



# Housing for Students in London

July 2020

---

Sanket Gokhale

# 1. Introduction

## 1.1 Background

According to Wikipedia, London has one of the largest concentrations of universities and higher education institutions in the world. It has 40 higher education institutions and has a student population of more than 400,000. Among the institutions in London are some of the old and world-famous colleges that today make up the federal University of London, modern universities, as well as a number of smaller and often highly specialised universities and colleges. According to an analysis of new data from the UK's Higher Education Statistics Agency (HESA) released on Wednesday, Indian student numbers in London grew by 34.7 per cent in 2018-19, marking the largest numbers since 2011-12. More than 7000 Indian students move to London for Higher Education every year.

## 1.2 Problem

In a large city and quite expensive city like London, it may become difficult for students looking for a place to stay to find the right neighborhood. This report is targeted towards Indian students who move to London for Higher Education.

# 2. Data

## 2.1 Data Sources

Three data sets from open sources were used for the creation of this report. They are:

1. London Crime Data Set - <https://www.kaggle.com/jboysen/london-crime>
2. London Housing Data Set - <https://www.kaggle.com/justinas/housing-in-london>
3. List of Boroughs in London Wikipedia Page - [https://en.wikipedia.org/wiki/List\\_of\\_London\\_boroughs](https://en.wikipedia.org/wiki/List_of_London_boroughs)

The wikipedia page was scrapped for a list of boroughs in London along with other information like coordinates, area, population, etc.

## 2.1 Data Cleaning

In this stage, each of the three datasets were handled independently and then merged to form the final dataset.

### 1. London Crime Data Set -

In this dataset, only the entries after 2014 were considered as the type and pattern of crime has changed over the years. The data after 2014 ensures that only recent data influences our decision.

	Borough	Burglary	Criminal Damage	Drugs	Other Notifiable Offences	Robbery	Theft and Handling	Violence Against the Person	Total
0	Barking and Dagenham	2916	3771	1863	711	1087	10784	11955	33087
1	Barnet	7255	4435	1715	888	1088	18935	14404	48720
2	Bexley	2208	3238	1324	681	380	8557	8442	24830
3	Brent	5332	4408	3904	947	1802	17493	17690	51576
4	Bromley	4738	4497	1598	821	732	15157	13258	40801
5	Camden	5482	3831	3175	928	1929	28543	14772	58660
6	City of London	7	5	16	6	9	233	53	329

### 2. London Housing Data Set -

Like the crime dataset, the monthly prices of only the year 2016 were used to prepare the dataset. As we are using the spot prices, and no prediction will be made, only the most recent data is enough to generate the report. The monthly prices were averaged and the mean price of housing in each Borough for the year 2016 was calculated.

	Borough	Average Price 2016
0	Barking & Dagenham	273919.636042
1	Barnet	525939.577300
2	Bexley	321563.508775
3	Brent	489469.418367
4	Bromley	428008.119983

### 3. List of Boroughs in London Wikipedia Page -

The table containing data regarding the Boroughs was scraped. String manipulation techniques were used to match the names of the Boroughs as in the other two datasets. Columns such as 'Nr in Map', 'Political Control', 'Local Authority', etc were dropped as these factors did not affect the topic of the report.

	Borough	Inner	Status	Local authority	Political control	Headquarters	Area (sq mi)	Population (2013 est)[1]	Co-ordinates	Nr. in map
0	Barking and Dagenham [note 1]			Barking and Dagenham London Borough Council	Labour	Town Hall, 1 Town Square	13.93	194,352	51°33'39"N 0°09'21"E / 51.5607°N 0.1557°E /...	25
1	Barnet			Barnet London Borough Council	Conservative	Barnet House, 2 Bristol Avenue, Colindale	33.49	369,088	51°37'31"N 0°09'06"W / 51.6252°N 0.1517°W /...	31
2	Bexley			Bexley London Borough Council	Conservative	Civic Offices, 2 Watling Street	23.38	236,687	51°27'18"N 0°09'02"E / 51.4549°N 0.1505°E /...	23
3	Brent			Brent London Borough Council	Labour	Brent Civic Centre, Engineers Way	16.70	317,264	51°33'32"N 0°16'54"W / 51.5588°N 0.2817°W /...	12
4	Bromley			Bromley London Borough Council	Conservative	Civic Centre, Stockwell Close	57.97	317,899	51°24'14"N 0°01'11"E / 51.4039°N 0.0198°E /...	20