Building a new police station in London

IBM Capstone Project Presentation





Intro

Problem: Deciding where to build a new police station in London

My project will use the python skills which I have learnt so far to help decide where to build a new police station in London. I have chosen to address this problem because I have a genuine interest in what the data may reveal. Areas with a high crime rates may benefit from police station of close proximity to improve response time to crimes. In addition to crime data, the report will also use demographic data of each London Borough and statistical analysis to help drive decision making. This analysis may be of use to the govt/police to assist them in a decision to construct a new police station based on crime hotspots.

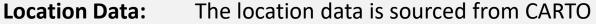
Data



Crime Data: The crime data is sourced from the London Datastore



(https://data.london.gov.uk/dataset/london-borough-profiles)





(https://joshuaboyd1.carto.com/tables/london-boroughs-proper)



The venue data about police stations is from Foursquure API call.

Results

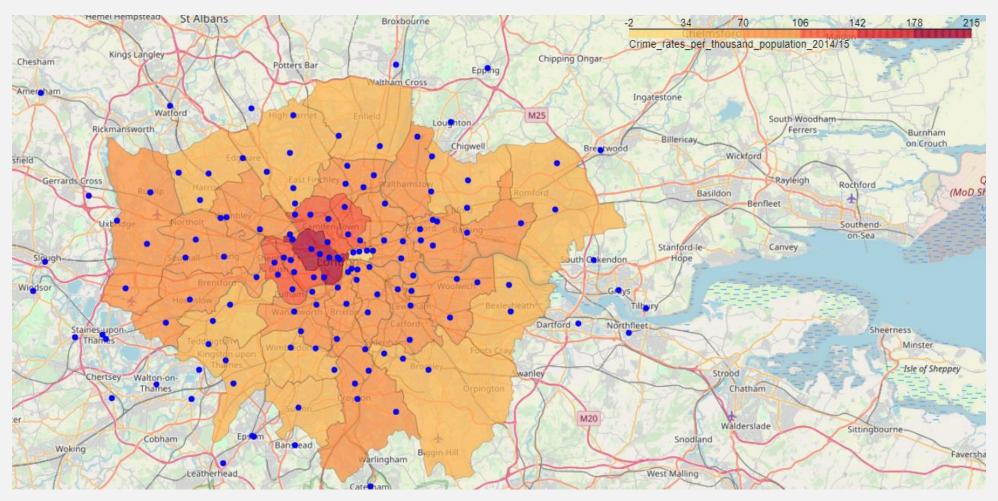


Figure 1: Choropleth map of crime rate for each London Borough with blue circles representing every police station

Results

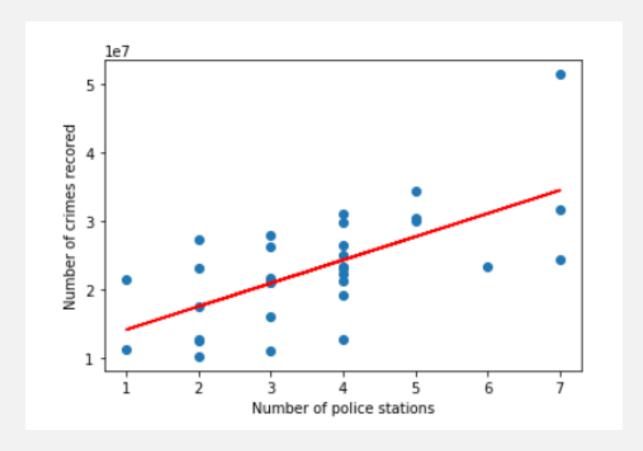


Figure 2: Scatter plot of relationship between number of police station and total crime for each borough with a linear regression

Results

Borough per st	
2.15465e+07 1 Waltham Forest 2.15465	e+07
2.73331e+07 2 Hackney 1.36666	e+07
2.31015e+07 2 Enfield 1.15508	e+07
1.13165e+07 1 Sutton 1.13165	e+07
2.8027e+07 3 Islington 9.34232	e+06



Figure 3: Table show the top 5 boroughs ranked by the total crime rate per police station and the image next to it is the name of every London Borough.

- I suggest that the new police station be built in Waltham Forest.
- It would definitely make sense to try and construct a new police station in the south of the borough if possible as it could serve both Waltham Forest and Hackney which is very near.