



Tameside – Hackney Carriage Unmet Demand Survey

Final Report

April 2014





EXECUTIVE SUMMARY

Key points

This survey has been conducted by Vector Transport Consultancy on behalf of Tameside Metropolitan Borough Council.

The survey, in conjunction with other information collected by Tameside Metropolitan Borough Council, is intended to fulfil the requirements of Section 16 of the 1985 Transport Act and to address the questions raised in the Department for Transport (DfT) 2010 Best Practice Guidance.

The objectives of the survey may be broadly defined as:

- Survey of activity at key taxi ranks around Tameside Metropolitan Borough.
- Analysis of public consultation responses.
- Calculation of the Index of Significant Unmet Demand value.

Surveys were undertaken at five of the busiest ranks in Tameside, over four days from the morning of Thursday the 6th March to the morning of Monday 10th March 2014. The volume of passengers and hackney carriages was recorded, together with Hackney Carriage waiting times and wait times for any queuing passengers.

The ranks surveyed were:

- Market Street, Stalybridge,
- Clarendon Street, Hyde,
- Market Street / Victoria Street, Denton
- Wellington Road / Cork Street, Ashton-Under-Lyne
- Old Street, Ashton-Under-Lyne.

Levels of activity and hours of operation varied at the different rank locations.

The rank at Market Street, Stalybridge was active on Friday and Saturday evening, through to the early hours of the following morning. There was no activity observed on Thursday and a low level of activity observed on Sunday.

The rank at Clarendon Street, Hyde, serves the bus station as well as walk up traffic from other adjacent areas. The rank is active from morning through to late night. There was activity at the rank on each of the days observed.

The rank at Market Street, Denton was active from early morning to late at night on all of the days surveyed. Whilst the marked rank is on Market Street, between Manchester Road and Victoria Street, the queue of Hackney Carriages occasionally exceeds the space available in the marked rank and extends on to Victoria Street.

The rank at Wellington Road, Ashton was active from morning through to late night on each of the days observed. The rank is fed from a feeder rank on Cork Street. For much of the time observed, both the principle rank and feeder rank were full of waiting Hackney Carriages.

The rank on Old Street, Ashton is adjacent to a shopping area and was active each day from morning through to late afternoon. Much of the demand appeared to be from shoppers.



At each of the ranks, some of the Hackney Carriages left the ranks empty. At most locations the scope for moving to an alternative official rank, nearby, is limited. Therefore, it may be the case that many of these empty departures may have been in response to telephone bookings.

Public consultation was undertaken through the Council's Citizens' Panel. The consultation covered frequency of use of Hackney Carriage or Private Hire Vehicles, How a Hackney Carriage was obtained for the last trip made and incidences of difficulties encountered with hiring a Hackney Carriage. Information on responses received are presented in detail in the survey report and so are not repeated here.

Unmet Demand assessment

Data from the taxi rank surveys was used, together with any indication from the public consultation surveys, of frustration with non-availability of Hackney Carriages, to calculate an Index of Significant Unmet Demand (ISUD). The ISUD index value calculated from the survey results was **3.6**. The threshold value for significant unmet demand is generally considered to be 80. Therefore, the value derived from the survey is significantly lower than this value and indicates that there is no significant unmet demand. Whilst the ISUD value is a strong indicator, it should not be taken in isolation as the only valid evidence.

On occasion, at peak periods such as the early hours of Saturday and Sunday mornings and at quiet times, when fewer Hackney Carriages are working, demand was observed to exceed supply for brief periods. However, these appear to be relatively infrequent events, in the context of overall demand. The proportion of passengers which had to wait for a hackney carriage to arrive at a rank, was 3.6%. Of those passengers who had to wait for a hackney carriage, the average wait time was 4 minutes 13 seconds.

Conclusions

The primary purpose of this study is to determine whether there is evidence of significant unmet demand. The evidence gathered suggests that there is a low level of unmet demand. However, evidence from the rank surveys, public consultation and the ISUD index value calculated, suggests that the level is below that which is considered to be significant. Therefore, it is concluded that there is **No Significant Unmet Demand**.



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1 STUDY OBJECTIVES

1.1 General

This survey has been conducted by Vector Transport Consultancy on behalf of Tameside Metropolitan Borough Council.

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The objectives of the survey may be broadly defined as:

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- Old Street, Ashton-Under-Lyne.



2 BACKGROUND

2.1 Definitions

This report refers to Taxis, Hackney Carriages and Private Hire Vehicles. Both Hackney Carriages and Private Hire Vehicles are licensed to operate within Tameside Metropolitan Borough.

Hackney Carriages may be hired in three ways. These are on street hailing, hire at a taxi rank and by telephone or taxi office booking.

Private Hire Vehicles may only be hired through advance booking. This is generally done by telephone or via internet booking, or at a Private Hire Vehicle operator's office.

In this report, the term Taxi is used as a generic term to encompass both Hackney Carriages and Private Hire Vehicles. The term 'Licensed Vehicles' is also used to encompass both Private Hire and Hackney Carriage vehicles.

Tameside Metropolitan Borough Council is the licensing authority for Hackney Carriage and Private Hire operators, drivers and vehicles within their area. They are able to specify the standards they require (over and above the legal minima) for operators, drivers and vehicles, they can regulate Hackney Carriage fares and specify the number of Hackney licences they issue.

2.2 DfT guidance on Unmet Demand surveys

In 2006 the Department for Transport (DfT) issued Good Practice Guidance to licensing authorities on the Hackney Carriage and Private Hire Vehicle (PHV) industry. This guidance was updated in 2010. It includes advice on the measurement of unmet demand.

Significant Unmet Demand (SUD) has two components:

- Observed or 'patent' demand – that which is directly observable
- Latent or 'suppressed' demand – that which is released by additional supply.

Where a limit has been imposed, the DfT recommend that surveys be repeated every three years to confirm that unmet demand had not arisen.

2.3 Observed unmet demand

This is determined from direct observation of passenger waiting times at representative taxi ranks and at representative times of day. Where the supply of Hackney Carriages at a particular time and location is inadequate, intending passengers will have to wait until a Hackney Carriage arrives. Where this waiting time becomes excessive there is unmet demand and where this occurs at a number of locations and for lengthy periods it constitutes Significant Unmet Demand.



2.4 Latent unmet demand

Where potential passengers are deterred from using Hackney Carriages through the assumption or knowledge that waiting times will be high, these passengers may decide not to travel or use an alternative means of transport. These passengers will not feature in the taxi rank surveys. Therefore to get an estimate of this latent demand an alternative form of survey is required. In this instance, the consultees in the Citizens' Panel Survey were asked if they had faced difficulty hiring a Hackney Carriage for immediate travel. The proportion of respondents who indicated that they had faced difficulties was used as an indication of latent unmet demand.

2.5 Other Surveys

The DfT guidance also recommends that stakeholders such as taxi providers and representatives of groups which rely heavily on taxis are contacted for their opinions on the number of taxis and the possible impact of licence quantity controls. This additional consultation has been undertaken by the Council and is not covered in this report.

2.6 Breakdown of the Hackney Carriage trade

Markets and hire methods typically targeted by Hackneys, in the UK, include:

- Public, private and unofficial ranks;
- Flag down/on-street;
- Telephone / radio bookings
- Contract work for statutory authorities such as for education authorities or social services;
- Commercial contract work;
- One off/occasional private hire for individuals or organisations;
- Evening leisure;
- Daytime shopping/social/business;
- Tourism
- Various combinations of the above that 'fit together' in time

Practices vary by location. For example, in some locations, a large proportion of work is serviced by radio bookings, whereas in other areas, work is based almost solely on rank based hire.

In some areas almost all of the trade may focus on one particular aspect of the market at the same time (i.e. school contracts) causing there to be unmet demands in other parts of the market at that time.



The market for taxis – both Private Hire Vehicles and Hackneys is therefore influenced by many factors – both on the demand and the supply side. Demand for example is influenced by:

- The overall population,
- The extent of car ownership,
- Availability of other transport including public, community and private transport,
- Levels of mobility impairment and disability,.
- Seasonality,

The extent and hours of the night time economy will affect demand. The market will also be influenced by the supply of Hackney and PHVs, in terms of the quality, affordability and quantity of provision – both perceived and actual.



3 TAXI RANK SURVEYS

3.1 Rank surveys

In order to follow a best value approach to planning and undertaking the surveys of taxi ranks, resources were focussed on surveying the more active ranks.

There were five marked taxi ranks in Tameside Metropolitan Borough which were covered in this survey. These were:

- Market Street, Stalybridge,
- Clarendon Street, Hyde,
- Market Street / Victoria Street, Denton
- Wellington Road / Cork Street, Ashton-Under-Lyne
- Old Street, Ashton-Under-Lyne.

These ranks were surveyed for four days, from the morning on Thursday 6th March 2014 to the morning of Monday 10th March 2014.



Figure 1 - Market Street, Stalybridge



Figure 2 - Clarendon Street, Hyde (bus station)



Figure 3 - Market Street / Victoria Street, Denton



Figure 4 - Wellington Road / Cork Street, Ashton-Under-Lyne



Figure 5 - Old Street, Ashton-Under-Lyne

3.2 Rank survey results

Full details of tabulated hourly passenger and Hackney Carriage volumes and waiting times for Hackney Carriages, are presented in Appendix A. Summary results are presented below.

The taxi ranks were surveyed, using video cameras fixed to nearby lamp posts, for four days, from Thursday morning to Monday morning, in order to capture the busiest periods of the week. This ensured that if there is any unmet demand that these are the days when this was most likely to be evident, as passenger waiting delays.

The ranks at Market Street / Victoria Street, Denton and Wellington Road / Cork Street, Ashton-Under-Lyne required two cameras to capture the extent of



Hackney Carriage queues and the number of passengers boarding at the head of the taxi queue.

Passenger waiting times were recorded when passengers arrived at a taxi rank and there were no taxis waiting at the rank, i.e. passengers had to wait for a Hackney Carriage to arrive at the rank. On these occasions, waiting times were measured from the time when a passenger arrived at the taxi rank until the passenger boarded a Hackney Carriage.

It is worth noting that the prevalent condition at the taxi ranks in Tameside Metropolitan Borough was that taxis queue at the ranks, waiting for passengers. Therefore, for the majority of the times surveyed, passengers arrived at the taxi ranks and a Hackney Carriage was waiting and ready for immediate boarding. On these occasions, the recorded passenger wait time was zero.

Market Street, Stalybridge

This rank appears to serve the night time economy and was active on Friday and Saturday nights with activity through to the early hours of Saturday and Sunday mornings. No activity was observed on Thursday night and only a low level of activity was observed on Sunday night.

