to February 2023
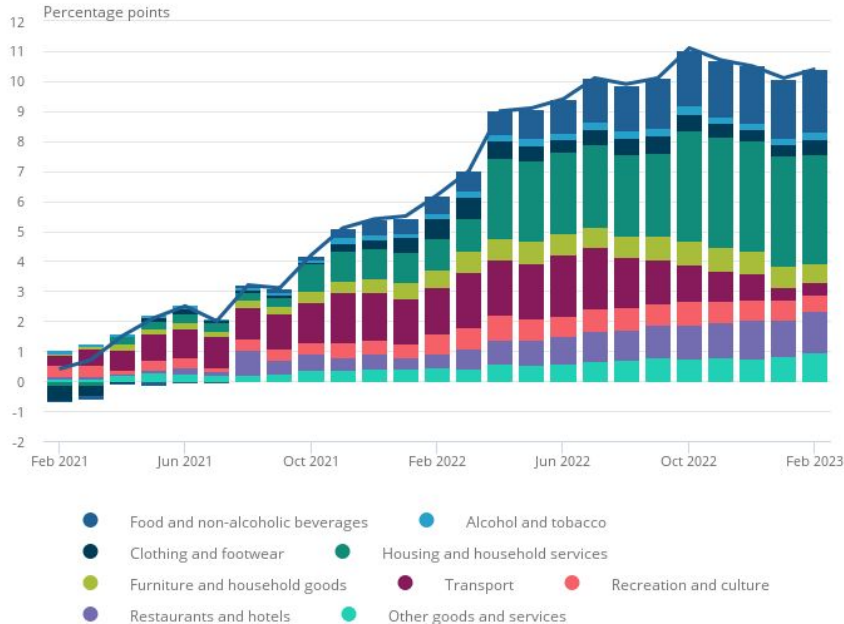
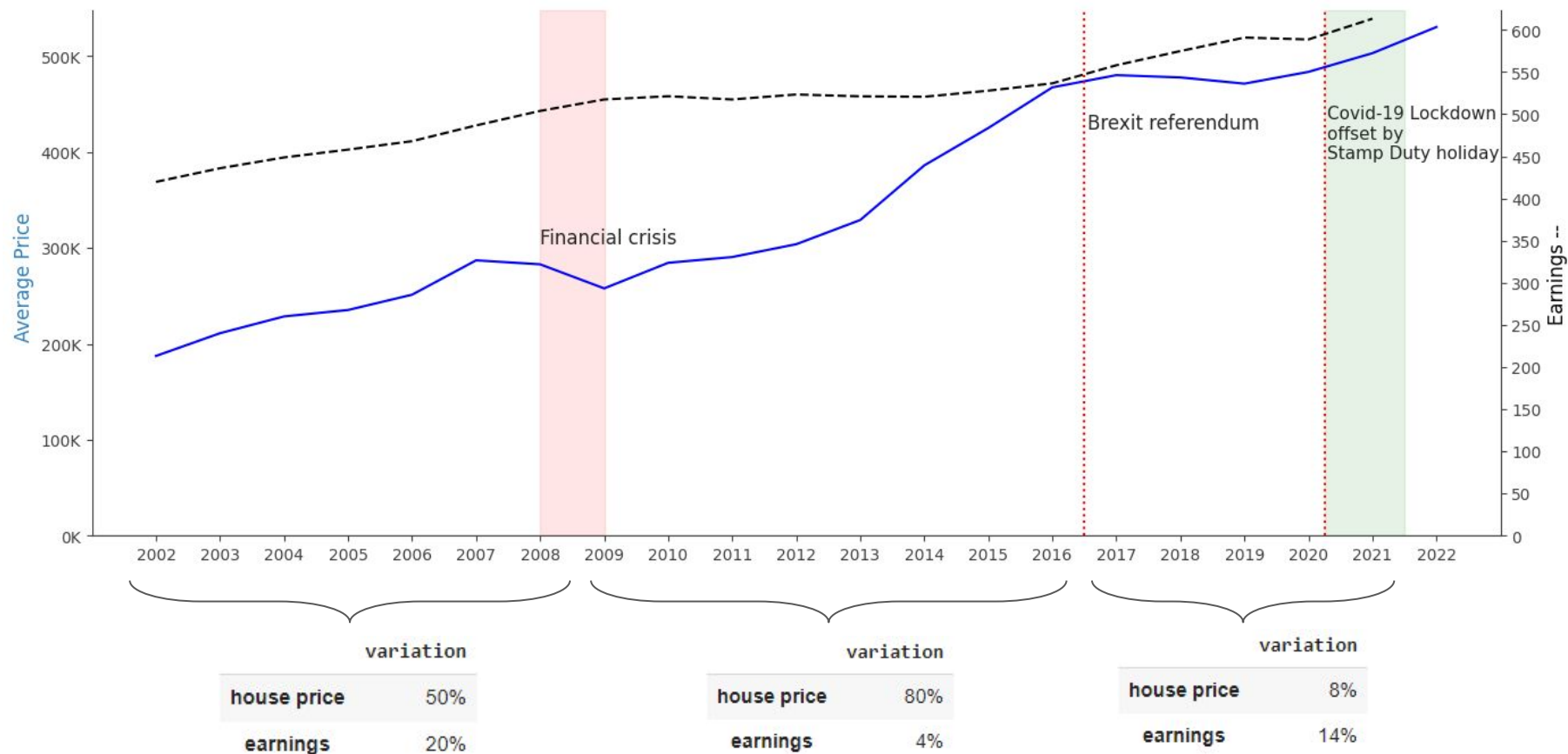Source: Consumer price inflation from the Office for National Statistics

