Capstone project: The Battle of the Neighborhoods

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Background

➢ Education and safety play a big role in family decisions to move from one London borough to another. More space and good schooling attract a growing number of families out of central London, relocating into greater London. Greater London has a lot to offer, with shops, cafés, libraries, theatres and parks. There is a lot going on for families. It is also well connected by train, bus and underground making it easy to commute to work.
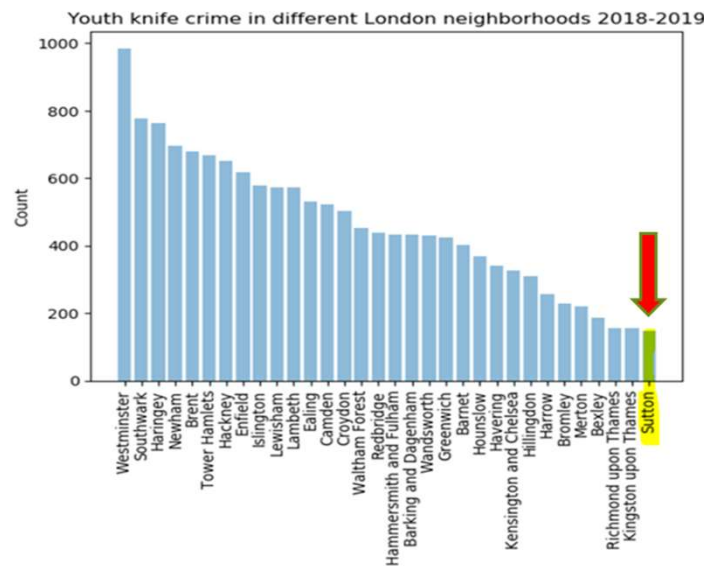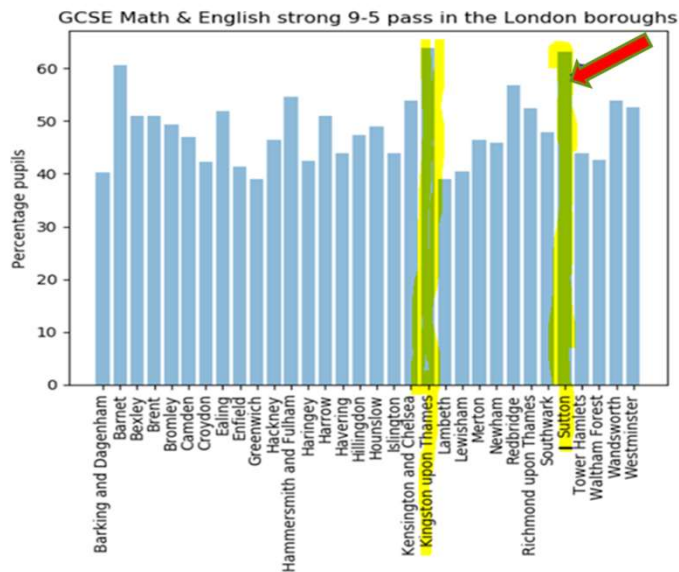
Problem

➢ The problem we want to solve is to find good schools in safe boroughs in London. London comprises of 32 boroughs. Finding a good school in a safe borough is an important task for many families with young children and teenagers. Many families decide to move borough to make sure their children attend a good school. Although there is a lot of interest in finding good state schools in London, it is quite difficult to have a real grasp of the situation. Detailed reports on this topic are available but they are not easy to read, especially for people moving from countries with a different school system and/or from non-English-speaking countries. The information and statistics available are not provided in a user-friendly manner and this can be quite frustrating for families moving to London.

➢ **Interest**

There is a lot of interest on this topic, from families with children and teenagers but also from couples that plan to start a family and foreign families moving to London.