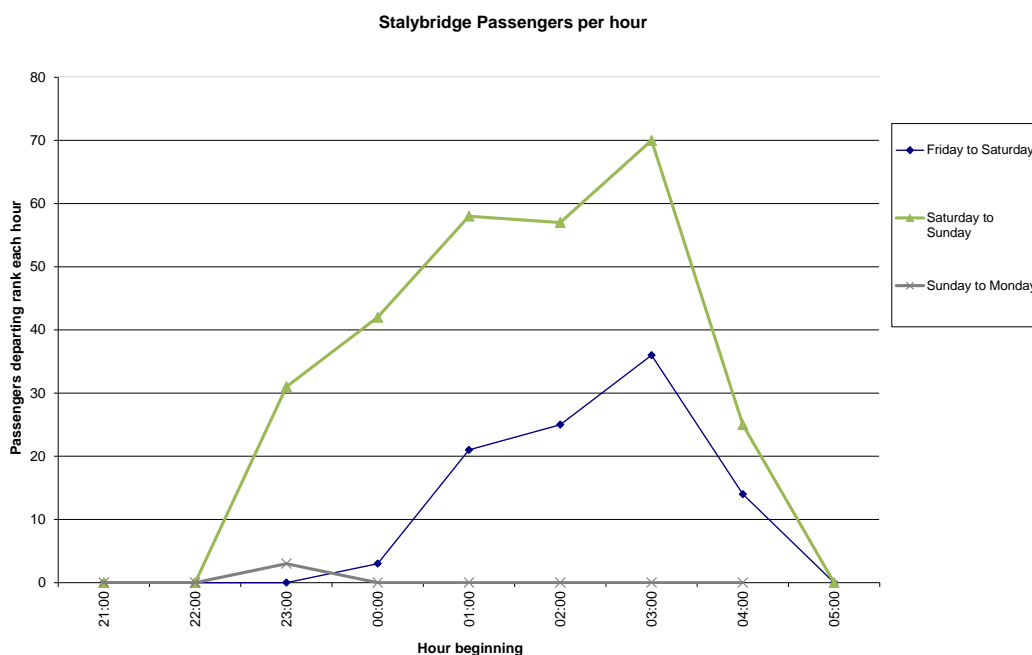


Figure 6 - Stalybridge Passengers Per Hour

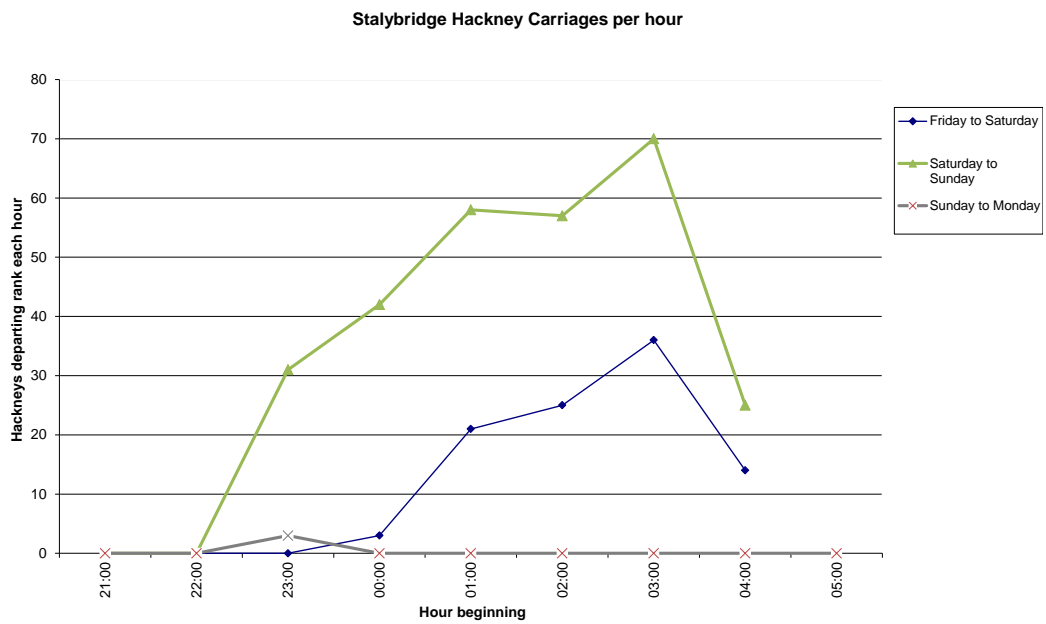


Figure 7 - Stalybridge Hackney Carriages per hour

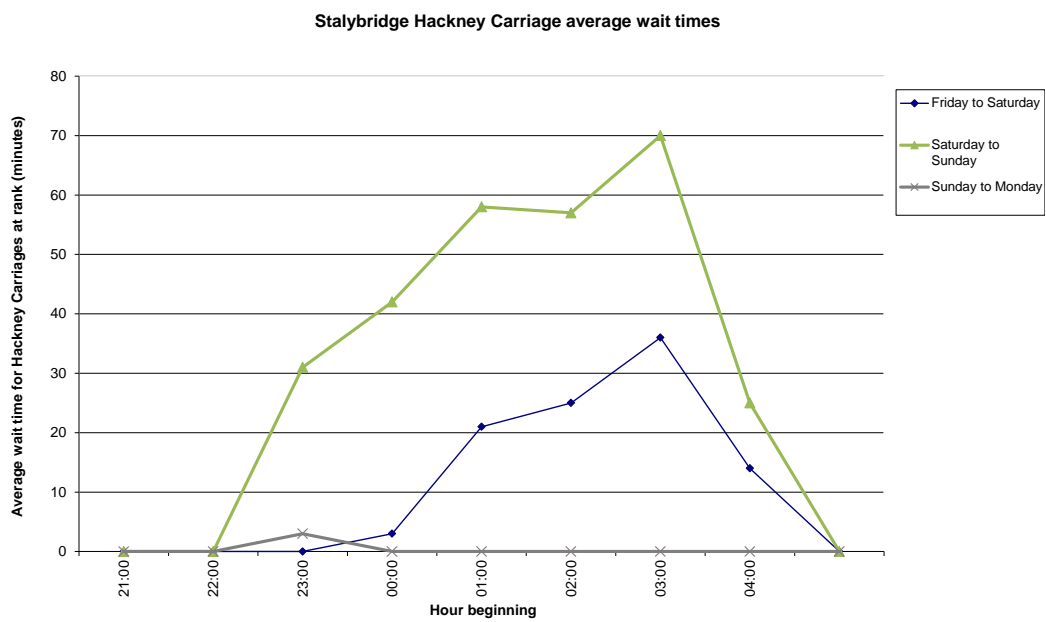


Figure 8 - Stalybridge Hackney Carriage Average Wait Times



Clarendon Street, Hyde

The rank was active on all of the days surveyed, from morning through to late night. Weekday activity (Thursday) was busiest in the morning, whereas on Friday and Saturday, both morning and night time formed periods of highest demand.

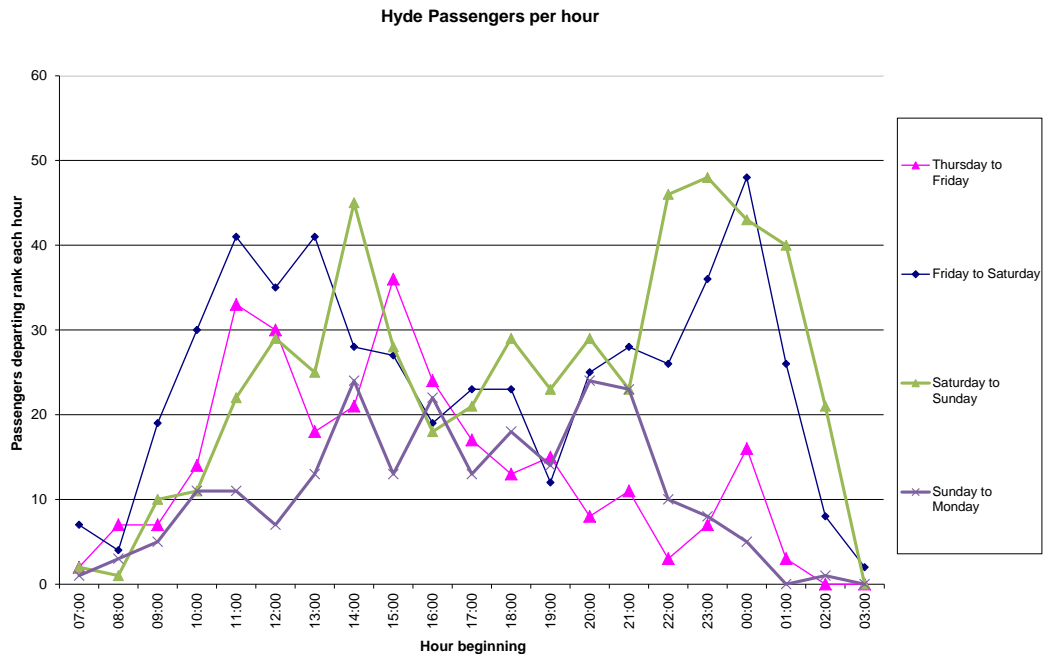


Figure 9 - Hyde passenger per hour

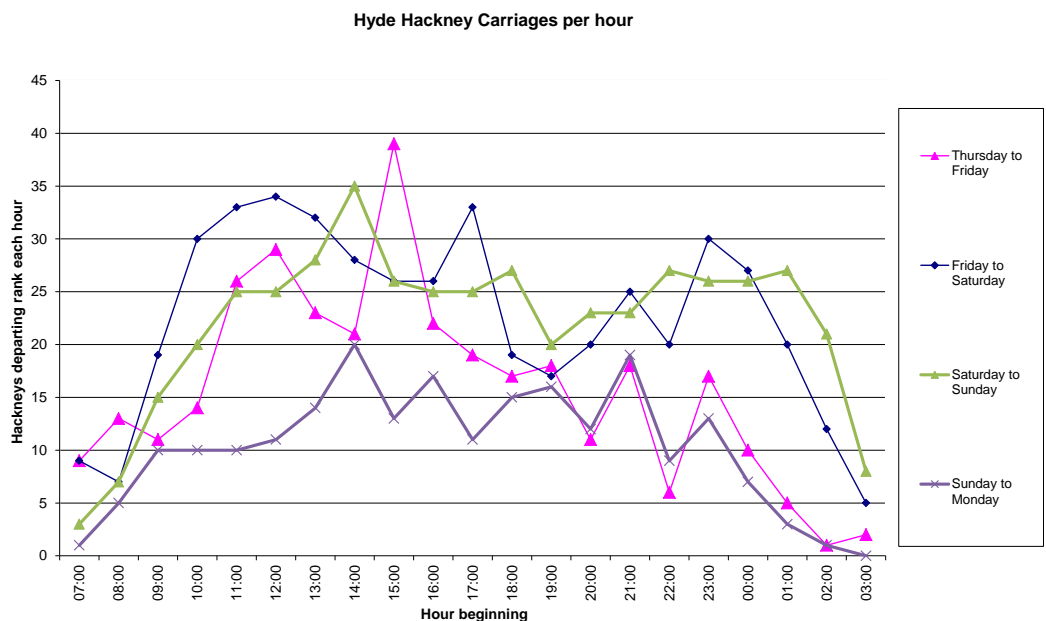


Figure 10 - Hyde Hackney Carriages per hour



Hyde Hackney Carriage average wait times

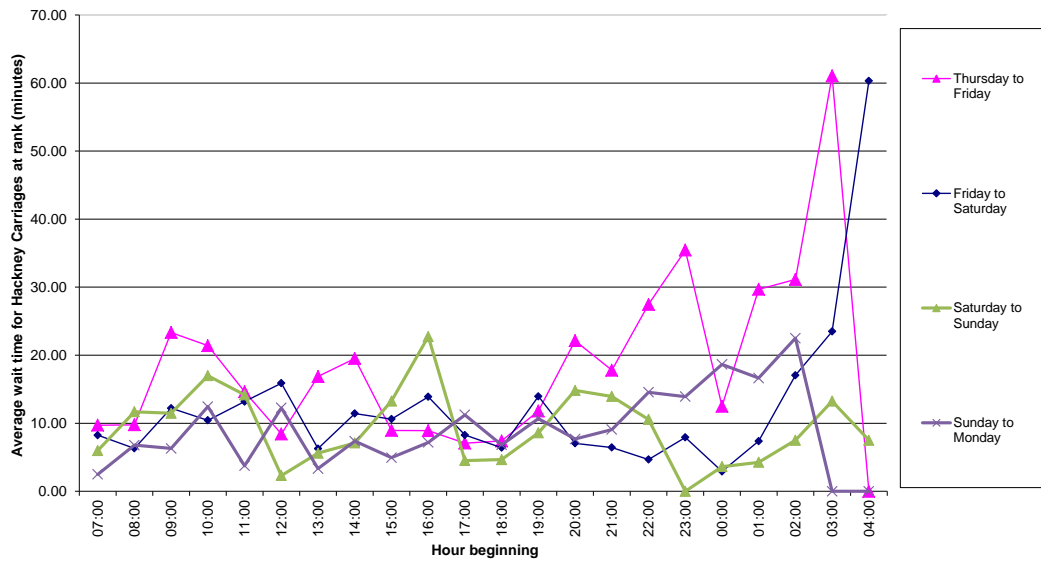


Figure 11 - Hyde Hackney Carriage average wait times

Market Street / Victoria Street, Denton

The rank was active from morning through to the early hours of the following morning on each of the surveyed days. Peak demand was on Friday and Saturday nights.

Denton Passengers per hour

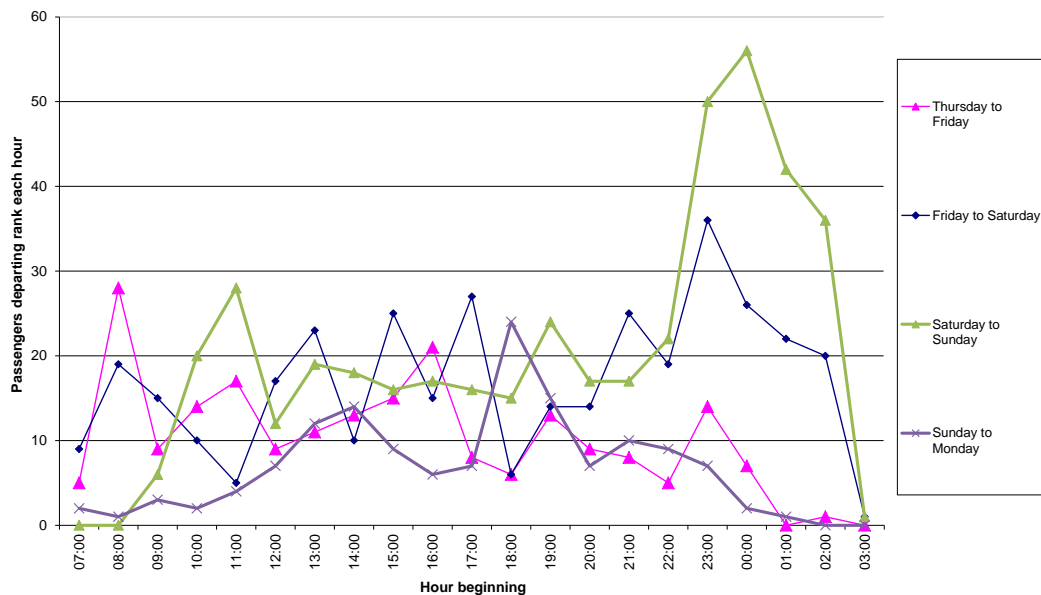


Figure 12 - Denton Passengers Per Hour

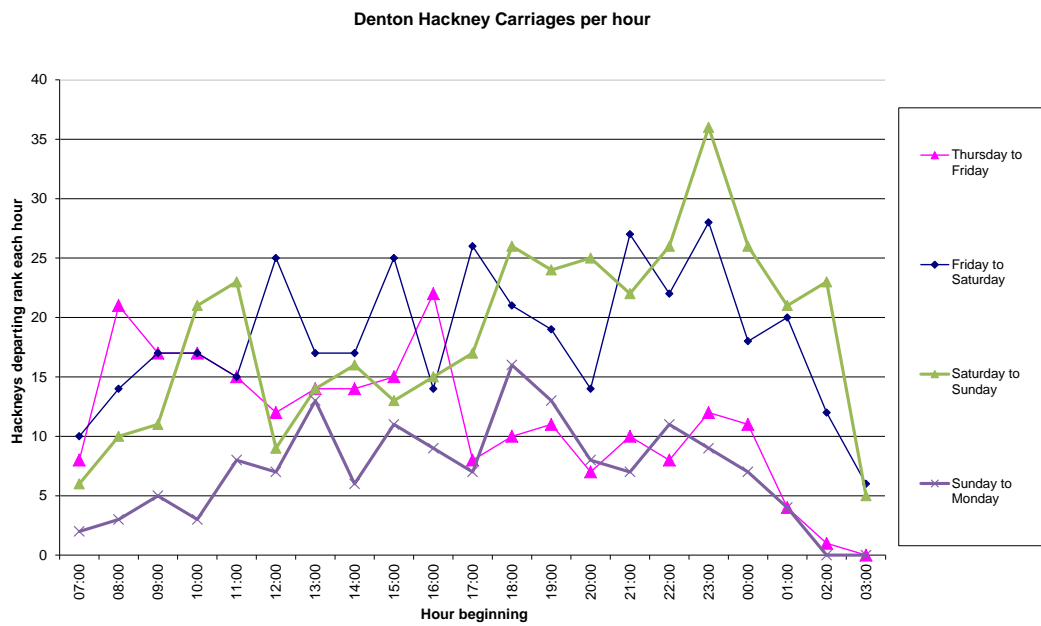


Figure 13 - Denton Hackney Carriages Per Hour

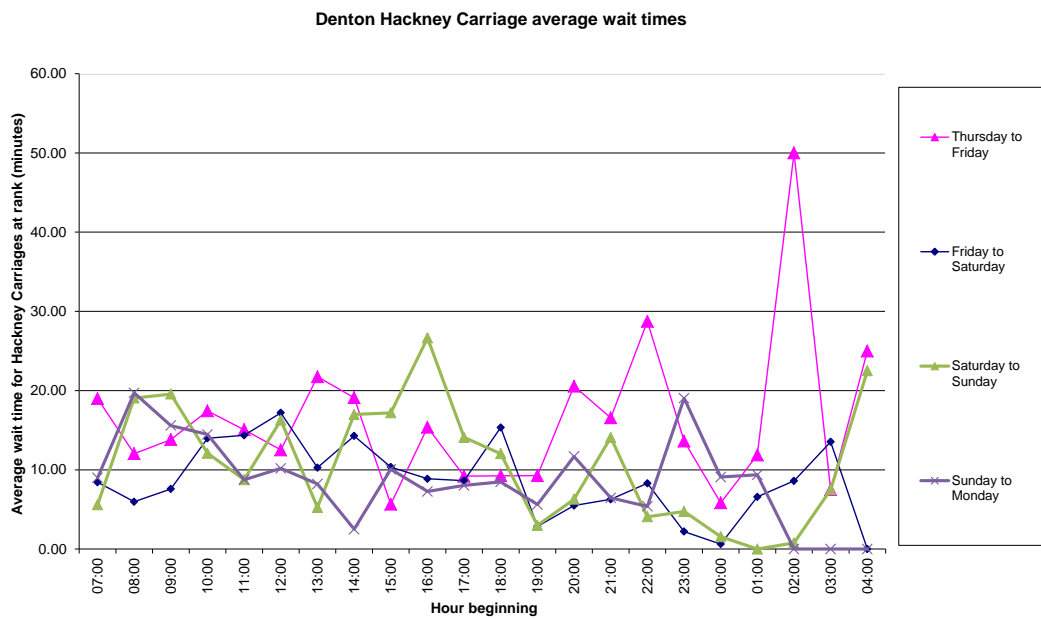


Figure 14 - Denton Hackney Carriage Average Wait Times



Wellington Road / Cork Street, Ashton-Under-Lyne

Wellington Road was the busiest rank surveyed and accounted for around half of the passenger trips observed. Peak activity was generally late afternoon on Thursday, Friday and Saturday.

