





Taxi Wait Time Report

Transport for London

Report
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- A Survey locations, classifications and shifts
- B Analysis method

Executive summary

Transport for London (TfL) commissioned Steer Davies Gleave to conduct a programme of research to investigate the taxi and private hire market within Greater London.

This report presents the findings of the surveys undertaken at taxi ranks and at various on street locations to determine wait times for passengers and taxis.

A total of 356 three hour fieldwork shifts were undertaken (171 shifts surveying taxi ranks and 185 shifts surveying on street).

Summary of key findings

Passengers at ranks

The mean wait time for passengers at taxi ranks was 53 seconds across all time periods and locations. The mean wait time was longer in the AM peak, and in central London locations.

The mean passenger group size was 1.36. The mean group size was lower in the AM peak (at 1.16) and higher in the interpeak (1.43). The mean group size on a Saturday was 1.84, and 1.61 on a Sunday. The mean group size at ranks at tourist attractions / hotspots was 1.96.

The mean number of passengers in a queue at a taxi rank was 2.57. This was higher in the AM peak and interpeak, in central London locations, and at ranks at rail or London Underground stations.

Passengers arriving at taxi ranks had an average of 0.33 pieces of luggage each.

Taxis at ranks

The mean proportion of taxis leaving a rank without a hire (without a passenger, with their light on) was 5%. The proportion of taxis leaving a rank with their light on was highest at night and on weekend days.

The mean wait time for taxis at a rank (the time a taxi waited at a rank before leaving empty or with a passenger) was 11 minutes and 21 seconds. The mean wait time was lower in the AM peak, and higher in the interpeak and evening.

At rank supply and demand comparison

At all times of day and at all locations, the mean wait time for passengers at ranks was considerably less than the mean wait time of taxis at ranks. The mean difference in wait time was 10 minutes and 28 seconds – passengers waited for 53 seconds at a rank for a taxi, on average, and taxis waited for 11 minutes and 21 seconds at a rank before leaving with or without a passenger.

Supply and demand was most closely matched in the AM peak – the difference in mean wait times was 6 minutes and 11 seconds during this period.

On street wait time

The mean on street wait time for a taxi during the day in central or inner London was 3 minutes and 23 seconds. The mean on street wait time for a taxi in the evening in central or inner London was 1 minute and 19 seconds (where no taxis were available for hire the record was excluded from the wait time calculation).

In outer London locations, the mean on street wait time for a taxi during the day was 17 minutes and 18 seconds. The mean on street wait time in the evening was 7 minutes and 2 seconds.

1 Method

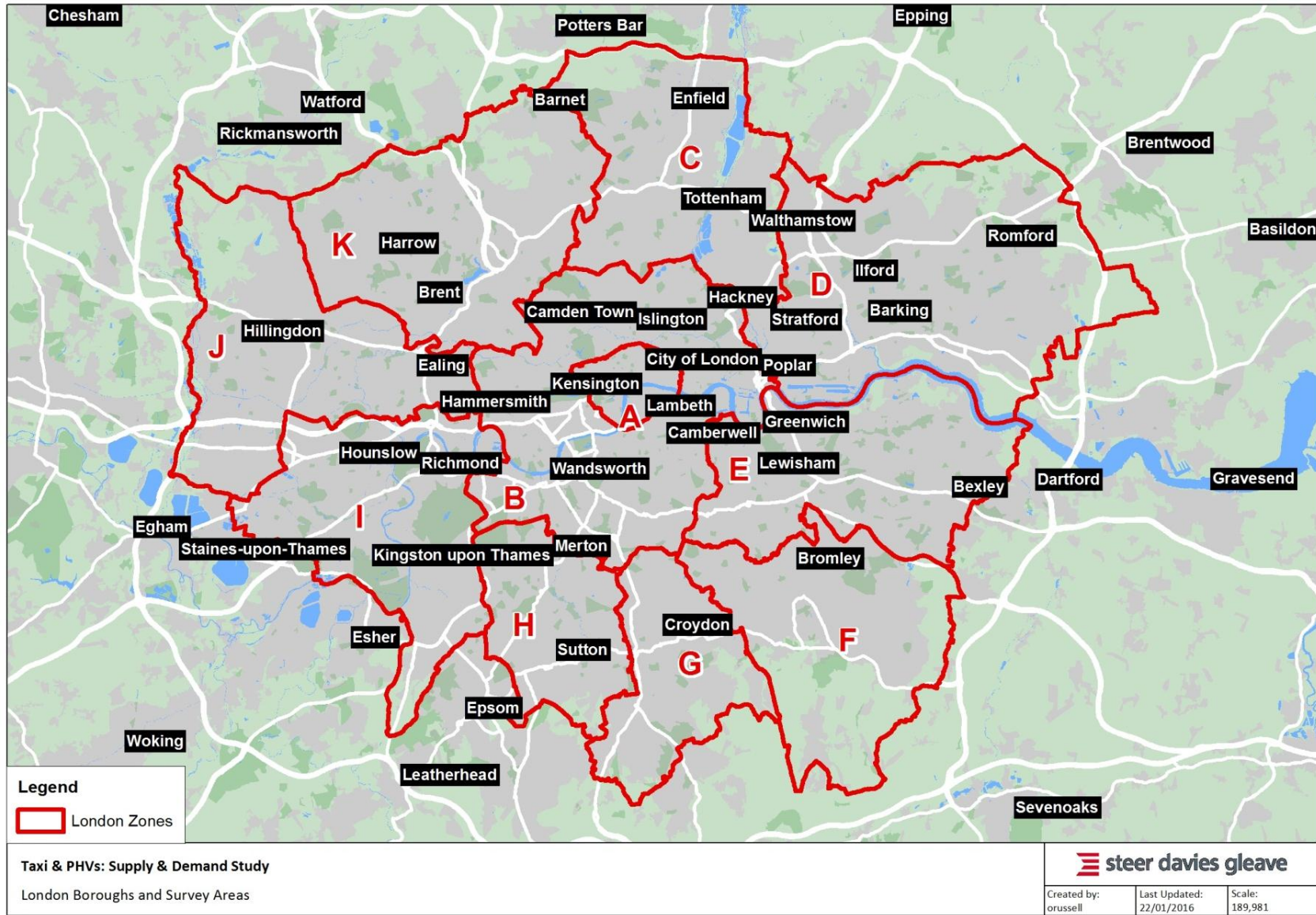
Introduction

- 1.1 In this section of the report details on the research design and scope of the 2015 surveys are provided.
- 1.2 Fieldwork took place between 24th September and 12th December 2015.

Scope

- 1.3 The survey included observations at 212 locations, broken down as follows:
 - 55 central and inner London ranks (sectors A and B).
 - 47 outer London ranks (sectors C, D, E, F, G, H, I, J, K).
 - 64 central and inner London on street locations (sectors A and B).
 - 46 outer London on street locations (sectors C, D, E, F, G, H, I, J, K).
- 1.1 Appendix A includes a listing of all survey locations, shifts undertaken and location classification.

Figure 1.1: Map showing the division of London into sectors



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Enumerators' tasks

1.4 This section describes the methodology adopted for the survey. Different methods were adopted depending on the size of the rank and how busy it is. Each of these is described in turn followed by a description of the method for on street surveying.

Large and / or busy ranks

1.5 Two or three enumerators were assigned to busy and / or large ranks. One enumerator (Enumerator 1) was assigned to make observations of vehicles and one or two enumerators (Enumerator 2) were assigned to make observations of people. A small number of very busy ranks required four enumerators, two each for passenger and vehicle observations.

1.6 The tasks for **Enumerator 1** were to record for each **taxi** arriving and departing the rank:

- The time the taxi pulled up at the rank.
- The time the taxi got to the front of the queue.
- The boarding time (the time when the passenger opens the door).
- The time of departure.
- The number of passengers boarding the taxi.
- The volume of luggage, if any (based on a simple classification).
- Record if any taxis leave the queue empty.

1.7 **Enumerator 2** selected a random sample of **passengers** to observe. At any one time up to three potential customers were identified. For each person selected they recorded:

- The time of joining the queue.
- The number of customers already waiting in the queue.
- The time of leaving the queue (if appropriate).
- Where possible the time to reach the head of the queue.
- The time the taxi pulls up at the head of the queue to pick up passengers.
- The boarding time (the time when the passenger opens the door).
- The time of departure in the taxi.

1.2 In order to afford a cross check with the data collected by Enumerator 1, wherever possible, Enumerator 2 also recorded:

- The number of passengers in the group departing in each taxi (or leaving the queue if appropriate).
- The volume of luggage.

Small and / or less busy ranks

1.8 The tasks completed at these ranks were the **Enumerator 2** duties (as detailed above). However, where possible the **Enumerator 1** tasks were also undertaken.

On street

1.3 On street the enumerators recorded the following:

- The time that each vacant taxi passes.
- The time that each occupied taxi passes.
- The time that an occupied taxi drops off passengers in the vicinity and becomes available for hire.
- The weather conditions at regular intervals.
- Any specific events which might cause significant peaks (or troughs) in demand.

1.9 Information was recorded for both directions of travel.

Shifts

1.10 A total of 356 three hour shifts were undertaken (171 shifts surveying taxi ranks and 185 shifts surveying on street).

1.11 There was distribution of survey locations across London based on the areas drivers could be licensed for.

Table 1.1: Distribution of shifts across London

London sector	Taxi rank shifts	On street shifts	Total
A, Central London	43	56	99
B, Inner London	34	42	76
C, Enfield, Haringey and Waltham Forest	18	15	33
D, Barking and Dagenham, Havering, Newham and Redbridge	17	13	30
E, Bexley, Greenwich and Lewisham	11	10	21
F, Bromley	5	5	10
G, Croydon	5	5	10
H, Merton and Sutton	8	8	16
I, Hounslow, Kingston upon Thames and Richmond upon Thames	8	12	20
J, Ealing and Hillingdon	11	8	19
K, Barnet, Brent and Harrow	11	11	22
Total	171	185	356

- 1.12 The distribution across time periods was also designed to capture the times of highest demand so that the most comprehensive picture of the demand and supply profiles could be achieved. This is demonstrated through the high percentage of survey time being concentrated in the PM peak and evening.
- 1.13 For taxi rank analysis Saturday and Sunday were used as separate time periods, but with on street survey analysis this was not the case.

Table 1.2: Distribution of survey shifts across time periods

Time period	Taxi rank shifts	On street shifts
AM Peak (0700-0959)	17%	16%
Interpeak (1000-1559)	15%	31%
PM Peak (1600-1859)	19%	29%
Evening (1900-2359)	24%	22%
Night (0000-0659)	1%	2%
Saturday	18%	N/A
Sunday	6%	N/A

Definitions

- 1.4 The terms AM peak, interpeak and PM peak are used throughout this report in the discussion of the results. The definitions of these terms, in the context of this study, are as follows:
- **AM peak:** 0700-1000
 - **Interpeak:** 1000-1600
 - **PM peak:** 1600-1900
- 1.5 Base sizes for the analysis corresponding to passenger counts represent either the total number of passenger groups observed (with each group having one or more passengers), or the total number of passengers observed.
- **Base: XX passenger groups** means the total number of passenger groups observed. A group may be one person or more.
 - **Base: XX passengers** means the total number of passengers observed, irrespective of passenger groupings.

2 Passengers at ranks

Introduction

2.1 This section presents the results from the observations of passengers arriving at taxi ranks. It includes analysis of passenger wait times, group size, queue lengths and the number of pieces of luggage passengers had with them when using a taxi rank.

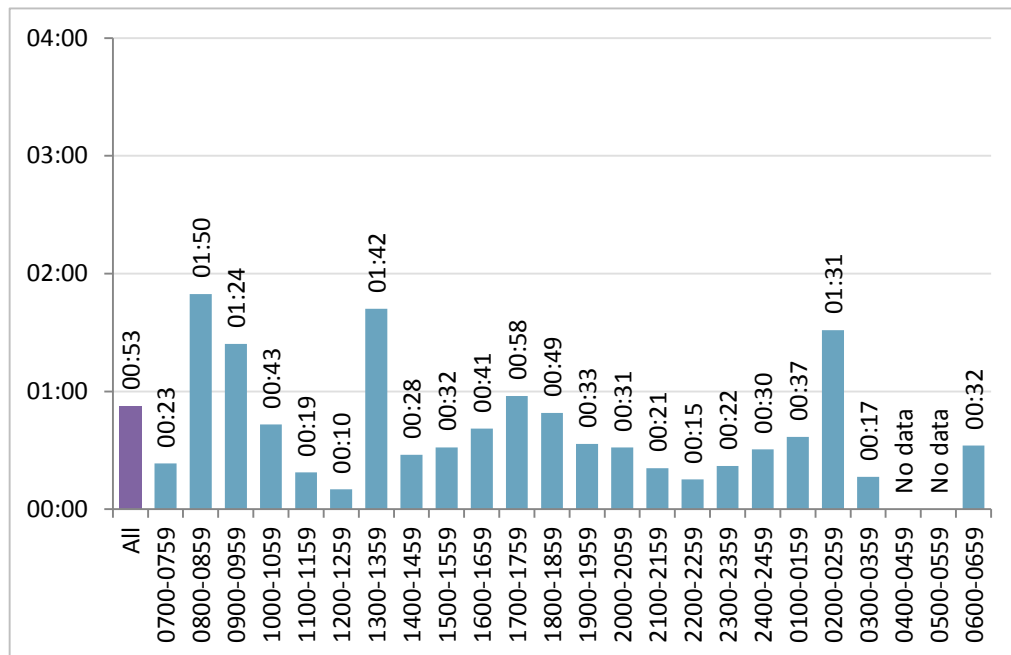
2.2 Appendix B provides the detail of the analysis method and calculations used.

Passenger wait time

2.3 The mean wait time for passengers at taxi ranks was no more than two minutes in any hour at which surveys took place, as shown in Figure 2.1. The times at which the mean wait time for passengers was highest were between 0800 and 0859 and between 1300 and 1359, when the mean wait times were 1 minute and 50 seconds and 1 minute and 42 seconds. The hour during which wait times were lowest was between 1200 and 1259, when the mean wait time was just 10 seconds.

2.4 The overall mean across all hours was 53 seconds.

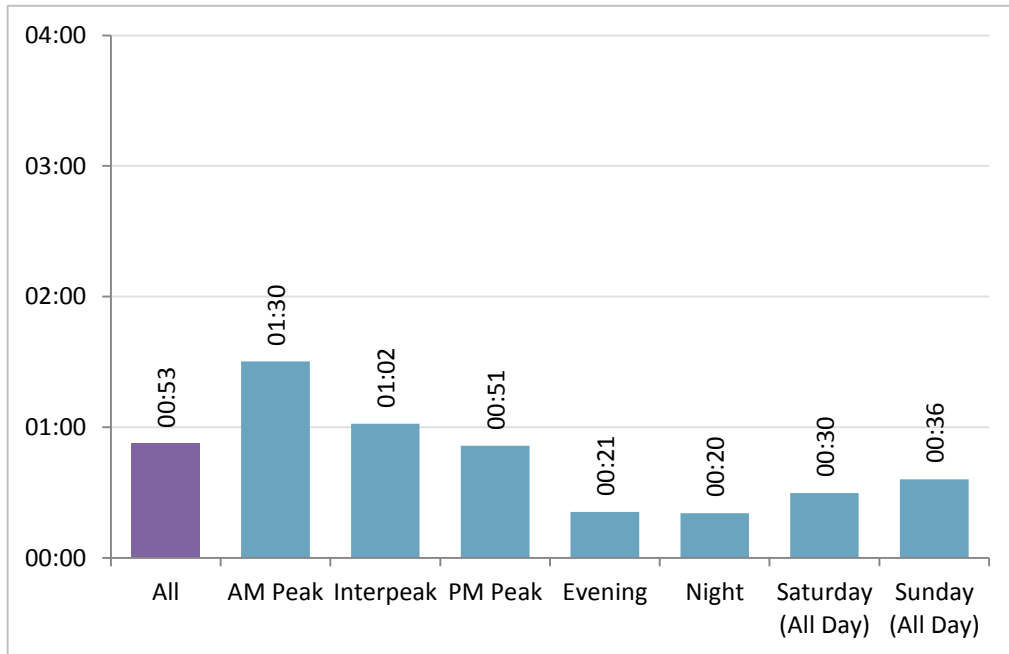
Figure 2.1: Mean passenger wait time (minutes:seconds) by hour



Base: 12,276 passenger groups

2.5 Passengers arriving at ranks in the AM peak had the longest wait, on average, for a taxi, with a mean passenger wait time of 1 minute and 30 seconds. Those arriving at ranks in the evening or at night had the shortest mean wait time, at 21 seconds and 20 seconds respectively. Overall, passengers arriving at ranks from Monday to Friday, during the AM peak (0700-1000), interpeak (1000-1600) and PM peak (1600-1900) periods, had longer waits than those arriving at ranks in the evenings or at weekends.

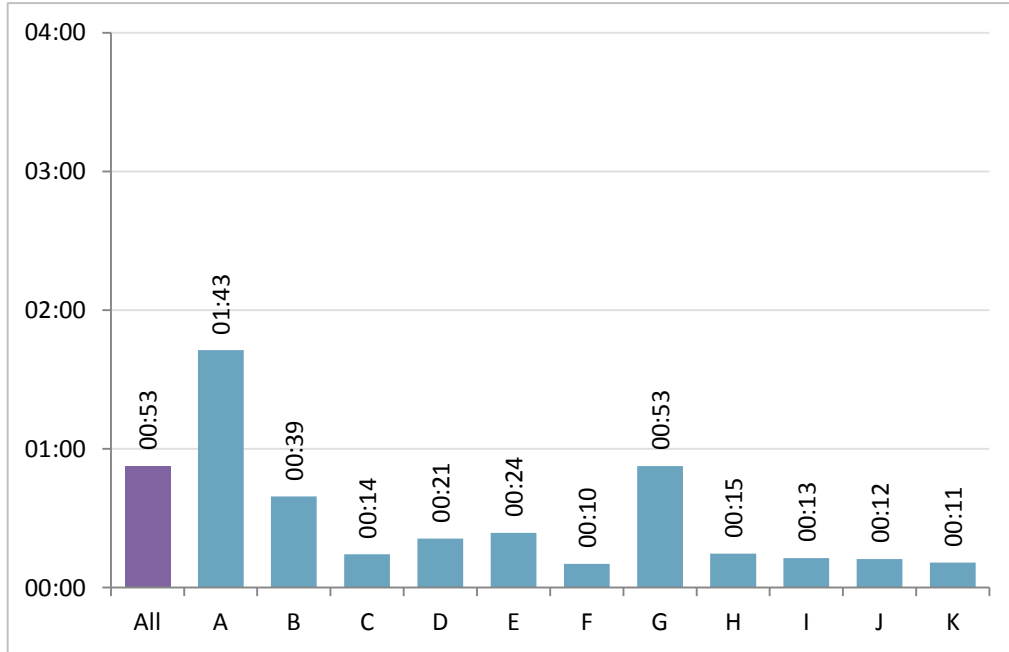
Figure 2.2: Mean passenger wait time (minutes:seconds) by time period / day



Base: 12,276 passenger groups

2.6 Passengers using ranks in Sector A, which covers central London, had the longest mean wait time for a taxi, at 1 minute and 43 seconds. Passengers arriving at ranks in outer London locations had, on average, fairly short mean wait times of less than 30 seconds. The exception to this was in Sector G, in Croydon, where the mean passenger wait time was 53 seconds.