Interest Rate ↑

Borrowing cost ↑
Demand ↓

How raising Interest rate can combat Inflation

Price ↓

Average house price vs Interest Rate

Average house price vs Earnings - London

? Social Disparity behind the Price tag
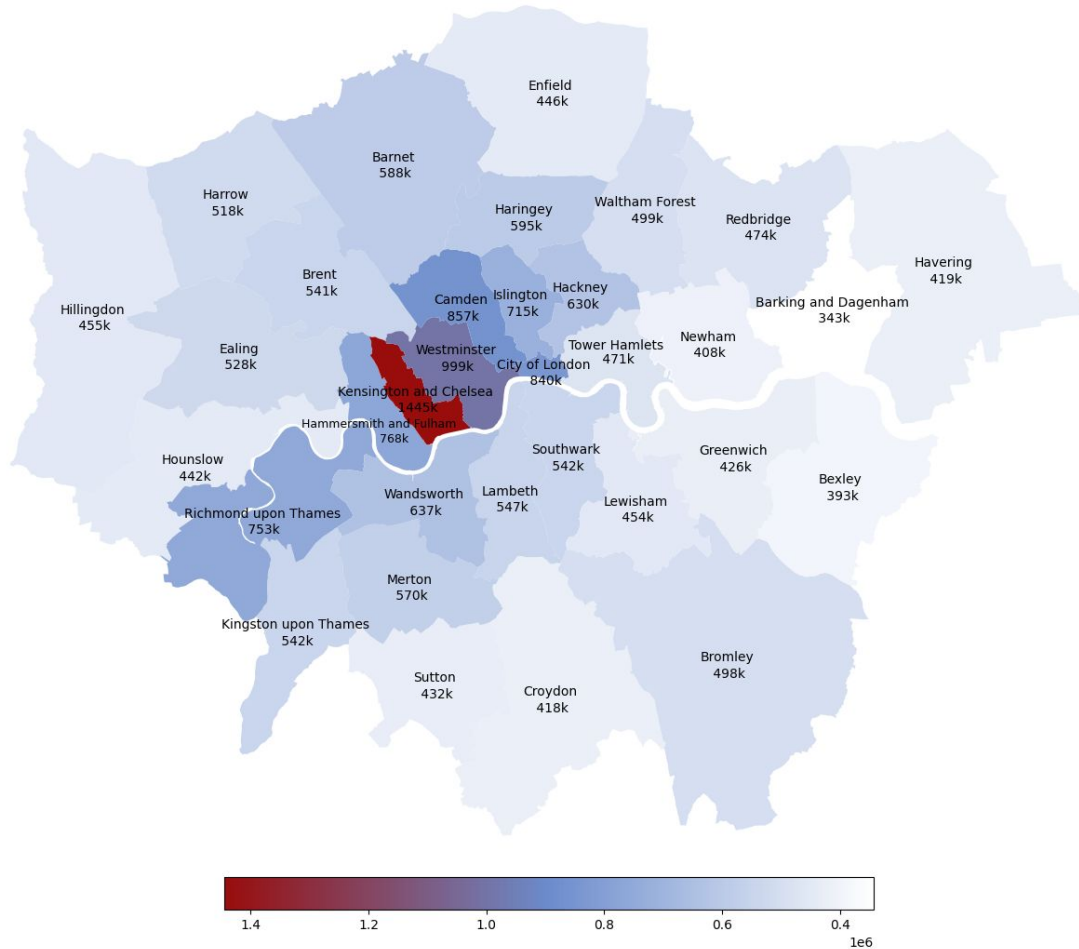
What are the social inequalities across various London boroughs? Who is thriving and who is facing challenges?