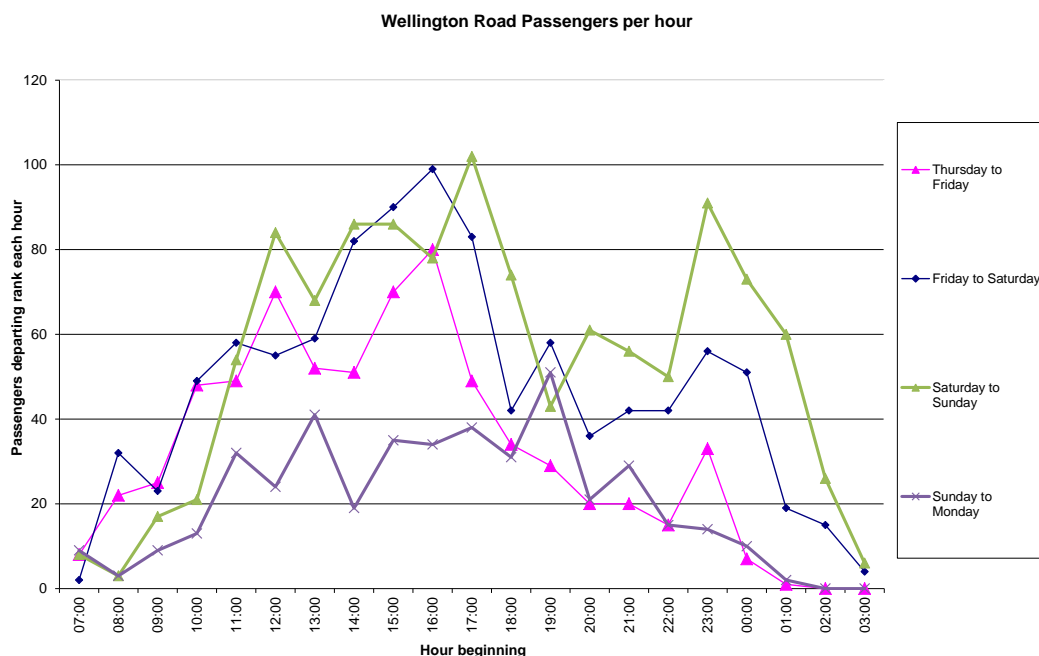


Figure 15 - Wellington Road Passengers Per Hour

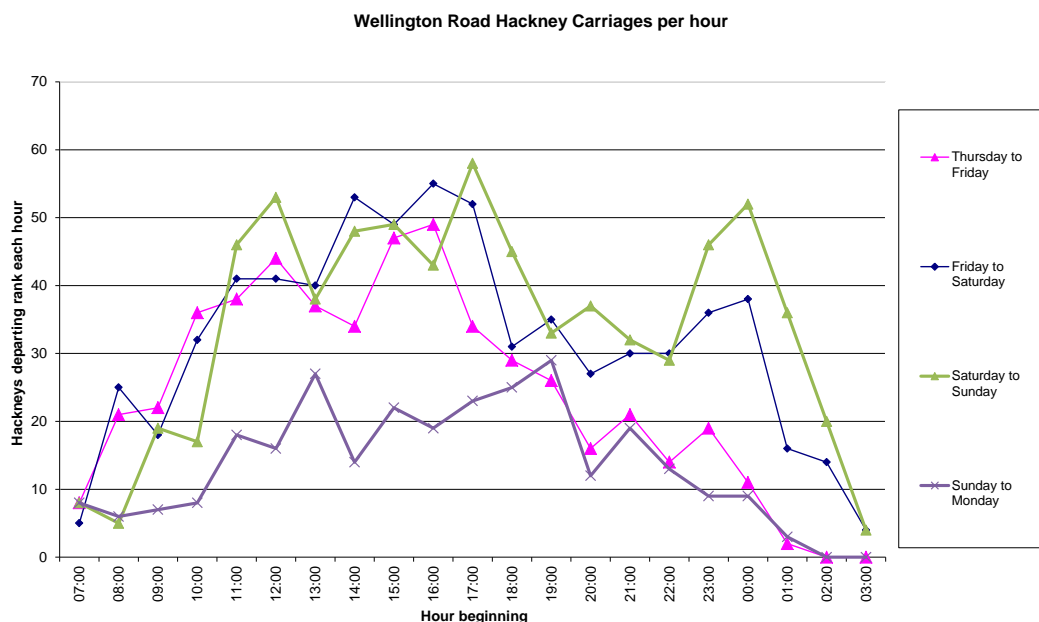


Figure 16 - Wellington Road Hackney Carriages Per Hour



Wellington Road Hackney Carriage average wait times

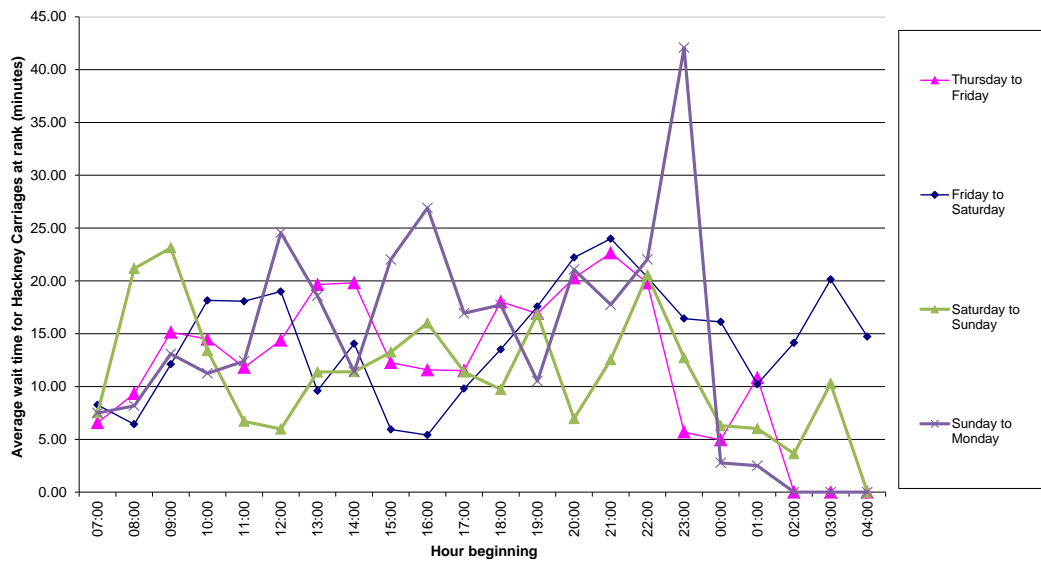


Figure 17 - Wellington Road Hackney Carriage Average Wait Times



Old Street, Ashton-Under-Lyne

The rank was active through the day, on each of the days observed. There is generally no activity in the evenings. The rank is close to adjacent shopping areas and the hours of operation are consistent with retailing activity.

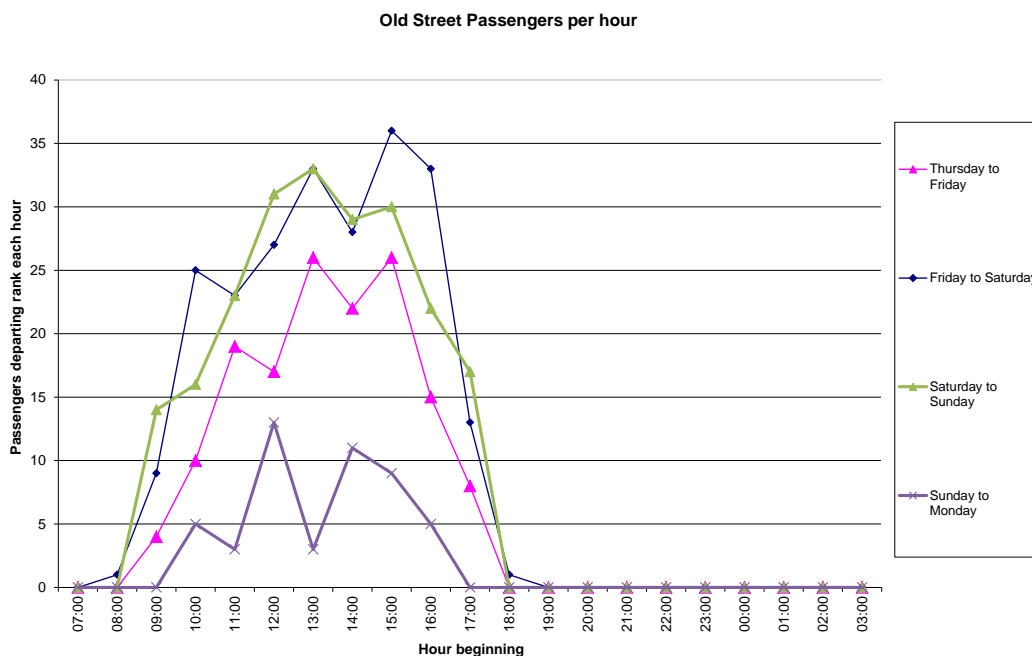


Figure 18 - Old Street Passengers Per Hour

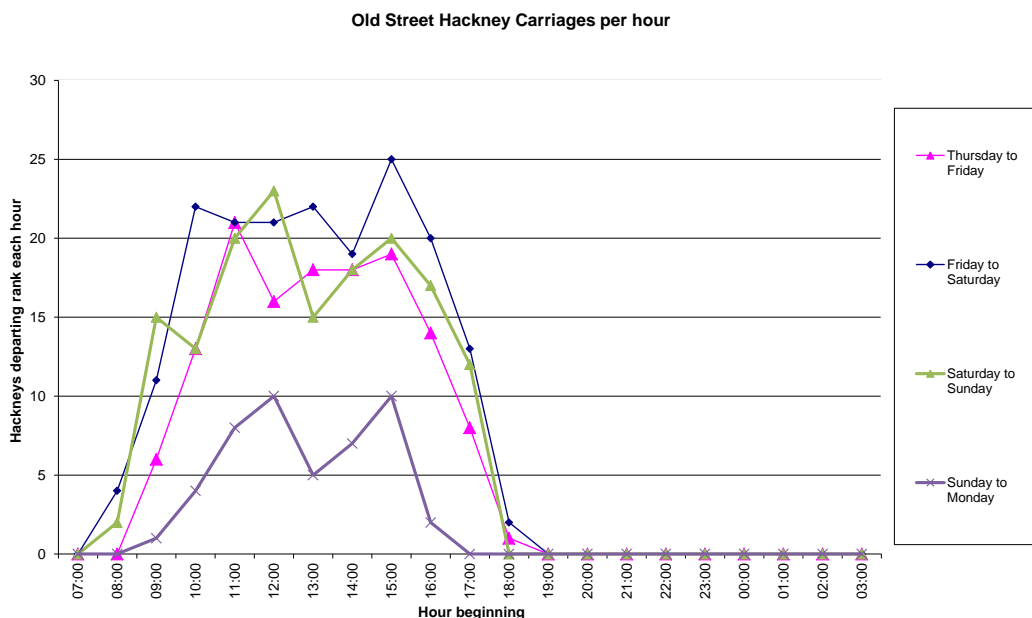


Figure 19 - Old Street Hackney Carriages Per Hour

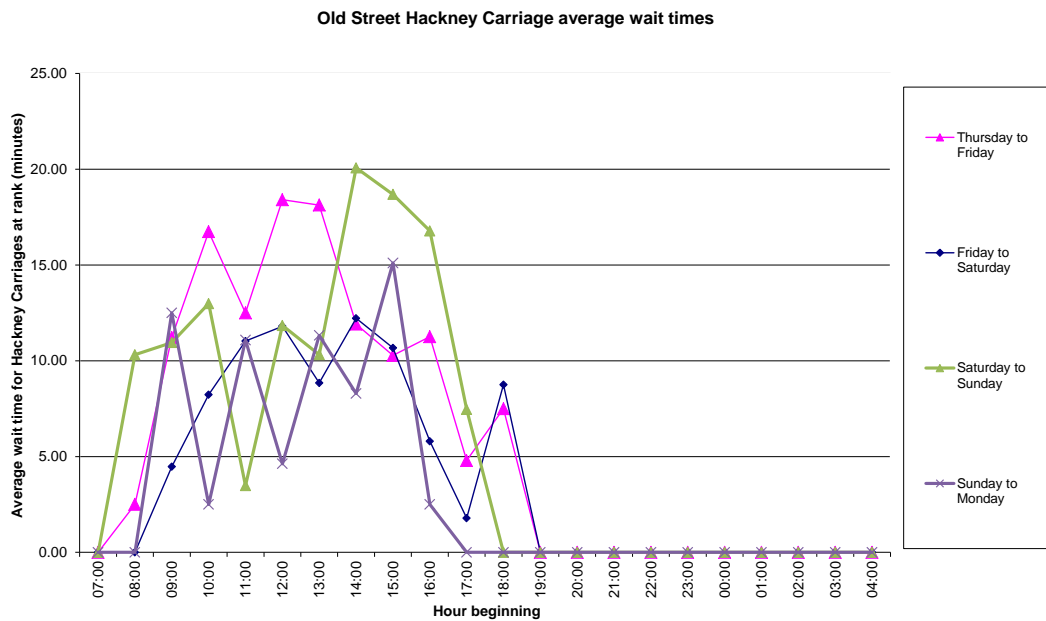


Figure 20 - Old Street Hackney Carriage Average Wait Times

Aggregate Passengers Per Hour from all observed ranks

Peak demand across all ranks is on Saturday night. Early evening shows a drop in aggregate demand, across all sites.

