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City of London

BANK JUNCTION TAXI AVAILABILITY ANALYSIS

Interim Report

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Interim Report

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1 INTRODUCTION

1.1 OVERVIEW

Since 2017, a bus and cycle only restriction has been in effect at Bank junction from 7 am to 7 pm, Monday to Friday. This was implemented as an experimental traffic order to predominately address the poor safety record at the junction. This was made permanent in 2018 and complementary interim footway widening was implemented shortly after. The City of London is now midway through completion on the All Change at Bank scheme. This will restrict traffic on three of the six arms of the junction and create a larger area of public realm space at the centre of the junction. The works are due for completion in Spring 2024. The current proposals retain the 'bus and cycle restriction' as it is on the remaining three arms, but there has been an ongoing commitment to review the traffic mix and timings.

A review is now being undertaken and the primary consideration for change is whether altering the traffic mix would address concerns about equality and accessibility for people who rely on taxis over those disbenefits for those that use public transport or who walk and cycle.

WSP have been commissioned by the City to undertake a comprehensive analysis around the availability of taxis, and to ascertain if Bank and the wider TfL Bishopsgate restrictions are negatively impacting the level of taxi provision in the City. Part of this work includes a comparison with taxi availability in the West End.
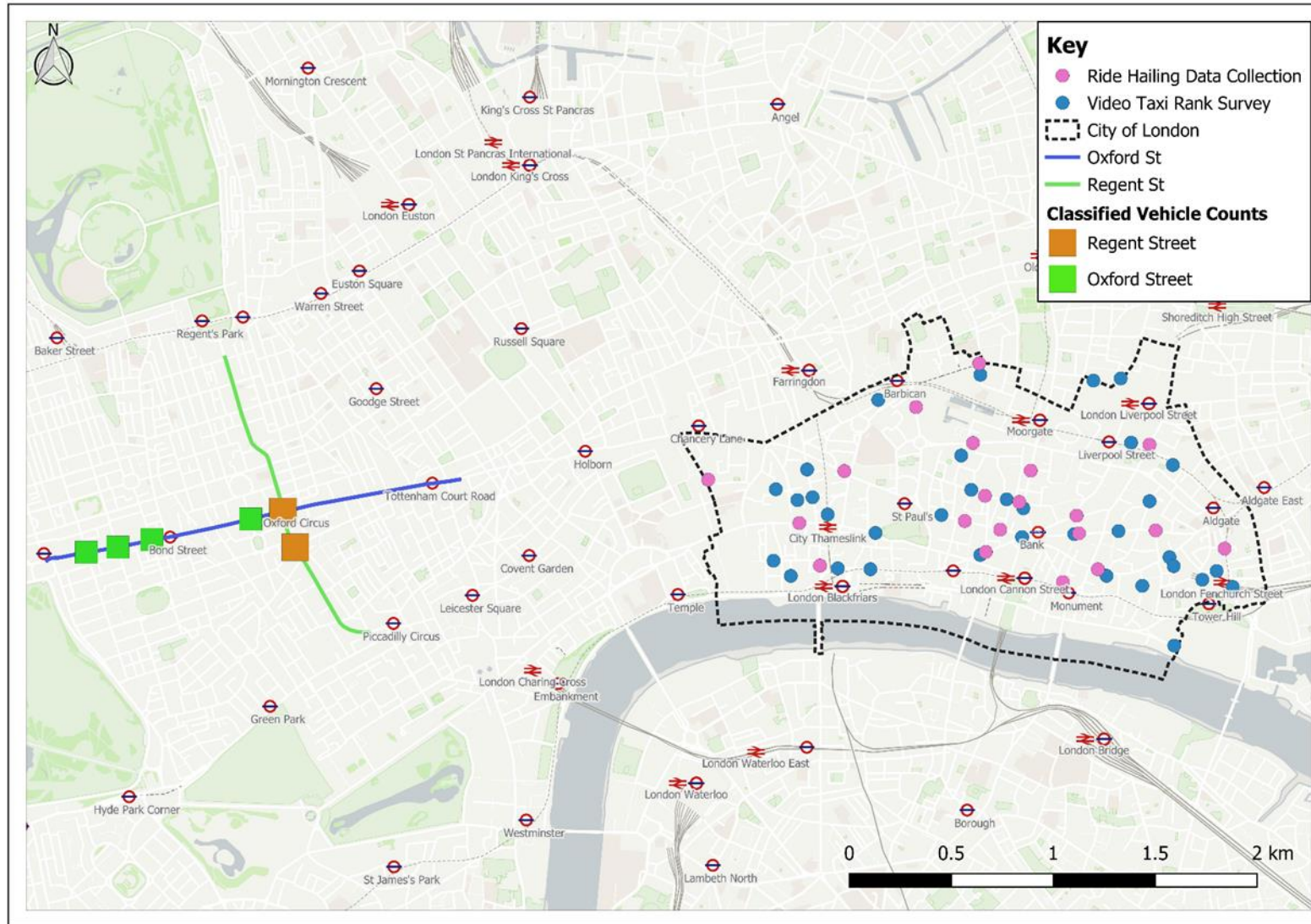
This interim report includes initial analysis of the availability of taxis in terms of:

- Ride Hailing Apps – determining wait time for private hire and black cab services over a 14 hrs period at a number of locations in the City

- Taxi Rank usage – surveys at nearly 30 sites in the City to assess how frequently these are used by taxis, and frequency of rides being hailed from a rank

- And a comparison with traffic classification count survey from Westminster, assessing trends in taxi volumes over the past five years and proportions of taxis in the traffic mix.

Human behaviour and decision-making play a significant role in taxi operations. Data alone cannot fully account for the unpredictability of passenger demand on a particular day, breaks had by taxi drivers, or the impact of special events we aren't aware of on taxi usage. These human-driven factors introduce a level of complexity that may not be fully represented in our dataset.

This report includes analysis of only part of the data set being collected for this commission. The report will be updated with more information on taxi rank surveys, manual taxi availability surveys and information on journey times comparisons in the full report expected to be completed in December.

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Figure 1-1 - Data collection locations for data within the Interim Report

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2 METHODOLOGY

2.1 TAXI RANK SURVEY

34 taxi ranks in the City were identified to be surveyed to see how well they are used (Figure 2-1).

Of the 34 locations, 28 had complete successful surveys, three had no data, three had incomplete data. Site by site break down is available in Appendix A

The survey recorded:

• The time when each taxi enters the rank

• Recorded when each taxi leaves the rank

• The length of time each taxi spends at the rank

• Whether each taxi picks up a passenger before leaving the rank

Ranks were surveyed Wednesday 11 October 2023 for 24hrs.

Early analysis has been included in this Interim Report, with more detailed analysis to be included in the Final Report, due in December.