Let's examine:
- Top 3 most and least expensive boroughs

- Housing Supply vs Need

Average house price by London Boroughs

- Kensington and Chelsea's most expensive borough is **4.2x pricier** than Barking and Dagenham's cheapest neighborhood

- **West London** along the Thames, from Richmond to Camden, hosts the **priciest areas**, while Inner London isn't always more expensive than Outer London

- Attempting to **level up London** has been an ambitious and challenging priority since the era of Margaret Thatcher until today

Top 3 most vs least expensive boroughs

Average price over time

House Price Index over time
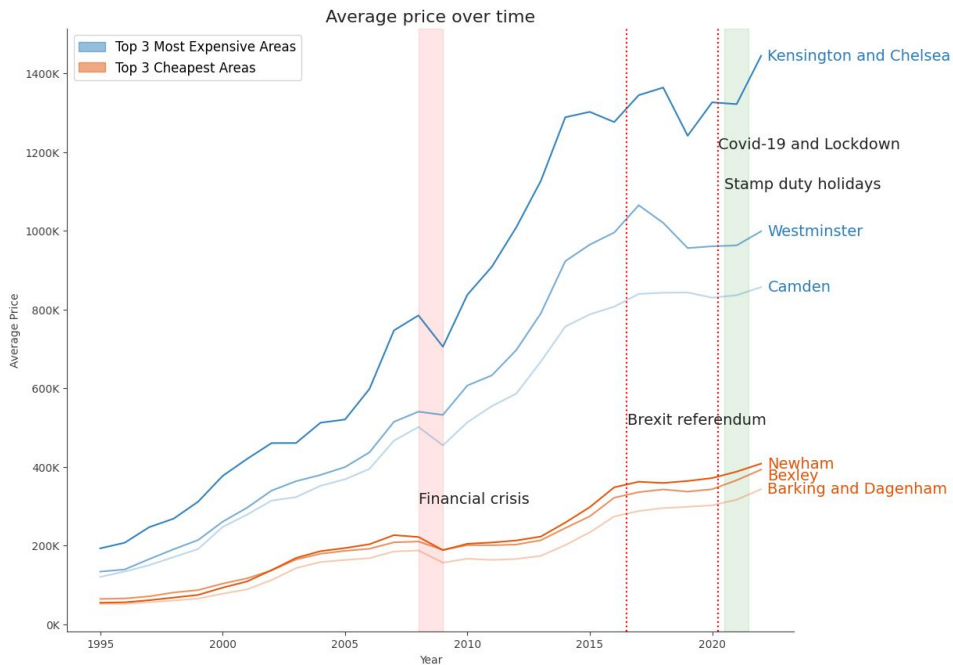
- **Clear distinction** between 2 groups
- Most vs least expensive : **from 3.7 to 4.2 times**
- Significant **increase in disparity** over the past 3 decades
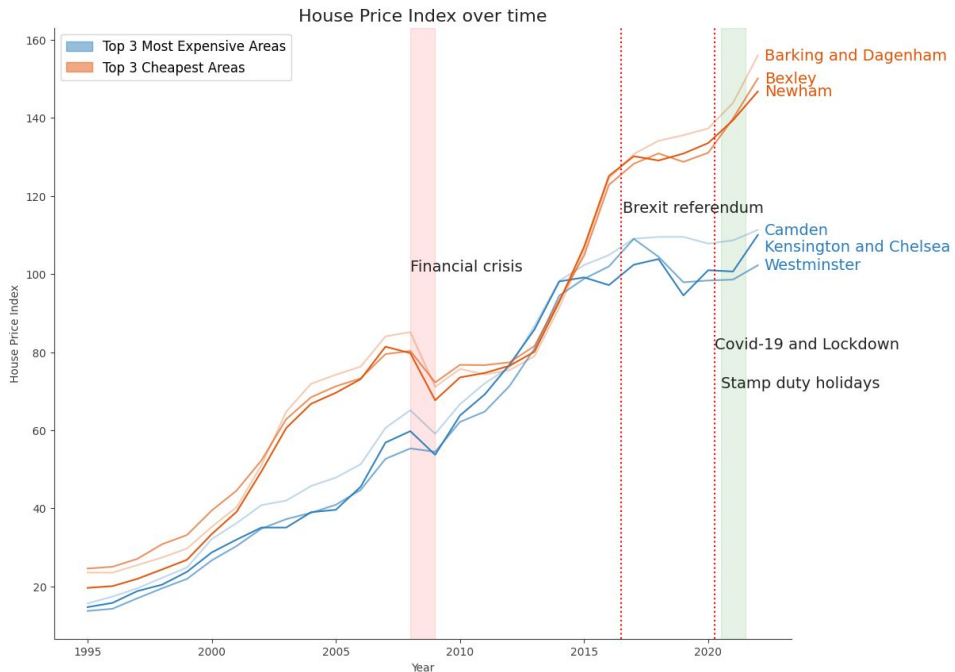
The top 3 **least expensive outperforms** over top 3 most expensive in terms of House Index , this is due to:
- **Brexit uncertainties** dissuading foreign investment
- **Tax changes** hindering additional properties and facilitating first time purchase