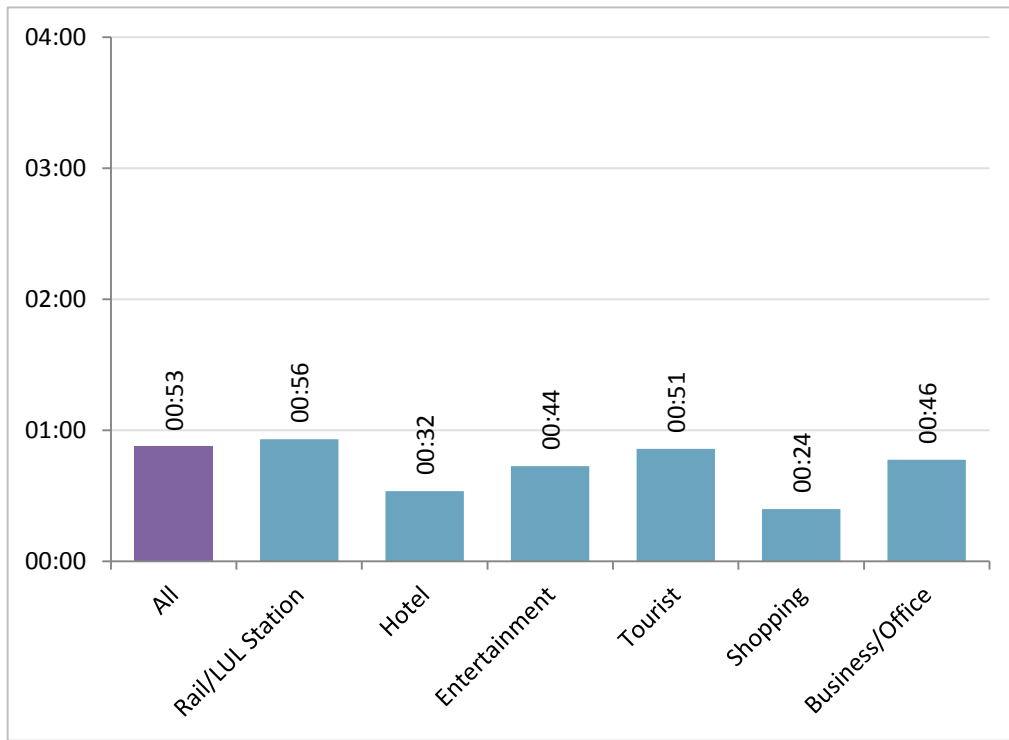
Figure 2.3: Mean passenger wait time (minutes:seconds) by location (sector)



Base: 12,276 passenger groups

2.7 Passengers using ranks at rail or London Underground stations had the highest mean wait time for a taxi (56 seconds), compared with passengers arriving at ranks of other types.

Figure 2.4: Mean passenger wait time (minutes:seconds) by type of rank

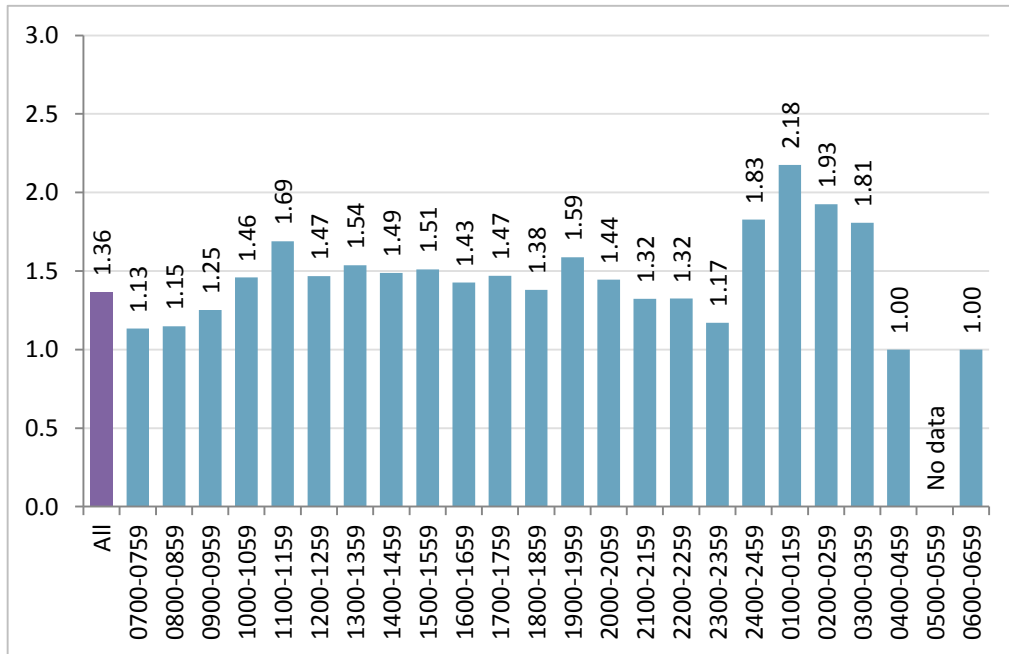


Base: 12,276 passenger groups

Passenger group size

2.8 The mean number of passengers boarding each taxi was highest between 0100 and 0159, when the mean number of passengers per taxi was 2.18. This was the only hour in which the mean number of passengers boarding each taxi exceeded two. Figure 2.5 shows that, in general, the average group size was highest in the late night and very early morning periods, when the mean number of passengers per taxi per hour exceeded the overall mean of 1.36 passengers.

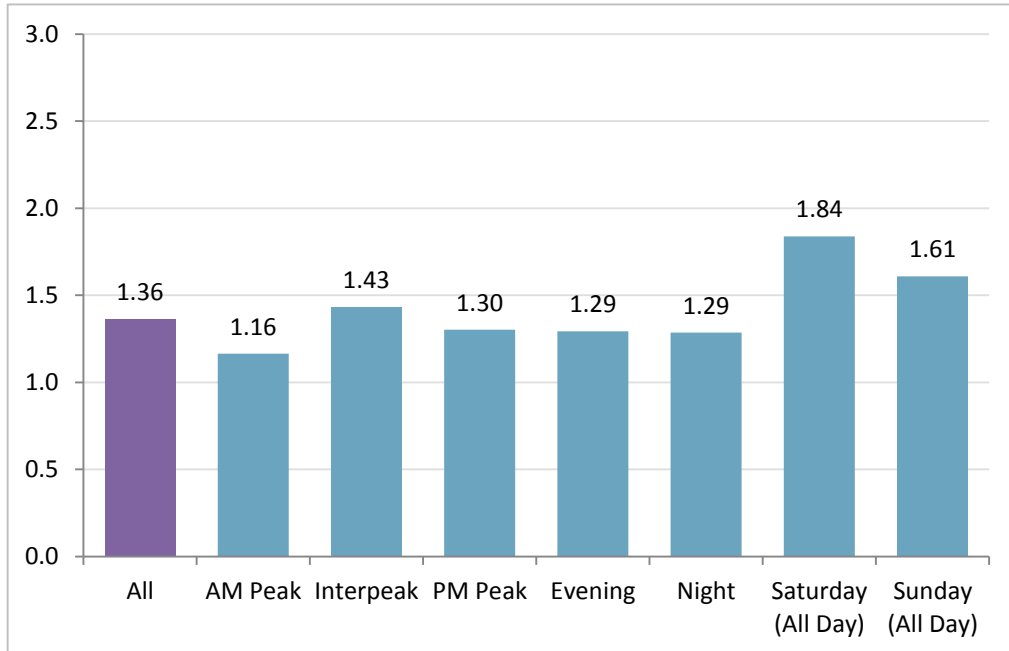
Figure 2.5: Mean number of passengers boarding each taxi by hour



Base: 12,489 passengers

2.9 There were fewest passengers per taxi in the AM peak (mean of 1.16 passengers). During the working day, group size was likely to be greatest during the interpeak period, when the mean number of passengers boarding per taxi was 1.43. Average group size was highest at weekends, when the mean number of passengers boarding per taxi were 1.84 (Saturday) and 1.61 (Sunday).

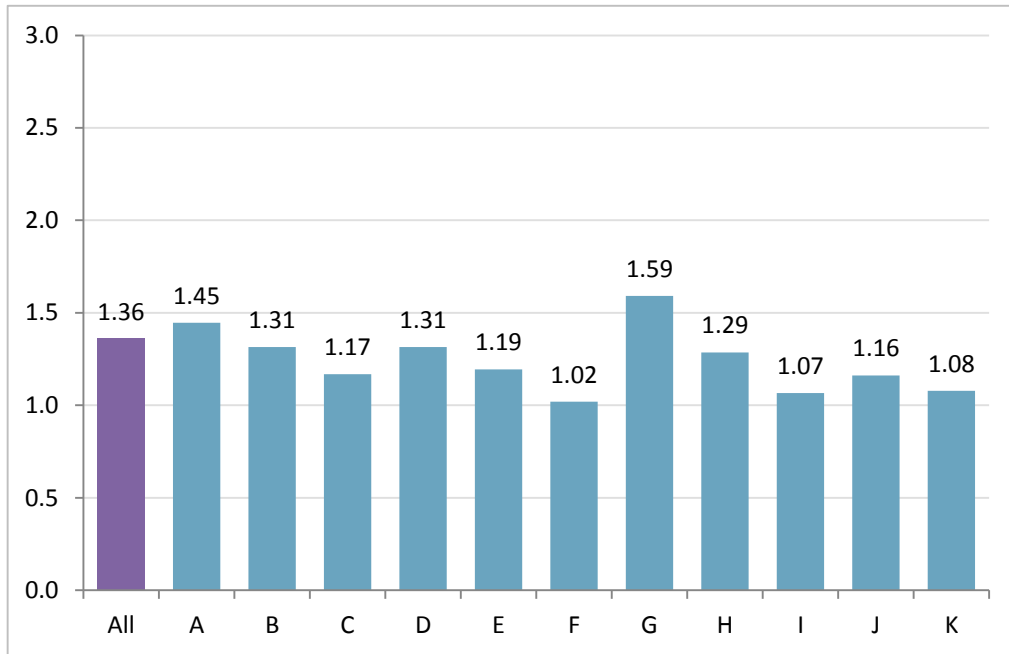
Figure 2.6: Mean number of passengers boarding by time period / day



Base: 12,489 passengers

2.10 Passengers boarding a taxi at a rank in Sector A, in central London, were more likely to be part of a group rather than alone as compared with other locations, with a mean of 1.45 passengers boarding each taxi, compared with 1.31 in Sector B, inner London, and 1.02 in Sector F, Bromley. The exception to this was in Sector G, Croydon, where the mean number of passengers boarding each taxi was higher than the overall mean, with an average group size of 1.59 compared with 1.36 overall.

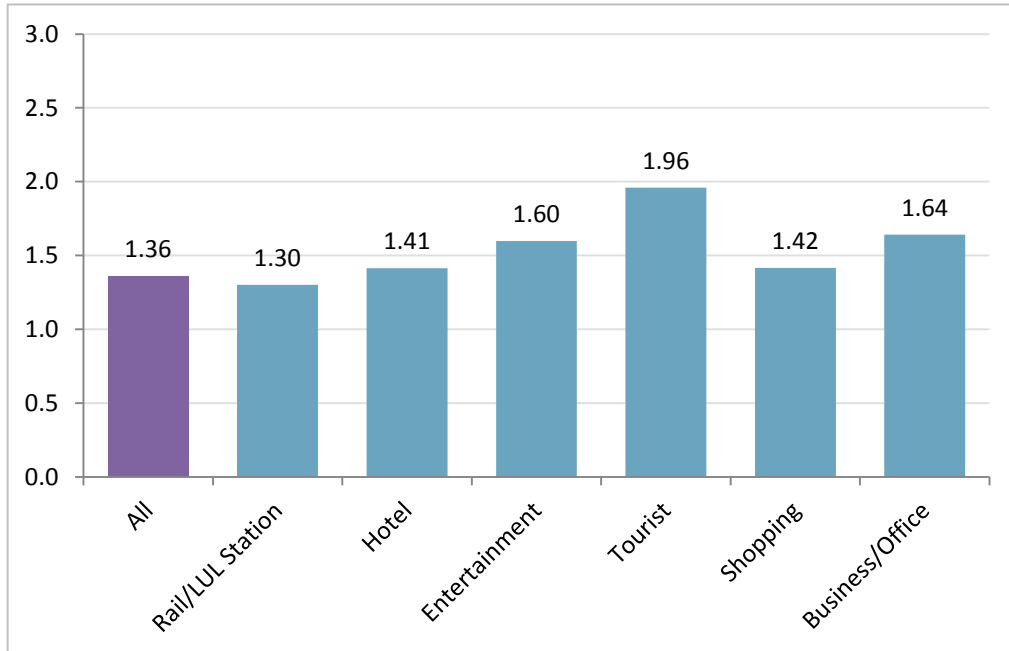
Figure 2.7: Mean number of passengers boarding by location



Base: 12,489 passengers

2.11 Passengers using taxi ranks located at tourist hotspots / attractions were more likely to be travelling as part of a group rather than travelling alone, with a mean number of passengers per taxi of 1.96, compared with the overall mean of 1.36. Passengers boarding taxis at rail or London Underground station ranks were less likely to be travelling as part of a group, with a mean number of passengers boarding per taxi of 1.30.

Figure 2.8: Mean number of passengers boarding by rank type

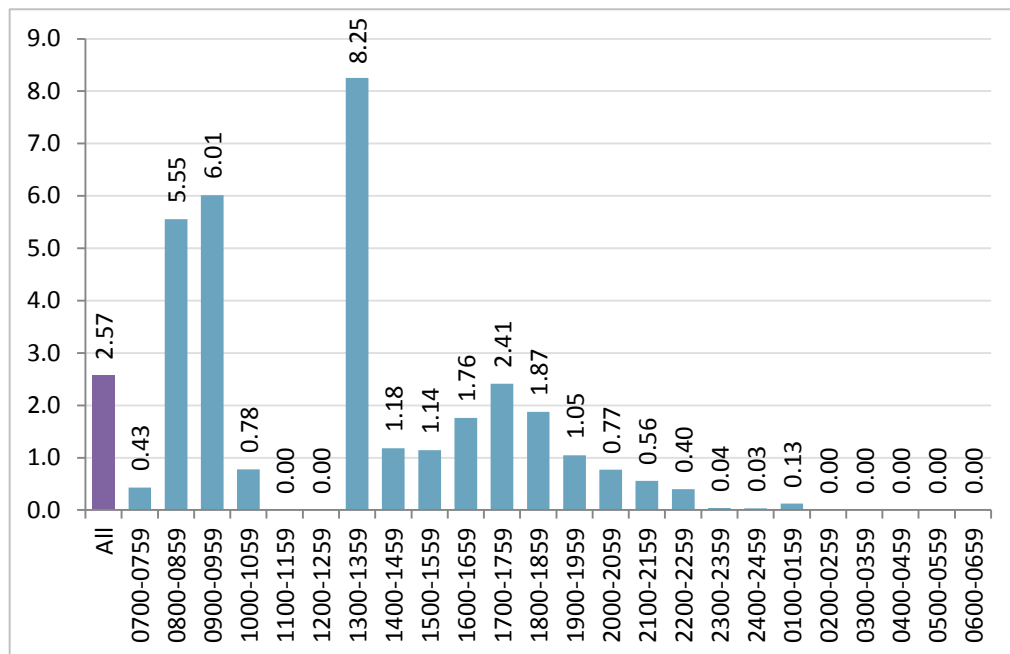


Base: 12,489 passengers

Number of passengers in queue

- 2.12 The mean number of passengers in a queue at any rank, at any time was 2.57. Queue lengths were generally longer in the morning. Between 0800 and 0859 there was an average of 5.55 passengers in the queue and an average of 6.01 passengers in the queue between 0900 and 0959 (Figure 2.9).
- 2.13 The average queue length peaked between 1300 and 1359, where the mean queue length was 8.25 passengers. During this period there were surveys conducted at 14 locations. At Waterloo station, one of the 14 locations, there was a particularly long queue at the rank. Excluding data from Waterloo station, the average number of passengers in queues between 1300 and 1359 was much lower, at 0.02.
- 2.14 Queues were typically short, or non-existent at ranks during the night, in the very early hours of the morning and also between 11am and 1pm. Beyond 2300 the mean number of passengers in the queue was no greater than 0.13, and beyond 0200 the mean was zero.

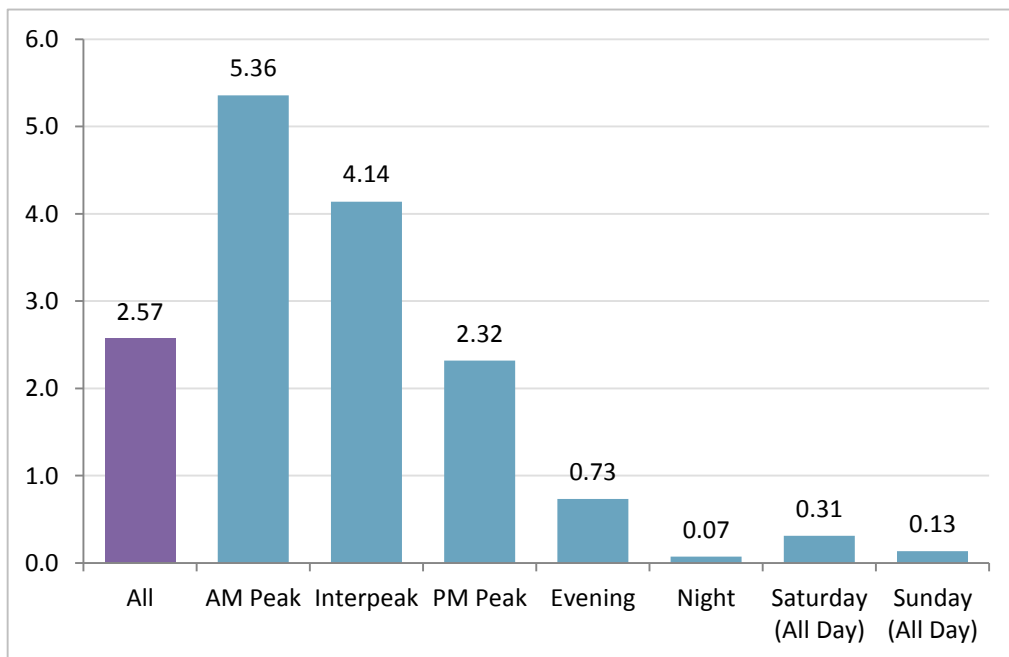
Figure 2.9: Mean number of passengers in queue by time period



Base: 12,489 passengers

- 2.15 The longest queues of passengers at ranks were during the AM peak period (Figure 2.10), when the mean number of passengers in the queue was 5.36. The mean queue length dropped throughout the working day, with interpeak being quieter than AM peak, and PM peak being quieter than interpeak, and so on. The mean number of passengers in the queue at ranks was lowest at night, when there was an average of less than one passenger in the queue.
- 2.16 Queues at the weekend were considerably shorter than during the week, with an average of just 0.31 passengers in the queue on a Saturday, compared with the overall mean of 2.57 across all time periods and days.