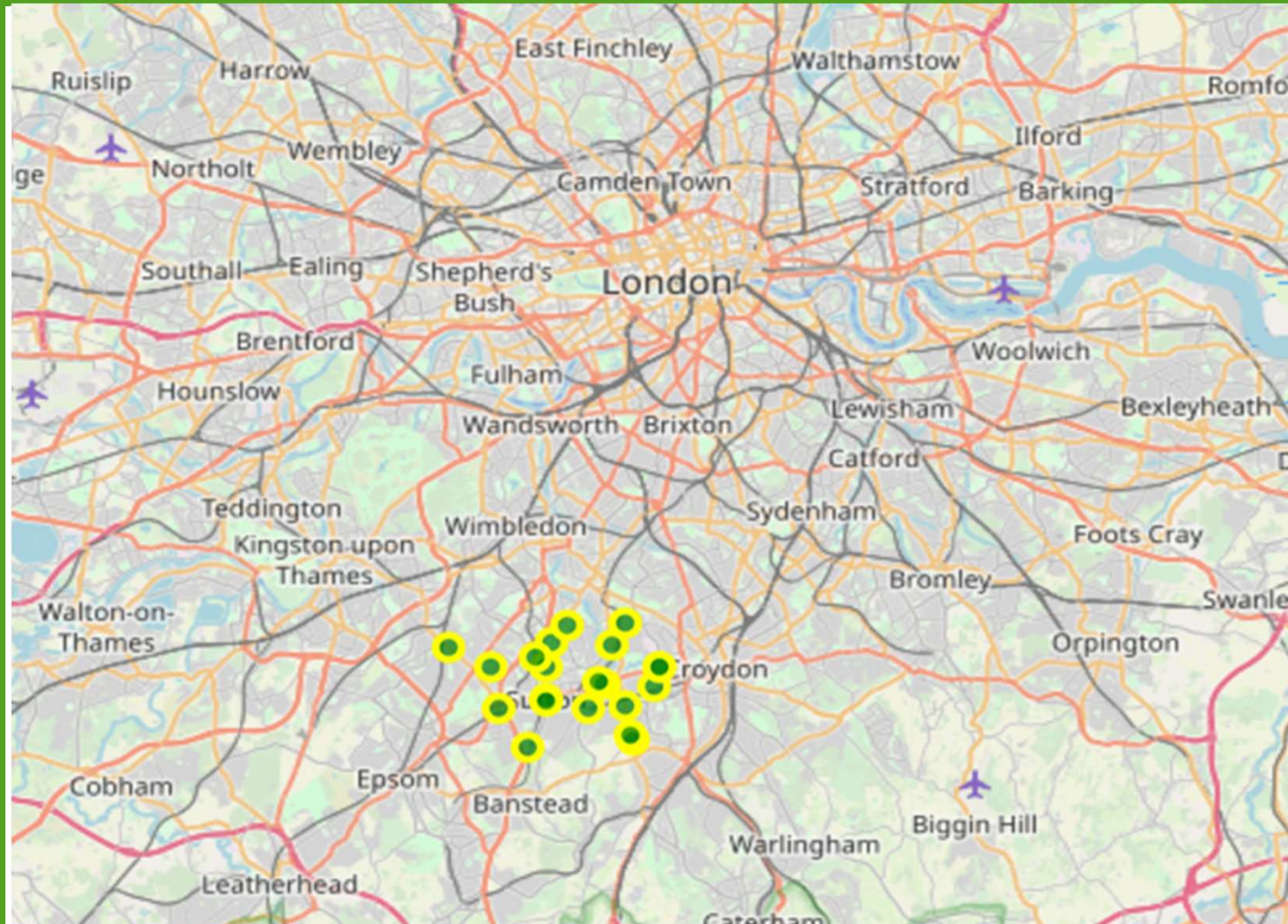High Schools Performances GSE & Knife-crime per London Borough

The Royal Borough of Sutton has the lowest youth crime rate and best achieving high schools in London

https://data.london.gov.uk/dataset/gcse-results-by-borough
https://www.london.gov.uk/mopac-disclosure-log/london-knife-crime-statistics

	Borough	District	Latitude	Longitude
0	Sutton	Bandon Hill	51.364777	-0.134833
1	Sutton	Beddington	51.371988	-0.132393
2	Sutton	Beddington Corner	51.386942	-0.149532
3	Sutton	Belmont	51.343785	-0.201152
4	Sutton	Benhilton	51.371642	-0.191571
5	Sutton	Carshalton	51.365788	-0.161086
6	Sutton	Carshalton Beeches	51.357196	-0.169351
8	Sutton	Cheam	51.357616	-0.216241
9	Sutton	Hackbridge	51.379613	-0.156754
10	Sutton	Little Woodcote	51.346076	-0.145932
11	Sutton	North Cheam	51.371578	-0.220225
12	Sutton	Rosehill	51.380152	-0.188640
13	Sutton	St. Helier	51.386695	-0.180057
14	Sutton	South Beddington	51.371988	-0.132393
15	Sutton	Sutton	51.360398	-0.190700
16	Sutton	Sutton Common	51.375373	-0.196032
17	Sutton	Sutton High Street	51.359765	-0.190991
18	Sutton	The Wrythe	51.367059	-0.162956
19	Sutton	Wallington	51.357945	-0.149562
20	Sutton	Woodcote Green	51.347991	-0.146830
21	Sutton	Worcester Park	51.378400	-0.241602

