



Identifying Suitable Cycle Shop Sites in the City of London

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INTRODUCTION

At the start of May 2020 during the Covid-19 pandemic, Grant Shapps the UK transport secretary announced he was bringing forward publication of the National Cycling Plan to help double cycling and increase walking by 2025. As part of this plan London's boroughs and Transport for London (TfL) have been allocated £5 million in the phase 1 and an indicated £20 million for the second phase¹

Later that month TfL announced its new cycling route map as part of its Streetspace for London project². This is part of a plan by London's Mayor to...

- Make it easier and safer for people to keep up social distancing
- Help people walk and cycle more often
- Avoid a sharp increase in car use. If people switch even a fraction of their previous journeys to cars, essential deliveries and emergency services will be gridlocked
- Keep London's air as clean as possible to protect everyone's health and to reduce carbon emissions

The UK government also announced a Fix Your Bike voucher scheme³ aiming to encourage more people in England to embrace cycling as an alternative to private cars. Anyone with an unused cycle in need of repair can avail of the voucher to get them and their bike back on the road.

Since the Covid pandemic the public are more reluctant to share public transport and as obesity has been highlighted as a key factor in Covid deaths more people have been encouraged to take up cycling.

In fact the Bicycle Associations market data service crunched some numbers revealing that between April and June this year there was a year on year increase of 63%. Sales were strongest for bikes below £1000 and e-bikes.

To build on this popularity and the increase of cycle routes in London, this report is being prepared for potential cycle shop/repair businesses to help identify suitable sites in London to set up a new business.

¹ <https://www.gov.uk/government/publications/emergency-active-travel-fund-local-transport-authority-allocations/emergency-active-travel-fund-total-indicative-allocations>

² <https://tfl.gov.uk/travel-information/improvements-and-projects/streetspace-for-london?cid=streetspace>

³ <https://fixyourbikevoucherscheme.est.org.uk/>

DATA SOURCES

I will be using a varying number of data sources for this project. To make sure this work is reproducible we will automate and code as much of this as possible. The data sources that we will be using are as follows...

Foursquare location Data

This project requires that I use Foursquare location data. In this case I will connect to FourSquare using their own API protocol to download a list of cycle shops for each borough. This will require me to identify the category ID for bike shops which are available at <https://developer.foursquare.com/docs/build-with-foursquare/categories/>

We will be collecting...

1. Shop Name
2. Latitude
3. Longitude

As there is a limit of 50 results with the API I have, I will likely break up the searches by the boroughs boundaries.

London Borough boundaries

In order to produce meaningful maps I will need mapping data for the boundaries of each of Londons boroughs. I have found a JSON file that has a section for each borough and a list of co-ordinates defining it's boundaries. This is available from <http://skrange.github.io/data.html>

London Boroughs

Wikipedia contains a list of London Boroughs at https://en.wikipedia.org/wiki/List_of_London_boroughs

Borough	Inner	Status	Local authority	Political control	Headquarters	Area (sq mi)	Population (2013 est) ^[1]	Co-ordinates	Ref. No.
Barking and Dagenham ^(info)			Barking and Dagenham London Borough Council	Labour	Town Hall, 1 Town Square	15.69	194,382	51°56′07″N 0°16′57″E﻿ / ﻿51.93527°N 0.1517°E﻿ / 51.93527; 0.1517	25
Barnet			Barnet London Borough Council	Conservative	Barnet House, 2 Broad Avenue, Colindale	33.49	369,368	51°52′52″N 0°15′17″W﻿ / ﻿51.4549°N 0.1535°E﻿ / 51.4549; 0.1535	23
Bexley			Bexley London Borough Council	Conservative	Civic Offices, 2 Watling Street	23.38	236,967	51°55′58″N 0°12′05″E﻿ / ﻿51.5558°N 0.1205°E﻿ / 51.5558; 0.1205	12
Brent			Brent London Borough Council	Labour	Brent Civic Centre, Engineers Way	16.30	317,264	51°40′39″N 0°01′58″E﻿ / ﻿51.4039°N 0.0158°E﻿ / 51.4039; 0.0158	20
Bromley			Bromley London Borough Council	Conservative	Civic Centre, Stockwell Close	57.67	317,899	51°40′39″N 0°01′58″E﻿ / ﻿51.4039°N 0.0158°E﻿ / 51.4039; 0.0158	20
Camden	✓ ^(info)		Camden London Borough Council	Labour	Camden Town Hall, Judd Street	8.40	229,719	51°52′07″N 0°12′05″W﻿ / ﻿51.5207°N 0.1205°W﻿ / 51.5207; -0.1205	11
Croydon			Croydon London Borough Council	Labour	Bernard Weatherill House, Mint Walk	33.41	372,752	51°37′14″N 0°09′7″W﻿ / ﻿51.5130°N 0.0095°W﻿ / 51.5130; -0.0095	13
Ealing			Ealing London Borough Council	Labour	Perceval House, 14-16 Uxbridge Road	21.44	342,494	51°51′30″N 0°07′59″W﻿ / ﻿51.6530°N 0.0799°W﻿ / 51.6530; -0.0799	22
Enfield			Enfield London Borough Council	Labour	Civic Centre, Silver Street	31.74	320,324	51°40′39″N 0°01′58″E﻿ / ﻿51.4039°N 0.0158°E﻿ / 51.4039; 0.0158	20
Greenwich ^(info)	✓ ^(info)	Royal	Greenwich London Borough Council	Labour	Woolwich Town Hall, Wellington Street	18.28	264,008	51°40′39″N 0°01′58″E﻿ / ﻿51.4039°N 0.0158°E﻿ / 51.4039; 0.0158	22
Hackney	✓ ^(info)		Hackney London Borough Council	Labour	Hackney Town Hall, Mare Street	7.36	257,379	51°54′50″N 0°05′13″W﻿ / ﻿51.5450°N 0.0513°W﻿ / 51.5450; -0.0513	9
Hammersmith and Fulham ^(info)	✓ ^(info)		Hammersmith and Fulham London Borough Council	Labour	Town Hall, King Street	8.33	178,345	51°40′27″N 0°02′03″W﻿ / ﻿51.4007°N 0.1119°W﻿ / 51.4007; -0.1119	4
Haringey			Haringey London Borough Council	Labour	Civic Centre, High Road	17.42	263,366	51°40′39″N 0°01′58″E﻿ / ﻿51.4039°N 0.0158°E﻿ / 51.4039; 0.0158	20
Havering			Havering London Borough Council	Conservative (found RDC)	Town Hall, Main Road	43.35	242,280	51°58′12″N 0°18′12″E﻿ / ﻿51.5812°N 0.1812°E﻿ / 51.5812; 0.1812	24

Screenshot from Wikipedia

It is my intention to use the following information from this Wikipedia page in the report...

1. Borough
2. Area
3. Population
4. Co-ordinates

Cycle Routes

TFL have an open data portal at <https://cycling.data.tfl.gov.uk/> with a JSON file with the latest cycle routes.

This dataset has the name of each route, whether it is open, in progress or planned for the future and a list of co-ordinates mapping the route.

I will use this data to map how much of each route sits within the boundary of each borough.