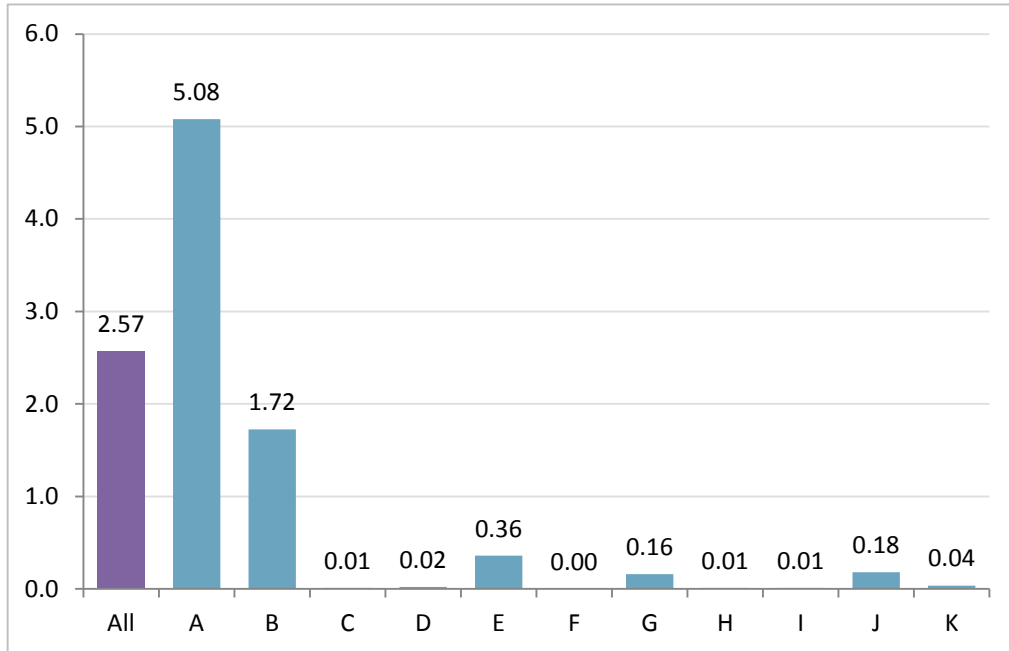
Figure 2.10: Mean number of passengers in queue by time period / day



Base: 12,489 passengers

2.17 Ranks in sector A, central London, had the longest queues, with an average of 5.08 passengers in the queue. Passengers in sector B, inner London, were likely to have at least one other passenger ahead of them in the queue, with a mean number of passengers in the queue of 1.72. The chance of encountering a queue at a rank in an outer London sector was lower. The mean number of passengers in the queue did not exceed one in any outer London sector.

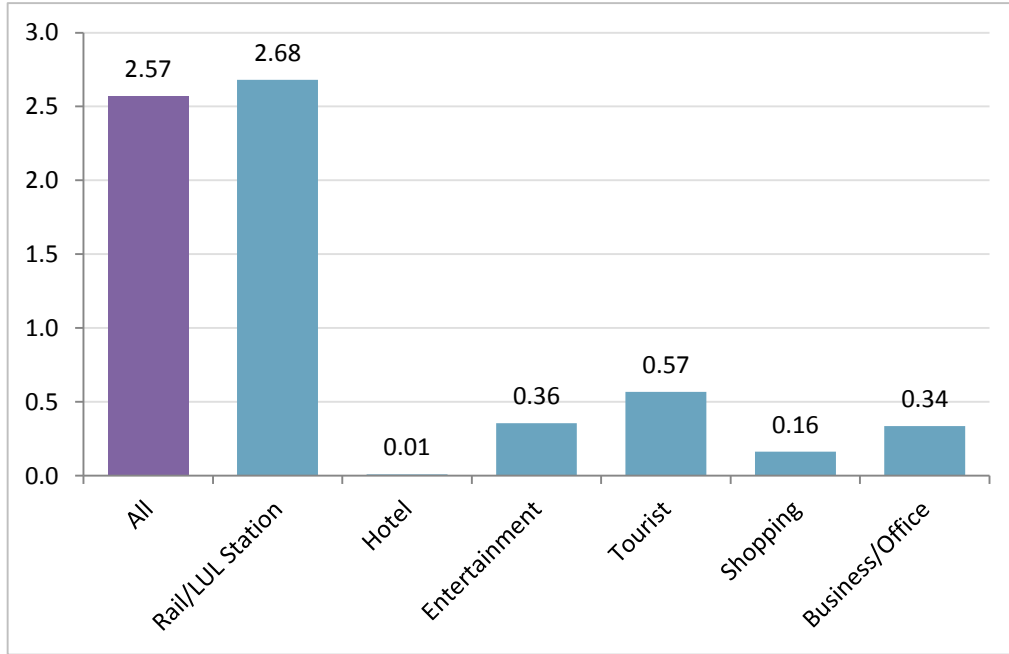
Figure 2.11: Mean number of passengers in queue by location



Base: 12,489 passengers

2.18 Passengers were most likely to have to queue for a taxi at ranks outside rail or London Underground stations, where the mean number of passengers in the queue was 2.68, against the overall mean of 2.57. At all other rank types the mean number of passengers in the queue was less than one.

Figure 2.12: Mean number of passengers in queue by rank type

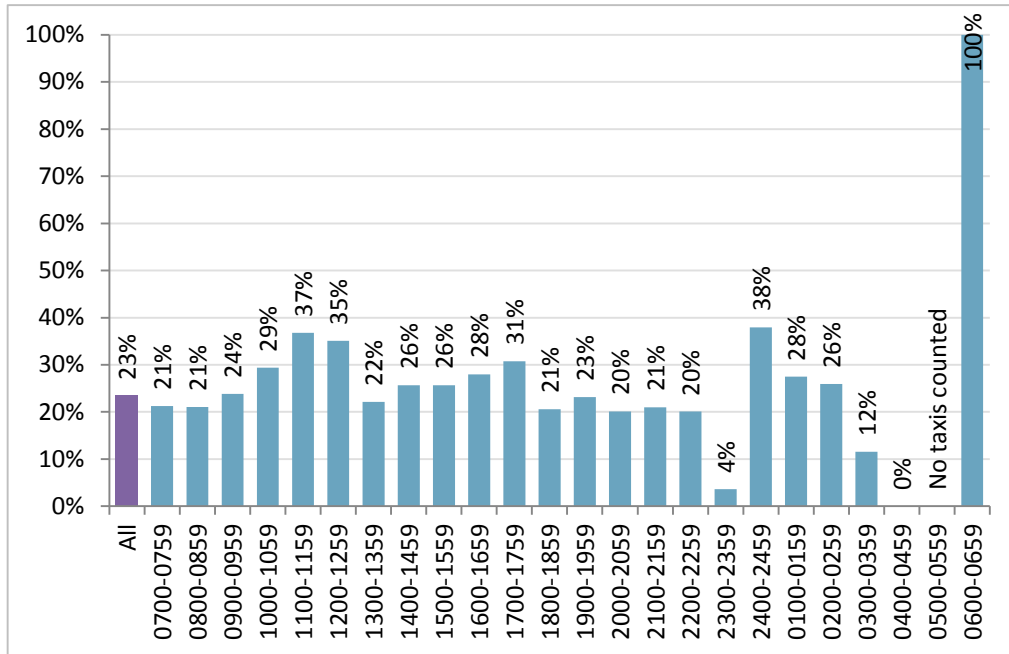


Base: 12,489 passengers

Luggage

2.19 Overall, passengers carried one or more pieces of luggage on 23% of trips. Passengers arriving at a taxi rank in the morning hours were less likely to have luggage than those arriving in the later morning and early afternoon. Data from night time shifts show a more varied picture with regards to luggage.

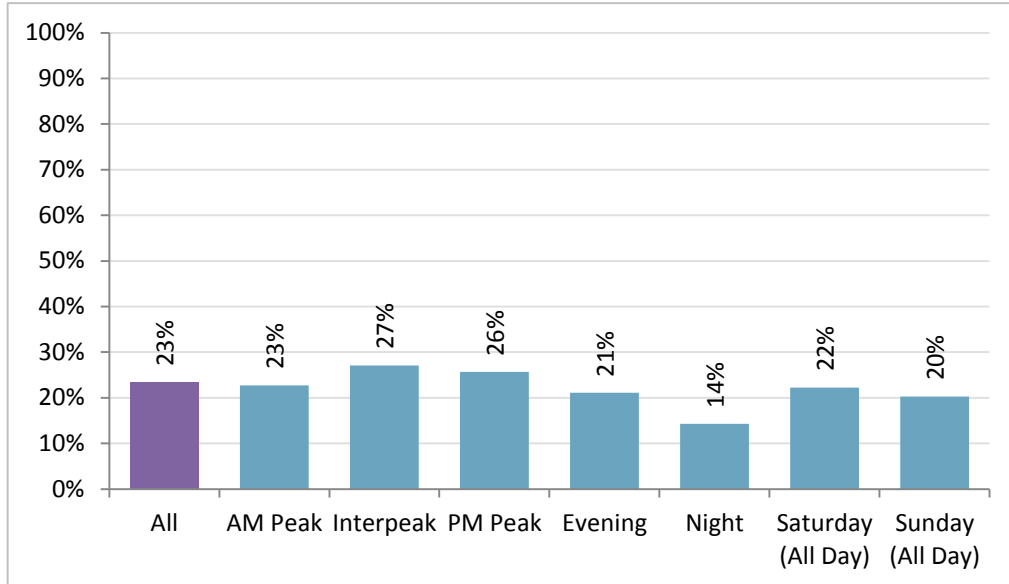
Figure 2.13: Proportion of trips where one or more pieces of luggage carried, by hour



Base: 12,489 passengers

2.20 Passengers arriving at ranks in the interpeak period were slightly more likely to have luggage with them, with 27% of trips made in the interpeak involving passengers carrying one or more pieces of luggage. Passengers arriving at night were least likely to have luggage with them – only 14% of trips from ranks involved passengers with one or more pieces of luggage.

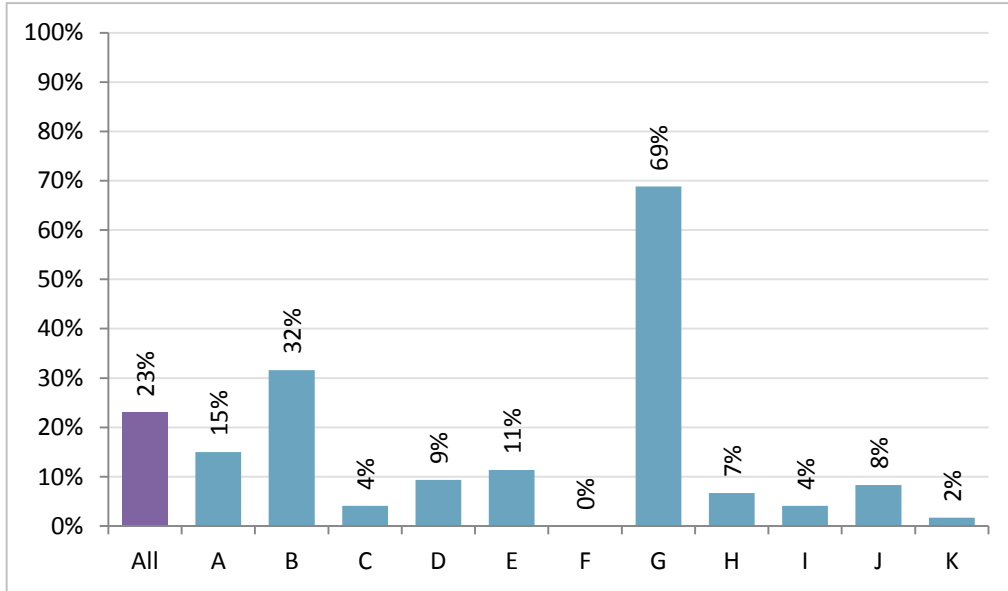
Figure 2.14: Proportion of trips where one or more pieces of luggage carried, by time period / day



Base: 12,489 passengers

2.21 Overall, trips made from ranks in outer London locations (sectors C-K) were less likely to involve passengers with luggage than those made from ranks in central or inner London locations. The exception was in sector G, Croydon, where more than two thirds of trips (69%) made from the ranks involved passengers with one or more pieces of luggage.

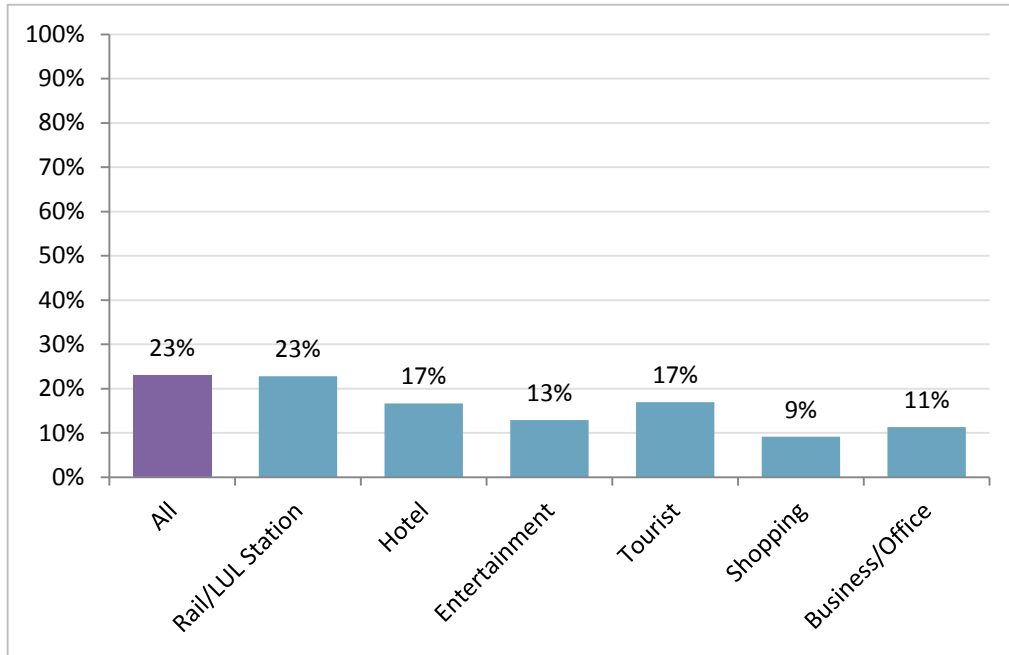
Figure 2.15: Proportion of trips where one or more pieces of luggage carried, by sector



Base: 12,489 passengers

2.22 Passengers using ranks at rail or London Underground stations, or at hotels, were most likely to have luggage with them. Just under a quarter of all trips made from rail or Underground station ranks (23%) were trips made including passengers with one or more pieces of luggage.

Figure 2.16: Proportion of trips where one or more pieces of luggage carried, by rank type



Base: 12,489 passengers

3 Taxis at ranks

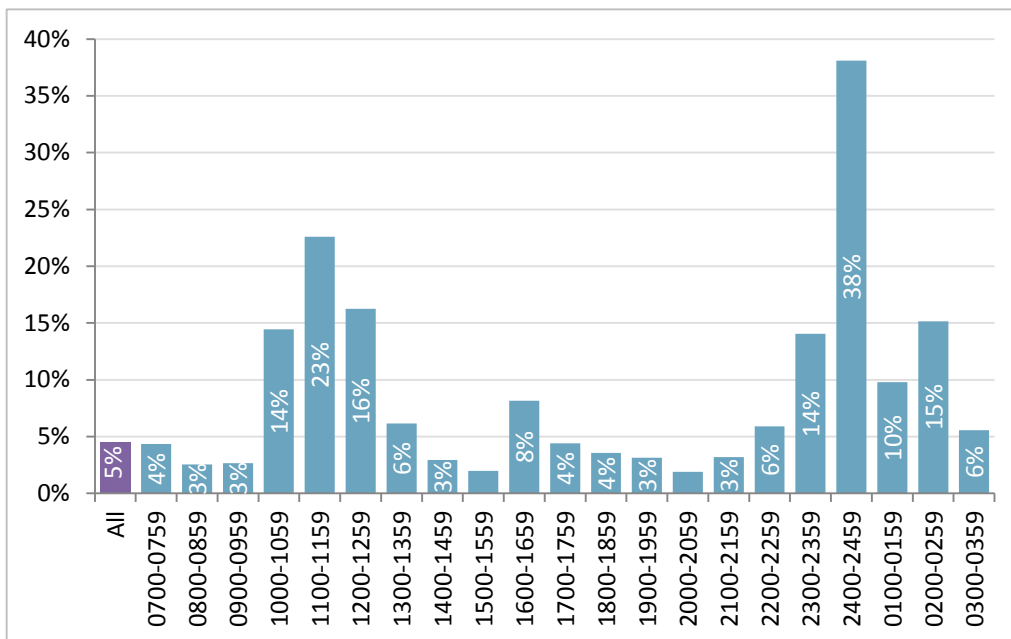
Introduction

- 3.1 This section presents the results of the observations of taxis at ranks; specifically, the proportion of taxis leaving ranks empty, without a hire, and the time spent by taxis at ranks (taxi wait time).
- 3.2 Appendix B provides the detail of the analysis method and calculations used.

Taxis leaving the rank without a hire

- 3.3 Taxis were most likely to leave the rank with their light on (without a hire) between 1100 and 1159, when 23% of all taxis leaving the rank left with their light on, and between 2400 and 2459, when 38% of all taxis leaving the rank left with their light on. Overall, only 5% of taxis left the rank with their light on.

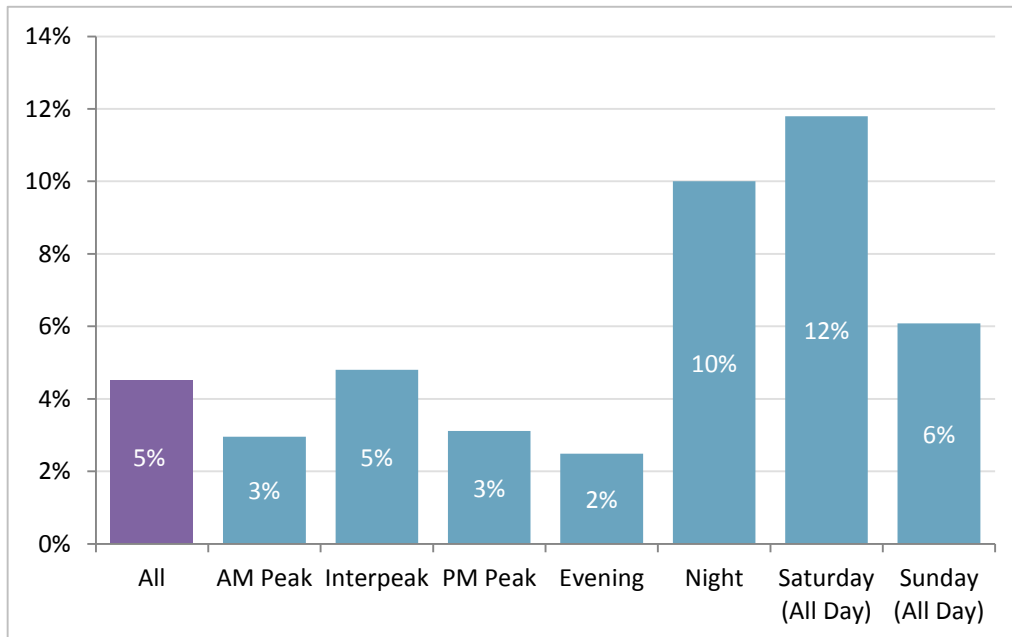
Figure 3.1: Proportion of taxis leaving queue with light on by hour



Base: 12,635 counted taxi vehicles

3.4 Just over one in ten taxis (12%) leave the rank with their light on during Saturdays. Taxis are least likely to leave the rank with their light on during the working week, when the proportion of taxis leaving with their light on is no higher than 5% (interpeak period).