Figure 2-1 - Taxi Rank Survey Locations
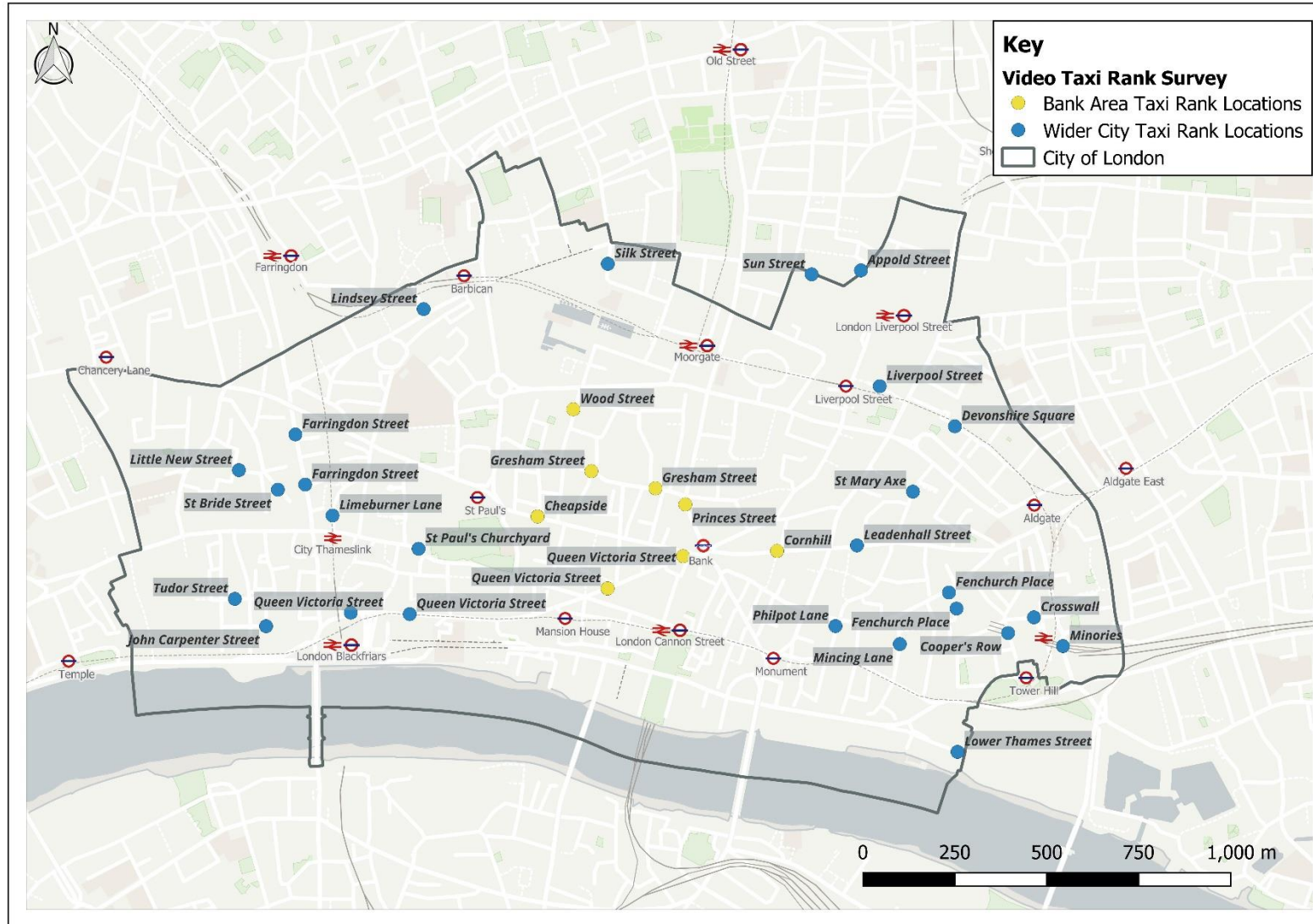
2.2 RIDE HAILING APPS

Waiting time for a taxi and private hire vehicle via ride hailing apps were captured for each survey site in Figure 2-2. This was captured once every 15 minutes between 7am and 1am, occurring on Tuesday 17th, Wednesday 18th and Thursday 19th of October 2023 for one neutral day using the following apps and services:

• Free Now

• Gett

• Uber

• Bolt

• Addison Lee

Surveys took place at the locations as shown on Figure 2-2. The data analysis has been divided into the Bank area (King William Street, Cornhill, Threadneedle Street, Princes Street, Poultry, Queen Victoria Street) and those ranks located in other locations in the City.

The dates they took place are included in Appendix B. These locations correspond to the sites for the manual taxi availability surveys.

Figure 2-2 - Ride Hailing Data Collection Locations
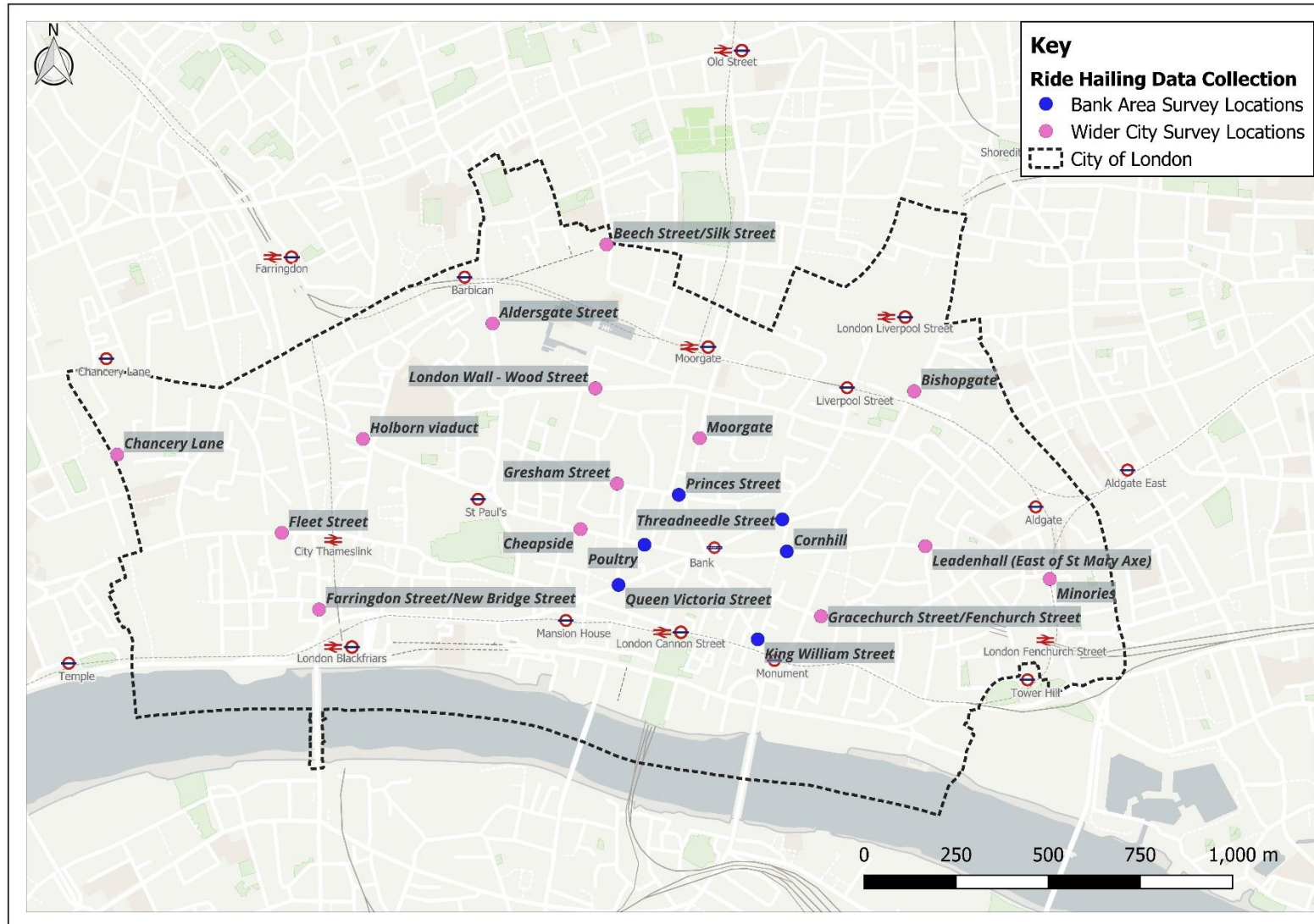
2.3 WESTMINSTER DATA

The evolution of taxi volumes in Westminster before and after the onset of the COVID-19 pandemic was investigated by considering several metrics including the proportion of taxis within the overall traffic, the absolute number of taxis by day, and data segmented by hourly intervals.

The classified traffic count data from Westminster covered Oxford Street Pre Covid on 04/05/2017, Oxford Street Post Covid on 21/09/2022, Regent Street Pre covid on 26/05/2017 and Regent Street Post covid on 20/05/2022.

These locations were selected from numerous available location counts plotted on a map, and those with nearby pre and post covid data selected as pairs.

