APPENDIX 2

Halton Hackney Unmet Demand Study

Final Report

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14th April 2020

Halton Borough Council

Halton Hackney Unmet Demand Study

Project No:	Project Number
Document Title:	Final Report
Document No.:	1
Revision:	1
Document Status:	Final
Date:	14 April 2020
Client Name:	Halton Borough Council
Client No:	
Project Manager:	Project Manager
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File Name:	

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Document history and status

Revision	Date	Description	Author	Checked	Reviewed	Approved
1	14.04.20	Final report	EP	LR	LR	LR

Contents

Executive Summary

This study has been conducted by Jacobs on behalf of Halton Borough Council. Halton Borough Council wishes to undertake an unmet demand study of Hackney Carriage provision in the borough. The purpose of the survey is to:

- determine whether or not there is a significant unmet demand for Hackney Carriage services within Halton as defined in Section 16 of the Transport Act 1985; and
- recommend how many additional taxis are required to eliminate any significant unmet demand.

In terms of the licensing of hackney carriages and private hire vehicles, Halton Borough Council operates a policy of limitation. The authority limits the number of hackney carriage vehicles at 267.

The 2019 study has identified that there is NO evidence of significant unmet demand for taxis in Halton. This conclusion is based on an assessment of the implications of case law that has emerged since 2000, and the results of Jacobs's analysis.

Public perception of the service was obtained through the undertaking of an online survey. Overall the public were generally satisfied with the service – key points included:

- 88% of respondents have used a taxi in Halton in the last 3 months;
- Over half (58%) of these journeys were obtained via booking over the telephone;
- Generally, respondents were satisfied with the promptness of their taxi arrival in Halton (77%), obtaining a taxi at a rank had the greatest level of satisfaction (95%) and by telephone was the least (69%);
- 56% of respondents believe there are enough taxis in Halton and 36% believe there isn't;

Our 2019 study has identified that there is NO evidence of significant demand in Halton. This conclusion covers both patent and latent/suppressed demand and is based on an assessment of the implications of case law that has emerged since 2000, and the results of our analysis.

On this basis the authority has the discretion in its taxi licensing policy and may either:

- Maintain its current policy of limiting to 267 hackneys ;
- Issue any number of additional plates as it sees fit, either in one allocation or a series of allocations; or
- Remove the numerical restriction on licences.

1. Introduction

This study has been conducted by Jacobs on behalf of Halton Borough Council. Halton Borough Council wishes to undertake an unmet demand study of Hackney Carriage provision in the borough. The purpose of the survey is to:

- determine whether or not there is a significant unmet demand for Hackney Carriage services within Halton as defined in Section 16 of the Transport Act 1985; and
- recommend how many additional taxis are required to eliminate any significant unmet demand.

In 2010 the Department for Transport (DfT) re issued Best Practice Guidance for Taxi and Private Hire licensing. The Guidance restates the DFT's position regarding quantity restrictions. Essentially, the DfT stated that the assessment of significant unmet demand, as set out in Section 16 of the 1985 Act, is still necessary but not sufficient in itself to justify continued entry control. The Guidance provides local authorities with assistance in local decision making when they are determining the licensing policies for their local area. Guidance is provided on a range of issues including: flexible taxi services, vehicle licensing, driver licensing and training.

An update to this Guidance was put out for consultation in early 2019. Revisions focussed on public safety and improving standards. No further update has been provided about when this guidance will be introduced.

Taxi Licensing has been subject to a number of reforms and reviews over the last few years. The Law Commission produced a report in 2014 which set out a number of recommendations on Taxi and Private Hire reform that have yet to be accepted. In its 2014 report the Law Commission concluded that the ability of local authorities to impose quantity restrictions on licensed taxis should remain, but that there should be controls on the transferability of licence plates in areas introducing new quantity restrictions. Transfers would continue to be permitted in areas where quantity restrictions were already in place.

The Equality Act 2010 provided a cross-cutting legislative framework to protect the rights of individuals and advance equality of opportunity for all; to update, simplify and strengthen the previous legislation; and to deliver a simple, modern and accessible framework of discrimination law which protects individuals from unfair treatment and promotes a fair and more equal society.