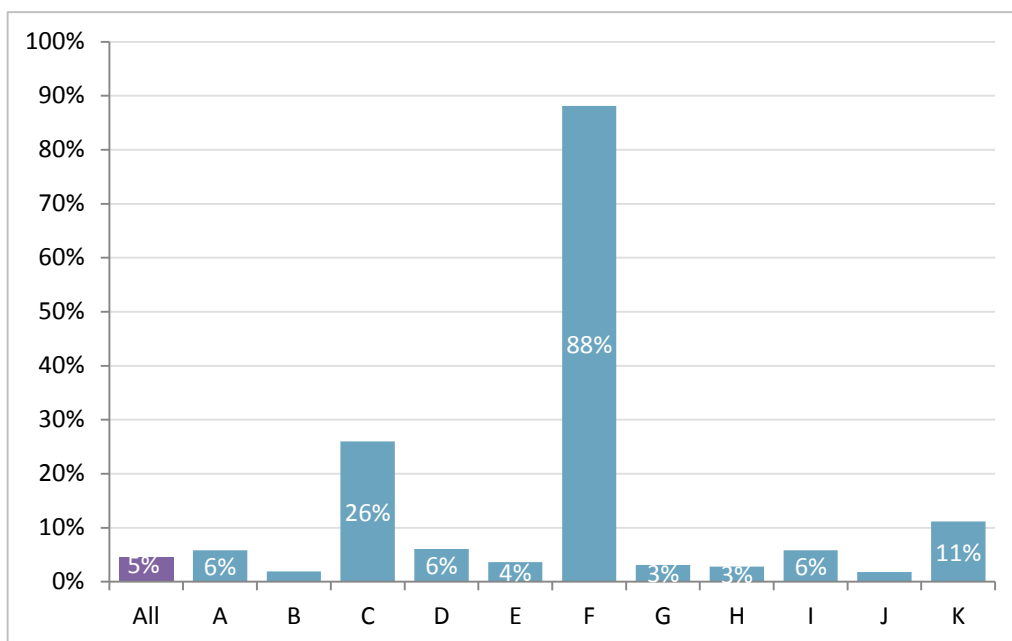
Figure 3.2: Proportion of taxis leaving queue with light on by time period / day



Base: 12,635 counted taxi vehicles

3.5 Overall, taxis were slightly more likely to leave the rank with their light on in outer London sectors, with the proportion of taxis leaving with their light on as high as 88% in sector F, Bromley (note that this is based on a low sample size).

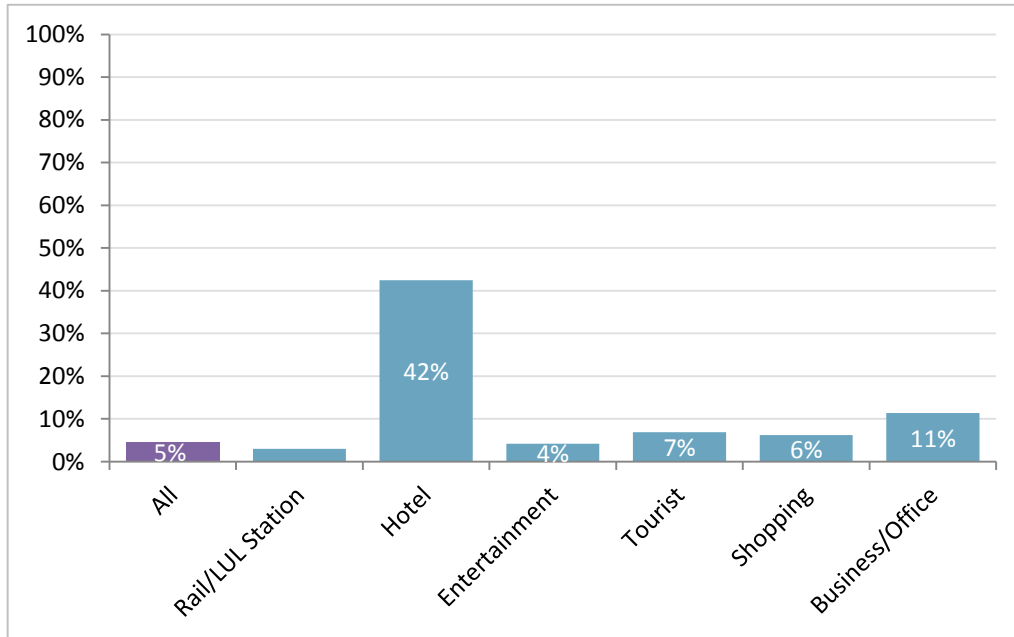
Figure 3.3: Proportion of taxis leaving queue with light on by location



Base: 12,635 counted taxi vehicles. Note that only 42 taxis were counted in Sector E and 32 in sector F.

3.6 Over two fifths (42%) of taxis at ranks outside hotels left the rank with their light on. Taxis at ranks outside rail or London Underground stations were less likely to leave the rank with their light on (available for hire).

Figure 3.4: Proportion of taxis leaving queue with light on by rank type

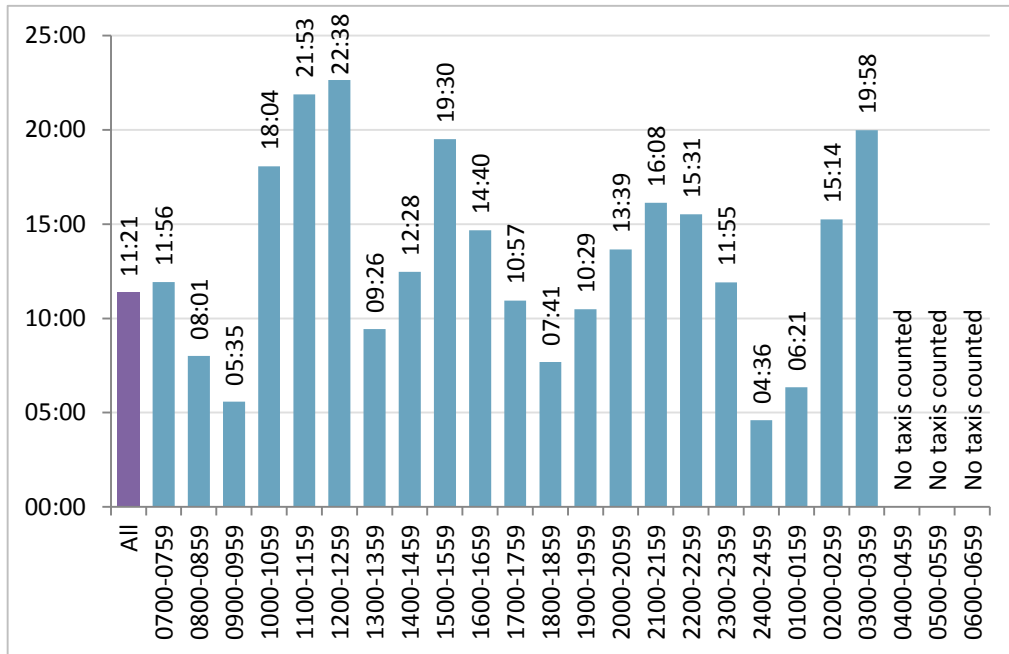


Base: 12,635 counted taxi vehicles.

Taxi wait time

- 3.7 The mean wait time of any taxi at a rank was 11 minutes and 21 seconds; this means that, on average, a taxi waited at a rank for 11 minutes and 21 seconds before leaving, either with a passenger or without (light on or off).
- 3.8 The mean taxi wait time reached a maximum of 22 minutes and 38 seconds between 1200 and 1259, and the minimum mean was 4 minutes and 36 seconds, between 2400 and 2459. Overall there is considerable variance in the mean wait time by hour, with several peaks and troughs throughout the day.

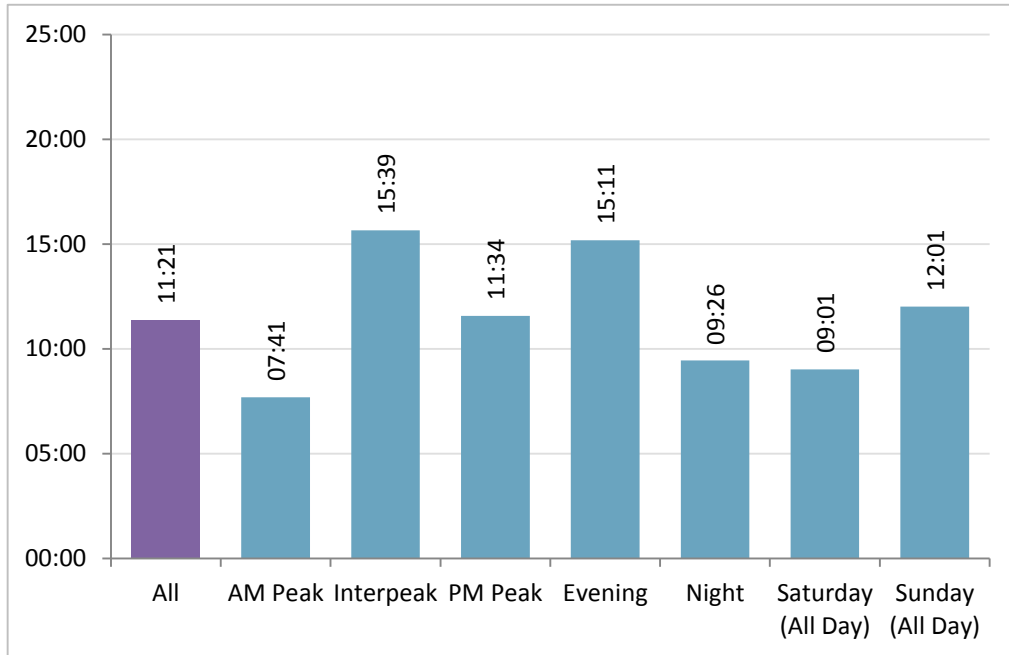
Figure 3.5: Mean wait time (minutes:seconds) of taxis in queue by hour



Base: 12,617 counted taxi vehicles

3.9 The mean wait time of taxis at ranks was greatest in the interpeak period at 15 minutes and 39 seconds, and similarly lengthy during the evening, at 15 minutes and 11 seconds. Mean wait times were less than 10 minutes during the AM peak, at night, and on Saturdays.

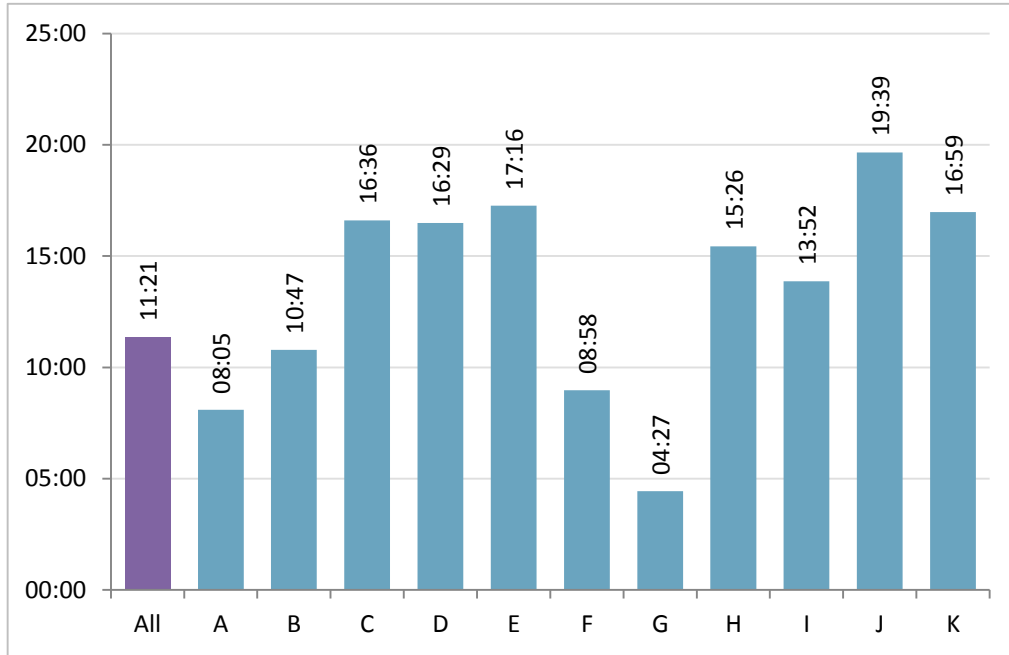
Figure 3.6: Mean wait time (minutes:seconds) of taxis in queue by time period / day



Base: 12,617 counted taxi vehicles

3.10 Taxis typically waited at central and inner London ranks for less time than those waiting at outer London ranks; in sector A, central London, the mean wait time was 8 minutes and 5 seconds, and wait times in sectors C-K were typically above 15 minutes (with a maximum mean of 19 minutes and 39 seconds in sector J, Ealing and Hillingdon. Sectors F (Bromley) and G (Croydon) had lower mean wait times for taxis, at 8 minutes and 58 seconds and 4 minutes and 27 seconds respectively.

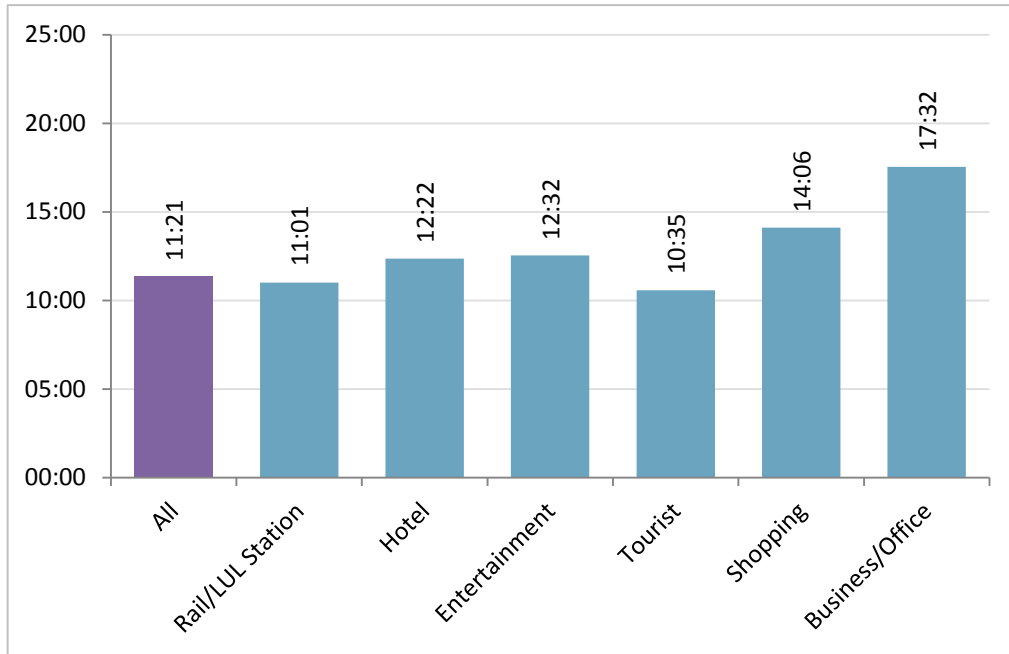
Figure 3.7: Mean wait time (minutes:seconds) of taxis in queue by location



Base: 12,617 counted taxi vehicles

3.11 Taxis waiting at ranks in the business / office category typically waited for longer before leaving the rank with or without passengers; the mean wait time for taxis at business / office ranks was 17 minutes and 32 seconds, compared with the overall mean of 11 minutes and 21 seconds, and a mean of 11 minutes and 1 second at rail or London Underground station ranks.

Figure 3.8: Mean wait time (minutes:seconds) of taxis in queue by rank type



Base: 12,617 counted taxi vehicles.

4 At rank supply and demand comparison

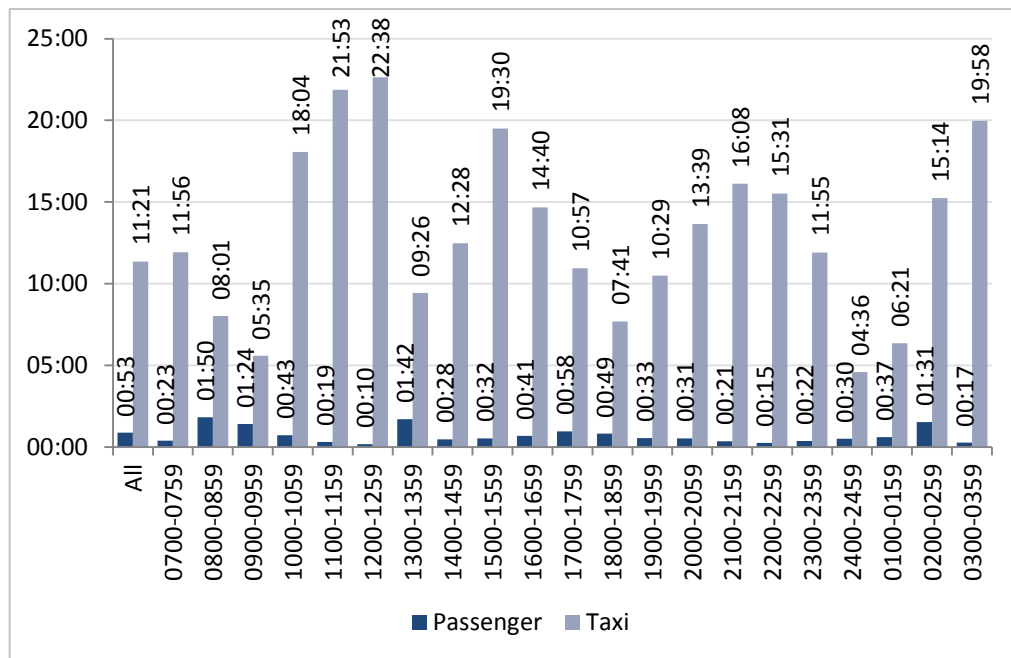
Introduction

- 4.1 This section combines some of the results presented in the previous two sections to show how the wait times of passengers at taxi ranks and the wait times of taxis at ranks compare.
- 4.2 It should be noted that wait times at ranks are just one indicator of total supply and demand, and differences in wait times should not be solely interpreted as a supply or demand deficit.
- 4.3 Appendix B provides the detail of the analysis method and calculations used.

Comparison of passenger and taxi wait times

- 4.4 At all times of the day, the mean wait time for passengers at a taxi rank (the time between arriving at the rank and getting into a taxi) is considerably shorter than the mean wait time of taxis at the rank (the time spent at the rank before leaving, either with a passenger or empty). Overall, the mean wait time for passengers is less than one minute, at 53 seconds, and the mean wait time for taxis is 11 minutes and 21 seconds. Taxis therefore wait, on average, more than ten minutes longer than passengers at ranks.
- 4.5 The difference in wait times is lowest between the hours of 0900-0959 and 2400-2459, when the difference in mean wait times is less than five minutes.