Latitude and longitude) for 22 Neighbourhoods (districts) Belonging to the Royal Borough of Sutton

**22
Neighbourhoods
(districts)
Belonging to the
Royal
Borough of Sutton
On the
London map**

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Belmont	Electronics Store	Asian Restaurant	Train Station	Pub	Women's Store	Hardware Store	Gym / Fitness Center	Gym	Grocery Store	Gastropub
1	Benhilton	Indian Restaurant	Park	Coffee Shop	Clothing Store	Pizza Place	Supermarket	Grocery Store	Gym / Fitness Center	Gastropub	Fast Food Restaurant
2	Carshalton	Grocery Store	Pub	Park	Café	Veterinarian	Historic Site	Train Station	Hotel	Tea Room	Platform
3	Carshalton Beeches	Health Food Store	Italian Restaurant	Train Station	Bakery	Grocery Store	Electronics Store	Hardware Store	Gym / Fitness Center	Gym	Gastropub
4	Cheam	Grocery Store	Italian Restaurant	Pub	Coffee Shop	Indian Restaurant	Soccer Field	Creperie	Gastropub	Gym / Fitness Center	Park
5	North Cheam	Coffee Shop	Supermarket	Fast Food Restaurant	Seafood Restaurant	Soccer Field	Social Club	Pub	Gym / Fitness Center	Grocery Store	Turkish Restaurant
6	Sutton	Pub	Clothing Store	Coffee Shop	Italian Restaurant	Bar	Pizza Place	Café	Women's Store	Sandwich Place	Hotel
7	Sutton High Street	Pub	Coffee Shop	Italian Restaurant	Bar	Pizza Place	Café	Electronics Store	Hotel	Irish Pub	Park
8	The Wrythe	Pub	Grocery Store	Café	Gym / Fitness Center	Historic Site	Hotel	Train Station	Platform	Tea Room	Park
9	Wallington	Grocery Store	Bakery	Supermarket	Spanish Restaurant	Pizza Place	Portuguese Restaurant	Pub	Convenience Store	Coffee Shop	Fast Food Restaurant
10	Worcester Park	Grocery Store	Pharmacy	Lebanese Restaurant	Pub	Fish & Chips Shop	Platform	Convenience Store	Coffee Shop	Pizza Place	Pet Store

Cluster 1 of similar neighbourhoods
&
top 10 most common venues per neighbourhood

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Little Woodcote	Park	Garden Center	Sports Club	Coffee Shop	Women's Store	Electronics Store	Hardware Store	Gym / Fitness Center	Gym	Grocery Store
1	St. Helier	Turkish Restaurant	Coffee Shop	Park	Breakfast Spot	Women's Store	Garden Center	Fish & Chips Shop	French Restaurant	Furniture / Home Store	Garden
2	Woodcote Green	Park	Garden Center	Coffee Shop	Women's Store	Electronics Store	Health Food Store	Hardware Store	Gym / Fitness Center	Gym	Grocery Store