Oxford Street counts (Figure 2-3)

1- A40 Oxford Street / Portman Street / Park Street

2- A40 Oxford Street / Orchard Street

4- Oxford Street / Duke Street

5- Oxford Street / Holles Street

Regent Street counts (Figure 2-4):

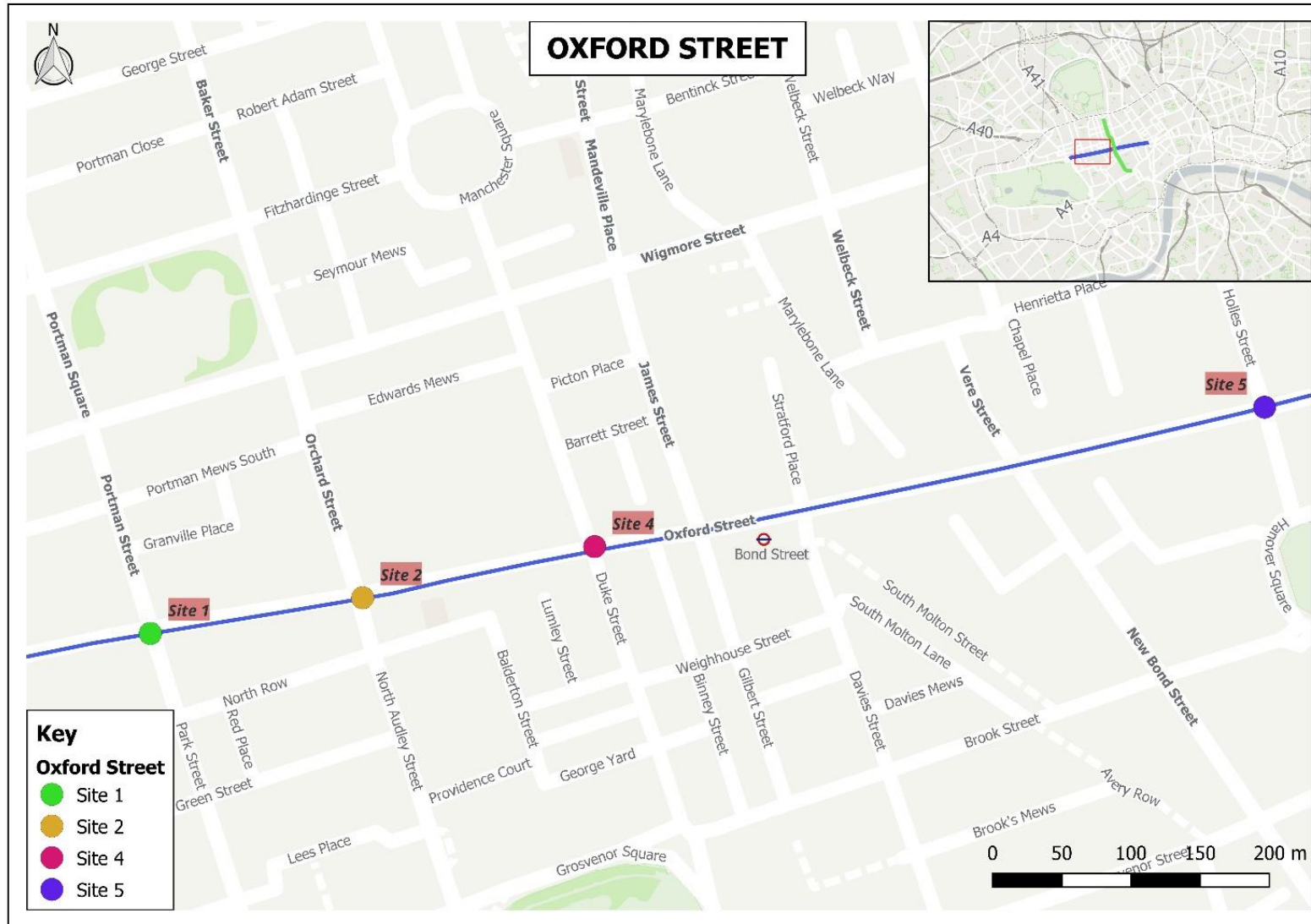**Figure 2-3 - Oxford Street Classified Count Locations**

Figure 2-4 – Regent Street Classified Count Locations
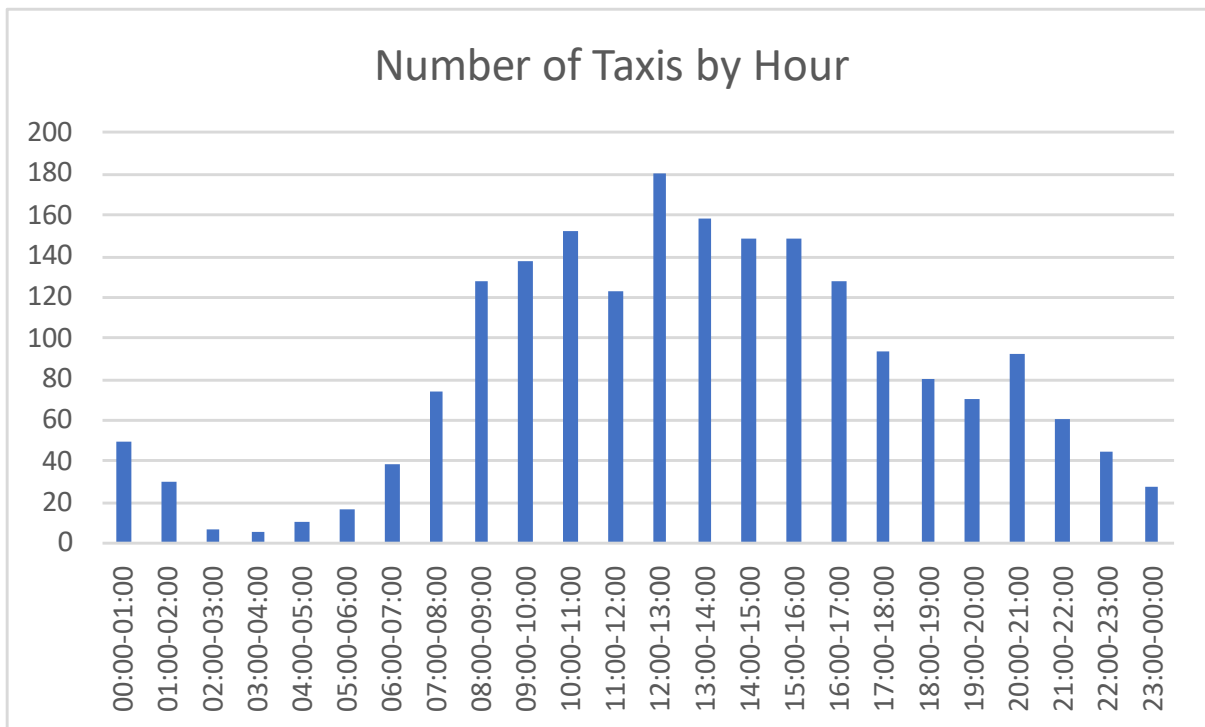
3 ANALYSIS

3.1 TAXI RANK SURVEY (CAMERAS)

Over the survey period 2002 taxis were recorded at the ranks.

70% (1402) of the taxis picked up passengers at the taxi ranks, compared to 30% (600) taxis leaving without a passenger.

Early analysis shows that the ranks close to Bank appear to have been very lightly used in the survey period.

The number of taxi's arriving at any rank peaked at 12:00 to 13:00 and was lowest between 02:00 and 04:00.

Figure 3-1 - Number of taxis arriving at all location by hour

Further analysis will be included in the final report.

3.2 RIDE HAILING APPS

For this data set the analysis has been divided between the Bank area, and the wider City of London sites. Overall, there was very little variation in the wait time for a taxi or private hire vehicle at any of the locations surveyed within the City.

The data has been divided into the Bank area (King William Street, Cornhill, Threadneedle Street, Princes Street, Poultry, Queen Victoria Street) and those ranks located in other locations in the City.

The shortest waiting time for a black cab in the Bank area was 2 minutes and 48 seconds, occurring between 00:00 and 01:00. During the same time frame, the average wait for a black cab at the broader City of London (City of London) locations was 3 minutes and 48 seconds.

The longest average waiting time for a black cab in the Bank area was observed between 18:00 and 19:00, with a wait time of 4 minutes and 36 seconds. For the wider City of London locations, the average wait time during this period was 5 minutes.