Sales volume vs Population over time

Sales Index vs Population Index

- Sales Index
- Population Index

How close is new housing supply to estimated future need?
Net additions per year (thousands of dwellings), England

Bramley (2018): 340k per year over 15 years

Government target: 300k per year by mid-2020s

Net supply
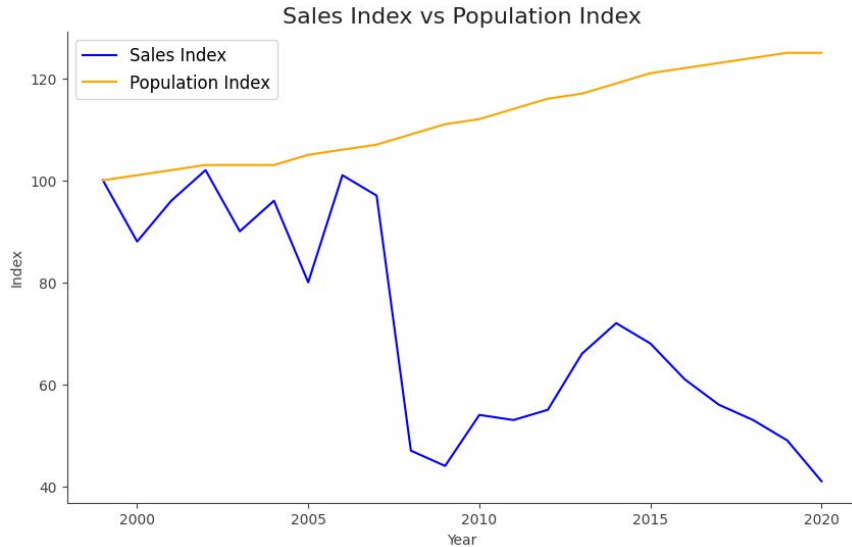
- Steady increase of the population
- Sharp decrease of sales volume
- Need to rebalance the housing market towards more home ownership
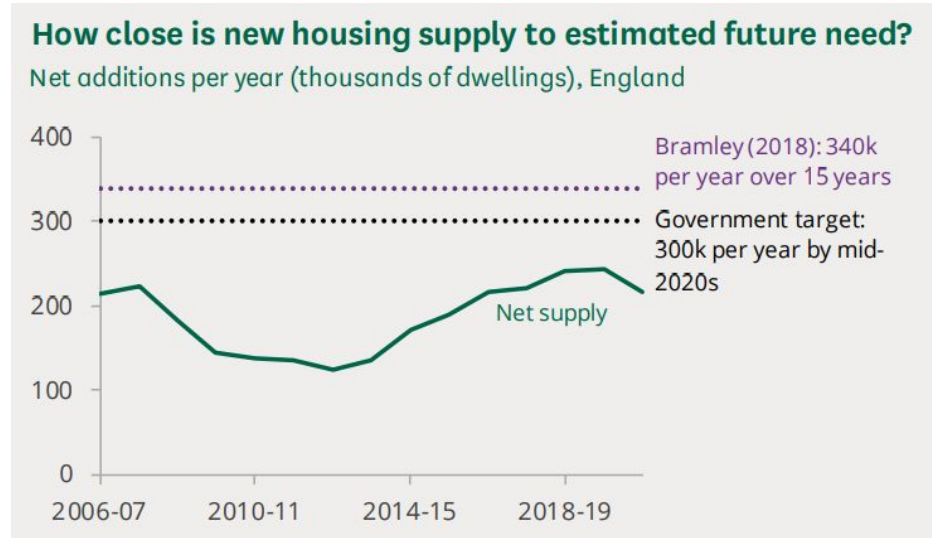
- Housing need <> Housing demand
- Social and Economic impact of lack of housing supply

