

Capstone Project – Battle of Neighbourhoods in London

1. Data used for the project

For the purpose of this project the following different sources of data are used.

1.1 List of London boroughs

https://en.wikipedia.org/wiki/List_of_London_boroughs

This is a Wikipedia page with list of local authority districts / boroughs in London. We will read the tables in the page and extract the details of boroughs available in the tables.

The two tables are:

- List of boroughs and local authorities
- City of London

The table(s) has/have following columns.

- Borough
- Inner
- Status
- Local authority
- Political control
- Headquarters
- Area (sq mi)
- Population (2013 est) / (2011 est)
- Co-ordinates
- Nr. In map

We will use these tables to extract the list of boroughs in London.

1.2 Recorded Crime: Geographic Breakdown

This data is obtained from London Data store (<https://data.london.gov.uk/>). This data counts the number of crimes at different geographic levels of London (borough, ward, LSOA) per month, according to crime type. Data is available in two files for each level of geography - the most up to date data covering the last available 24 months only and one covering all historic full calendar years. We have considered **MPS Borough Level Crime (most recent 24 months)** for the purpose of this project. This currently only covers the most recent 24 months of data.

Below is a list of the crime types covered under the new HO categories:

Major Category: Minor Category

Arson and Criminal Damage - Arson / Criminal Damage

Burglary: Burglary - Business and Community / Burglary - Residential**

Drug Offences: Drug Trafficking / Possession of Drugs

Miscellaneous Crimes Against Society: Absconding from Lawful Custody / Bail Offences / Bigamy / Concealing an Infant Death Close to Birth / Dangerous Driving / Disclosure, Obstruction, False or Misleading State / Exploitation of Prostitution / Forgery or Use of Drug Prescription / Fraud or Forgery Associated with Driver Records / Going Equipped for Stealing / Handling Stolen Goods / Making, Supplying or Possessing Articles for use i / Obscene Publications / Offender Management Act / Other Forgery / Other Notifiable Offences / Perjury / Perverting Course of Justice / Possession of False Documents / Profitting From or Concealing Proceeds of Crime / Soliciting for Prostitution / Threat or Possession With Intent to Commit Crimina / Wildlife Crime

Possession of Weapons: Other Firearm Offences / Possession of Firearm with Intent / Possession of Firearms Offences / Possession of Other Weapon / Possession of Article with Blade or Point

Public Order Offences: Other Offences Against the State, or Public Order / Public Fear Alarm or Distress / Racially or Religiously Aggravated Public Fear / Violent Disorder

Robbery: Robbery of Business Property / Robbery of Personal Property

Sexual Offences: Other Sexual Offences / Rape

Theft: Bicycle Theft / Other Theft / Shoplifting / Theft from Person

Vehicle Offences: Aggravated Vehicle Taking / Interfering with a Motor Vehicle / Theft from a Motor Vehicle / Theft or Taking of a Motor Vehicle

Violence Against the Person: Homicide / Violence with Injury / Violence without Injury

The web page for this data is

https://data.london.gov.uk/dataset/recorded_crime_summary

The actual file of the data considered for this project is at:

https://data.london.gov.uk/download/recorded_crime_summary/d2e9ccfc-a054-41e3-89fb-53c2bc3ed87a/MPS%20Borough%20Level%20Crime%20%28most%20recent%2024%20months%29.csv

1.3 List of London neighbourhoods in the top three safe boroughs

Based on the analysis of crime data it is found that the top three safe boroughs in London are: Kingston upon Thames, Sutton and Richmond upon Thames.

For the detailed analysis of these boroughs and its neighbourhoods, the following Wikipedia pages are used as source for collecting the list of neighbourhoods/districts within these three boroughs.

https://en.wikipedia.org/wiki/London_Borough_of_Sutton

https://en.wikipedia.org/wiki/Royal_Borough_of_Kingston_upon_Thames

https://en.wikipedia.org/wiki/London_Borough_of_Richmond_upon_Thames

Note: For this section, the list of neighbourhoods are collected manually

1.4 Other sources:

- a. Geocoder package: It is used to obtain the Latitude and Longitudes of a given location.
- b. Foursquare APIs are used to obtain the venue details for a given location.