Figure 3-2 – Average wait time for taxi'black cabs

Figure 3-2 – Average wait time for taxi'black cabs
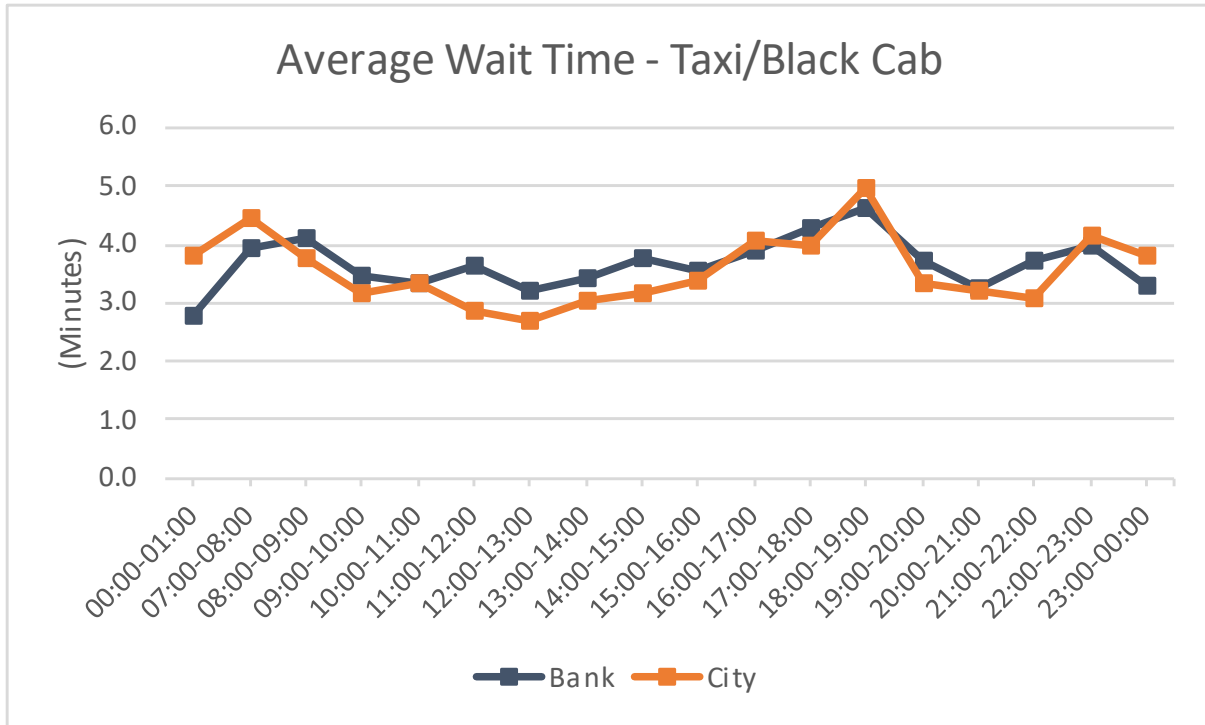
For PHVs, the shortest average wait time in the Bank area was 3 minutes and 12 seconds, taking place between 20:00 and 21:00. Concurrently, the average wait for a PHV in the broader City of London locations was 3 minutes and 18 seconds.

In contrast, the longest average wait time for a PHV in the Bank area was 12 minutes and 24 seconds, recorded between 22:00 and 23:00. During this same time frame, the average wait for a PHV in the wider City of London locations was 7 minutes.

Figure 3-3 – Average wait time for PHV

Average Wait Time - PHV
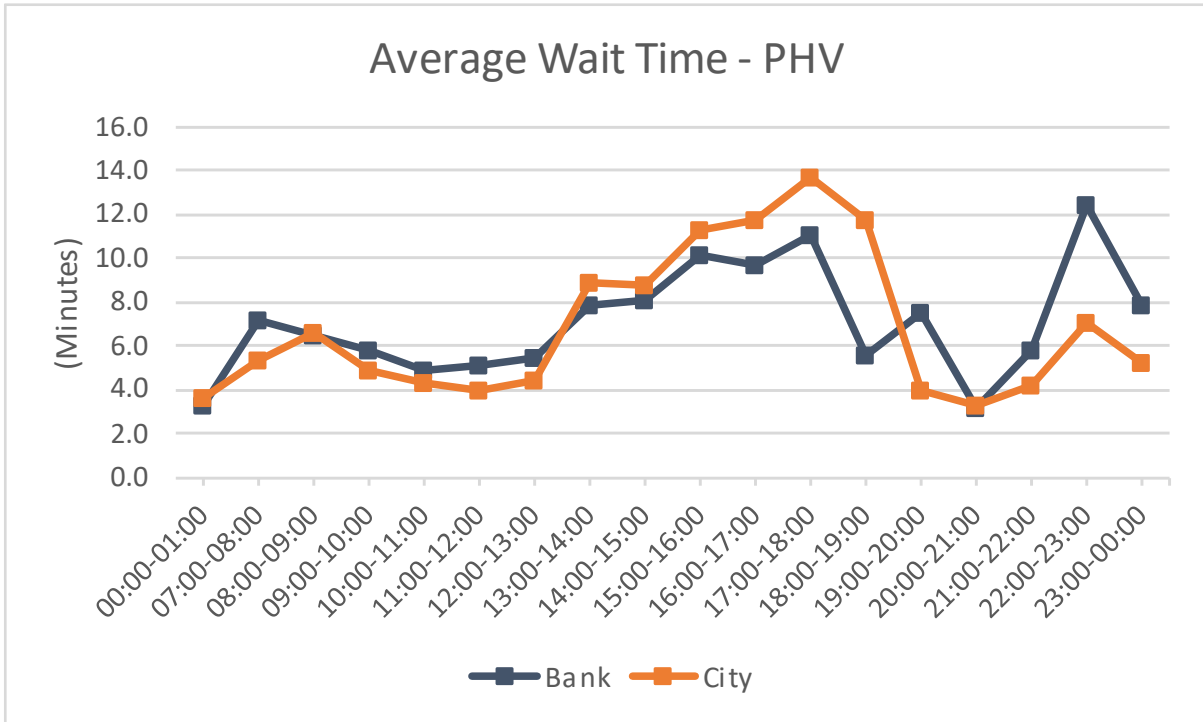
In summary, the average wait time across the surveyed period for taxis in Bank was 3 minutes and 36 seconds, mirroring the average wait time in the wider City of London locations. However, the average wait time for a PHV in Bank was 7 minutes and 6 seconds, slightly exceeding the wait time of 6 minutes and 54 seconds in the wider City of London area.

Figure 3-4 - Average wait time for taxis and PHV in Bank compared to the City
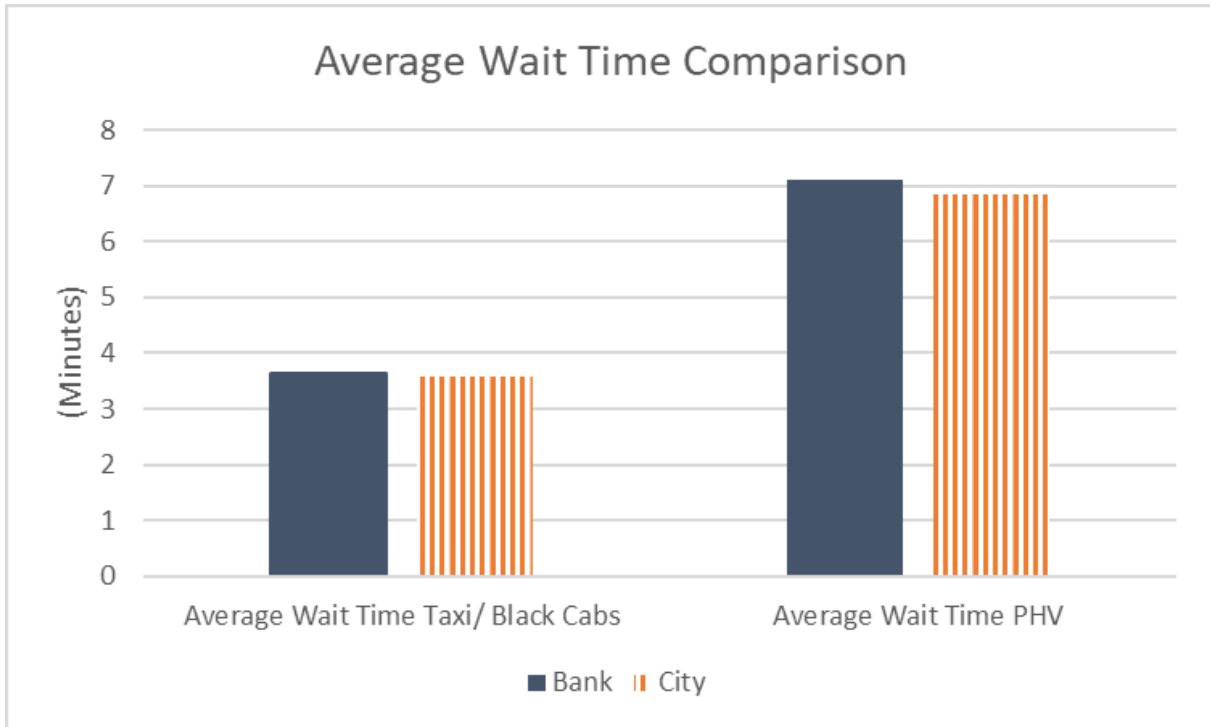
The average time to wait for either a private hire vehicle (PHV) or taxi at any location in the City was 4 minutes and 54 seconds. Combined taxi/ black cab wait times shows that wait time is longer at end of the working day (17:00-18:00) and peaks again around 22:00-23:00 when it is likely there are less vehicles in the area compared to demand.