Figure 4.1: Mean wait time (minutes:seconds) of passengers and taxis in queue by hour

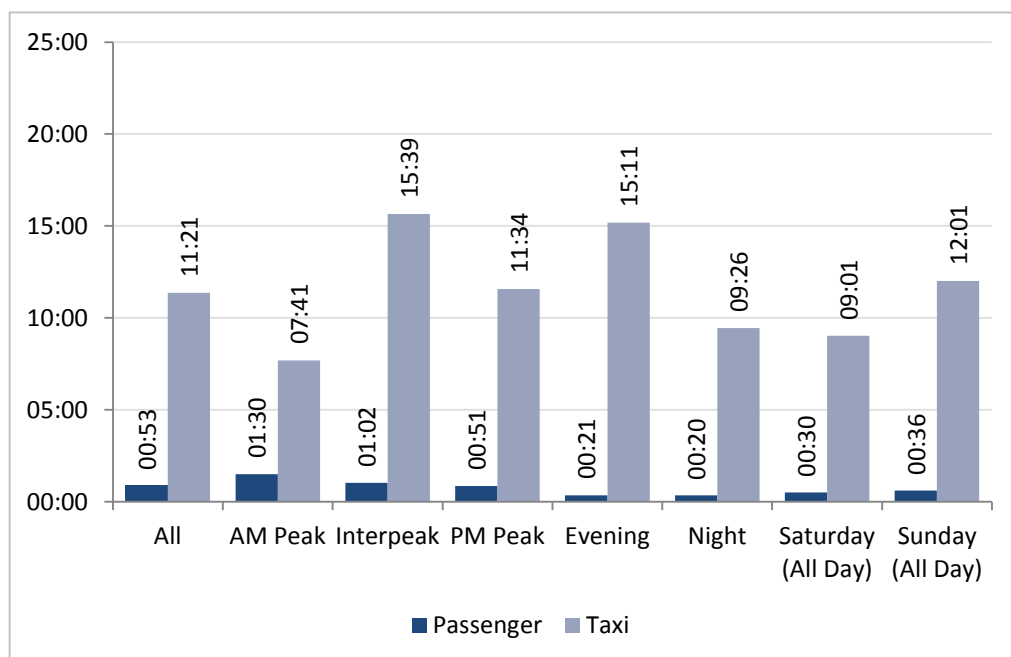


Base: 12,489 passengers and 12,617 counted taxi vehicles

4.6

The mean wait times of passengers and taxis are most closely matched (there is the smallest difference) in the AM peak, when the mean passenger wait time is 1 minute and 30 seconds, and the mean taxi wait time is 7 minutes and 41 seconds – meaning that taxis wait for just over 6 minutes longer than passengers. The greatest difference between mean wait times is in the interpeak period (difference of 14 minutes and 37 seconds) and in the evening (difference of 14 minutes and 50 seconds).

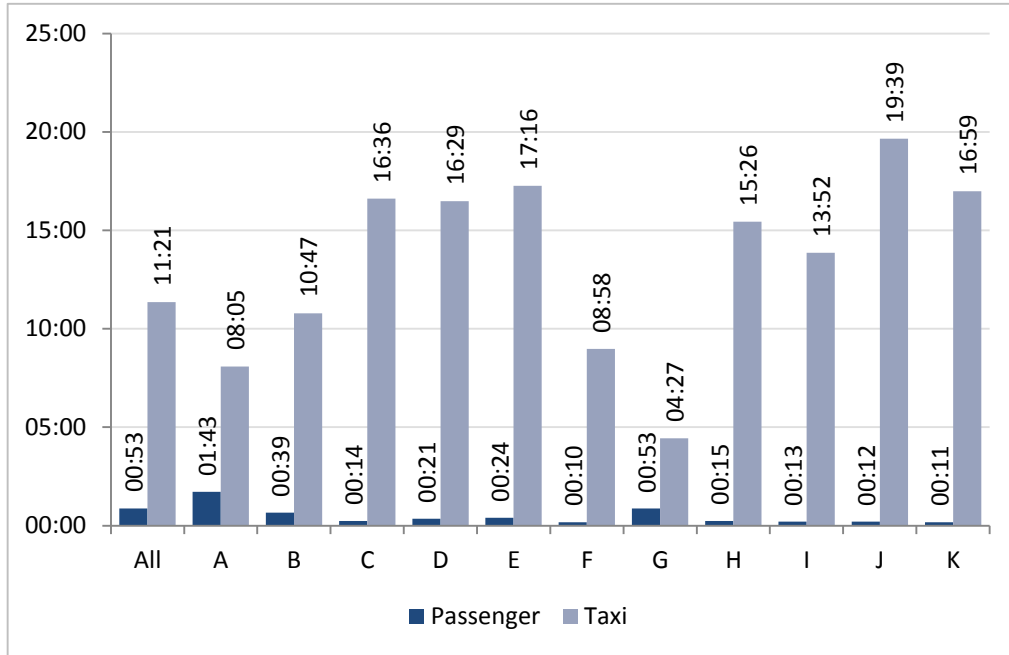
Figure 4.2: Mean wait time (minutes:seconds) of passengers and taxis in queues by time period / day



Base: 12,489 passengers and 12,617 counted taxi vehicles

4.7 Mean wait times for passengers and taxis are more closely matched in sector A, central London, where the difference between the mean wait for passengers and the mean wait for taxis is 6 minutes and 22 seconds. There was a considerable difference in the mean wait times of passengers and of taxis in the outer London sectors, in general. In sectors C, D, E, H, J and K the difference in wait times at ranks between passengers and taxis was in excess of 15 minutes.

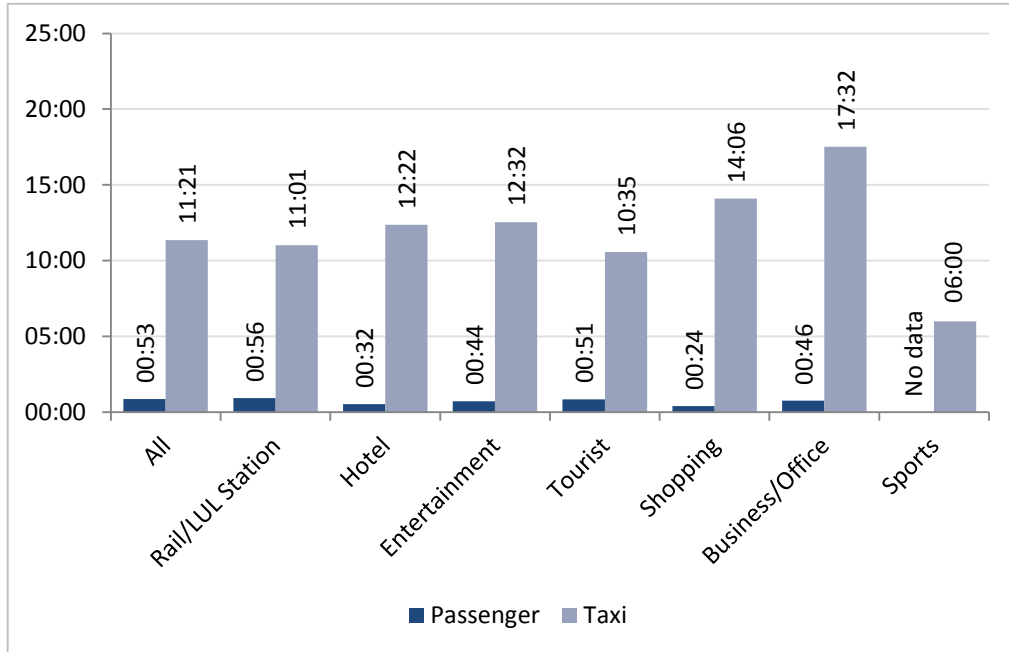
Figure 4.3: Mean wait time (minutes:seconds) of passengers and taxis in queue by location



Base: 12,489 passengers and 12,617 counted taxi vehicles

4.8 Across the different types of ranks there is not substantial variation in the difference between the mean wait time of passengers and the mean wait time of taxis; for rail or London Underground station, hotel, entertainment and tourist ranks, the difference is between 9 and 12 minutes. The shopping and business / office ranks have the greatest difference in mean wait times, at 13 minutes and 42 seconds and 15 minutes and 16 minutes and 46 seconds respectively.

Figure 4.4: Mean wait time (minutes:seconds) of passengers and taxis in queue by rank type



Base: 12,489 passengers and 12,617 counted taxi vehicles

5 On street wait time

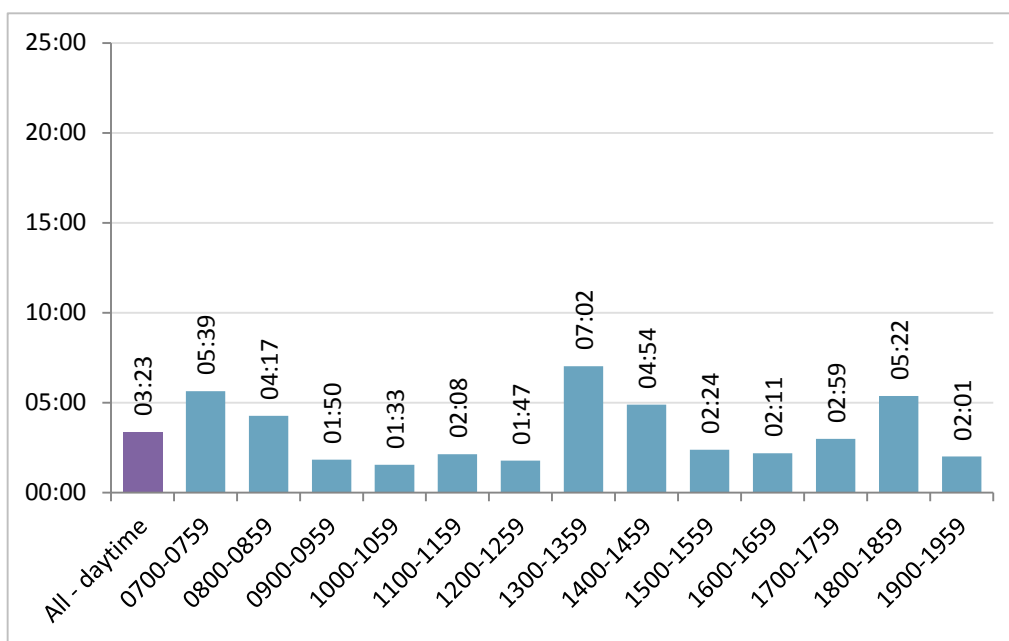
Introduction

- 5.1 This section of the report presents the results for the on street wait time surveys.
- 5.2 The results are presented in aggregate, for all locations in which surveys took place, as well as by sector. The results represent the time that it would take to hail a taxi from an on street location, rather than getting a taxi at a rank.
- 5.3 The number of taxis counted forms the base for the on street wait time calculation and analysis. There were a total of 47,237 taxis counted across the sectors.
- 5.4 Appendix B provides the detail of the analysis method and calculations used.

On street wait times by time band

- 5.5 The mean calculation excludes any records in which there were no taxis counted during the hour, which has the effect of a reduced mean wait time. Comparable time periods and sectors have therefore been grouped, and the overall mean in each chart is not presented together with other mean values to reduce the risk of encouraging comparisons where comparisons are not appropriate.
- 5.6 The mean on street wait time in sectors A and B (central and inner London) during the day (0700-1959) was 3 minutes and 23 seconds. This means that, on average, it would take 3 minutes and 23 seconds before a taxi that was available (with its light on) passed an on street location. The range of on street wait times for sectors A and B by daytime hour is shown in Figure 5.1.
- 5.7 The longest on street wait time in central and inner London was between 1300 and 1359, when the mean wait time was 7 minutes and 2 seconds. There were three hours during which the on street wait time exceeded five minutes: between 0700 and 0759, between 1300 and 1359, and again between 1800 and 1859. The overall mean on street wait time was 3 minutes and 23 seconds.

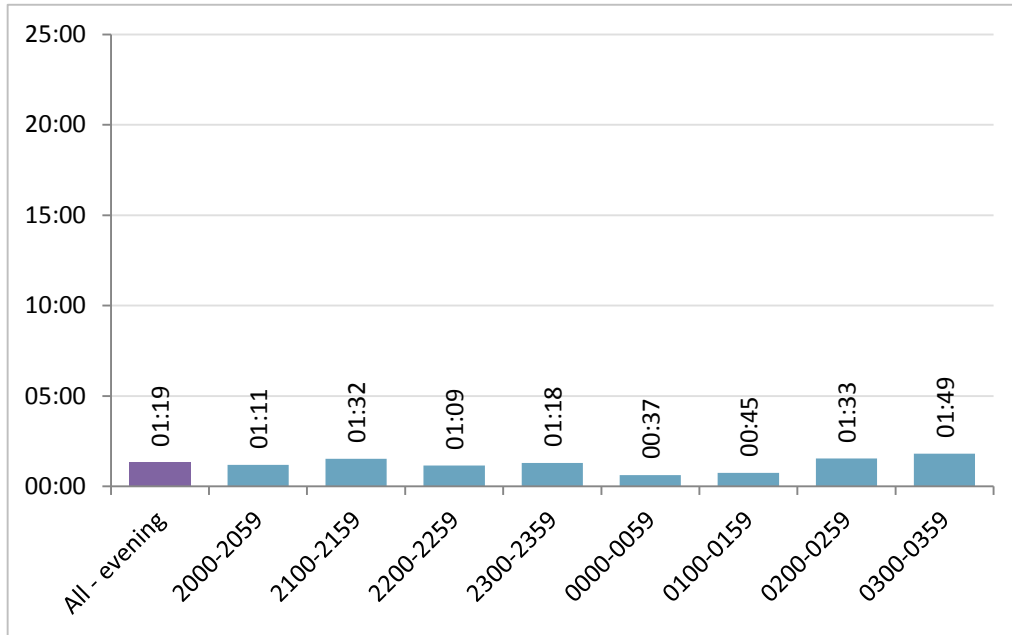
Figure 5.1: Mean on street wait time (minutes:seconds) by daytime hour, sectors A&B



Base: 21,231 counted taxi vehicles

5.8 The mean on street wait time in the evening in central and inner London (sectors A and B) was 1 minute and 19 seconds. Figure 5.2 shows the mean on street wait times by evening / night hour in central and inner London.

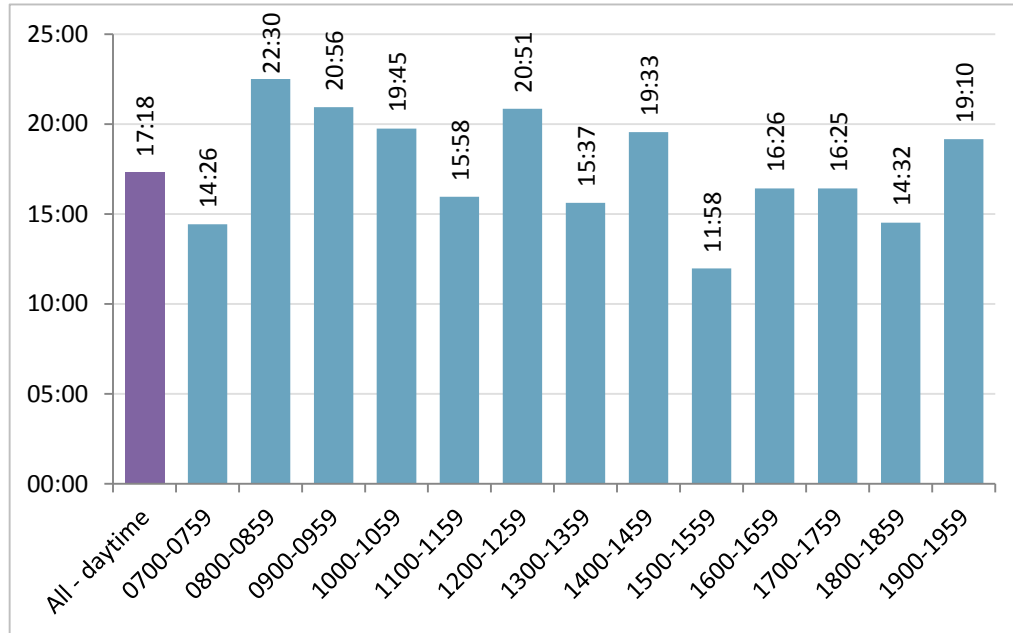
Figure 5.2: Mean on street wait time (minutes:seconds) by evening hour, sectors A&B



Base: 17,281 counted taxi vehicles

5.9 On street wait times were much higher in sectors C-K, the outer London locations. The mean on street wait time for a taxi in sectors C-K during the day was 17 minutes and 18 seconds. The mean wait time was highest between 0800 and 0859, when the mean wait time was 22 minutes and 20 seconds. The mean wait time was lowest between 1500 and 1559, at 11 minutes and 58 seconds.

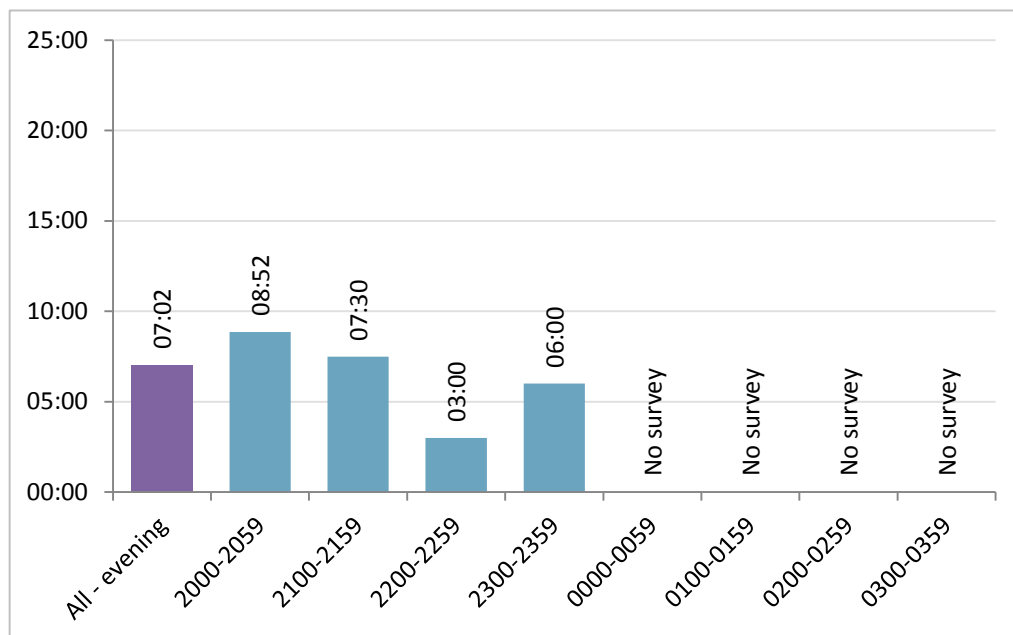
Figure 5.3: Mean on street wait time (minutes:seconds) by daytime hour, sectors C-K



Base: 1,578 counted taxi vehicles

5.10 In the evening, in outer London, the mean on street wait time was 7 minutes and 2 seconds. The shortest wait time was between 2200 and 2259, when the mean wait was just 3 minutes.