Demographics of the most vs least expensive borough

Density by Age Group and Area

Legend:
- Youth Male
- Youth Female
- Working Age Male
- Working Age Female
- Mid Career Male
- Mid Career Female
- Senior Male
- Senior Female

Y-axis: Percentrage of the Population (0.00 – 0.35)

X-axis: Area — Barking and Dagenham, Kensington and Chelsea
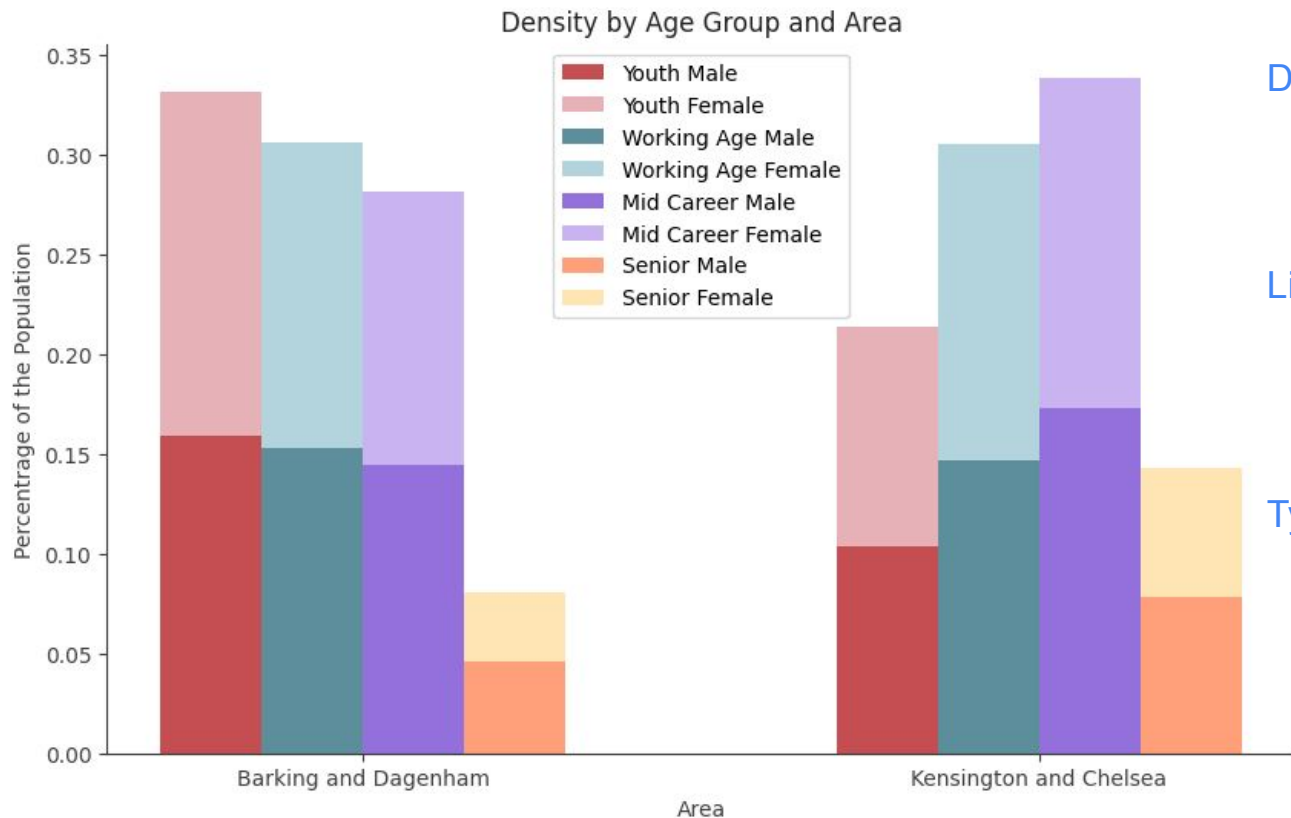
Dominant age group:
- **Youth** for Barking
- **Mid Career** for Kensington