Figure 3-5 – Combined average wait time for taxi/black cabs and PHV
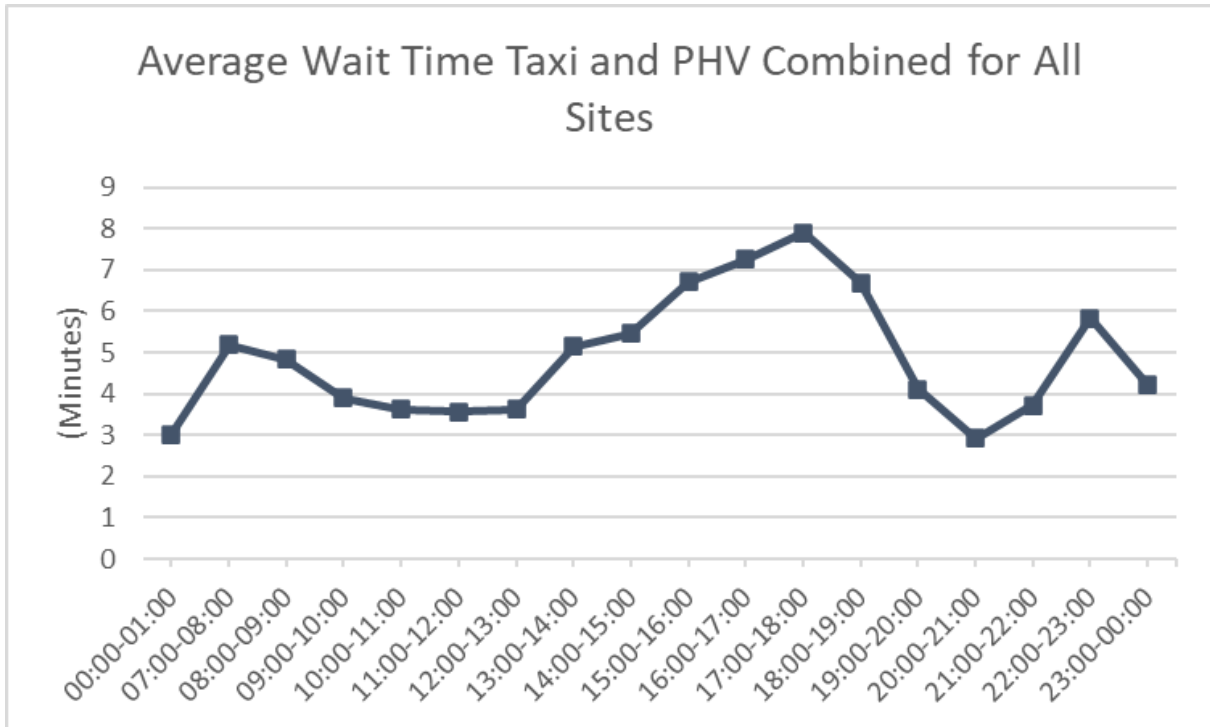
3.3 WESTMINSTER DATA

3.3.1 OXFORD STREET

Oxford Street in Westminster has experienced a substantial decline in the overall number of taxis after the onset of the COVID-19 pandemic. The most significant drop in the number of taxis occurred between 17:30 and 18:30, resulting in a 37% decrease. In contrast, the period from 08:30 to 09:30 witnessed the least decline in taxi numbers, with only an 8% reduction (Figure 3-6). On average, across all time intervals, there was a 26% decrease in taxi availability. Oxford Street data is represented hour by hour in the graph below, for the two hour AM and PM peaks and the lunchtime two hour peaks.

Figure 3-6 - Oxford Street Taxi Numbers Pre to Post Covid
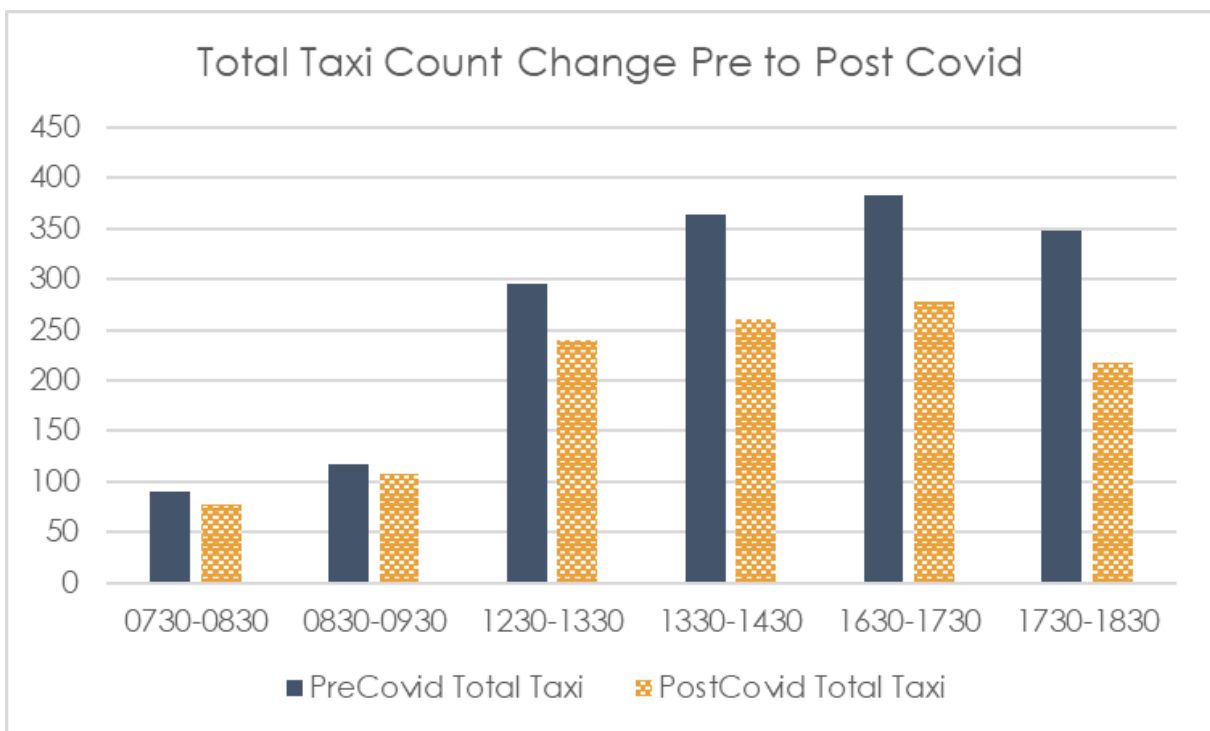
The broader traffic trends in Westminster show an average 36% decrease in traffic volume from pre-COVID to post-COVID across all time slots. The most significant drop in the number of vehicles occurred between 07:30 and 08:30 where a 42% drop was observed. Between 12:30 and 13:00 saw the least reduction in vehicles, at a 29% reduction (Figure 3-9)