Figure 5.4: Mean on street wait time (minutes:seconds) by evening hour, sectors C-K

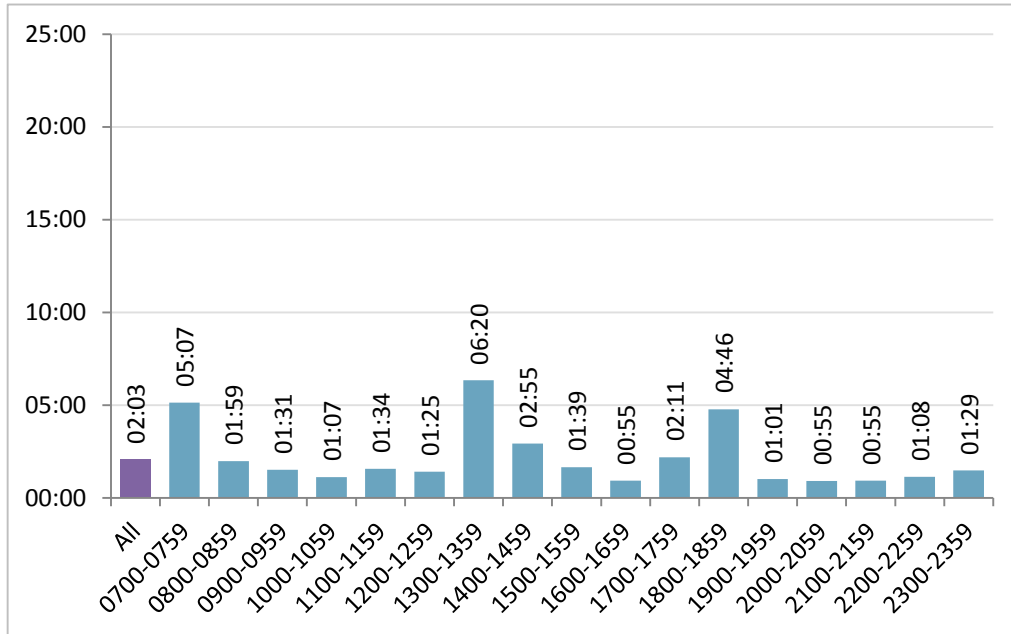


Base: 86 counted taxi vehicles

On street wait times by location

- 5.11 The mean on street wait times can be broken down by sector and by time period in which surveys took place in that location.
- 5.12 In sector A, in inner London, the mean on street wait time was 2 minutes and 3 seconds (Figure 5.5). The mean wait time was higher between the hours of 0700 and 0759 (5 minutes and 7 seconds), between 1300 and 1359 (6 minutes and 20 seconds), and between 1800 and 1859 (4 minutes and 46 seconds).

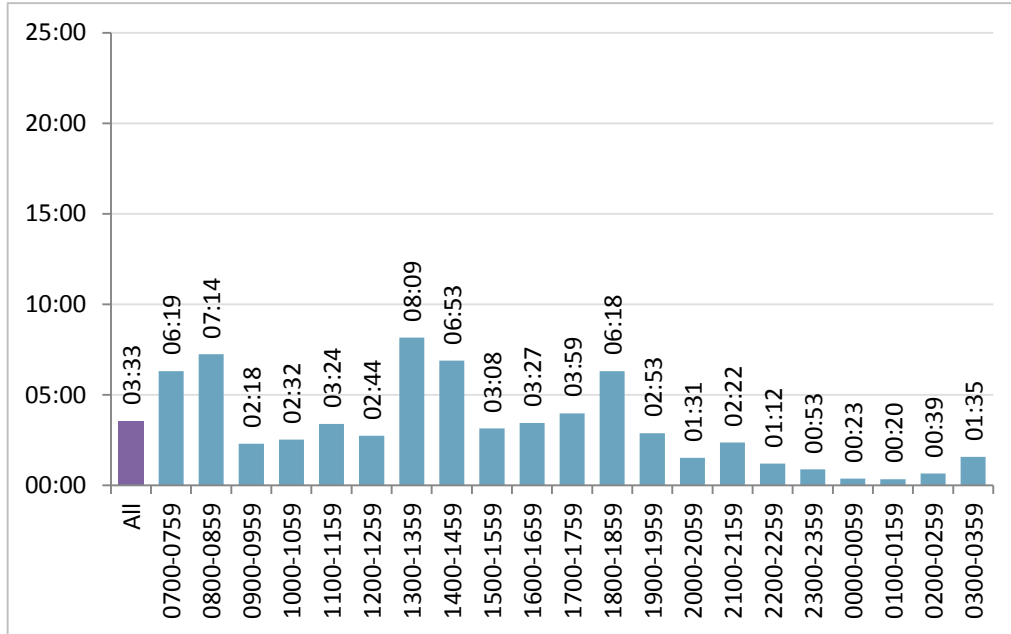
Figure 5.5: Mean on street wait time (minutes:seconds) by hour – sector A, central London



Base: 29,923 counted taxi vehicles in sector A

5.13 The mean on street wait time for taxis in sector B, inner London, was 3 minutes and 33 seconds. The hours in which there was the longest wait for a taxi were 0700-0759, 0800-0859, 1300-1359, 1400-1459 and 1800-1859, with the maximum mean on street wait time being 8 minutes and 9 seconds, between 1300 and 1359.

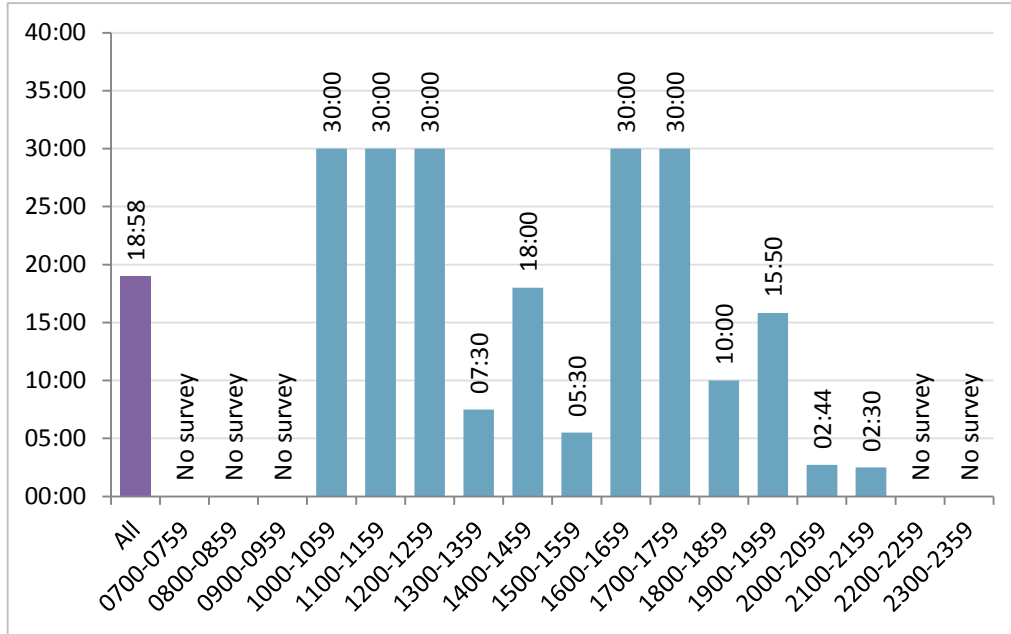
Figure 5.6: Mean on street wait time (minutes:seconds) by hour – sector B, inner London



Base: 15,650 counted taxi vehicles in sector B

5.14 In sector C, Enfield, Haringey and Waltham Forest, the mean on street wait time was 18 minutes and 58 seconds. There were five hours in which the mean on street wait was 30 minutes – a result of only one taxi that was available for hire (light on) being observed within the hour.

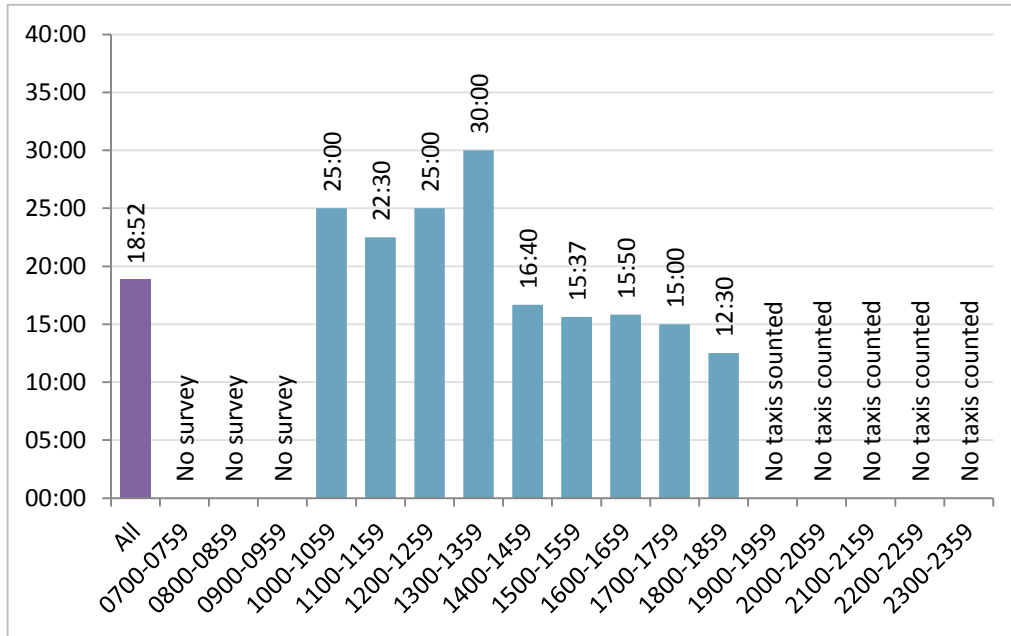
Figure 5.7: Mean on street wait time (minutes:seconds) by hour – sector C, Enfield, Haringey and Waltham Forest



Base: 218 counted taxi vehicles in sector C

5.15 The mean on street wait time in sector D, covering Barking and Dagenham, Havering and Newham, was 18 minutes and 52 seconds. The mean on street wait time across all time periods in which surveys were undertaken was relatively high overall, with the minimum mean wait time being 12 minutes and 30 seconds (between 1800 and 1859), and the maximum being 30 minutes (between 1300 and 1359).

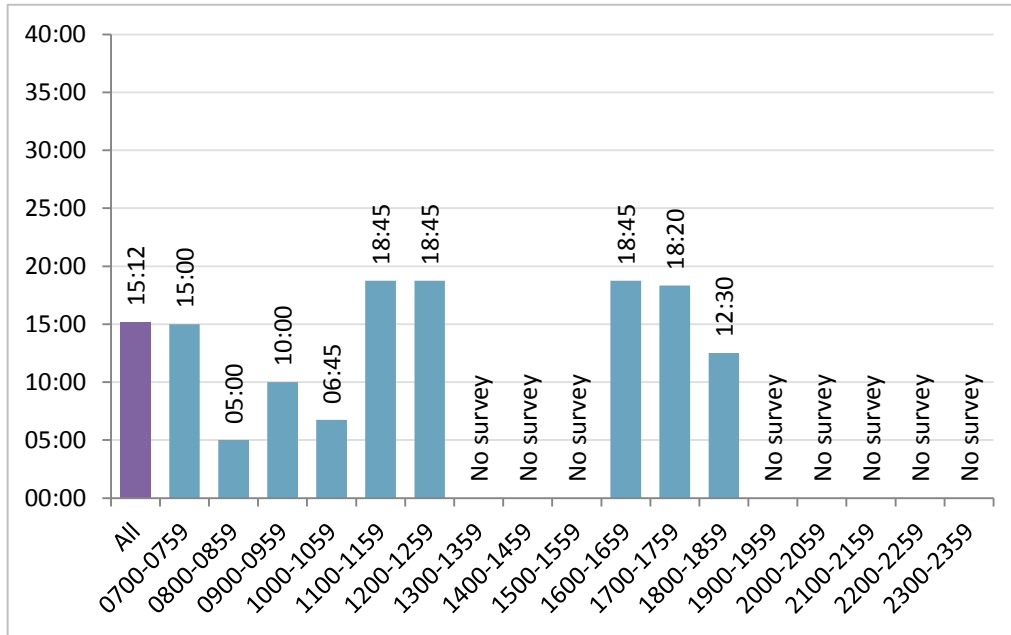
Figure 5.8: Mean on street wait time (minutes:seconds) by hour – sector D, Barking and Dagenham, Havering, Newham and Redbridge



Base: 242 counted taxi vehicles in sector D

5.16 In sector E, which covers Bexley, Greenwich and Lewisham, the mean on street wait time was 15 minutes and 12 seconds. The mean on street wait times were lower in the morning hours, with the minimum mean time recorded being 5 minutes, between 0800 and 0859.

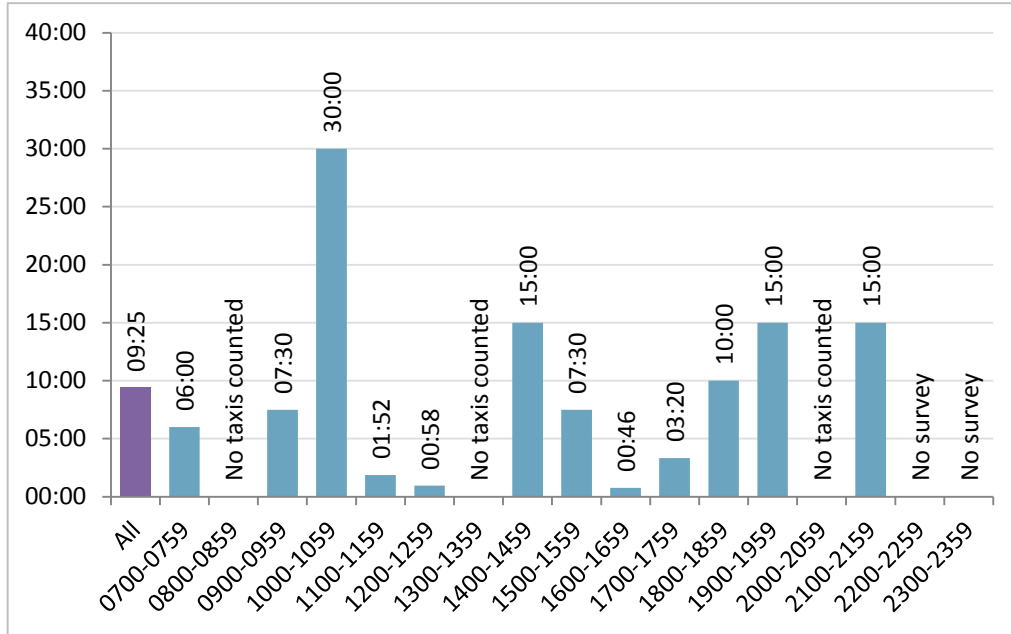
Figure 5.9: Mean on street wait time (minutes:seconds) by hour – sector E, Bexley, Greenwich and Lewisham



Base: 165 counted taxi vehicles in sector E

5.17 The mean on street wait time in sector F, Bromley, was 9 minutes and 25 seconds. There was considerable variation in the mean wait times within this sector by hour, with mean wait times falling as low as 46 seconds (between 1600 and 1659), and as high as 30 minutes (between 1000 and 1059). There were also two hours in which no taxis available for hire were observed.

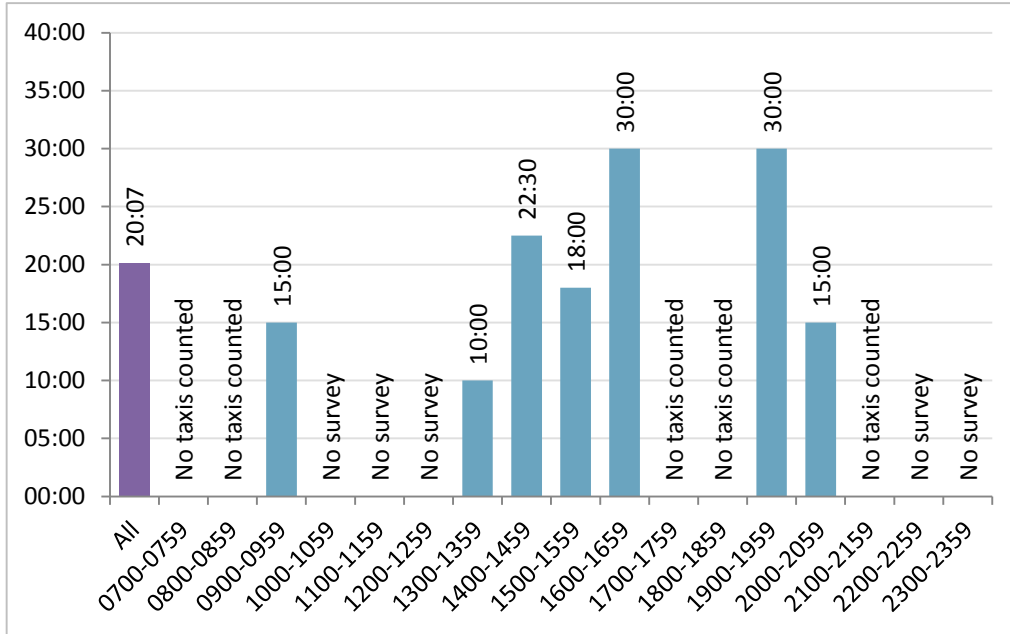
Figure 5.10: Mean on street wait time (minutes:seconds) by hour – sector F, Bromley



Base: 223 counted taxi vehicles in sector F

5.18 The mean on street wait time in sector G, Croydon, was 20 minutes and 7 seconds. Similarly to sector F, there were a number of hours during which the survey took place in which no taxis available for hire were observed (between 0700 and 0859, between 1700 and 1859, and between 2100 and 2159).

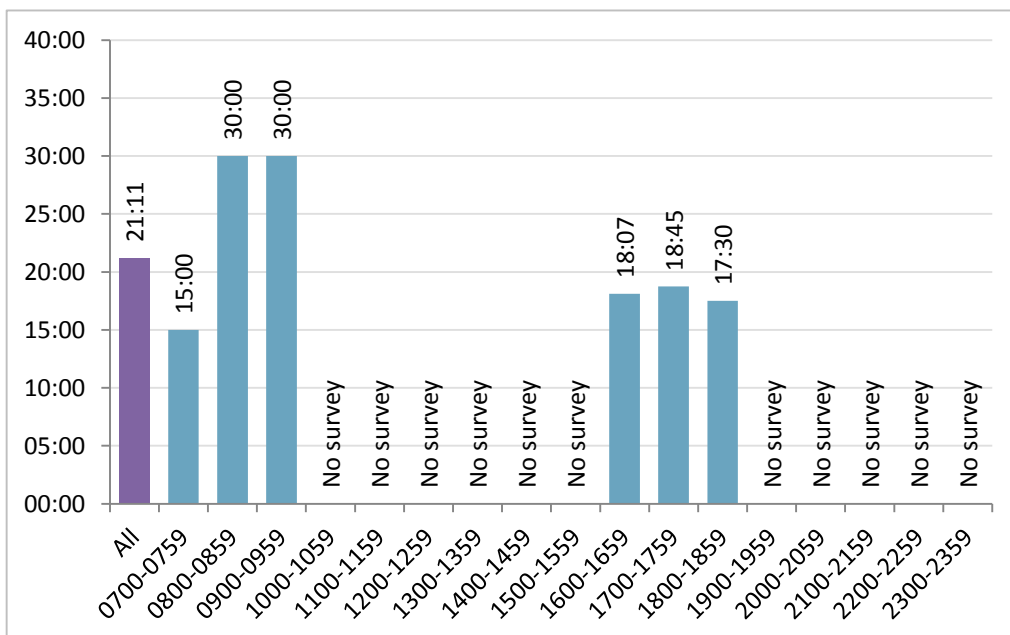
Figure 5.11: Mean on street wait time (minutes:seconds) by hour – sector G, Croydon



Base: 57 counted taxi vehicles in sector G. Note small base size.