The bulk of night time demand is on Friday and Saturday nights, with Saturday being the busiest night.

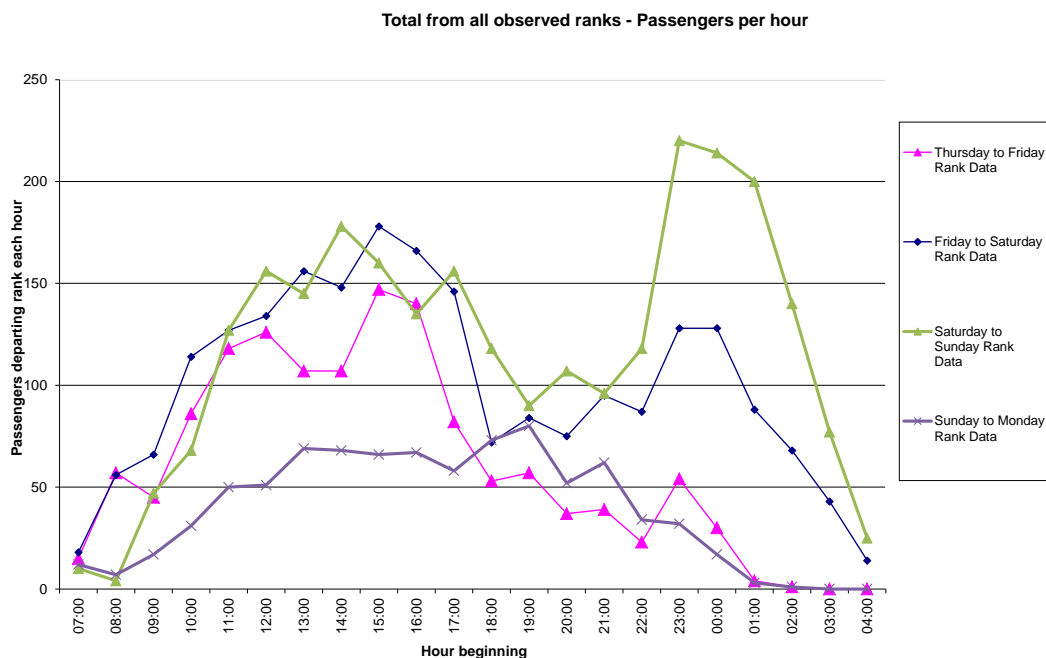


Figure 21 - Aggregate Passengers at all observed ranks



3.3 Summary of results

The results of the rank surveys, in terms of passenger and vehicle statistics are presented in the following tables, for each day surveyed.

RANK LOCATION	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
Hyde	100	231	331	285	1.23	15
Staleybridge	0	0	0	0	0.00	
Wellington Road (Ashton)	41	467	508	683	1.46	14
Old Street (Ashton)	24	110	134	147	1.34	13
Denton	87	151	238	213	1.41	14
Total	252	959	1211	1328	1.38	14

Table 1 Thursday Rank Summary Results

RANK LOCATION	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
Hyde	113	361	474	508	1.41	10
Stalybridge	19	57	76	99	1.74	6
Wellington Road (Ashton)	38	636	674	997	1.57	14
Old Street (Ashton)	22	158	180	229	1.45	9
Denton	157	227	384	358	1.58	9
Total	349	1439	1788	2191	1.52	11

Table 2 Friday Rank Summary Results

RANK LOCATION	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
Hyde	121	342	463	514	1.50	9
Stalybridge	13	152	165	283	1.86	4
Wellington Road (Ashton)	72	646	718	1147	1.78	11
Old Street (Ashton)	21	134	155	215	1.60	13
Denton	152	238	390	432	1.82	9
Total	379	1512	1891	2591	1.71	10

Table 3 Saturday Rank Summary Results



RANK LOCATION	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
Hyde	55	162	217	226	1.40	9
Stalybridge	2	3	5	3	1.00	3
Wellington Road (Ashton)	21	266	287	430	1.62	17
Old Street (Ashton)	21	26	47	49	1.88	9
Denton	48	101	149	142	1.41	9
Total	147	558	705	850	1.52	12

Table 4 Sunday Rank Summary Results

The aggregate weekly total for Hackney Carriages and passengers, was estimated from the daily totals. For the ranks which were surveyed on all four days, the weekly total was estimated by factoring the Thursday results by four and adding the daily results from each of the other days, i.e. 7 days is represented by (4 x Thursday) + Friday + Saturday + Sunday.

RANK LOCATION	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER [OCCUPIED] HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
Hyde	689	1789	2478	2388	1.3	12
Stalybridge	34	212	246	385	1.8	5
Wellington Road (Ashton)	295	3416	3711	5306	1.6	14
Old Street (Ashton)	160	758	918	1081	1.4	12
Denton	705	1170	1875	1784	1.5	12
Total	1883	7345	9228	10944	1.49	13

Table 5 Estimated Weekly Ranks Volumes

3.4 Commentary on results

The most active rank was Wellington Road, Ashton. This rank accounted for almost half of the total observed passengers. All of the ranks, except Stalybridge, were active each day surveyed. Old Street, Ashton was only active morning and afternoon and Market Street, Stalybridge was only active on Friday and Saturday nights. These ranks appear to serve local retail and night time economy demand, respectively. The remaining ranks are active during daytime and night time.



3.5 Passenger queuing

There were 135 incidences of passenger queuing observed. The average delay per waiting passenger was 4 minutes 13 seconds. Of the 6,960 passenger trips observed, 249 (3.6%) of those trips involved passengers who had to wait for a Hackney Carriage to arrive at ranks. The average wait time across all passengers (including those who did not have to wait for a Hackney Carriage) was 9 seconds. Details of observed passenger queuing in presented in Appendix B.

The incidence of queuing at ranks around Tameside Metropolitan Borough is taken into account when calculating the Index of Significant Unmet Demand (ISUD).



4 PUBLIC CONSULTATION

4.1 Public consultation questionnaires

Public consultation was undertaken through the Council's Citizens' Panel. The consultation covered frequency of use of Hackney Carriage or Private Hire Vehicles, How a Hackney Carriage was obtained for the last trip made and incidences of difficulties encountered with hiring a Hackney Carriage. Information on responses received are presented in detail in the Citizens' Panel survey report and so are not repeated here.

Latent demand relates to intending passengers who do not attempt to hire a hackney carriage or give up trying. The Citizens' Panel questionnaire asked respondents if they had faced any difficulties hiring a Hackney Carriage. The results of this question was that 6.8% of Hackney Carriage users found difficulties. This value was used as the value for 'Latent Demand' when calculating the Index of Significant Unmet Demand (ISUD).



5 DETERMINATION OF UNMET DEMAND

5.1 Quantitative Assessment

We have calculated a factor for the Incidence of Significant Unmet Taxi Demand (ISUD) using the following standard formula:

$$\text{ISUD} = \text{APD} \times \text{PF} \times \text{SSP} \times \text{GID} \times \text{SF} \times \text{LDF}$$

where:

ISUD = Incidence of Significant Unmet Demand

APD = Average passenger delay across all time periods

PF = whether the demand is highly peaked. This will equal 1 if there is no peaking and 0.5 if peaking is present

SSP = Steady State Performance - Percentage of weekday daytime hours in which passenger queues are observed

GID = General Incidence of Delay - Proportion of Hackney Carriage users travelling in hours where average passenger delay exceeds one minute

SF = Seasonality Factor

LDF = Latent Demand Factor. Takes into account trips not made owing to perceived poor quality of service.

An ISUD value of 80 or higher is generally taken as indicating there is significant unmet demand.

The ISUD factor was developed in the early 1990s and has been used by a number of transport consultancies since that time for Unmet Demand Surveys. It provides a useful benchmark measure of the level of unmet demand that is present. It combines a number of intuitive measures of Unmet Demand with the intention that locations where there are long delays in most hours for a high proportion of passengers produce very high values, while minimal delays for short periods affecting a small minority of passengers result in a low value.

5.2 Calculation of ISUD variables

APD: Passenger delays were observed at all the ranks except Market Street, Stalybridge. The average delay is determined by calculating the total passenger delay as aggregate passenger delay minutes, then dividing by the total number of passengers, including those who did not suffer any delay.

The aggregate delays in passenger hours and minutes, are presented in Appendix B and sum to 17 hours, 29 minutes and 50 seconds. If we divide by



the total number of passengers observed, (6,960), the resultant average delay of 9 seconds equates to an APD value of 0.15 minutes. **APD = 0.15**

PF There are no consistent sharp peaks in demand across the taxi ranks surveyed. Each rank has busier periods. However, whilst Friday and Saturday nights are busier than other times, there is no area wide sharp peak. Given the lack of sharp peaks in overall demand, the **PF value is 1.0**.

SSP Week day, daytime hours are deemed to be between 7.00 am and 6.00 pm. The data from Thursday and Friday observations was analysed to determine whether there were any occasions when passengers were delayed by more than one minute. The calculated value was 9.8%, **SSP value = 9.8**.

GID The percentage of Hackney Carriage users travelling in hours where the average passenger delay exceeds one minute was assessed. There were two hours when average passenger delay exceeded one minute. These were Midnight to 1.00 am on Saturday morning and Midnight to 1.00 am on Sunday morning. Total passengers in these two hours was 159, which equates to **2.3%**

SF Due to the nature of these surveys it is not possible to collect information throughout an entire year to assess the effects of seasonality. Experience has suggested that Hackney demand does exhibit a degree of seasonality and this is allowed for by the inclusion of a seasonality factor. The factor is set at a level to ensure that a marginal decision either way obtained in an “untypical” month will be reversed. This factor typically takes a value of 1 for surveys conducted in September to November and March to June, i.e. “typical” months. It takes a value of 1.2 for surveys conducted in January and February and the longer school holidays, where low demand the absence of contract work will bias the results in favour of the Hackney trade, and a value of 0.8 for surveys conducted in December during the pre-Christmas rush of activity. For this study, given that trade volume is higher during the summer, a factor of **1.0** is assumed.

LDF Latent Demand Factor. This is derived from the public attitude survey results and provides a measure of the proportion of the public who have given up trying to obtain a Hackney Carriage at either a rank or by flagging down. It is measured as 1+ proportion giving up waiting. The inclusion of this factor is a response to the latest DfT guidance requiring an estimate of latent demand.

The public consultation survey results indicate that 6.8% of respondents have faced difficulty trying to hire a taxi by hailing or at a rank. This value is used as a proxy for Latent Demand. Therefore, the **LDF factor is 1.068**.

The ISUD value was calculated as follows, using the variables derived for this study.

$$\text{ISUD} = \text{APD} \times \text{PF} \times \text{SSP} \times \text{GID} \times \text{SF} \times \text{LDF}$$

$$\text{ISUD} = 0.15 \times 1.0 \times 9.8 \times 2.3 \times 1.0 \times 1.068 = 3.6$$

Where the ISUD value is less than 80, it is generally considered to be an indicator that there is no unmet demand.



5.3 Consideration of wider factors.

The ISUD value of 3.6 falls below the level which would suggest that the level of unmet demand is significant. Whilst a powerful indicator, the ISUD value should not be taken in isolation. Other available evidence should also be considered.

From the Tameside Metropolitan Borough taxi rank surveys, 135 incidences of passenger queuing were observed. Passengers waited at ranks at various periods through morning afternoon, evening and night time.

At the peak night time economy times of late Friday and Saturday nights passengers occasionally had to queue in multiple groups (i.e. not a single group of passengers travelling together), waiting for Hackney Carriages to arrive at the ranks. However, at other times of day, passengers who had to wait were often solo passengers or a single group travelling together.

During periods of low demand, Hackney Carriage would commonly drive past ranks to check for waiting passengers, but not necessarily stop to wait at the rank.

The prevailing condition at the taxi ranks, during periods of active passenger demand, was that of Hackney Carriages waiting for passengers to arrive.

5.4 Future growth in demand and potential changes in levels of service.

Growth in travel demand is linked to levels of economic activity. When an area is experiencing economic growth, this tends to drive growth in demand, and the converse is true, when an area experiences periods of economic decline or stagnation.

With respect to licensed vehicle levels of service, if the national and local economy grows in the next few years, this is likely to drive an increase in demand for travel. Growth would be catered for by both Hackney Carriages and Private Hire Vehicles.

One of the features of the Hackney Carriage trade, especially in areas which experience a high degree of seasonal variation in demand, is that the hours that driver work, will vary according to demand. For example, in quiet times, drivers may work for longer hours to generate sufficient income. As demand increases, the hours worked by some drivers can reduce, as they can achieve the same income level, working fewer hours. In turn, this effect can lead to fewer drivers available at quiet times of day. However, even though such periods attract lower levels of passenger demand, these are periods when unmet demand can occur. If the number of Hackney Carriages available should reduce at these times, the incidences of passenger queuing can increase sharply. This in turn could increase the calculated ISUD value. Therefore, if overall demand for licensed vehicles increases in future years, this could have the counter intuitive effect of increasing incidences of unmet demand at off peak demand times.

Strong indicators of increased demand are an increase in the number of licensed Private Hire Vehicles and an increase in the number, or operating hours, of licensed premises, especially night clubs.



6 CONCLUSIONS

6.1 Unmet demand

Analysis of the taxi rank survey data and consultation data indicates that there is some evidence of unmet demand, based on the number of observed incidences of passengers waiting for Hackney Carriages at ranks. However, the level of unmet demand is not significant, with respect to the ISUD index calculation and this is supported by the low proportion of public consultation respondents who have faced difficulties hiring a Hackney Carriage.

There is generally excess supply of Hackney Carriages at the ranks.