Figure 3-7 - Oxford Street Vehicle Numbers Pre to Post Covid
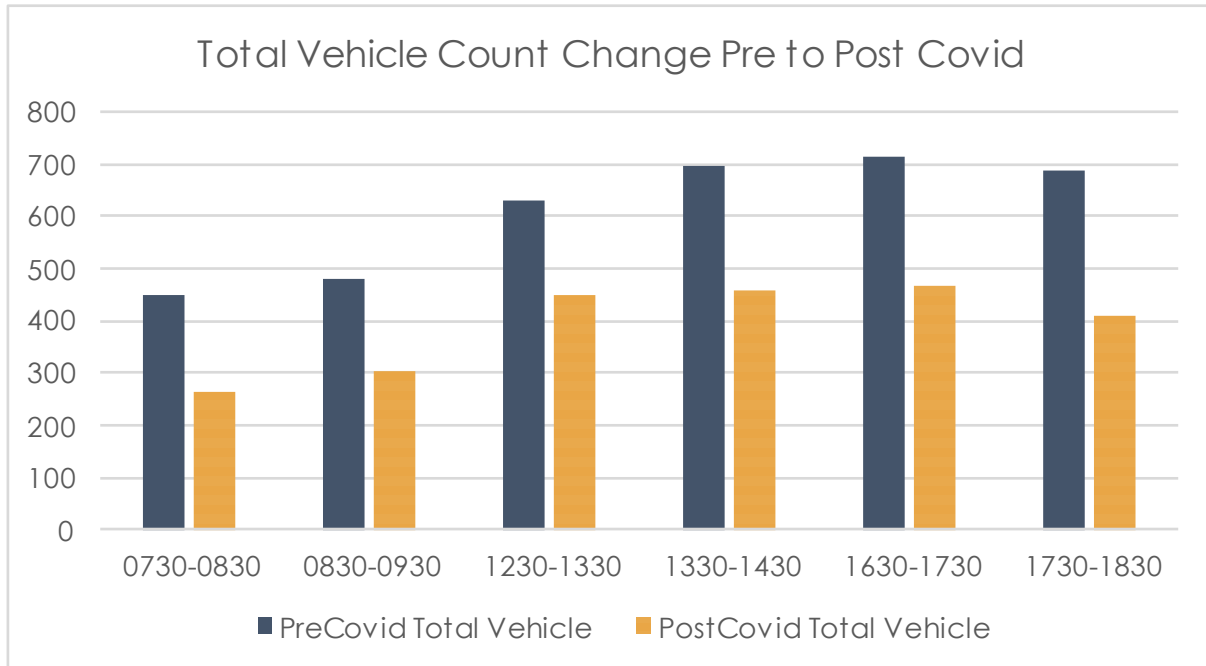
Figure 3-8 shows that taxi/ black cab numbers have fallen less than total vehicle counts across all timeframes.

Figure 3-8 - Percentage Change from Pre to Post Covid for Taxi/Black Cabs and Total Vehicles
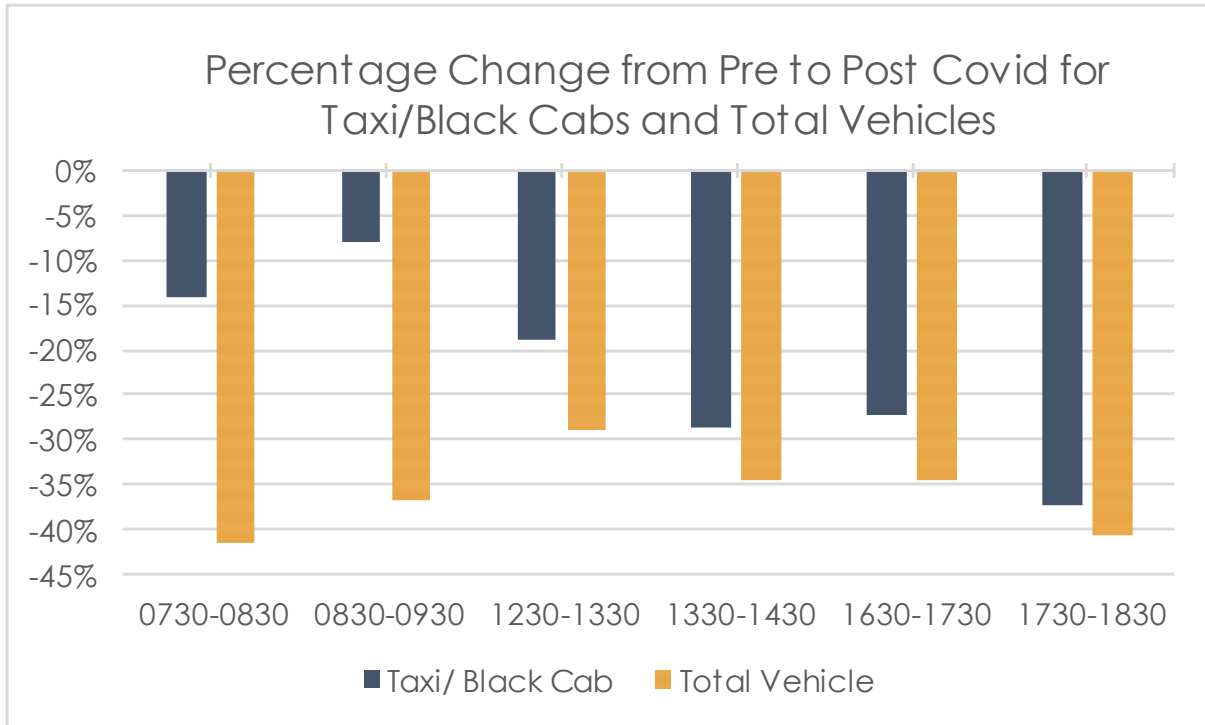
3.3.2 REGENT STREET

Taxi numbers on Regent Street in Westminster has experienced a 46% decrease after the onset of the COVID-19 pandemic compared to pre pandemic. The most significant drop in the number of taxis occurred between 08:00 and 09:00, resulting in a 61% decrease, there was a 43% decrease in taxis between 13:00 and 14:00, and a 42% reduction between 17:15 and 18:15 (Post Covid: 17:00 and 18:00).

Figure 3-9 – Total Taxi Count Change Pre to Post Covid

![WSP logo]

The broader traffic trends on Regent Street show an average 18% decrease in traffic volume from pre-COVID to post-COVID across all time slots. There was a 13% decrease in traffic between 08:00 and 09:00, a 27% decrease in traffic between 13:00 and 14:00, and a 15% decrease between 17:15 and 18:15 (Post Covid: 17:00-18:00) (Figure 3-10).