Life expectancy:
- **Higher in Kensington**
- Senior age group twice as big

Typical household:
- **Young** family with more **children** in Barking
- More **couple** at **working and mid career** age groups

Pay Gap across London boroughs
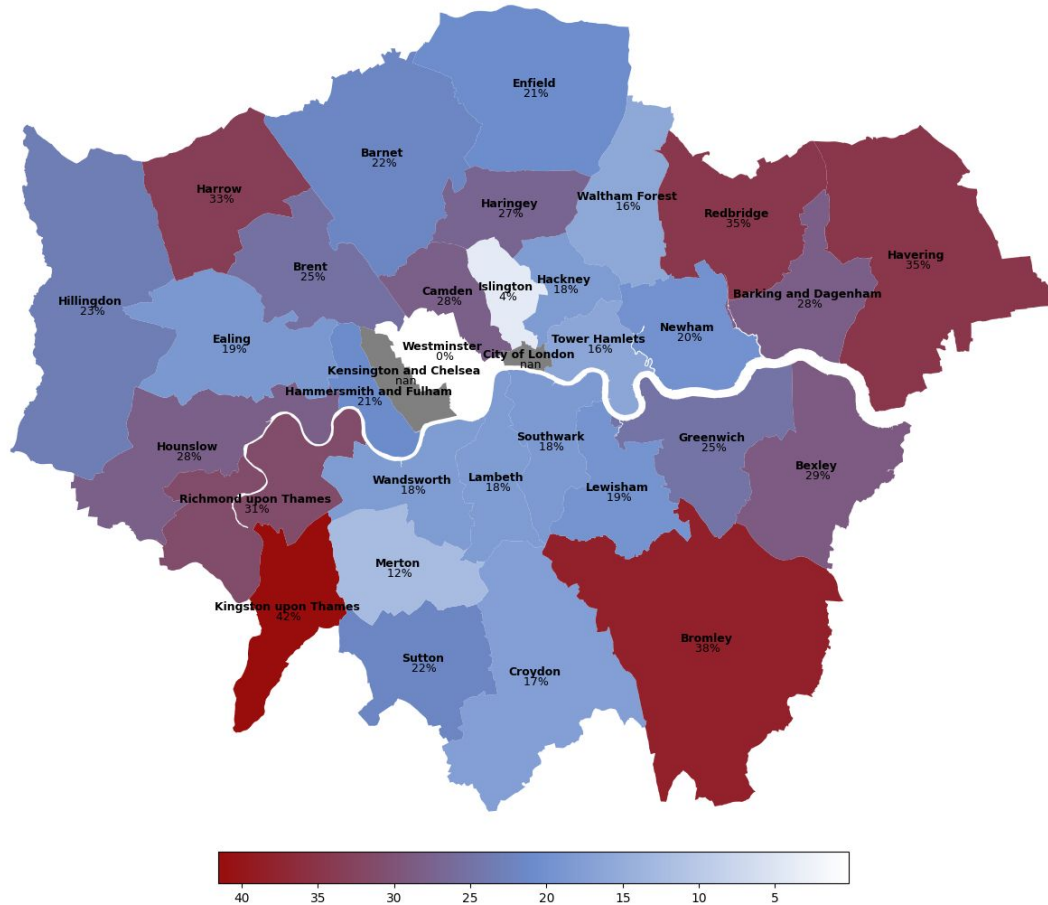
As discussed in the Average price per borough map:

- Most expensive price in West London borough surrounding the Thames river
- Price decreasing in proportion to the distance to that area

Pay gap per borough map:

- Unrelated to wealth gap
- Omnipresent issue
- Need further research to find appropriate solutions

? Drivers of Property Prices

What factors contribute to housing prices? And how significant is the impact of each factor?

Let's examine:
- Earnings
- Population
- Jobs density
- Dwelling density
- etc.