6.2 Recommendations

There is no evidence of significant unmet demand for Hackney Carriages in Tameside Metropolitan Borough. However, if projected growth in the economy manifests over the next few years, this is likely to drive additional demand for licensed vehicle services.

There is no compelling need for the issue of additional Hackney Carriage licenses at this time, to address unmet demand. However, the Council may wish to consider any need for additional licenses in future if there is evidence of growth in demand, such as increase levels of business in the night time economy or an increase in the number of Private Hire Vehicles in operation.



APPENDIX A TAXI RANK OBSERVATION RESULTS



Hyde - March 2014 Survey		Thursday to Friday Rank Data				
Hour Beginning	Total Hackney Carriages Departing Rank Empty	Total Hackney Carriages Departing Rank With Passengers	Total Hackney Carriages Departing Rank	Total Passengers Departing Rank	Average Passengers per Hackney Carriage	Average Wait Time at the Rank per Hackney Carriage (Minutes)
07:00	7.00	2.00	9.00	2.00	1.0	10
08:00	7.00	6.00	13.00	7.00	1.2	10
09:00	5.00	6.00	11.00	7.00	1.2	23
10:00	2.00	12.00	14.00	14.00	1.2	21
11:00	5.00	21.00	26.00	33.00	1.6	15
12:00	3.00	26.00	29.00	30.00	1.2	8
13:00	7.00	16.00	23.00	18.00	1.1	17
14:00	5.00	16.00	21.00	21.00	1.3	20
15:00	8.00	31.00	39.00	36.00	1.2	9
16:00	3.00	19.00	22.00	24.00	1.3	9
17:00	4.00	15.00	19.00	17.00	1.1	7
18:00	6.00	11.00	17.00	13.00	1.2	7
19:00	6.00	12.00	18.00	15.00	1.3	12
20:00	3.00	8.00	11.00	8.00	1.0	22
21:00	8.00	10.00	18.00	11.00	1.1	18
22:00	4.00	2.00	6.00	3.00	1.5	27
23:00	11.00	6.00	17.00	7.00	1.2	35
00:00	1.00	9.00	10.00	16.00	1.8	12
01:00	2.00	3.00	5.00	3.00	1.0	30
02:00	1.00	0.00	1.00	0.00	0.0	31
03:00	2.00	0.00	2.00	0.00	0.0	61
04:00	0.00	0.00	0.00	0.00	0.0	0
Total	100.00	231.00	331.00	285.00	1.2	

Hyde - March 2014 Survey		Friday to Saturday Rank Data				
Hour Beginning	Total Hackney Carriages Departing Rank Empty	Total Hackney Carriages Departing Rank With Passengers	Total Hackney Carriages Departing Rank	Total Passengers Departing Rank	Average Passengers per Hackney Carriage	Average Wait Time at the Rank per Hackney Carriage (Minutes)
07:00	2.00	7.00	9.00	7.00	1.0	8
08:00	3.00	4.00	7.00	4.00	1.0	6
09:00	3.00	16.00	19.00	19.00	1.2	12
10:00	7.00	23.00	30.00	30.00	1.3	10
11:00	6.00	27.00	33.00	41.00	1.5	13
12:00	5.00	29.00	34.00	35.00	1.2	16
13:00	1.00	31.00	32.00	41.00	1.3	6
14:00	3.00	25.00	28.00	28.00	1.1	11
15:00	3.00	23.00	26.00	27.00	1.2	11
16:00	9.00	17.00	26.00	19.00	1.1	14
17:00	14.00	19.00	33.00	23.00	1.2	8
18:00	2.00	17.00	19.00	23.00	1.4	6
19:00	8.00	9.00	17.00	12.00	1.3	14
20:00	3.00	17.00	20.00	25.00	1.5	7
21:00	11.00	14.00	25.00	28.00	2.0	6
22:00	6.00	14.00	20.00	26.00	1.9	5
23:00	7.00	23.00	30.00	36.00	1.6	8
00:00	1.00	26.00	27.00	48.00	1.8	3
01:00	8.00	12.00	20.00	26.00	2.2	7
02:00	6.00	6.00	12.00	8.00	1.3	17
03:00	3.00	2.00	5.00	2.00	1.0	23
04:00	2.00	0.00	2.00	0.00	0.0	60
Total	113.00	361.00	474.00	508.00	1.4	



Hyde - March 2014 Survey		Saturday to Sunday Rank Data				
HOURLY BEGINNING	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
07:00	1.00	2.00	3.00	2.00	1.0	6
08:00	6.00	1.00	7.00	1.00	1.0	12
09:00	6.00	9.00	15.00	10.00	1.1	11
10:00	12.00	8.00	20.00	11.00	1.4	17
11:00	6.00	19.00	25.00	22.00	1.2	14
12:00	2.00	23.00	25.00	29.00	1.3	2
13:00	9.00	19.00	28.00	25.00	1.3	6
14:00	4.00	31.00	35.00	45.00	1.5	7
15:00	5.00	21.00	26.00	28.00	1.3	13
16:00	9.00	16.00	25.00	18.00	1.1	23
17:00	9.00	16.00	25.00	21.00	1.3	5
18:00	6.00	21.00	27.00	29.00	1.4	5
19:00	4.00	16.00	20.00	23.00	1.4	9
20:00	4.00	19.00	23.00	29.00	1.5	15
21:00	10.00	13.00	23.00	23.00	1.8	14
22:00	2.00	25.00	27.00	46.00	1.8	11
23:00	1.00	25.00	26.00	48.00	1.9	0
00:00	4.00	22.00	26.00	43.00	2.0	4
01:00	3.00	24.00	27.00	40.00	1.7	4
02:00	9.00	12.00	21.00	21.00	1.8	8
03:00	8.00	0.00	8.00	0.00	0.0	13
04:00	1.00	0.00	1.00	0.00	0.0	8
Total	121.00	342.00	463.00	514.00	1.5	
Hyde - March 2014 Survey		Sunday to Monday Rank Data				
HOURLY BEGINNING	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
07:00	0.00	1.00	1.00	1.00	1.0	3
08:00	2.00	3.00	5.00	3.00	1.0	7
09:00	5.00	5.00	10.00	5.00	1.0	6
10:00	1.00	9.00	10.00	11.00	1.2	12
11:00	1.00	9.00	10.00	11.00	1.2	4
12:00	5.00	6.00	11.00	7.00	1.2	12
13:00	2.00	12.00	14.00	13.00	1.1	3
14:00	0.00	20.00	20.00	24.00	1.2	7
15:00	4.00	9.00	13.00	13.00	1.4	5
16:00	1.00	16.00	17.00	22.00	1.4	7
17:00	2.00	9.00	11.00	13.00	1.4	11
18:00	5.00	10.00	15.00	18.00	1.8	7
19:00	7.00	9.00	16.00	14.00	1.6	11
20:00	0.00	12.00	12.00	24.00	2.0	8
21:00	5.00	14.00	19.00	23.00	1.6	9
22:00	2.00	7.00	9.00	10.00	1.4	15
23:00	7.00	6.00	13.00	8.00	1.3	14
00:00	3.00	4.00	7.00	5.00	1.3	19
01:00	3.00	0.00	3.00	0.00	0.0	17
02:00	0.00	1.00	1.00	1.00	1.0	23
03:00	0.00	0.00	0.00	0.00	0.0	0
04:00	0.00	0.00	0.00	0.00	0.0	0
Total	55.00	162.00	217.00	226.00	1.4	



Stalybridge - March 2014 Survey		Thursday to Friday Rank Data				
Hour Beginning	Total Hackney Carriages Departing Rank Empty	Total Hackney Carriages Departing Rank With Passengers	Total Hackney Carriages Departing Rank	Total Passengers Departing Rank	Average Passengers per Hackney Carriage	Average Wait Time at the Rank per Hackney Carriage (Minutes)
07:00	0.00	0.00	0.00	0.00	0.00	0
08:00	0.00	0.00	0.00	0.00	0.00	0
09:00	0.00	0.00	0.00	0.00	0.00	0
10:00	0.00	0.00	0.00	0.00	0.00	0
11:00	0.00	0.00	0.00	0.00	0.00	0
12:00	0.00	0.00	0.00	0.00	0.00	0
13:00	0.00	0.00	0.00	0.00	0.00	0
14:00	0.00	0.00	0.00	0.00	0.00	0
15:00	0.00	0.00	0.00	0.00	0.00	0
16:00	0.00	0.00	0.00	0.00	0.00	0
17:00	0.00	0.00	0.00	0.00	0.00	0
18:00	0.00	0.00	0.00	0.00	0.00	0
19:00	0.00	0.00	0.00	0.00	0.00	0
20:00	0.00	0.00	0.00	0.00	0.00	0
21:00	0.00	0.00	0.00	0.00	0.00	0
22:00	0.00	0.00	0.00	0.00	0.00	0
23:00	0.00	0.00	0.00	0.00	0.00	0
00:00	0.00	0.00	0.00	0.00	0.00	0
01:00	0.00	0.00	0.00	0.00	0.00	0
02:00	0.00	0.00	0.00	0.00	0.00	0
03:00	0.00	0.00	0.00	0.00	0.00	0
04:00	0.00	0.00	0.00	0.00	0.00	0
Total	0.00	0.00	0.00	0.00	#DIV/0!	

Stalybridge - March 2014 Survey		Friday to Saturday Rank Data				
Hour Beginning	Total Hackney Carriages Departing Rank Empty	Total Hackney Carriages Departing Rank With Passengers	Total Hackney Carriages Departing Rank	Total Passengers Departing Rank	Average Passengers per Hackney Carriage	Average Wait Time at the Rank per Hackney Carriage (Minutes)
07:00	0.00	0.00	0.00	0.00	0.00	0
08:00	0.00	0.00	0.00	0.00	0.00	0
09:00	0.00	0.00	0.00	0.00	0.00	0
10:00	0.00	0.00	0.00	0.00	0.00	0
11:00	0.00	0.00	0.00	0.00	0.00	0
12:00	0.00	0.00	0.00	0.00	0.00	0
13:00	0.00	0.00	0.00	0.00	0.00	0
14:00	0.00	0.00	0.00	0.00	0.00	0
15:00	0.00	0.00	0.00	0.00	0.00	0
16:00	0.00	0.00	0.00	0.00	0.00	0
17:00	0.00	0.00	0.00	0.00	0.00	0
18:00	0.00	0.00	0.00	0.00	0.00	0
19:00	0.00	0.00	0.00	0.00	0.00	0
20:00	0.00	0.00	0.00	0.00	0.00	0
21:00	0.00	0.00	0.00	0.00	0.00	0
22:00	0.00	0.00	0.00	0.00	0.00	0
23:00	0.00	0.00	0.00	0.00	0.00	0
00:00	0.00	2.00	2.00	3.00	1.5	5
01:00	7.00	13.00	20.00	21.00	1.6	6
02:00	5.00	15.00	20.00	25.00	1.7	7
03:00	4.00	20.00	24.00	36.00	1.8	8
04:00	3.00	7.00	10.00	14.00	2.0	5
Total	19.00	57.00	76.00	99.00	1.7	



Stalybridge - March 2014 Survey		Saturday to Sunday Rank Data				
HOURLY BEGINNING	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
07:00	0.00	0.00	0.00	0.00	0.00	0.0
08:00	0.00	0.00	0.00	0.00	0.00	0.0
09:00	0.00	0.00	0.00	0.00	0.00	0.0
10:00	0.00	0.00	0.00	0.00	0.00	0.0
11:00	0.00	0.00	0.00	0.00	0.00	0.0
12:00	0.00	0.00	0.00	0.00	0.00	0.0
13:00	0.00	0.00	0.00	0.00	0.00	0.0
14:00	0.00	0.00	0.00	0.00	0.00	0.0
15:00	0.00	0.00	0.00	0.00	0.00	0.0
16:00	0.00	0.00	0.00	0.00	0.00	0.0
17:00	0.00	0.00	0.00	0.00	0.00	0.0
18:00	0.00	0.00	0.00	0.00	0.00	0.0
19:00	0.00	0.00	0.00	0.00	0.00	0.0
20:00	0.00	0.00	0.00	0.00	0.00	0.0
21:00	0.00	0.00	0.00	0.00	0.00	0.0
22:00	5.00	0.00	5.00	0.00	0.00	0.0
23:00	1.00	19.00	20.00	31.00	1.6	5.0
00:00	1.00	23.00	24.00	42.00	1.8	3.0
01:00	0.00	28.00	28.00	58.00	2.1	0.0
02:00	2.00	29.00	31.00	57.00	2.0	7.0
03:00	0.00	39.00	39.00	70.00	1.8	7.0
04:00	3.00	14.00	17.00	25.00	1.8	8.0
Total	12.00	152.00	164.00	283.00	1.9	

Stalybridge - March 2014 Survey		Sunday to Monday Rank Data				
HOURLY BEGINNING	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
07:00	0.00	0.00	0.00	0.00	0.00	0.0
08:00	0.00	0.00	0.00	0.00	0.00	0.0
09:00	0.00	0.00	0.00	0.00	0.00	0.0
10:00	0.00	0.00	0.00	0.00	0.00	0.0
11:00	0.00	0.00	0.00	0.00	0.00	0.0
12:00	0.00	0.00	0.00	0.00	0.00	0.0
13:00	0.00	0.00	0.00	0.00	0.00	0.0
14:00	0.00	0.00	0.00	0.00	0.00	0.0
15:00	0.00	0.00	0.00	0.00	0.00	0.0
16:00	0.00	0.00	0.00	0.00	0.00	0.0
17:00	0.00	0.00	0.00	0.00	0.00	0.0
18:00	0.00	0.00	0.00	0.00	0.00	0.0
19:00	0.00	0.00	0.00	0.00	0.00	0.0
20:00	0.00	0.00	0.00	0.00	0.00	0.0
21:00	0.00	0.00	0.00	0.00	0.00	0.0
22:00	0.00	0.00	0.00	0.00	0.00	0.0
23:00	2.00	3.00	5.00	3.00	1.0	3.0
00:00	0.00	0.00	0.00	0.00	0.00	0.0
01:00	0.00	0.00	0.00	0.00	0.00	0.0
02:00	0.00	0.00	0.00	0.00	0.00	0.0
03:00	0.00	0.00	0.00	0.00	0.00	0.0
04:00	0.00	0.00	0.00	0.00	0.00	0.0
Total	2.00	3.00	5.00	3.00	1.0	