5.19 In sector H, which covers Merton and Sutton, the mean on street wait time was 21 minutes and 11 seconds. Surveys only took place in the morning and evening peak periods (0700-0959 and 1600-1859) and the mean therefore does not include any data from other periods.

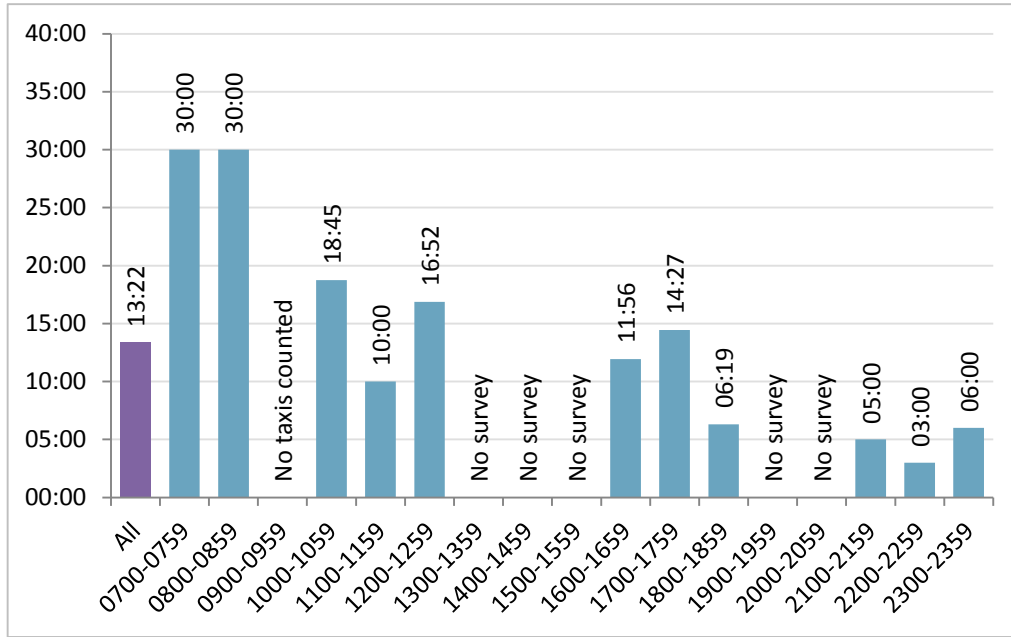
Figure 5.12: Mean on street wait time (minutes:seconds) by hour – sector H, Merton and Sutton



Base: 77 counted taxi vehicles in sector H. Note small base size.

5.20 The mean on street wait time in sector I, covering Hounslow, Kingston upon Thames and Richmond upon Thames, was 13 minutes and 22 seconds. On street surveys took place at night in this sector, but not in the interpeak or the evening periods. There was considerable variation in the mean on street wait times recorded, with a maximum of 30 minutes recorded between 0700 and 0759, and between 0800 and 0859, and a minimum of 3 minutes recorded between 2200 and 2259.

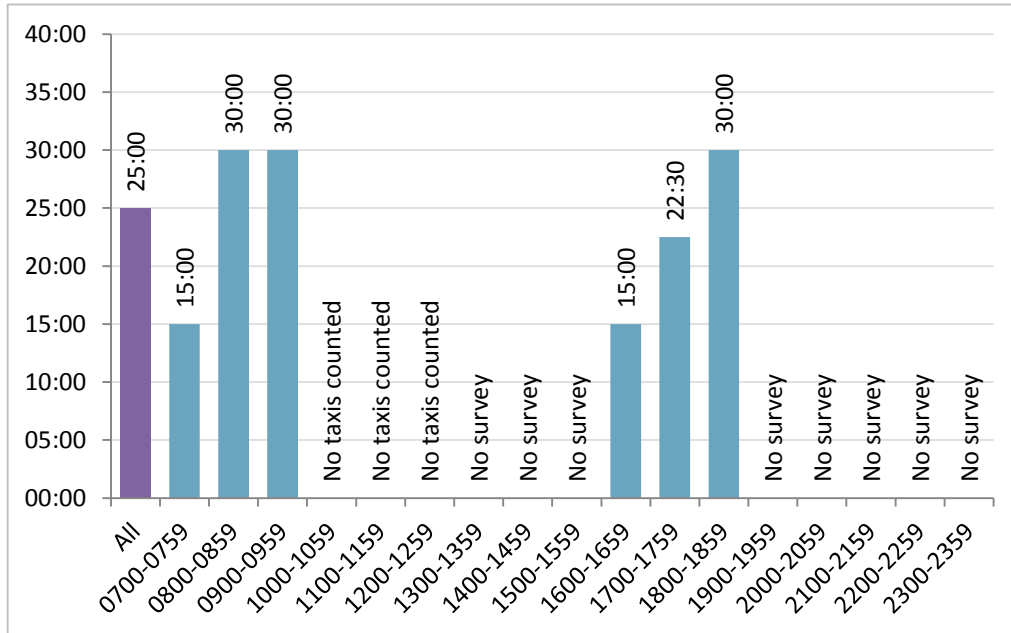
Figure 5.13: Mean on street wait time (minutes:seconds) by hour – sector I, Hounslow, Kingston upon Thames and Richmond upon Thames



Base: 400 counted taxi vehicles in sector I

5.21 The mean on street wait time in sector J, Ealing and Hillingdon, was 25 minutes. This was the highest mean wait time recorded across all the sectors. The shortest mean wait time was between 1600 and 1659, when the wait time was 15 minutes, and the longest mean wait time was 30 minutes, recorded between 0800 and 0859, 0900 and 0959, and again between 1800 and 1859.

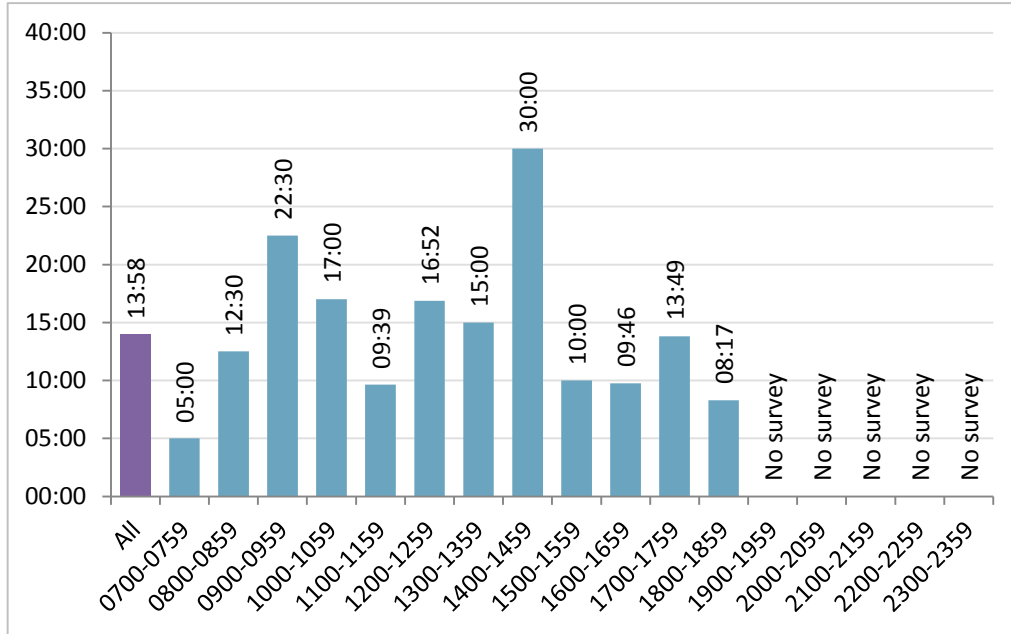
Figure 5.14: Mean on street wait time (minutes:seconds) by hour – sector J, Ealing and Hillingdon



Base: 54 counted taxi vehicles in sector J. Note small base size.

5.22 In sector K, covering Barnet, Brent and Harrow, the mean on street wait time was 13 minutes and 58 seconds. The shortest mean wait was between 0700 and 0759, when the wait was 5 minutes, and the longest mean wait was between 1400 and 1459, when the wait was 30 minutes.

Figure 5.15: Mean on street wait time (minutes:seconds) by hour – sector K, Barnet, Brent and Harrow



Base: 228 counted taxi vehicles in sector K. Note small base size.

A Survey locations, classifications and shifts

Rank surveys

Table A.1: Rank survey locations and shifts, sector A, central London

Sector	Location	Main use	Day of week	Shifts
A	Liverpool Street Station	Station	Tuesday	0700-0959; 1600-1859
A	Aldwych (Waldorf Hilton Hotel)	Entertainment; Hotel	Monday	1000-1259, 2400-0359
		Hotel	Sunday	1900-2159
A	Liverpool Street (on street)	Station; Business	Friday	0700-0959; 1600-1859
A	Tottenham Court Road (Dominion Theatre)	Entertainment	Tuesday	2100-2359; 2400-0359
			Sunday	2100-2359
A	Tottenham Court Road (Heals)	Shop	Wednesday	1000-1259; 1300-1559
A	Regent Street (Piccadilly Circus/Lillywhites)	Entertainment	Friday	1900-2159
			Saturday	1400-1659; 2000-2259
A	Oxford Street (Selfridges)	Shop; Tourist	Thursday	1300-1559
			Saturday	1000-1259
A	Oxford Street (John Lewis)	Shop; Tourist	Wednesday	1300-1559; 1600-1859
			Saturday	1300-1559; 1600-1859
A	Cheapside	Business	Thursday	0700-0959; 1600-1859
A	Greys Inn Road (ITN Building)	Business	Thursday	0700-0959, 1600-1859
A	London Bridge Station	Station	Thursday	0700-0959; 1600-1859
			Sunday	0900-1159
A	Bedford Avenue (St. Giles Hotel)	Hotel	Friday	0700-0959; 2000-2259
A	Bury Street (Quaglino's)	Entertainment	Thursday	2100-2359
			Saturday	2100-2359
A	Waterloo Station	Station	Wednesday	0700-0959; 1300-1559; 1600-1859

Sector	Location	Main use	Day of week	Shifts
A	St Pauls Church yard	Business; Tourist	Tuesday	1000-1259; 2000-2259
A	Belvedere Road (London Eye)	Tourist	Friday	1300-1559
			Saturday	1000-1259
A	Charing Cross Station	Station	Thursday	0700-0959; 1600-1859
			Saturday	1900-2159
A	Appold Street	Business	Thursday	0700-0959; 1600-1859
A	Portman Square (Churchill Hyatt Regency London Hotel)	Hotel	Friday	2000-2259; 2400-0359
			Sunday	1600-1859
A	Ropemakers Street	Business	Monday	0700-0959; 1600-1859
A	Hamilton Place (was Lever Street - The Thistle City Barbican Hotel)	Hotel	Tuesday	2100-2359
			Saturday	1100-1359; 2100-2359
A	Victoria Station	Station; Business; Tourist	Thursday	0700-0959, 1600-1859 (taxi rank in Hudson Place); 2400-0359 (taxi rank in Terminus Place)
			Saturday	0700-0959, 1600-1859 (taxi rank in Hudson Place); 2400-0359 (taxi rank in Terminus Place)
A	Blackfriars Station (Queen Victoria Street)	Station	Wednesday	0700-0959; 1600-1859; 2100-2359
			Saturday	0900-1159
A	St Brides Street	Business	Wednesday	0700-0959
A	Gwynne Place (Travelodge)	Hotel	Tuesday	1900-2159
A	Trinity Square (Tower Hill Station) (was Mile End Station)	Station	Saturday	1600-1859
			Tuesday	1900-2159
A	Piccadilly (Le Meridian Waldorf Hotel)	Hotel	Tuesday	2100-2400
A	Piccadilly (Fortum and Masons)	Shop	Tuesday	1300-1559; 1600-1859
			Saturday	1300-1559; 1600-1859
A	Charterhouse Street		Thursday	1300-1559
			Saturday	2000-2259; 2400-0359
A	Tooley Street (More London) (was Tooley Street -Duke Street Hill)	General	Thursday	1000-1259; 1900-2159
A	Meridian Square (Stratford)	Business	Thursday	0700-0959; 2100-2359

Table A.2: Rank survey locations and shifts, sector B, inner London

Sector	Location	Main use	Day of week	Shifts
B	Lancaster Gate (Plaza on the Park)	Hotel	Friday	1300-1859; 1900-2159
B	Acacia Road (St. John's Wood Station)	General	Friday	0700-0959; 1600-1859; 2100-2359
B	Werter Road (Sainsbury's), Putney	Shop	Saturday	1400-1659
B	Balham Station Road (Balham Station)	Station	Monday	1000-1259; 1600-1859; 2000-2259
B	Seville Street (Sheraton Park Tower)	Hotel	Tuesday	1000-1259; 2000-2259
B	Scarsdale Place (Cophthore London Tara Hotel)	Hotel	Friday	1900-2159
			Saturday	1900-2159
B	King's Road (Bluebird)	Entertainment	Friday	2000-2259
B	Chesham Place (Sheraton)	Hotel	Tuesday	1900-2159
			Sunday	1100-1359
B	Harrington Road (South Kensington Station)	Station	Tuesday	1900-2159
			Wednesday	1100-1359
B	Garratt Lane (Sainsbury's), Wandsworth	Shop	Tuesday	1300-1559
			Saturday	1500-1759
B	Uxbridge Road , Shepherds Bush	General	Tuesday	1000-1259; 1600-1859; 2100-2359
			Saturday	2000-2259
B	Hammersmith Broadway (Hammersmith Station)	Station	Wednesday	2000-2259
			Sunday	1400-1659
B	St. John's Road/Prested Road (Clapham Junction Station)	Station	Monday	0700-0959; 1600-1859; 1900-2159
			Sunday	2000-2259
B	Old Street, Hoxton	General	Friday	1300-1559; 2000-2259; 2400-0359
B	Canary Wharf Station (Upper Bank Street)	Station	Tuesday	1100-1359; 1500-1759; 2000-2259
B	St Pancras Station (Midland Road)	Station	Wednesday	0700-0959; 1300-1559; 1600-1859; 2000-2259
		Station; Tourist	Saturday	2100-2359
B	Finsbury Park Station	Station	Monday	0900-1159; 1600-1859
			Saturday	1200-1459; 1700-1959
B	Tooting Broadway Station	Station	Thursday	2000-2259
			Sunday	1100-1359

Sector	Location	Main use	Day of week	Shifts
B	Kings Cross Station	Station	Tuesday	0700-0959; 1600-1859
B	Euston Station	Station	Wednesday	0700-0959; 1600-1859
B	Paddington Station	Station; Tourist	Friday	0700-0959; 1600-1859; 2000-2259
B	Marylebone Station	Station	Wednesday	0700-0959; 1600-1859

Table A.3: Rank survey locations and shifts, sector C, Enfield, Haringey and Waltham Forest

Sector	Location	Main use	Day of week	Shifts
C	Ashfield Parade, Southgate	General	Wednesday	1000-1259; 1900-2159
C	High Road (Wood Green Station)	General	Wednesday	1600-1859; 2100-2359
			Saturday	2100-2359
C	Selbourne Road (Walthamstow Central Station)	Business	Tuesday	0900-1159; 19:00-2159; 2100-2359
C	Dukes Avenue, Muswell Hill	General	Wednesday	1000-1259; 1900-2159
C	Alderman's Hill (Morrisons), Plamers Green	Shop	Monday	1200-1459; 1800-2059
C	Grove Green Road (Leystone Station)	Station	Tuesday	0700-0959; 1600-1859

Table A.4: Rank survey locations and shifts, sector D, Barking and Dagenham, Havering, Newham and Redbridge

Sector	Location	Main use	Day of week	Shifts
D	Balfour Road (Ilford Station), Ilford	Station	Monday	0700-0959; 1600-1859
D	Westfield (Stratford City) Montfichet Road (was Roundhouse Lane)	Shop	Monday	1200-1459; 1800-2059
			Sunday	1500-1759
D	High Street, Romford	General	Thursday	1300-1559
			Saturday	1100-1359
D	Eastern Road (Romford Station), Romford	Station	Tuesday	2000-2259
			Sunday	1600-1859
D	Kempton Road, East Ham	General	Tuesday	1000-1259; 1600-1859
D	Station Parade/Wakering Road (Barking Station), Barking	Business	Friday	0800-1059; 1700-1959
D	George Lane (Sainsbury's), South Woodford	Shop	Monday	1200-1459; 1800-2059
D	Rainham Road South (Dagenham East Station), Dagenham	Station	Tuesday	0700-0959; 1600-1859

Table A.5: Rank survey locations and shifts, sector E, Bexley, Greenwich and Lewisham

Sector	Location	Main use	Day of week	Shifts
E	Lewisham Station	Station	Tuesday	0700-0959; 1600-1859; 2100-2359
E	Townley Road, Bexleyheath	Station	Tuesday	1200-1459
			Sunday	1400-1659
E	Greenwich, Church Street (Cutty Sark) (was Church Street - Greenwich Market)	Station	Thursday	1400-1659
			Saturday	1400-1659
E	Amersham Vale (New Cross Station)	Station	Thursday	0700-0959; 1600-1859
E	Vincent Road (Woolwich Arsenal Stadion)	Station	Wednesday	0700-0959; 1600-1859

Table A.6: Rank survey locations and shifts, sector F, Bromley

Sector	Location	Main use	Day of week	Shifts
F	High Street (TK Max), Bromley	General	Wednesday	0700-0959; 1600-1859
F	High Street, Beckenham	Station	Saturday	1400-1659; 2200-0059
F	High Street, Orpington, Kent	General	Wednesday	0700-0959; 1600-1859

Table A.7: Rank survey locations and shifts, sector G, Croydon

Sector	Location	Main use	Day of week	Shifts
G	High Street, Croydon	Entertainment	Monday	1900-2159
		Entertainment	Sunday	2000-2259
G	Whytecliffe Road (Purley Station), Purley	Station	Friday	2000-2259
			Saturday	1900-2159
G	Station Road (Norwood Junction Station), South Norwood	Station	Friday	2000-2259

Table A.8: Rank survey locations and shifts, sector H, Merton and Sutton

Sector	Location	Main use	Day of week	Shifts
H	High Street/Mulgrave Road (Sutton Station), Sutton	Station	Friday	2000-2259
			Saturday	1900-2159
H	Un-Named Road, leading to Service Road, Wimbledon Station	Station	Wednesday	2000-2259
			Sunday	1900-2159
H	London Road (Morden station), Morden	Station	Friday	2000-2259
			Saturday	1900-2159
H	Wrythe Lane (St. Helier Hospital), Carshalton	General	Thursday	1100-1359 ; 1600-1859

Table A.9: Rank survey locations and shifts, sector I, Hounslow, Kingston upon Thames and Richmond upon Thames