Sections 165, 166 and 167 of the Equality Act 2010 are concerned with the provision of wheelchair accessible vehicles and place obligations on drivers of registered vehicles to carry out certain duties unless granted an exemption by the licensing authority on the grounds of medical or physical condition. Section 166 allows taxi drivers to apply to their licensing authority for an exemption from Section 165 of the Equality Act 2010.

2. Background

2.1 General

This section of the report provides a general background to the taxi market in Halton and the relevant legislation governing the market.

2.2 Background

Halton Borough is situated in the North West of England and comprises the towns of Widnes and Runcorn. It has a resident population of 128, 432 (2018 mid year estimate, Office of National Statistics).

In terms of the licensing of hackney carriages and private hire vehicles, Halton Borough Council operates a policy of limitation. The authority limits the number of hackney carriage vehicles at 267. At the Regulatory Committee, held on 28th November 2018, an application for issuing 15 additional plates was heard. The Committee were requested to consider issuing these additional licences in addition to the current numerical limit. The Committee decoded at this meeting that there was no significant demand for the services of hackney carriages that was unmet and therefore refused the applications.

Following this decision, the limitation policy was the subject of a Crown Court appeal in 2019. The Court suggested that an unmet demand survey be commissioned to 'ascertain definitively whether there is significant unmet demand for hackney carriages within the borough. Thereafter, if significant unmet demand is identified, to issue licences in a manner fair to all persons who would wish to be considered for such a licence'.

As of 31st March 2019, there were 267 licensed taxis operating in Halton, of which 54 (20%) were fully wheelchair accessible vehicles[1]. The private hire fleet consists of 113 vehicles, of which 19 (17%) are fully wheelchair accessible. In view of the size of this fleet relative to the taxi fleet, it is evident that taxis are the dominant force in the Halton market.

Many of the hackney carriages working in Halton are also on radio circuits and undertake contracted work on behalf of the local authority.

2.3 Provision of Taxi Stands

There are currently 20 official taxi ranks located throughout the Halton licensing area; the locations and times of operation of each of the ranks are provided in Appendix 1. In addition to these official ranks there are a number of unofficial ranks located at supermarkets across the borough.

[1] In Halton, fully wheelchair accessible vehicles are those vehicles capable of carrying a wheelchair in a folded and stored condition with the wheelchair passenger seated in a standard seat or at the election of the wheelchair passenger capable of carrying the passenger while sitting in the wheelchair and meets the criteria required by Halton Borough Council