Figure 3-10 – Total Vehicle Count Change Pre to Post Covid

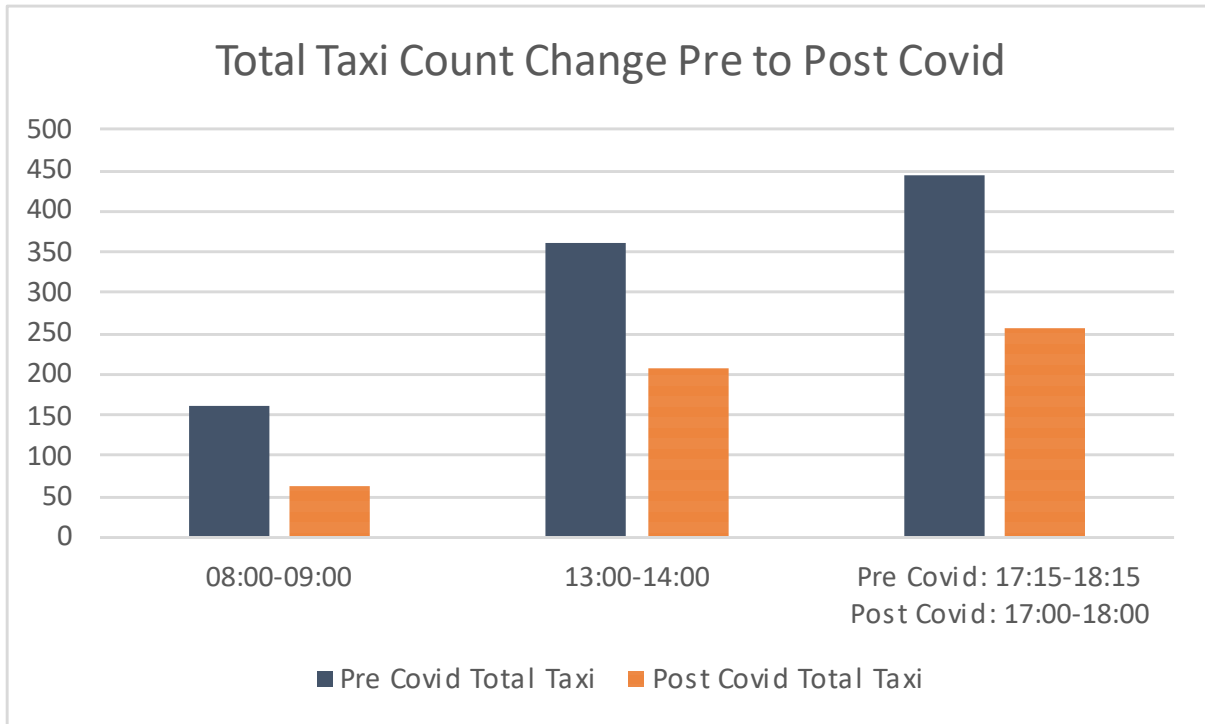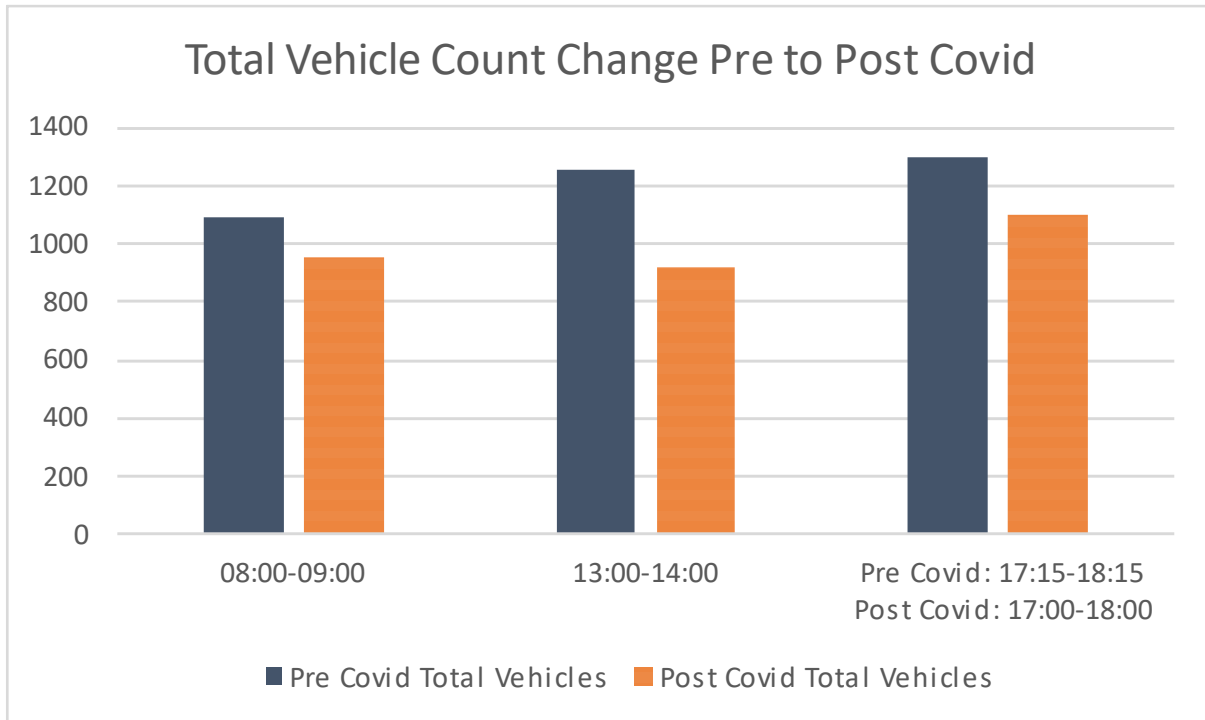Figure 3-11 shows that taxi/ black cab numbers have fallen more than total vehicle counts across all timeframes. This is particularly evident between 08:00 and 09:00 where taxi/ black cab availability has fallen over 60%, but vehicle counts only 13%

Figure 3-11 - Percentage Change from Pre to Post Covid for Taxi/Black Cabs and Total Vehicles
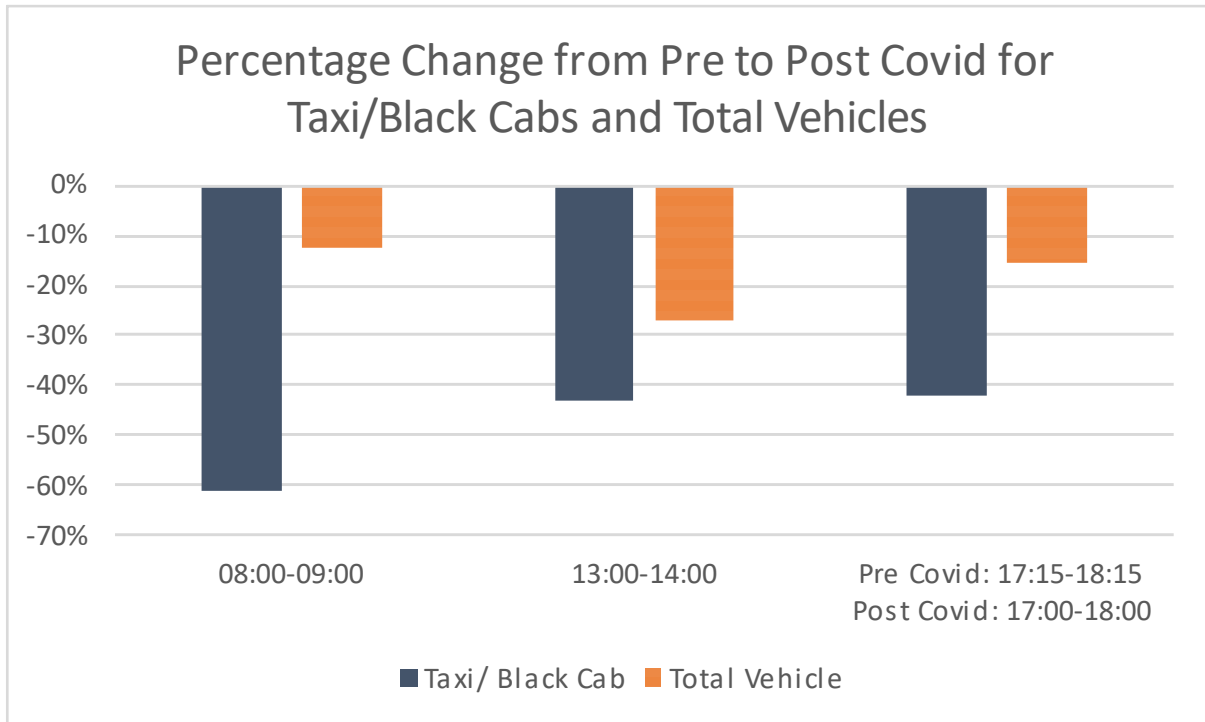
Table 3-1 – Taxi number comparison between 2017 and 2022/23, for peak hours (approx. 08:00-10:00, 12:00-14:00, 17:00-19:00)* across multiple sites

	Pre-COVID (2017) taxi volumes	Post-COVID (2022/23) taxi volumes	Absolute change	% change
Oxford Street	6389	4729	-2660	-26%
Regent Street*	965	525	-440	-46%
Bank area	4846	2840	-2006	-41%
Rest of City	5457	3999	-1458	-27%

*Regent Street sites peak hour counts were for one hour only

4 NEXT STEPS

4.1 TAXI RANK SURVEY (CAMERAS)

For the final report, further analysis will be undertaken looking at individual taxi rank sites and those in and around Bank.