Wellington Road - March 2014 Survey			Thursday to Friday Rank Data			
HOOR BEGINNING	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
07:00	2.00	6.00	8.00	8.00	1.3	7
08:00	6.00	15.00	21.00	22.00	1.5	9
09:00	0.00	22.00	22.00	25.00	1.1	15
10:00	4.00	32.00	36.00	48.00	1.5	14
11:00	2.00	36.00	38.00	49.00	1.4	12
12:00	0.00	44.00	44.00	70.00	1.6	14
13:00	0.00	37.00	37.00	52.00	1.4	20
14:00	0.00	34.00	34.00	51.00	1.5	20
15:00	1.00	46.00	47.00	70.00	1.5	12
16:00	0.00	49.00	49.00	80.00	1.6	12
17:00	0.00	34.00	34.00	49.00	1.4	12
18:00	3.00	26.00	29.00	34.00	1.3	18
19:00	1.00	25.00	26.00	29.00	1.2	17
20:00	3.00	13.00	16.00	20.00	1.5	20
21:00	5.00	16.00	21.00	20.00	1.3	23
22:00	3.00	11.00	14.00	15.00	1.4	20
23:00	3.00	16.00	19.00	33.00	2.1	6
00:00	7.00	4.00	11.00	7.00	1.8	5
01:00	1.00	1.00	2.00	1.00	1.0	11
02:00	0.00	0.00	0.00	0.00	0.0	0
03:00	0.00	0.00	0.00	0.00	0.0	0
04:00	0.00	0.00	0.00	0.00	0.0	0
Total	41.00	467.00	508.00	683.00	1.5	
Wellington Road - March 2014 Survey			Friday to Saturday Rank Data			
HOOR BEGINNING	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
07:00	3.00	2.00	5.00	2.00	1.0	8
08:00	3.00	22.00	25.00	32.00	1.5	6
09:00	1.00	17.00	18.00	23.00	1.4	12
10:00	2.00	30.00	32.00	49.00	1.6	18
11:00	0.00	41.00	41.00	58.00	1.4	18
12:00	0.00	41.00	41.00	55.00	1.3	19
13:00	0.00	40.00	40.00	59.00	1.5	10
14:00	0.00	53.00	53.00	82.00	1.5	14
15:00	0.00	49.00	49.00	90.00	1.8	6
16:00	0.00	55.00	55.00	99.00	1.8	5
17:00	0.00	52.00	52.00	83.00	1.6	10
18:00	0.00	31.00	31.00	42.00	1.4	14
19:00	2.00	33.00	35.00	58.00	1.8	18
20:00	4.00	23.00	27.00	36.00	1.6	22
21:00	0.00	30.00	30.00	42.00	1.4	24
22:00	1.00	29.00	30.00	42.00	1.4	20
23:00	1.00	35.00	36.00	56.00	1.6	16
00:00	9.00	29.00	38.00	51.00	1.8	16
01:00	2.00	14.00	16.00	19.00	1.4	10
02:00	6.00	8.00	14.00	15.00	1.9	14
03:00	2.00	2.00	4.00	4.00	2.0	20
04:00	2.00	0.00	2.00	0.00	0.0	15
Total	38.00	636.00	674.01	997.00	1.6	



Wellington Road - March 2014 Survey			Saturday to Sunday Rank Data			
HOURLY BEGINNING	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
07:00	3.00	5.00	8.00	8.00	1.6	8
08:00	2.00	3.00	5.00	3.00	1.0	21
09:00	7.00	12.00	19.00	17.00	1.4	23
10:00	3.00	14.00	17.00	21.00	1.5	13
11:00	13.00	33.00	46.00	54.00	1.6	7
12:00	4.00	49.00	53.00	84.00	1.7	6
13:00	1.00	37.00	38.00	68.00	1.8	11
14:00	0.00	48.00	48.00	86.00	1.8	11
15:00	0.00	49.00	49.00	86.00	1.8	13
16:00	0.00	43.00	43.00	78.00	1.8	16
17:00	2.00	56.00	58.00	102.00	1.8	11
18:00	4.00	41.00	45.00	74.00	1.8	10
19:00	6.00	27.00	33.00	43.00	1.6	17
20:00	3.00	34.00	37.00	61.00	1.8	7
21:00	2.00	30.00	32.00	56.00	1.9	13
22:00	0.00	29.00	29.00	50.00	1.7	21
23:00	0.00	46.00	46.00	91.00	2.0	13
00:00	9.00	43.00	52.00	73.00	1.7	6
01:00	7.00	29.00	36.00	60.00	2.1	6
02:00	5.00	15.00	20.00	26.00	1.7	4
03:00	1.00	3.00	4.00	6.00	2.0	10
04:00	0.00	0.00	0.00	0.00	0.0	0
Total	72.00	646.00	718.00	1147.00	1.8	

Wellington Road - March 2014 Survey			Sunday to Monday Rank Data			
HOURLY BEGINNING	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
07:00	3.00	5.00	8.00	9.00	1.8	8
08:00	4.00	2.00	6.00	3.00	1.5	8
09:00	0.00	7.00	7.00	9.00	1.3	13
10:00	0.00	8.00	8.00	13.00	1.6	11
11:00	1.00	17.00	18.00	32.00	1.9	12
12:00	1.00	15.00	16.00	24.00	1.6	25
13:00	1.00	26.00	27.00	41.00	1.6	19
14:00	1.00	13.00	14.00	19.00	1.5	11
15:00	1.00	21.00	22.00	35.00	1.7	22
16:00	1.00	18.00	19.00	34.00	1.9	27
17:00	1.00	22.00	23.00	38.00	1.7	17
18:00	0.00	25.00	25.00	31.00	1.2	18
19:00	1.00	28.00	29.00	51.00	1.8	11
20:00	0.00	12.00	12.00	21.00	1.8	21
21:00	1.00	18.00	19.00	29.00	1.6	18
22:00	1.00	12.00	13.00	15.00	1.3	22
23:00	0.00	9.00	9.00	14.00	1.6	42
00:00	2.00	7.00	9.00	10.00	1.4	3
01:00	2.00	1.00	3.00	2.00	2.0	3
02:00	0.00	0.00	0.00	0.00	0.0	0
03:00	0.00	0.00	0.00	0.00	0.0	0
04:00	0.00	0.00	0.00	0.00	0.0	0
Total	21.00	266.00	287.00	430.00	1.6	



Old Street - March 2014 Survey		Thursday to Friday Rank Data				
Hour Beginning	Total Hackney Carriages Departing Rank Empty	Total Hackney Carriages Departing Rank With Passengers	Total Hackney Carriages Departing Rank	Total Passengers Departing Rank	Average Passengers per Hackney Carriage	Average Wait Time at the Rank per Hackney Carriage (Minutes)
07:00	0.00	0.00	0.00	0.00	0.00	0.0
08:00	0.00	0.00	0.00	0.00	0.00	3
09:00	2.00	4.00	6.00	4.00	1.0	11
10:00	5.00	8.00	13.00	10.00	1.3	17
11:00	3.00	18.00	21.00	19.00	1.1	12
12:00	3.00	13.00	16.00	17.00	1.3	18
13:00	1.00	17.00	18.00	26.00	1.5	18
14:00	3.00	15.00	18.00	22.00	1.5	12
15:00	3.00	16.00	19.00	26.00	1.6	10
16:00	3.00	11.00	14.00	15.00	1.4	11
17:00	0.00	8.00	8.00	8.00	1.0	5
18:00	1.00	0.00	1.00	0.00	0.0	8
19:00	0.00	0.00	0.00	0.00	0.0	0
20:00	0.00	0.00	0.00	0.00	0.0	0
21:00	0.00	0.00	0.00	0.00	0.0	0
22:00	0.00	0.00	0.00	0.00	0.0	0
23:00	0.00	0.00	0.00	0.00	0.0	0
00:00	0.00	0.00	0.00	0.00	0.0	0
01:00	0.00	0.00	0.00	0.00	0.0	0
02:00	0.00	0.00	0.00	0.00	0.0	0
03:00	0.00	0.00	0.00	0.00	0.0	0
04:00	0.00	0.00	0.00	0.00	0.0	0
Total	24.00	110.00	134.00	147.00	1.3	

Old Street - March 2014 Survey		Friday to Saturday Rank Data				
Hour Beginning	Total Hackney Carriages Departing Rank Empty	Total Hackney Carriages Departing Rank With Passengers	Total Hackney Carriages Departing Rank	Total Passengers Departing Rank	Average Passengers per Hackney Carriage	Average Wait Time at the Rank per Hackney Carriage (Minutes)
07:00	0.00	0.00	0.00	0.00	0.0	0
08:00	3.00	1.00	4.00	1.00	1.0	0
09:00	3.00	8.00	11.00	9.00	1.1	4
10:00	1.00	21.00	22.00	25.00	1.2	8
11:00	3.00	18.00	21.00	23.00	1.3	11
12:00	2.00	19.00	21.00	27.00	1.4	12
13:00	3.00	19.00	22.00	33.00	1.7	9
14:00	2.00	17.00	19.00	28.00	1.6	12
15:00	2.00	23.00	25.00	36.00	1.6	11
16:00	1.00	19.00	20.00	33.00	1.7	6
17:00	1.00	12.00	13.00	13.00	1.1	2
18:00	1.00	1.00	2.00	1.00	1.0	9
19:00	0.00	0.00	0.00	0.00	0.0	0
20:00	0.00	0.00	0.00	0.00	0.0	0
21:00	0.00	0.00	0.00	0.00	0.0	0
22:00	0.00	0.00	0.00	0.00	0.0	0
23:00	0.00	0.00	0.00	0.00	0.0	0
00:00	0.00	0.00	0.00	0.00	0.0	0
01:00	0.00	0.00	0.00	0.00	0.0	0
02:00	0.00	0.00	0.00	0.00	0.0	0
03:00	0.00	0.00	0.00	0.00	0.0	0
04:00	0.00	0.00	0.00	0.00	0.0	0
Total	22.00	158.00	180.00	229.00	1.4	



Old Street - March 2014 Survey		Saturday to Sunday Rank Data				
HOOR BEGINNING	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
07:00	0.00	0.00	0.00	0.00	0.00	0
08:00	2.00	0.00	2.00	0.00	0.00	10
09:00	5.00	10.00	15.00	14.00	1.4	11
10:00	2.00	11.00	13.00	16.00	1.5	13
11:00	2.00	18.00	20.00	23.00	1.3	3
12:00	1.00	22.00	23.00	31.00	1.4	12
13:00	0.00	15.00	15.00	33.00	2.2	10
14:00	1.00	17.00	18.00	29.00	1.7	20
15:00	1.00	19.00	20.00	30.00	1.6	19
16:00	3.00	14.00	17.00	22.00	1.6	17
17:00	4.00	8.00	12.00	17.00	2.1	7
18:00	0.00	0.00	0.00	0.00	0.00	0
19:00	0.00	0.00	0.00	0.00	0.00	0
20:00	0.00	0.00	0.00	0.00	0.00	0
21:00	0.00	0.00	0.00	0.00	0.00	0
22:00	0.00	0.00	0.00	0.00	0.00	0
23:00	0.00	0.00	0.00	0.00	0.00	0
00:00	0.00	0.00	0.00	0.00	0.00	0
01:00	0.00	0.00	0.00	0.00	0.00	0
02:00	0.00	0.00	0.00	0.00	0.00	0
03:00	0.00	0.00	0.00	0.00	0.00	0
04:00	0.00	0.00	0.00	0.00	0.00	0
Total	21.00	134.00	155.00	215.00	1.6	

Old Street - March 2014 Survey		Sunday to Monday Rank Data				
HOOR BEGINNING	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
07:00	0.00	0.00	0.00	0.00	0.00	0
08:00	0.00	0.00	0.00	0.00	0.00	0
09:00	1.00	0.00	1.00	0.00	0.00	13
10:00	1.00	3.00	4.00	5.00	1.7	3
11:00	5.00	3.00	8.00	3.00	1.0	11
12:00	3.00	7.00	10.00	13.00	1.9	5
13:00	3.00	2.00	5.00	3.00	1.5	11
14:00	3.00	4.00	7.00	11.00	2.8	8
15:00	4.00	6.00	10.00	9.00	1.5	15
16:00	1.00	1.00	2.00	5.00	5.0	3
17:00	0.00	0.00	0.00	0.00	0.00	0
18:00	0.00	0.00	0.00	0.00	0.00	0
19:00	0.00	0.00	0.00	0.00	0.00	0
20:00	0.00	0.00	0.00	0.00	0.00	0
21:00	0.00	0.00	0.00	0.00	0.00	0
22:00	0.00	0.00	0.00	0.00	0.00	0
23:00	0.00	0.00	0.00	0.00	0.00	0
00:00	0.00	0.00	0.00	0.00	0.00	0
01:00	0.00	0.00	0.00	0.00	0.00	0
02:00	0.00	0.00	0.00	0.00	0.00	0
03:00	0.00	0.00	0.00	0.00	0.00	0
04:00	0.00	0.00	0.00	0.00	0.00	0
Total	21.00	26.00	47.00	49.00	1.9	



Denton - March 2014 Survey		Thursday to Friday Rank Data				
Hour Beginning	Total Hackney Carriages Departing Rank Empty	Total Hackney Carriages Departing Rank With Passengers	Total Hackney Carriages Departing Rank	Total Passengers Departing Rank	Average Passengers per Hackney Carriage	Average Wait Time at the Rank per Hackney Carriage (Minutes)
07:00	3.00	5.00	8.00	5.00	1.0	19
08:00	4.00	17.00	21.00	28.00	1.6	12
09:00	8.00	9.00	17.00	9.00	1.0	14
10:00	7.00	10.00	17.00	14.00	1.4	17
11:00	4.00	11.00	15.00	17.00	1.5	15
12:00	4.00	8.00	12.00	9.00	1.1	13
13:00	6.00	8.00	14.00	11.00	1.4	22
14:00	3.00	11.00	14.00	13.00	1.2	19
15:00	2.00	13.00	15.00	15.00	1.2	6
16:00	9.00	13.00	22.00	21.00	1.6	15
17:00	2.00	6.00	8.00	8.00	1.3	9
18:00	4.00	6.00	10.00	6.00	1.0	9
19:00	3.00	8.00	11.00	13.00	1.6	9
20:00	3.00	4.00	7.00	9.00	2.3	21
21:00	5.00	5.00	10.00	8.00	1.6	17
22:00	4.00	4.00	8.00	5.00	1.3	29
23:00	5.00	7.00	12.00	14.00	2.0	14
00:00	6.00	5.00	11.00	7.00	1.4	6
01:00	4.00	0.00	4.00	0.00	0.0	12
02:00	0.00	1.00	1.00	1.00	1.0	50
03:00	0.00	0.00	0.00	0.00	0.0	8
04:00	1.00	0.00	1.00	0.00	0.0	25
Total	87.00	151.00	238.00	213.00	1.4	