Figure 2.1: Morrisons rank, Widnes

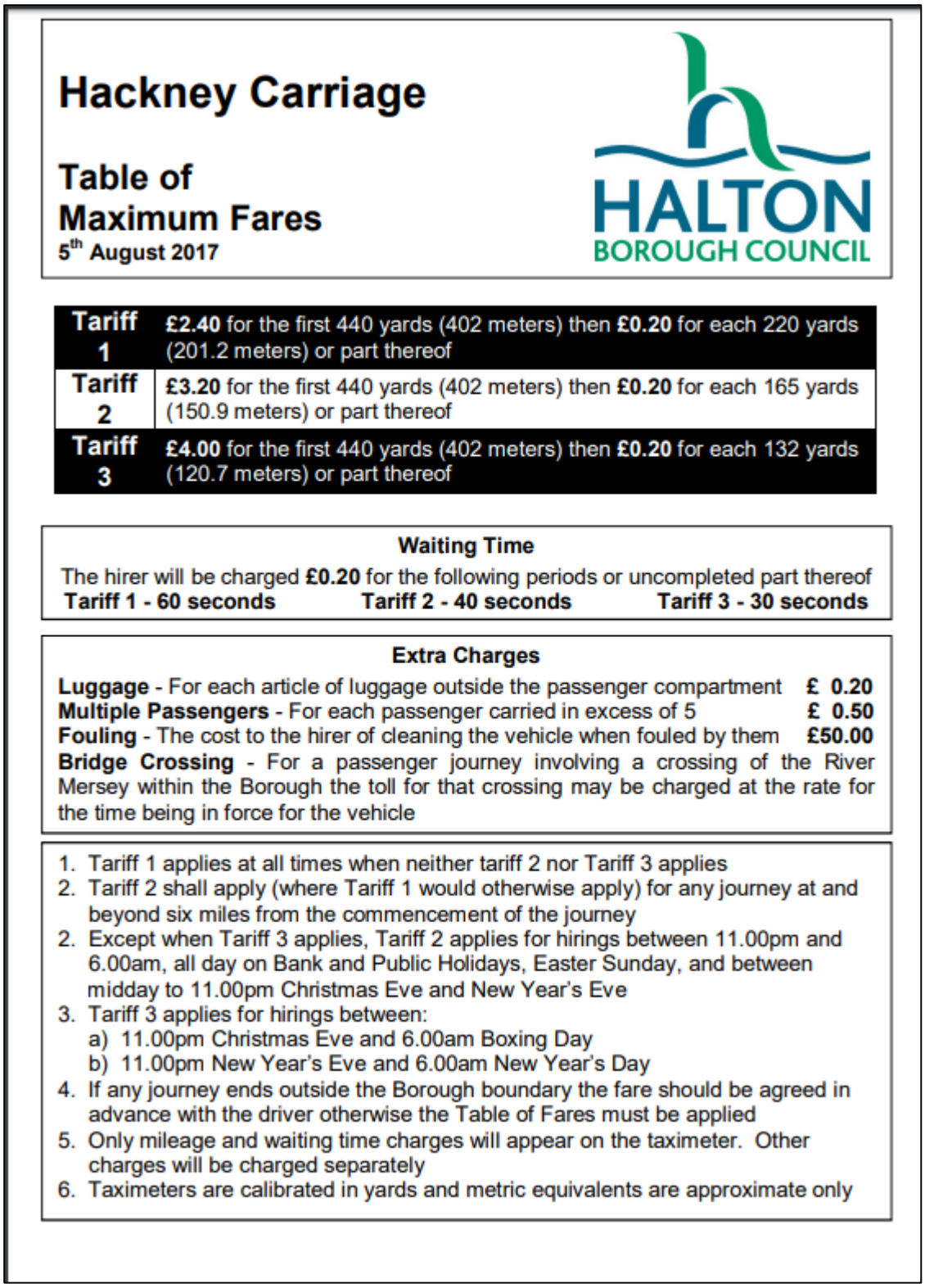
Figure 2.2: Albert Road rank, Widnes

2.4 Taxi Fares and Licence Premiums

Taxi fares are regulated by the Local Authority. There are three tariffs. Tariff 1 applies at all times, except where Tariff 2 and Tariff 3 apply. Tariff 2 applies for journeys longer than 6 miles and Tariff 3 applies for journeys between 11pm and 6am, all day on Bank and Public Holidays, Easter Sunday, and between midday to 11pm Christmas Eve and New Year's Eve. Tariff 3 also applies for hiring's between 11pm Christmas Eve and 6am Boxing Day as well as 11pm New Year's Eve and 6am New Year's Day.

The standard charge tariff is made up of two elements: an initial fee (or 'drop') of £2.40 for entering the vehicle, and a fixed price addition of 20p per 220yds, 165yds or 132 yds of distance, plus fixed additions for waiting time. Fixed additional charges are also in place for extra passengers, luggage, additional passengers, fouling and tolls. A standard two-mile daytime fare undertaken by one individual would therefore be £5.20. The tariffs are outlined in detail in the fare card in Figure 2.3 below.

Figure 2.3 – Farecard for Halton. The values were set August 2017



Hackney Carriage

Table of Maximum Fares

5th August 2017

HALTON BOROUGH COUNCIL

Tariff 1	**£2.40** for the first 440 yards (402 meters) then **£0.20** for each 220 yards (201.2 meters) or part thereof
Tariff 2	**£3.20** for the first 440 yards (402 meters) then **£0.20** for each 165 yards (150.9 meters) or part thereof
Tariff 3	**£4.00** for the first 440 yards (402 meters) then **£0.20** for each 132 yards (120.7 meters) or part thereof

Waiting Time

The hirer will be charged **£0.20** for the following periods or uncompleted part thereof