4.2 MANUAL TAXI AVAILABILITY SURVEYS

Surveys were undertaken to record the number of taxis passing the survey location in both directions, whether they have their lights on or off and how many passengers they are carrying.

Data was collected between 7am and 1am in 15 minute slots on Tuesday 17th, Wednesday 18th, Thursday 19th of October, and 2nd November 2023.

Surveys took place at the following locations (see):

17th October:

1. Cheapside

2. Moorgate

6. Gresham Street

7. Gracechurch Street/Fenchurch Street

18th October: On this day, a high security event took place at Mansion House.

12. King William Street

13. Cornhill

14. Threadneedle Street

15. Princes Street

16. Poultry

17. Queen Victoria Street

19th October:

4. Holborn viaduct

5. Aldersgate Street

8. Fleet Street

9. Farringdon Street/New Bridge Street

20. Chancery Lane

2nd November:

3. Bishopsgate

10. Beech Street/Silk Street

11. London Wall – Wood Street

18. Leadenhall (East of St Mary Axe)

19. Minories

Analysis is not yet complete for this data collection but will be available in the final report.

4.3   JOURNEY TIME DATA

A series of journey time surveys between the four origin-destination pairs listed below will be undertaken in November. Journeys will be made three times per pair and route option (explained further below) in each direction between 4pm and 7pm for a total of 66 journeys.

The origin destination pairs are as follows:

1. London Bridge to Silk Street (Barbican entrance) (routes one, two and three)

2. Aldgate Underground to Blackfriars Station (routes one and two)

3. Fenchurch Street Station to Barts Hospital Main Entrance (routes one, two and three)

4. Liverpool Street to Queen Victoria Street (Bloomberg) (routes one, two and three)

The routes are as follows:

Route one - Take the vehicle through Bank junction

Route two - Take the vehicle along the fastest route that observes all relevant traffic restrictions in place between 7am and 7pm

Route three - To be taken along Bishopsgate

Appendix A

TAXI RANK NUMBER, LOCATION AND COMMENTS

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Site Number	Taxi Rank Number	Location	Comments
1	01-TR	Lindsey Street (east of Smithfield Market)	No Issues To Report
2	02-TR	Silk Street (adj Linklaters)	No Issues To Report
3	03-TR	Sun Street	Taxi Rank Not Surveyed Due To Roadworks From Building Site
4	04-TR	Appold Street	No Issues To Report
5	5&6-TR	Liverpool Street (East)	No Issues To Report
6	07-TR	Devonshire Square	No Issues To Report
7	08-TR	St Mary Axe	No Issues To Report
8	09-TR	Leadenhall Street	Taxi Rank Closed Off From 08:09 Until End of Survey
9	10-TR	Philpot Lane	No Issues To Report
10	11-TR	Mincing Lane	No Issues To Report
11	14-TR	Fenchurch Place	No Issues To Report
12	13-TR	Trinity Square	No Issues To Report
13	15-TR	Cooper's Row	No Issues To Report
14 -	16-TR	Minories	No Issues To Report
15	17-TR	Lower Thames Street	No Issues To Report
16	18-TR	Cornhill	No Issues To Report
17	19-TR	Queen Victoria Street	Taxi Rank Not Surveyed As Road Was Closed
18	20-TR	Queen Victoria Street (Bloomberg)	No Issues To Report
19	21-TR	Princes Street	No Issues To Report
20	22-TR	Gresham Street (west junc with Old Jewry)	Approximately Half of Taxi Rank Closed Off By Cones With Digger Parked In Taxi Rank
21	23-TR	Gresham Street (west Milk Street)	No Issues To Report
22	24-TR	Cheapside (One New Change)	No Issues To Report
23	25-TR	St. Paul's Churchyard	No Issues To Report
24	26-TR	Queen Victoria Street (Church of Scientology)	No Issues To Report

25	27-TR	Queen Victoria Street (Blackfriars Station)	No Issues To Report
26	28-TR	John Carpenter Street	Taxi Rank Surveyed From 00:00 -10:22 Only Due To Camera Malfunction
27	29-TR	Tudor Street	No Issues To Report
28	30-TR	Limeburner Lane	No Issues To Report
29	31-TR	Farringdon Street (opp Goldman Sachs)	No Issues To Report
30	32-TR	St Bride Street	Taxi Rank Not Surveyed As Road Was Closed
31	33-TR	Little New Street	No Issues To Report
32	34-TR	Farringdon Street (Old Fleet Lane)	No Issues To Report
33	35-TR	Wood Street	No Issues To Report
34	36-TR	Crosswall	No Issues To Report

Appendix B

DATES OF DATA COLLECTION

RIDE HAILING APPS

17th October:

1. Cheapside

2. Moorgate

6. Gresham Street

7. Gracechurch Street/Fenchurch Street

18th October: On this day, a high security event took place at Mansion House.

12. King William Street

13. Cornhill

14. Threadneedle Street

15. Princes Street

16. Poultry

17. Queen Victoria Street

19th October:

3. Bishopsgate

4. Holborn viaduct

5. Aldersgate Street

8. Fleet Street

9. Farringdon Street/New Bridge Street

10. Beech Street/Silk Street

11. London Wall – Wood Street

18. Leadenhall (East of St Mary Axe)

19. Minories

20. Chancery Lane

Appendix C

CONGESTION CHARGE ZONE DATA

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Congestion Charge and Low Emissions Zone factsheets			
Date	from	to	Average number of Licensed Taxis detected (during charging hours and on charging days)
	01-Apr	30-Jun	
Q1	2016		11396
Q1	2017		11409
Q1	2018		9796
Q1	2019		9405
Q1	2021		5310
Q1	2022		6585
Q1	2023		6344
Q1	2020		n/a

Source: Congestion Charge - Transport for London (tfl.gov.uk)

Appendix D

TAXI AND PRIVATE HIRE LICENSING FIGURES BY YEAR

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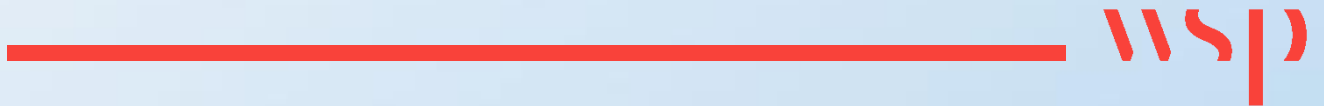
Taxis

Year	Vehicles	Drivers: All London	Drivers: Suburban	Drivers: Total
09/10	22,445	21,334	3,580	24,914
10/11	22,558	21,499	3,571	25,070
11/12	23,099	21,690	3,646	25,336
12/13	22,168	21,733	3,727	25,460
13/14	22,810	21,876	3,662	25,538
14/15	22,500	21,724	3,508	25,232
15/16	21,759	21,500	3,370	24,870
16/17	21,300	21,274	3,213	24,487
17/18	21,026	20,803	3,023	23,826
18/19	20,136	20,301	2,858	23,159
19/20	18,504	19,642	2,695	22,337
20/21	13,461	18,341	2,445	20,786
21/22	14,695	17,361	2,184	19,486
* 22 october 2023	14,611	15,948	1,879	17,827

Private Hire

Year	Operators	Drivers	Vehicles
09/10	2,882	59,191	49,355
10/11	3,111	61,200	50,663
11/12	3,164	64,063	53,960
12/13	3,159	66,975	49,854
13/14	3,038	65,656	52,811
14/15	3,006	78,690	62,724
15/16	2,814	101,434	78,139
16/17	2,430	117,712	87,409
17/18	2,373	113,645	87,921
18/19	2,206	106,777	88,113
19/20	2,113	111,766	94,712
20/21	1,955	105,329	77,726
21/22	1,710	99,937	80,857
* 22 October 2023	1,670	106,355	90,916

Source TfL:
[Licensing information - Transport for London (tfl.gov.uk)](https://tfl.gov.uk)

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