Sector	Location	Main use	Day of week	Shifts
I	Surbiton Parade (Surbiton Station), Surbiton	Station	Thursday	0700-0959; 1600-1859
I	Clarence Street (John Lewis) Kingston	Shop	Friday	1000-1259; 1300-1559
I	Turnham Green Terrace (Turnham Green Station), Turnham Green	Station	Wednesday	1900-2159
			Saturday	1500-1759
I	Kew Road (Richmond Station), Richmond	Station	Friday	0700-0959; 1600-1859
I	Victoria Road (Teddington Station), Teddington	Station	Friday	0700-0959; 1600-1859

Table A.10: Rank survey locations and shifts, sector J, Ealing and Hillingdon

Sector	Location	Main use	Day of week	Shifts
J	High Street (Uxbridge Station)	Station	Monday	1900-2159
			Sunday	1100-1359
J	Haven Green (Ealing Broadway Station), Ealing	Station	Wednesday	1300-1559; 2000-2259
J	Heathrow Terminal 1,2,3	Tourist	Tuesday	0700-0959; 1600-1859; 2000-2259
			Saturday	0700-0959; 1600-1859; 2000-2259
J	Heathrow Terminal 4		Tuesday	0700-0959; 1600-1859; 2000-2259
			Saturday	0700-0959; 1600-1859; 2000-2259
J	Heathrow Terminal 5		Tuesday	0700-0959; 1600-1859; 2000-2259
			Saturday	0700-0959; 1600-1859; 2000-2259
J	Hatton Cross (Bus Station)		Tuesday	0700-0959; 1600-1859; 2000-2259
			Saturday	0700-0959; 1600-1859; 2000-2259
J	Leeland Terrace (Sainsbury's), West Ealing	Shop	Wednesday	0700-0959; 1600-1859

Table A.11: Rank survey locations and shifts, sector K, Barnet, Brent and Harrow

Sector	Location	Main use	Day of week	Shifts
K	Wembley Park Station	Station	Tuesday	1000-1259; 2100-2359
K	Station Road (Edgware Station), Edgware	Station	Wednesday	0700-0959; 1600-1859
K	College Road (Harrow on the Hill Station), Harrow on the Hill	Station	Thursday	1300-1559; 1900-2159
K	Broadway Parade, Pinner Road	General	Tuesday	0700-0959; 1600-1859
K	Station Parade (Willesden Green Station), Willesden Green	Station	Thursday	0700-0959; 1600-1859
K	North End Road (Golders Green Station), Golders Green	Station	Tuesday	0700-0959; 1600-1859

On street surveys

Table A.12: On street survey locations and shifts, sector A, central London

Sector	Location	Main use	Day of week	Shifts
A	Commercial Street	Business; Entertainment	Friday	0700-0959; 2000-2259
A	Long Acre	Shop; Tourist	Monday	2100-2359; 2400-0359
A	Long Acre	Business	Sunday	1900-2159
A	Fenchurch Street		Monday	1000-1259; 1600-1859
A	Charlotte Street	Business; Entertainment; Hotel; Tourist	Monday	2100-2359
			Sunday	2100-2359
A	Pall Mall	Business; Entertainment; Hotel	Friday	1900-2159
			Saturday	2000-2259
A	Fleet Street	General; Business	Tuesday	0700-0959; 1300-1559; 1600-1859
A	Newgate Street	Business	Thursday	0700-0959; 1600-1859
A	Kings Cross Road	General; Hotel; Tourist	Thursday	0700-0959; 1600-1859
A	Tower Bridge Road	General	Thursday	1000-1259
			Sunday	1100-1359
A	Bedford Square	General; Business	Monday	0700-0959; 1600-1859
A	Regent Street	Shop; Tourist	Tuesday	1900-2159
A	Shaftesbury Avenue	Entertainment; Shop; Tourist	Tuesday	2000-2259
			Saturday	2100-2359
A	Stamford Street	General	Monday	1300-1559; 2000-2259
A	Cannon Street	Business	Wednesday	1000-1259; 2100-2359
A	Westminster Bridge	Hotel	Wednesday	1300-1559
			Saturday	1000-1259
A	Embankment	General; Business; Tourist	Thursday	1900-2159
			Saturday	1900-2159
A	Moorgate	Business	Friday	0700-0959; 1600-1859
A	Farringdon Road	General; Entertainment	Monday	1000-1259; 1600-1859
A	London Wall	Business	Monday	0700-0959; 1300-1559
A	City Road (just off Old Street)	Business; Entertainment	Tuesday	1000-1259; 2000-2259
			Saturday	0900-1159
A	Gracechurch Street	General; Business	Thursday	1300-1559; 1600-1859;
			Saturday	2000-2259 1100-1359
A	Holborn Viaduct	Business	Wednesday	0700-0959; 1000-1259
A	Pentonville Road		Saturday	1600-1859
A	Leadenhall Street	Business	Tuesday	1000-1259; 1600-1859; 2000-2259
A	St Thomas Street	General; Business	Thursday	0700-0959; 1800-2059
			Saturday	1300-1559; 1900-2159

Table A.13: On street survey locations and shifts, sector B, inner London

Sector	Location	Main use	Day of week	Shifts
B	Bayswater Road	Hotel; Tourist	Friday	1300-1559; 2000-2259
B	Wellington Road	General	Friday	0700-0959; 1300-1559; 2100-2359
B	Putney High Street	Entertainment; Shop	Saturday	1400-1659
B	Balham High Road	Entertainment; Shop	Monday	1000-1259; 1600-1859; 1900-2159
B	Knightsbridge	Shop; Hotel; Tourist	Wednesday	1000-1259; 2100-2359
B	Kensington High Street	Shop; Hotel; Tourist	Thursday	1900-2159
			Saturday	1900-2159
B	Gloucester Road	General; Shop	Friday	1900-2159; 2400-0359;
			Sunday	1400-1659
B	Cheyne Walk	General	Wednesday	1900-2159
B	Sloane Street	General; Business; Hotel	Friday	1900-2159
			Sunday	0900-1159
B	Old Brompton Road	General; Entertainment; Shop	Monday	2000-2259
B	Wandsworth High Street	Entertainment; Shop	Tuesday	1300-1559
			Saturday	1500-1759
B	Goldhawk Road	General	Wednesday	1000-1259; 1600-1859;
			Saturday	2000-2259; 2100-2359
B	Shepherd's Bush Road	General; Entertainment	Wednesday	2100-2359
			Sunday	1600-1859
B	Buckingham Palace Road	General; Business; Hotel	Thursday	1600-1859; 2400-0359
B	Pentonville Road	General; Entertainment	Wednesday	2100-2359
B	Commercial Road	General	Wednesday	0700-0959; 2000-2259
B	Bethnal Green Road	General; Shop	Wednesday	0700-0959
B	Shopping Centre (SE1 6TG)	Shop	Tuesday	0700-0959
B	High Street (SE15 5ED)	Shop	Thursday	0700-0959
B	Camden Town Station (NW1 0NE)	Station	Tuesday	1100-1359; 1600-1859
B	Hampstead Tube Station (NW3)	Station	Thursday	0700-0959; 1600-1859
B	Homerton High Street, Hospital (E59 6AG)	General	Wednesday	1300-1559; 19:00-21:59
B	Bethnal Green Station (E2)	Station	Monday	0700-0959; 1600-1859

Table A.14: On street survey locations and shifts, sector C, Enfield, Haringey and Waltham Forest

Sector	Location	Main use	Day of week	Shifts
C	High Street, Hornsey (N8)	Shop	Saturday	1000-1259; 1600-1859
C	Highgate Golf Club (N6)	Entertainment	Saturday	1000-1259; 1600-1859
C	Palace Garden Shopping Centre (EN2 6SN)	Entertainment; Shop	Tuesday	1000-1259; 1600-1859
C	ibis Style Hotel (E10 7EB)	Hotel	Wednesday	1300-1559
C	Whipps Cross Road, Whipps Cross University Hospital (E11 1NR)	General	Monday	1300-1559; 19:00-21:59
C	The Mall Wood Green (N22 6YQ)	Business; Entertainment; Shop	Monday	1000-1259; 1600-1859
C	Chase Farm Hospital (EN2 8JL)	General	Friday	1300-1559; 19:00-21:59

Table A.15: On street survey locations and shifts, sector D, Barking and Dagenham, Havering, Newham and Redbridge

Sector	Location	Main use	Day of week	Shifts
D	Cranbrook Road, Tesco Superstore (IGH 1HY)	Shop	Saturday	1000-1259; 1600-1859
D	High Street, Illford, Fulwell Cross Leisure Centre (IG6 2EA)	General	Saturday	1000-1259; 1600-1859
D	Green Street, Boleyn Ground (E13 9AZ)	Entertainment	Wednesday	2100-2359
D	New Road, Premier Inn London Dagenham (RM10 9NH)	Hotel	Tuesday	1300-1559
D	Highbridge Road (IG11 7BA)	Hotel	Wednesday	1300-1559
D	St. Marys Lane, Upminster (RM14)	General	Tuesday	1000-1259; 1600-1859
D	Rom Valley Way, Queen's Hospital (RM7 0AG)	General	Friday	1300-1559; 19:00-21:59

Table A.16: On street survey locations and shifts, sector E, Bexley, Greenwich and Lewisham

Sector	Location	Main use	Day of week	Shifts
E	Molesworth St, Lewisham Shopping Centre (SE13 7HB)	Entertainment; Shop	Tuesday	1000-1259; 1600-1859
E	Catford Road, Catford (The Broadway Theatre and Lewisham Council) (SE6 4RU)	Entertainment; Shop	Thursday	1000-1259; 1600-1859
E	Erith High Street, Erith Riverside Shopping Centre (DA8 1RG)	Shop	Monday	1000-1259; 1600-1859
E	Frogna Avenue, Queen Mary's Hospital (DA14 6LT)	General	Wednesday	1300-1559; 19:00-21:59
E	Greenwich High Road (Greenwich Station) (SE10 8JA)	General	Monday	0700-0959; 1600-1859
E	Beresford Street (Greenwich Heritage Centre) (SE18)	Entertainment; Shop	Saturday	1000-1259; 1600-1859

Table A.17: On street survey locations and shifts, sector F, Bromley

Sector	Location	Main use	Day of week	Shifts
F	High Street, Bromley (Intu Bromley Shopping Centre) (BR1 1DN)	Entertainment; Shop	Thursday	1000-1259; 1600-1859
F	Farnborough Common, Orpington (Princess Royal University Hospital) (BR6)	General	Friday	1300-1559; 19:00-21:59
F	Beckenham Road (Clock House station) (BR3)	Station	Tuesday	0700-0959; 1600-1859

Table A.18: On street survey locations and shifts, sector G, Croydon

Sector	Location	Main use	Day of week	Shifts
G	London Road (Hotel ibis, Croydon University Hospital) (CR7)	General; Hotel	Friday	1300-1559
G	Godstone Road (Kenley Station) (CR8)	Station	Wednesday	0700-0959; 1600-1859
G	Monks Orchard Road (Bethlem Royal Hospital, Museum of the Mind) (BR3 3BX)	General	Monday	1300-1559; 19:00-21:59

Table A.19: On street survey locations and shifts, sector H, Merton and Sutton

Sector	Location	Main use	Day of week	Shifts
H	Merton High Street (Sainsbury's, Premier Inn London) (SW19 1DD)	General	Thursday	0700-0959; 1600-1859
H	Sutton Common Road (Sutton Common Station) (SM1)	Station	Wednesday	0700-0959; 1600-1859
H	Wallington Station (SM6)	Station	Thursday	0700-0959; 1600-1859
H	Mitcham Road (Primark) (SW17 9PA)	General	Wednesday	1000-1259; 1600-1859

Table A.20: On street survey locations and shifts, sector I, Hounslow, Kingston upon Thames and Richmond upon Thames

Sector	Location	Main use	Day of week	Shifts
I	Coombe Road (Norbiton Station) (KT2)	Station	Thursday	0700-0959; 1600-1859
I	The Rotunda Centre (Odeon IMAX) (KT1 1QP)	Entertainment	Friday	1600-1859; 2100-2359
I	Whitton Road (Twickenham Station/Stadium) (TW1)	Station; Entertainment	Friday	0700-0959; 1600-1859
I	Twickenham Road, Richmond Athletic Ground (TW9 2SF)	Entertainment	Saturday	1000-1259; 1600-1859
I	Hanworth Road, Hounslow The Treaty Shopping Centre) (TW3)	Shop	Tuesday	1000-1259; 1600-1859
I	High Street, Brentford (Premier Inn London Kew) (TW8 0BB)	General	Wednesday	1000-1259; 1600-1859

Table A.21: On street survey locations and shifts, sector J, Ealing and Hillingdon

Sector	Location	Main use	Day of week	Shifts
J	Uxbridge Road, Hillingdon Heath/Hillingdon (UB10)	General	Thursday	0700-0959; 1600-1859
J	Ruislip Underground Station (HA4)	Station; Shop	Thursday	0700-0959; 1600-1859
J	The Broadway, Southall (UB1)	General	Friday	1000-1259; 1600-1859
J	West Acton Underground Station (W3)	Station	Wednesday	0700-0959; 1600-1859

Table A.22: On street survey locations and shifts, sector K, Barnet, Brent and Hounslow

Sector	Location	Main use	Day of week	Shifts
K	St Anns Shopping Centre (HA1 1AR)	Shop	Saturday	1000-1259; 1600-1859
K	Hatch End Station (HA5)	Station	Tuesday	0700-0959; 1600-1859
K	Wembley Hill Road (ibis London Wembley and Holiday Inn) (HA9 8AU)	Hotel	Monday	1300-1559
K	Kensal Rise Station (NW10)	Station	Monday	0700-0959; 1600-1859
K	Station Road, Edgware (The Broadwalk Centre) (HA8 7BD)	General; Station; Shop	Monday	1000-1259; 1600-1859
K	High Street, Barnet (The Spires Shopping Centre) (EN5 5XY)	General	Saturday	1000-1259; 1600-1859

B Analysis method

Analysis of taxi rank observation data

B.1 In each of the calculations described, an attempt was made to include as many of the survey records as possible when calculating the various means. So, if a record did not have enough information to be included in one calculation but did have enough information to be included in another, then that record was excluded from the first calculation and included in the second. As a consequence, the total number of records included in each calculation did vary.

Calculation of passenger wait times

B.2 The survey data includes the time the passenger(s) joined the queue as well as the time the passenger(s) boarded the taxi (specifically the time the passenger(s) opened the taxi door). Passenger wait times were calculated by subtracting the arrival time (i.e. the time the passenger(s) joined the queue) from the departure time (i.e. the time the passenger(s) boarded the taxi).

B.3 These individual passenger wait times were then used to create the following tables:

- Mean passenger wait time by 1-hour time band (based on passenger arrival times);
- Mean passenger wait time by time period;
- Mean passenger wait time by location; and
- Mean passenger wait time by rank type.

B.4 Due to some discrepancies in the data (such as missing arrival/departure times or arrival times which are later than departure times) some records were excluded from the calculations.

B.5 A location could be assigned one or more rank types. Where this was the case, all survey records at that location were used in the calculation of the mean for every assigned rank type, i.e. if a location was assigned two rank types, A and B, then the records at that location would be used to calculate the means for both A and B.

B.6 Means were calculated in a straightforward way, whereby if, for example, there were two passengers arriving in a particular time band with wait times of 12 and 20 seconds, then the mean wait time for that time band would be $(12 + 20) / 2 = 16$ seconds.

Calculation of mean group size

B.7 The survey data recorded the size of each passenger group (consisting of one or more people) as they boarded their taxi. Combining this with the other recorded data, the following tables were created:

- Mean number of passengers boarding by 1-hour time band;
- Mean number of passengers boarding by time period;
- Mean number of passengers boarding by location; and
- Mean number of passengers boarding by rank type.

B.8 Blank group size fields were counted as one individual passenger.

Calculation of mean passenger queue lengths

B.9 In addition to the group size of every passenger arrival, the survey data also recorded the size of the passenger queues. Similarly to the passenger boarding numbers, the passenger queue lengths were combined with the other recorded data to create the following tables:

- Mean number of passengers in queue by 1-hour time band;
- Mean number of passengers in queue by time period;
- Mean number of passengers in queue by location; and
- Mean number of passengers in queue by rank type.

B.10 Blank queue length fields were counted as passenger queue lengths of zero (no queue).

B.11 It should be noted that records with zero queue lengths were still included in the mean calculations. Therefore, if a time band had, for example, four records with queue lengths of zero, zero, zero, and two, the mean queue length would be $(0 + 0 + 0 + 2) / 4 = 0.5$.

Calculation of mean number of luggage pieces

B.12 In a similar way to mean passenger queue lengths, the mean number of luggage pieces per passenger group were calculated in the following tables:

- Mean number of luggage pieces by 1-hour time band;
- Mean number of luggage pieces by time period;
- Mean number of luggage pieces by location; and
- Mean number of luggage pieces by rank type.

B.13 Blank luggage fields were counted as no luggage. Items carried by passengers were counted as 'luggage pieces' where the item carried was an encumbrance, e.g. a suitcase or grocery shopping, but not a handbag or briefcase.

Calculation of taxi wait times

- B.14 Individual taxi wait times were calculated by subtracting the time the taxi pulled up at the rank from the time the taxi departed from the rank (either with a passenger or without).
- B.15 Similarly to the passenger wait times, individual taxi wait times were used to create the following tables:
- Mean taxi wait time by 1-hour time band (based in taxi arrival times);
 - Mean taxi wait time by time period;
 - Mean taxi wait time by location; and
 - Mean taxi wait time by rank type.

Calculation of proportion of taxis leaving queue empty

- B.16 The survey data included instances where taxis left the queue without picking up a passenger. When this happened, whether the taxi left with its light on or off was also recorded.
- B.17 Proportions of taxis leaving with a passenger, with their light on, or with their light off were calculated in the following tables:
- Proportion of taxis leaving queue by 1-hour time band;
 - Proportion of taxis leaving queue by time period;
 - Proportion of taxis leaving queue by location; and
 - Proportion of taxis leaving queue by rank type.
- B.18 There were some instances where it was recorded that a taxi left the queue without a passenger, however whether it left with its light on or off was not recorded. These records were not included in the above calculations.

Analysis of on street observation data

Calculation of on street wait times

- B.19 In order to calculate the average on street wait time for a taxi, records at each site were grouped by hour surveyed (e.g. between 0700-0759), then filtered by whether their 'for hire' light was on.
- B.20 The number of taxis passing with their light on was then divided by 60, the number of minutes in an hour.
- B.21 The arrival profile of passengers on street is random, and if taxis arrive at 20 minute intervals a passenger could, in theory, wait for 20 minutes, or zero minutes, depending on when they arrive. The intervals of the taxis was therefore halved to represent the average wait time for a person arriving on street and hailing a taxi.
- B.22 For example:
- 120 taxis are observed driving past between 07:00-07:59
 - Of these 120 taxis, 60 were available for hire with their hire light on
 - With 60 minutes in an hour, 60 taxis translates to 1 taxi every minute
 - Due to the random arrival time of on street passengers, it is assumed that passengers can arrive at any time between taxis and therefore the wait time is halved
 - This results in an expected wait time of 30 seconds.

Calculation of on street wait times by time period

- B.23 In order to calculate the average wait time across the day (or evening) to hail a taxi by location, all average wait times through the specified time period (either day or evening) were averaged, excluding those surveys which occurred outside of the specified period.

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