Tariff 1 - 60 seconds **Tariff 2 - 40 seconds** **Tariff 3 - 30 seconds**

Extra Charges

Luggage - For each article of luggage outside the passenger compartment **£ 0.20**
Multiple Passengers - For each passenger carried in excess of 5 **£ 0.50**
Fouling - The cost to the hirer of cleaning the vehicle when fouled by them **£50.00**
Bridge Crossing - For a passenger journey involving a crossing of the River Mersey within the Borough the toll for that crossing may be charged at the rate for the time being in force for the vehicle

1. Tariff 1 applies at all times when neither tariff 2 nor Tariff 3 applies
2. Tariff 2 shall apply (where Tariff 1 would otherwise apply) for any journey at and beyond six miles from the commencement of the journey
2. Except when Tariff 3 applies, Tariff 2 applies for hirings between 11.00pm and 6.00am, all day on Bank and Public Holidays, Easter Sunday, and between midday to 11.00pm Christmas Eve and New Year's Eve
3. Tariff 3 applies for hirings between:
   a) 11.00pm Christmas Eve and 6.00am Boxing Day
   b) 11.00pm New Year's Eve and 6.00am New Year's Day
4. If any journey ends outside the Borough boundary the fare should be agreed in advance with the driver otherwise the Table of Fares must be applied
5. Only mileage and waiting time charges will appear on the taximeter. Other charges will be charged separately
6. Taximeters are calibrated in yards and metric equivalents are approximate only

The Private Hire and Taxi Monthly magazine publish monthly league tables of the fares for 365 authorities over a two mile journey. Each journey is ranked with one being the most expensive. The January 2020 table shows Halton rated 316th in the table, indicating that Halton has lower than average fares. Table 2.1 provides a comparison of where a selection of neighbouring authorities rank in terms of fares, showing that fares in Halton are lower than most neighbouring authorities.

Table 2.1 - Comparison of neighbouring authorities in terms of fares (Source Private Hire and Taxi Monthly, January 2020)

Local Authority	Rank
Chester	49
Wirral	189
Liverpool	248
St Helens	304
Halton	**316**
Warrington	322
Knowsley	351

3. Definition, Measurement and Removal of Significant Unmet Demand

3.1 Introduction

Section 3 provides a definition of significant unmet demand derived from experience of over 100 unmet demand studies since 1987. This leads to an objective measure of significant unmet demand that allows clear conclusions regarding the presence or absence of this phenomenon to be drawn. Following this, a description is provided of the SUDSIM model which is a tool developed to determine the number of additional hackney licences required to eliminate significant unmet demand, where such unmet demand is found to exist. This method has been applied to numerous local authorities and has been tested in the courts as a way of determining if there is unmet demand for Hackney Carriages.

3.2 Overview

Significant Unmet Demand (SUD) has two components:

- patent demand – that which is directly observable; and
- "suppressed" demand – that which is released by additional supply.

Patent demand is measured using rank observation data. Suppressed (or latent) demand is assessed using data from the rank observations and public attitude interview survey. Both are brought together in a single measure of unmet demand, ISUD (Index of Significant Unmet Demand).

3.3 Defining Significant Unmet Demand

The provision of evidence to aid licensing authorities in making decisions about hackney carriage provision requires that surveys of demand be carried out. Results based on observations of activity at hackney ranks have become the generally accepted minimum requirement.

The definition of significant unmet demand is informed by two Court of Appeal judgements:

- R v Great Yarmouth Borough Council ex p Sawyer (1987); and
- R v Castle Point Borough Council ex p Maud (2002).

The Sawyer case provides an indication of the way in which an Authority may interpret the findings of survey work. In the case of Sawyer v. Yarmouth City Council, 16 June 1987, Lord Justice Woolf ruled that an Authority is entitled to consider the situation from a temporal point of view as a whole. It does not have to condescend into a detailed consideration as to what may be the position in every limited area of the Authority in relation to the particular time of day. The area is required to give effect to the language used by the Section (Section 16) and can ask itself with regard to the area as a whole whether or not it is satisfied that there is no significant unmet demand.