Correlation between Average price and different Features

Positive correlation to:
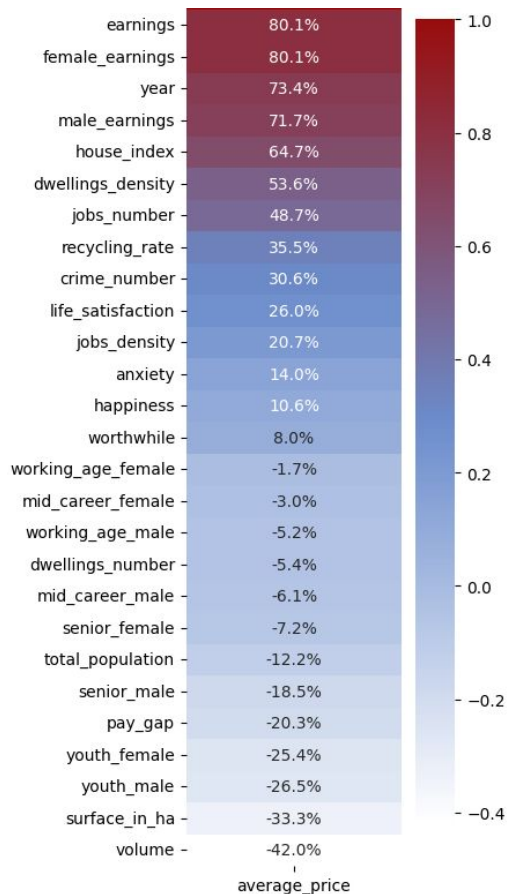
- Earnings, especially Female earnings
- Dwelling density
- Job number and density
- Recycling rate
- Crime number
- Well being

Negative correlation to:

- Volume
- Youth population

	average_price
earnings	80.1%
female_earnings	80.1%
year	73.4%
male_earnings	71.7%
house_index	64.7%
dwellings_density	53.6%
jobs_number	48.7%
recycling_rate	35.5%
crime_number	30.6%
life_satisfaction	26.0%
jobs_density	20.7%
anxiety	14.0%
happiness	10.6%
worthwhile	8.0%
working_age_female	-1.7%
mid_career_female	-3.0%
working_age_male	-5.2%
dwellings_number	-5.4%
mid_career_male	-6.1%
senior_female	-7.2%
total_population	-12.2%
senior_male	-18.5%
pay_gap	-20.3%
youth_female	-25.4%
youth_male	-26.5%
surface_in_ha	-33.3%
volume	-42.0%

Aligned with results from Linear Regression and Stats model

	coef	std err	t	P>|t|	[0.025	0.975]
const	-0.2036	0.020	-9.959	0.000	-0.244	-0.163
volume	0.0580	0.023	2.470	0.014	0.012	0.104
earnings	0.3076	0.117	2.632	0.009	0.078	0.537
male_earnings	0.0543	0.067	0.808	0.420	-0.078	0.187
female_earnings	0.1556	0.071	2.193	0.029	0.016	0.295
recycling_rate	-0.0106	0.032	-0.335	0.738	-0.073	0.052
jobs_number	-0.7584	0.299	-2.533	0.012	-1.347	-0.170
jobs_density	0.8713	0.290	3.009	0.003	0.302	1.441
dwellings_number	-0.3011	0.109	-2.773	0.006	-0.515	-0.088
surface_in_ha	-0.0115	0.043	-0.270	0.788	-0.096	0.073
dwellings_density	0.2556	0.050	5.152	0.000	0.158	0.353
youth_male	-0.4587	0.229	-2.003	0.046	-0.909	-0.008
youth_female	0.4898	0.236	2.074	0.039	0.025	0.954
working_age_male	-0.2272	0.119	-1.903	0.058	-0.462	0.008
working_age_female	0.3074	0.106	2.899	0.004	0.099	0.516
mid_career_male	0.9942	0.223	4.448	0.000	0.555	1.434
mid_career_female	-0.6429	0.238	-2.697	0.007	-1.112	-0.174
senior_male	-0.2408	0.188	-1.278	0.202	-0.611	0.130
senior_female	0.2440	0.205	1.193	0.234	-0.158	0.646
total_population	0.0950	0.024	3.926	0.000	0.047	0.143

Conclusion

The cost of housing is significantly influenced by social, political, and economic developments and regulations

⟹ It is crucial for policy makers to strike a balance between economic advancement and social equity

Foreign investment has been favored over young people's ability to buy property, this is a high cost of the post-financial crisis recovery

⟹ Making more affordable housing available is a crucial objective

Each borough has its own demographics specificities

⟹ Local councils needs to address their specific challenges, not only in terms of economic development but also in terms of the well-being of their residents.