Denton - March 2014 Survey		Friday to Saturday Rank Data				
Hour Beginning	Total Hackney Carriages Departing Rank Empty	Total Hackney Carriages Departing Rank With Passengers	Total Hackney Carriages Departing Rank	Total Passengers Departing Rank	Average Passengers per Hackney Carriage	Average Wait Time at the Rank per Hackney Carriage (Minutes)
07:00	2.00	8.00	10.00	9.00	1.1	8
08:00	6.00	8.00	14.00	19.00	2.4	6
09:00	4.00	13.00	17.00	15.00	1.2	8
10:00	7.00	10.00	17.00	10.00	1.0	14
11:00	11.00	4.00	15.00	5.00	1.3	14
12:00	16.00	9.00	25.00	17.00	1.9	17
13:00	4.00	13.00	17.00	23.00	1.8	10
14:00	9.00	8.00	17.00	10.00	1.3	14
15:00	6.00	19.00	25.00	25.00	1.3	10
16:00	4.00	10.00	14.00	15.00	1.5	9
17:00	11.00	15.00	26.00	27.00	1.8	9
18:00	16.00	5.00	21.00	6.00	1.2	15
19:00	7.00	12.00	19.00	14.00	1.2	3
20:00	7.00	7.00	14.00	14.00	2.0	5
21:00	14.00	13.00	27.00	25.00	1.9	6
22:00	8.00	14.00	22.00	19.00	1.4	8
23:00	9.00	19.00	28.00	36.00	1.9	2
00:00	3.00	15.00	18.00	26.00	1.7	1
01:00	6.00	14.00	20.00	22.00	1.6	7
02:00	2.00	10.00	12.00	20.00	2.0	9
03:00	5.00	1.00	6.00	1.00	1.0	14
04:00	0.00	0.00	0.00	0.00	0.0	0
Total	157.00	227.00	384.00	358.00	1.6	



Denton - March 2014 Survey		Saturday to Sunday Rank Data				
HOURLY BEGINNING	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
07:00	6.00	0.00	6.00	0.00	0.0	6
08:00	10.00	0.00	10.00	0.00	0.0	19
09:00	7.00	4.00	11.00	6.00	1.5	20
10:00	9.00	12.00	21.00	20.00	1.7	12
11:00	8.00	15.00	23.00	28.00	1.9	9
12:00	4.00	5.00	9.00	12.00	2.4	16
13:00	3.00	11.00	14.00	19.00	1.7	5
14:00	5.00	11.00	16.00	18.00	1.6	17
15:00	5.00	8.00	13.00	16.00	2.0	17
16:00	7.00	8.00	15.00	17.00	2.1	27
17:00	8.00	9.00	17.00	16.00	1.8	14
18:00	15.00	11.00	26.00	15.00	1.4	12
19:00	8.00	16.00	24.00	24.00	1.5	3
20:00	11.00	14.00	25.00	17.00	1.2	6
21:00	13.00	9.00	22.00	17.00	1.9	14
22:00	13.00	13.00	26.00	22.00	1.7	4
23:00	8.00	28.00	36.00	50.00	1.8	5
00:00	3.00	23.00	26.00	56.00	2.4	2
01:00	0.00	21.00	21.00	42.00	2.0	0
02:00	4.00	19.00	23.00	36.00	1.9	1
03:00	4.00	1.00	5.00	1.00	1.0	8
04:00	1.00	0.00	1.00	0.00	0.0	23
Total	152.00	238.00	390.00	432.00	1.8	
Denton - March 2014 Survey		Sunday to Monday Rank Data				
HOURLY BEGINNING	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
07:00	1.00	1.00	2.00	2.00	2.0	9
08:00	2.00	1.00	3.00	1.00	1.0	20
09:00	2.00	3.00	5.00	3.00	1.0	16
10:00	1.00	2.00	3.00	2.00	1.0	14
11:00	4.00	4.00	8.00	4.00	1.0	9
12:00	1.00	6.00	7.00	7.00	1.2	10
13:00	4.00	9.00	13.00	12.00	1.3	8
14:00	0.00	6.00	6.00	14.00	2.3	3
15:00	4.00	7.00	11.00	9.00	1.3	10
16:00	5.00	4.00	9.00	6.00	1.5	7
17:00	2.00	5.00	7.00	7.00	1.4	8
18:00	0.00	16.00	16.00	24.00	1.5	8
19:00	3.00	10.00	13.00	15.00	1.5	6
20:00	3.00	5.00	8.00	7.00	1.4	12
21:00	0.00	7.00	7.00	10.00	1.4	6
22:00	4.00	7.00	11.00	9.00	1.3	5
23:00	4.00	5.00	9.00	7.00	1.4	19
00:00	5.00	2.00	7.00	2.00	1.0	9
01:00	3.00	1.00	4.00	1.00	1.0	9
02:00	0.00	0.00	0.00	0.00	0.0	0
03:00	0.00	0.00	0.00	0.00	0.0	0
04:00	0.00	0.00	0.00	0.00	0.0	0
Total	48.00	101.00	149.00	142.00	1.4	



Total observed movements through all observed ranks - March 2014 Survey

Thursday to Friday Rank Data						
HOURLY BEGINNING	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
07:00	12.00	13.00	25.00	15.00	3.3	35
08:00	17.00	38.00	55.00	57.00	4.3	34
09:00	15.00	41.00	56.00	45.00	4.3	64
10:00	18.00	62.00	80.00	86.00	5.3	70
11:00	14.00	86.00	100.00	118.00	5.5	54
12:00	10.00	91.00	101.00	126.00	5.2	54
13:00	14.00	78.00	92.00	107.00	5.4	76
14:00	11.00	76.00	87.00	107.00	5.5	70
15:00	14.00	106.00	120.00	147.00	5.5	37
16:00	15.00	92.00	107.00	140.00	5.9	47
17:00	6.00	63.00	69.00	82.00	4.9	33
18:00	14.00	43.00	57.00	53.00	3.5	42
19:00	10.00	45.00	55.00	57.00	4.0	38
20:00	9.00	25.00	34.00	37.00	4.8	63
21:00	18.00	31.00	49.00	39.00	4.0	57
22:00	11.00	17.00	28.00	23.00	4.1	76
23:00	19.00	29.00	48.00	54.00	5.2	55
00:00	14.00	18.00	32.00	30.00	4.9	23
01:00	7.00	4.00	11.00	4.00	2.0	52
02:00	1.00	1.00	2.00	1.00	1.0	81
03:00	2.00	0.00	2.00	0.00	0.0	69
04:00	1.00	0.00	1.00	0.00	0.0	25
Total	252.00	959.00	1211.00	1328.00	1.4	

Total observed movements through all observed ranks - March 2014 Survey

Friday to Saturday Rank Data						
HOURLY BEGINNING	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
07:00	7.00	17.00	24.00	18.00	3.1	25
08:00	15.00	35.00	50.01	56.00	5.8	19
09:00	11.00	54.00	65.00	66.00	4.8	36
10:00	17.00	84.00	101.00	114.00	5.1	51
11:00	20.00	90.00	110.00	127.00	5.5	57
12:00	23.00	98.00	121.00	134.00	5.9	64
13:00	8.00	103.00	111.00	156.00	6.3	35
14:00	14.00	103.00	117.00	148.00	5.6	52
15:00	11.00	114.00	125.00	178.00	5.9	38
16:00	14.00	101.00	115.00	166.00	6.2	34
17:00	26.00	98.00	124.00	146.00	5.7	28
18:00	19.00	54.00	73.00	72.00	4.9	44
19:00	17.00	54.00	71.00	84.00	4.3	34
20:00	14.00	47.00	61.00	75.00	5.0	35
21:00	25.00	57.00	82.00	95.00	5.3	37
22:00	15.00	57.00	72.00	87.00	4.7	33
23:00	17.00	77.00	94.00	128.00	5.1	27
00:00	13.00	72.00	85.00	128.00	6.8	24
01:00	23.00	53.00	76.00	88.00	6.7	30
02:00	19.00	39.00	58.00	68.00	6.9	46
03:00	14.00	25.00	39.00	43.00	5.8	65
04:00	7.00	7.00	14.00	14.00	2.0	80
Total	349.01	1439.00	1788.01	2191.00	1.5	



Total observed movements through all observed ranks - March 2014 Survey **Saturday to Sunday Rank Data**

HOURLY BEGINNING	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
07:00	10.00	7.00	17.00	10.00	2.6	19
08:00	20.00	4.00	24.00	4.00	2.0	62
09:00	25.00	35.00	60.00	47.00	5.4	65
10:00	26.00	45.00	71.00	68.00	6.0	55
11:00	29.00	85.00	114.00	127.00	5.9	33
12:00	11.00	99.00	110.00	156.00	6.8	36
13:00	13.00	82.00	95.00	145.00	7.1	33
14:00	10.00	107.00	117.00	178.00	6.6	56
15:00	11.00	97.00	108.00	160.00	6.7	62
16:00	19.00	81.00	100.00	135.00	6.6	82
17:00	23.00	89.00	112.00	156.00	7.0	37
18:00	25.00	73.00	98.00	118.00	4.5	26
19:00	18.00	59.00	77.00	90.00	4.5	28
20:00	18.00	67.00	85.00	107.00	4.5	28
21:00	25.00	52.00	77.00	96.00	5.5	43
22:00	20.00	67.00	87.00	118.00	5.3	39
23:00	10.00	118.00	128.00	220.00	7.3	23
00:00	17.00	111.00	128.00	214.00	7.9	15
01:00	10.00	102.00	112.00	200.00	7.8	11
02:00	20.00	75.00	95.00	140.00	7.3	19
03:00	13.00	43.00	56.00	77.00	4.8	38
04:00	5.00	14.00	19.00	25.00	1.8	38
Total	378.00	1512.00	1890.00	2591.00	1.7	

Total observed movements through all observed ranks - March 2014 Survey **Sunday to Monday Rank Data**

HOURLY BEGINNING	TOTAL HACKNEY CARRIAGES DEPARTING RANK EMPTY	TOTAL HACKNEY CARRIAGES DEPARTING RANK WITH PASSENGERS	TOTAL HACKNEY CARRIAGES DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER HACKNEY CARRIAGE	AVERAGE WAIT TIME AT THE RANK PER HACKNEY CARRIAGE (MINUTES)
07:00	4.00	7.00	11.00	12.00	4.80	19.00
08:00	8.00	6.00	14.00	7.00	3.50	34.67
09:00	8.00	15.00	23.00	17.00	3.29	47.48
10:00	3.00	22.00	25.00	31.00	5.51	40.66
11:00	11.00	33.00	44.00	50.00	5.10	35.98
12:00	10.00	34.00	44.00	51.00	5.79	51.62
13:00	10.00	49.00	59.00	69.00	5.49	41.44
14:00	4.00	43.00	47.00	68.00	7.74	29.56
15:00	13.00	43.00	56.00	66.00	5.90	52.14
16:00	8.00	39.00	47.00	67.00	9.76	43.86
17:00	5.00	36.00	41.00	58.00	4.57	36.20
18:00	5.00	51.00	56.00	73.00	4.54	33.02
19:00	11.00	47.00	58.00	80.00	4.88	26.83
20:00	3.00	29.00	32.00	52.00	5.15	40.45
21:00	6.00	39.00	45.00	62.00	4.68	33.28
22:00	7.00	26.00	33.00	34.00	3.96	41.99
23:00	13.00	23.00	36.00	32.00	5.29	77.54
00:00	10.00	13.00	23.00	17.00	3.68	30.52
01:00	8.00	2.00	10.00	3.00	3.00	28.52
02:00	0.00	1.00	1.00	1.00	1.00	22.50
03:00	0.00	0.00	0.00	0.00	0.00	0.00
04:00	0.00	0.00	0.00	0.00	0.00	0.00
Total	147.00	558.00	705.00	850.00	1.5	



APPENDIX B PASSENGER QUEUE OBSERVATION RESULTS



Rank location	Date	Day	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing (HH:MM:SS)	Number of passengers	Did passengers leave in a taxi Y/N	Wait time	Notes
Clarendon Street, Hyde	06/03/2014	Thursday	16:03:34	16:05:20	1	Y	00:01:46	
Old Street, Ashton	06/03/2014	Thursday	17:22:12	17:27:10	1	N	00:04:58	
Old Street, Ashton	06/03/2014	Thursday	17:24:30	17:28:28	1	Y	00:03:58	
Clarendon Street, Hyde	06/03/2014	Thursday	17:36:04	17:40:16	1	N	00:04:12	
Clarendon Street, Hyde	06/03/2014	Thursday	17:37:16	17:40:56	2	Y	00:03:40	
Wellington Road, Ashton	06/03/2014	Thursday	23:14:06	23:18:44	2	Y	00:04:38	
Wellington Road, Ashton	06/03/2014	Thursday	23:16:20	23:20:12	2	Y	00:03:52	
Wellington Road, Ashton	06/03/2014	Thursday	23:19:28	23:25:28	1	Y	00:06:00	
Wellington Road, Ashton	06/03/2014	Thursday	23:50:02	23:53:46	1	Y	00:03:44	
Wellington Road, Ashton	07/03/2014	Friday	00:53:09	01:06:15	1	Y	00:13:06	



Rank location	Date	Day	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing	Number of passengers	Did passengers leave in a taxi	Wait time	Notes
Wellington Road, Ashton	07/03/2014	Friday	08:24:26	08:27:32	3	Y	00:03:06	
Wellington Road, Ashton	07/03/2014	Friday	08:26:08	08:32:32	1	Y	00:06:24	
Wellington Road, Ashton	07/03/2014	Friday	08:30:38	08:34:00	1	Y	00:03:22	
Wellington Road, Ashton	07/03/2014	Friday	08:31:12	08:34:22	3	Y	00:03:10	
Wellington Road, Ashton	07/03/2014	Friday	08:34:16	08:37:12	3	Y	00:02:56	
Wellington Road, Ashton	07/03/2014	Friday	08:35:08	08:37:50	2	Y	00:02:42	
Wellington Road, Ashton	07/03/2014	Friday	12:46:54	12:51:38	2	Y	00:04:44	
Wellington Road, Ashton	07/03/2014	Friday	12:51:22	12:52:18	1	Y	00:00:56	
Wellington Road, Ashton	07/03/2014	Friday	12:51:38	12:52:40	1	Y	00:01:02	
Wellington Road, Ashton	07/03/2014	Friday	12:51:56	12:53:38	3	Y	00:01:42	
Wellington Road, Ashton	07/03/2014	Friday	12:56:56	12:58:56	2	Y	00:02:00	