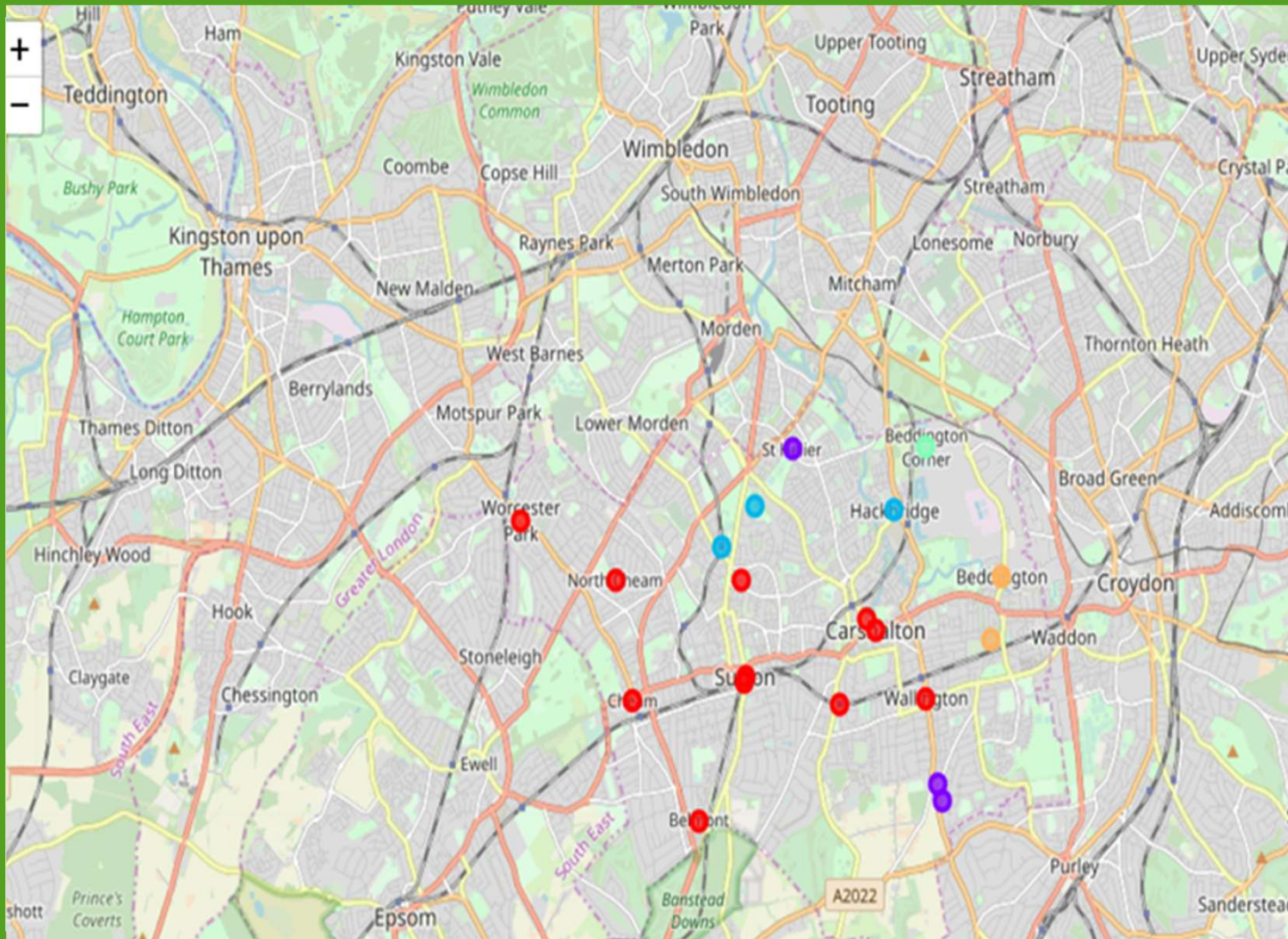|	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Hackbridge	Convenience Store	Train Station	Park	River	Women's Store	Garden	Fast Food Restaurant	Fish & Chips Shop	French Restaurant	Furniture / Home Store
1	Rosehill	Park	Supermarket	Gym / Fitness Center	Tennis Court	Fast Food Restaurant	Athletics & Sports	Gym	Grocery Store	Electronics Store	Hardware Store
2	Sutton Common	Grocery Store	Athletics & Sports	Train Station	Gym / Fitness Center	Tennis Court	Park	Garden Center	Fish & Chips Shop	French Restaurant	Furniture / Home Store

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Beddington Corner	Business Service	Furniture / Home Store	Racetrack	Women's Store	Electronics Store	Health Food Store	Hardware Store	Gym / Fitness Center	Gym	Grocery Store

	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	7th Most Common Venue	8th Most Common Venue	9th Most Common Venue	10th Most Common Venue
0	Bandon Hill	Park	Garden	Pub	Women's Store	Electronics Store	Hardware Store	Gym / Fitness Center	Gym	Grocery Store	Gastropub
1	Beddington	Indian Restaurant	Hardware Store	Park	Pub	Electronics Store	Gym / Fitness Center	Gym	Grocery Store	Gastropub	Garden Center
2	South Beddington	Indian Restaurant	Hardware Store	Park	Pub	Electronics Store	Gym / Fitness Center	Gym	Grocery Store	Gastropub	Garden Center

Cluster 2 of similar Neighbourhoods & top ten venues

Cluster 3 of similar Neighbourhoods & top ten venues

Cluster 4 of similar Neighbourhoods & top ten venues

Cluster 5 of similar Neighbourhoods & top ten venues

Similar Neighbourhoods that belong to the same cluster are represented with the same colour (circle) on the London map

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Conclusion

➤ Finding good schools in a safe borough is an important matter for many families in London.

➤ The safest borough in London with the best achieving high schools is Sutton.

➤ Sutton neighbourhoods were explored and 11 seem quite vibrant with many amenities to offer. The other half seems quieter with many parks, a great choice for those families who love outdoor activities.

➤ Sutton neighbourhoods are mostly well connected to central London by railway. That is key for all those people who need to commute for work.

➤ This approach gives a good snapshot of each neighbourhood helping families make their choice when it comes to move home.