Rank location	Date	Day	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing	Number of passengers	Did passengers leave in a taxi	Wait time	Notes
Wellington Road, Ashton	07/03/2014	Friday	12:57:18	12:59:34	1	Y	00:02:16	
Wellington Road, Ashton	07/03/2014	Friday	12:58:38	12:59:44	1	Y	00:01:06	
Wellington Road, Ashton	07/03/2014	Friday	12:58:54	13:00:20	1	Y	00:01:26	
Wellington Road, Ashton	07/03/2014	Friday	13:02:40	13:05:04	1	Y	00:02:24	
Wellington Road, Ashton	07/03/2014	Friday	13:03:16	13:05:46	1	Y	00:02:30	
Wellington Road, Ashton	07/03/2014	Friday	13:03:54	13:08:44	1	Y	00:04:50	
Old Street, Ashton	07/03/2014	Friday	13:04:12	13:06:04	1	Y	00:01:52	
Old Street, Ashton	07/03/2014	Friday	13:08:18	13:16:38	3	Y	00:08:20	
Old Street, Ashton	07/03/2014	Friday	13:11:48	13:17:14	2	Y	00:05:26	
Old Street, Ashton	07/03/2014	Friday	13:12:20	13:18:58	1	Y	00:06:38	
Old Street, Ashton	07/03/2014	Friday	13:16:38	13:22:22	4	Y	00:05:44	



Rank location	Date	Day	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing	Number of passengers	Did passengers leave in a taxi	Wait time	Notes
Old Street, Ashton	07/03/2014	Friday	15:29:25	15:34:03	2	Y	00:04:38	
Old Street, Ashton	07/03/2014	Friday	15:30:29	15:36:53	1	Y	00:06:24	
Old Street, Ashton	07/03/2014	Friday	15:32:35	15:41:05	2	Y	00:08:30	
Old Street, Ashton	07/03/2014	Friday	15:36:53	15:38:45	3	Y	00:01:52	
Old Street, Ashton	07/03/2014	Friday	15:37:37	15:45:35	1	Y	00:07:58	
Old Street, Ashton	07/03/2014	Friday	15:37:45	15:45:24	1	Y	00:07:39	
Old Street, Ashton	07/03/2014	Friday	15:53:33	15:58:39	1	Y	00:05:06	
Old Street, Ashton	07/03/2014	Friday	15:53:33	16:01:25	2	Y	00:07:52	
Old Street, Ashton	07/03/2014	Friday	15:53:33	16:00:19	3	Y	00:06:46	
Old Street, Ashton	07/03/2014	Friday	15:57:23	16:00:43	2	Y	00:03:20	
Old Street, Ashton	07/03/2014	Friday	16:04:05	16:09:31	1	Y	00:05:26	



Rank location	Date	Day	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing	Number of passengers	Did passengers leave in a taxi	Wait time	Notes
Old Street, Ashton	07/03/2014	Friday	16:09:01	16:10:45	1	Y	00:01:44	
Old Street, Ashton	07/03/2014	Friday	17:24:51	17:41:27	4	N	00:16:36	
Old Street, Ashton	07/03/2014	Friday	17:39:55	17:48:19	1	Y	00:08:24	
Old Street, Ashton	07/03/2014	Friday	17:45:01	17:50:05	1	Y	00:05:04	
Clarendon Street, Hyde	07/03/2014	Friday	22:18:08	22:22:58	4	Y	00:04:50	
Clarendon Street, Hyde	07/03/2014	Friday	22:20:00	22:22:58	2	Y	00:02:58	
Clarendon Street, Hyde	07/03/2014	Friday	22:21:36	22:27:36	2	Y	00:06:00	
Market Street, Denton	07/03/2014	Friday	23:50:15	23:50:45	4	Y	00:00:30	
Market Street, Denton	07/03/2014	Friday	23:50:15	23:52:25	3	Y	00:02:10	
Market Street, Denton	07/03/2014	Friday	23:53:05	23:56:13	2	Y	00:03:08	
Market Street, Denton	07/03/2014	Friday	23:55:03	23:57:51	2	Y	00:02:48	



Rank location	Date	Day	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing	Number of passengers	Did passengers leave in a taxi	Wait time	Notes
Market Street, Denton	07/03/2014	Friday	23:57:05	23:58:41	1	Y	00:01:36	
Market Street, Denton	08/03/2014	Saturday	00:08:13	00:09:01	3	Y	00:00:48	
Clarendon Street, Hyde	08/03/2014	Saturday	00:09:22	00:14:56	3	Y	00:05:34	
Clarendon Street, Hyde	08/03/2014	Saturday	00:11:10	00:15:16	2	Y	00:04:06	
Market Street, Denton	08/03/2014	Saturday	00:20:01	00:22:51	4	Y	00:02:50	
Clarendon Street, Hyde	08/03/2014	Saturday	00:21:10	00:23:14	2	Y	00:02:04	
Market Street, Denton	08/03/2014	Saturday	00:27:01	00:29:55	3	Y	00:02:54	
Clarendon Street, Hyde	08/03/2014	Saturday	00:27:16	00:28:44	4	Y	00:01:28	
Clarendon Street, Hyde	08/03/2014	Saturday	00:37:22	00:38:04	2	Y	00:00:42	
Clarendon Street, Hyde	08/03/2014	Saturday	00:38:22	00:41:34	2	Y	00:03:12	
Clarendon Street, Hyde	08/03/2014	Saturday	00:38:40	00:42:40	1	Y	00:04:00	



Rank location	Date	Day	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing	Number of passengers	Did passengers leave in a taxi	Wait time	Notes
Clarendon Street, Hyde	08/03/2014	Saturday	00:38:40	00:43:36	2	Y	00:04:56	
Clarendon Street, Hyde	08/03/2014	Saturday	00:38:40	00:45:32	1	Y	00:06:52	
Clarendon Street, Hyde	08/03/2014	Saturday	00:40:20	00:45:32	1	Y	00:05:12	
Clarendon Street, Hyde	08/03/2014	Saturday	00:40:58	00:49:06	1	Y	00:08:08	
Market Street, Denton	08/03/2014	Saturday	00:41:31	00:46:15	3	Y	00:04:44	
Market Street, Denton	08/03/2014	Saturday	00:43:21	00:50:33	1	Y	00:07:12	
Clarendon Street, Hyde	08/03/2014	Saturday	00:44:10	00:49:06	1	Y	00:04:56	
Clarendon Street, Hyde	08/03/2014	Saturday	00:44:42	00:49:06	2	Y	00:04:24	
Market Street, Denton	08/03/2014	Saturday	00:48:07	00:53:01	1	Y	00:04:54	
Market Street, Denton	08/03/2014	Saturday	00:50:41	00:54:11	2	Y	00:03:30	
Market Street, Denton	08/03/2014	Saturday	00:59:57	01:01:37	2	Y	00:01:40	



Rank location	Date	Day	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing	Number of passengers	Did passengers leave in a taxi	Wait time	Notes
Market Street, Denton	08/03/2014	Saturday	02:39:41	02:41:01	1	Y	00:01:20	
Wellington Road, Ashton	08/03/2014	Saturday	09:39:37	09:42:11	1	Y	00:02:34	
Old Street, Ashton	08/03/2014	Saturday	11:00:55	11:01:51	2	Y	00:00:56	
Old Street, Ashton	08/03/2014	Saturday	11:01:51	11:07:47	2	Y	00:05:56	
Wellington Road, Ashton	08/03/2014	Saturday	12:09:51	12:10:19	2	Y	00:00:28	
Wellington Road, Ashton	08/03/2014	Saturday	12:10:33	12:11:47	1	Y	00:01:14	
Wellington Road, Ashton	08/03/2014	Saturday	12:11:23	12:13:29	1	Y	00:02:06	
Wellington Road, Ashton	08/03/2014	Saturday	12:11:23	12:13:45	2	Y	00:02:22	
Wellington Road, Ashton	08/03/2014	Saturday	12:13:09	12:14:35	1	Y	00:01:26	
Clarendon Street, Hyde	08/03/2014	Saturday	12:16:37	12:18:45	2	Y	00:02:08	
Clarendon Street, Hyde	08/03/2014	Saturday	12:21:17	12:23:37	2	N	00:02:20	



Rank location	Date	Day	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing	Number of passengers	Did passengers leave in a taxi	Wait time	Notes
Clarendon Street, Hyde	08/03/2014	Saturday	12:22:13	12:24:15	1	Y	00:02:02	
Market Street, Denton	08/03/2014	Saturday	13:17:00	13:26:26	3	N	00:09:26	
Market Street, Denton	08/03/2014	Saturday	13:19:12	13:30:28	1	Y	00:11:16	
Clarendon Street, Hyde	08/03/2014	Saturday	16:55:37	16:56:29	1	Y	00:00:52	
Clarendon Street, Hyde	08/03/2014	Saturday	17:06:33	17:09:01	1	Y	00:02:28	
Wellington Road, Ashton	08/03/2014	Saturday	18:05:20	18:06:52	2	N	00:01:32	
Wellington Road, Ashton	08/03/2014	Saturday	18:07:18	18:08:08	2	Y	00:00:50	
Wellington Road, Ashton	08/03/2014	Saturday	18:09:18	18:12:00	2	Y	00:02:42	
Wellington Road, Ashton	08/03/2014	Saturday	18:10:06	18:12:00	2	Y	00:01:54	
Clarendon Street, Hyde	08/03/2014	Saturday	18:56:29	18:58:21	2	Y	00:01:52	
Clarendon Street, Hyde	08/03/2014	Saturday	18:57:03	18:58:21	1	Y	00:01:18	



Rank location	Date	Day	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing	Number of passengers	Did passengers leave in a taxi	Wait time	Notes
Clarendon Street, Hyde	08/03/2014	Saturday	20:33:11	20:39:21	4	Y	00:06:10	
Clarendon Street, Hyde	08/03/2014	Saturday	20:33:33	20:42:19	2	Y	00:08:46	
Clarendon Street, Hyde	08/03/2014	Saturday	20:34:37	20:42:19	2	Y	00:07:42	
Clarendon Street, Hyde	08/03/2014	Saturday	20:42:01	20:43:21	2	Y	00:01:20	
Market Street, Denton	09/03/2014	Sunday	00:18:15	00:23:39	4	Y	00:05:24	
Market Street, Denton	09/03/2014	Sunday	00:25:43	00:28:37	5	Y	00:02:54	
Market Street, Denton	09/03/2014	Sunday	00:26:49	00:30:01	5	Y	00:03:12	
Market Street, Denton	09/03/2014	Sunday	00:39:09	00:41:11	2	Y	00:02:02	
Market Street, Denton	09/03/2014	Sunday	00:46:25	00:48:09	4	Y	00:01:44	
Market Street, Denton	09/03/2014	Sunday	00:47:05	00:51:33	2	Y	00:04:28	
Market Street, Denton	09/03/2014	Sunday	00:47:29	00:57:59	4	Y	00:10:30	



Rank location	Date	Day	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing	Number of passengers	Did passengers leave in a taxi	Wait time	Notes
Market Street, Denton	09/03/2014	Sunday	00:49:31	00:59:07	2	Y	00:09:36	
Market Street, Denton	09/03/2014	Sunday	00:53:09	01:06:15	1	Y	00:13:06	
Market Street, Denton	09/03/2014	Sunday	00:53:39	00:59:07	2	Y	00:05:28	
Market Street, Denton	09/03/2014	Sunday	01:00:45	01:06:51	1	Y	00:06:06	
Market Street, Denton	09/03/2014	Sunday	01:00:45	01:10:51	2	Y	00:10:06	
Market Street, Denton	09/03/2014	Sunday	01:00:45	01:07:13	2	Y	00:06:28	
Market Street, Denton	09/03/2014	Sunday	01:00:45	01:09:21	3	Y	00:08:36	
Market Street, Denton	09/03/2014	Sunday	01:01:45	01:10:51	2	Y	00:09:06	
Market Street, Denton	09/03/2014	Sunday	01:04:07	01:13:14	1	Y	00:09:07	
Market Street, Denton	09/03/2014	Sunday	01:20:19	01:23:49	2	Y	00:03:30	
Market Street, Denton	09/03/2014	Sunday	01:50:21	01:51:19	4	Y	00:00:58	



Rank location	Date	Day	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing	Number of passengers	Did passengers leave in a taxi	Wait time	Notes
Market Street, Denton	09/03/2014	Sunday	01:50:49	01:53:41	2	Y	00:02:52	
Market Street, Denton	09/03/2014	Sunday	01:54:21	01:55:01	1	Y	00:00:40	
Old Street, Ashton	09/03/2014	Sunday	10:33:48	10:44:44	3	Y	00:10:56	
Clarendon Street, Hyde	09/03/2014	Sunday	10:40:49	10:48:31	2	Y	00:07:42	
Clarendon Street, Hyde	09/03/2014	Sunday	11:10:05	11:15:21	2	Y	00:05:16	
Clarendon Street, Hyde	09/03/2014	Sunday	11:13:03	11:18:09	2	Y	00:05:06	
Clarendon Street, Hyde	09/03/2014	Sunday	11:14:25	11:18:49	1	Y	00:04:24	
Old Street, Ashton	09/03/2014	Sunday	12:50:01	12:52:33	4	Y	00:02:32	
Clarendon Street, Hyde	09/03/2014	Sunday	13:11:47	13:14:13	1	Y	00:02:26	
Clarendon Street, Hyde	09/03/2014	Sunday	13:11:47	13:17:43	1	N	00:05:56	
Clarendon Street, Hyde	09/03/2014	Sunday	13:22:23	13:23:29	2	Y	00:01:06	



Rank location	Date	Day	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing	Number of passengers	Did passengers leave in a taxi	Wait time	Notes
Clarendon Street, Hyde	09/03/2014	Sunday	14:44:15	14:48:35	3	Y	00:04:20	
Clarendon Street, Hyde	09/03/2014	Sunday	14:46:25	14:50:11	1	Y	00:03:46	
Clarendon Street, Hyde	09/03/2014	Sunday	14:47:43	14:56:55	2	Y	00:09:12	
Wellington Road, Ashton	10/03/2014	Monday	00:04:21	00:07:03	2	Y	00:02:42	