The term "suppressed" or "latent" demand has caused some confusion over the years. It should be pointed out that following Maud v Castle Point Borough Council, heard in the Court of Appeal in October 2002, the term is now interpreted to relate purely to that demand that is measurable. Following Maud, there are two components to what Lord Justice Keene prefers to refer to as "suppressed demand":

- what can be termed inappropriately met demand. This is current observable demand that is being met by, for example, private hire cars illegally ranking up; and
- that which arises if people are forced to use some less satisfactory method of travel due to the unavailability of a hackney carriage.

If demand remained at a constant level throughout the day and week, the identification and treatment of significant unmet demand would be more straight-forward. If there were more cabs than required to meet the existing demand there would be queues of cabs on ranks throughout the day and night and passenger waiting times would be zero. Conversely, if too few cabs were available there would tend to be queues of passengers

throughout the day. In such a case it would, in principle, be a simple matter to estimate the increase in supply of cabs necessary to just eliminate passenger queues.

Demand for hackney carriages varies throughout the day and on different days. The problem, introduced by variable demand, becomes clear when driver earnings are considered. If demand is much higher late at night than it is during the day, an increase in cab supply large enough to eliminate peak delays will have a disproportionate effect on the occupation rate of cabs at all other times. Earnings will fall and fares might have to be increased sharply to sustain the supply of cabs at or near its new level.

The main implication of the present discussion is that it is necessary, when considering whether significant unmet demand exists, to take account of the practicability of improving the standard of service through increasing supply.

3.4 Measuring Patent Significant Unmet Demand

Taking into account the economic, administrative and legal considerations, the identification of this important aspect of significant unmet demand should be treated as a three stage process as follows:

- identify the demand profile;
- estimate passenger and cab delays; and
- compare estimated delays to the demand profile.

The broad interpretation to be given to the results of this comparison are summarised in Table 3.1.

Table 3.1 Existence of Significant Unmet Demand (SUD) Determined by Comparing Demand and Delay Profiles

	Delays during peak only	Delays during peak and other times
Demand is:		
Highly Peaked	No SUD	Possibly a SUD
Not Highly Peaked	Possibly a SUD	Possibly a SUD

It is clear from the content of the table that the simple descriptive approach fails to provide the necessary degree of clarity to support the decision making process in cases where the unambiguous conclusion is not achievable. However, it does provide the basis of a robust assessment of the principal component of significant unmet demand. The analysis is therefore extended to provide a more formal numerical measure of significant unmet demand. This is based on the principles contained in the descriptive approach but provides greater clarity. A description follows.

The measure feeds directly off the results of observations of activity at the ranks. In particular it takes account of:

- case law that suggests an authority should take a broad view of the market;
- the effect of different levels of supply during different periods at the rank on service quality;
- the need for consistent treatment of different authorities, and the same authority over time.

The Index of Significant Unmet Demand (ISUD) was developed in the early 1990's and is based on the following formula. The SF element was introduced in 2003 and the LDF element was introduced in 2006 to reflect the increased emphasis on latent demand in DfT Guidance.

ISUD = APD x PF x GID x SSP x SF x LDF

Where:

APD = Average Passenger Delay calculated across the entire week in minutes.

PF = Peaking Factor. If passenger demand is highly peaked at night or during the day the factor takes the value of 0.5. If it is not peaked the value is 1. Following case law this provides dispensation for the effects of peaked demand on the ability of the Trade to meet that demand. To identify high peaking we are generally looking for demand at night (at weekends) to be substantially higher than demand at other times. However in some cases it maybe that demand is much higher during the day.

GID = General Incidence of Delay. This is measured as the proportion of passengers who travel in hours where the delay exceeds one minute.

SSP = Steady State Performance. The corollary of providing dispensation during the peaks in demand is that it is necessary to focus on performance during "normal" hours. This is measured by the proportion of hours during weekday daytimes when the market exhibits excess demand conditions (i.e. passenger queues form at ranks).

SF = Seasonality factor. 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 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. Generally, surveys in these atypical months, and in school holidays, should be avoided.

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 flagdown during the previous three months. It is measured as 1+ proportion giving up waiting. The inclusion of this factor is a tactical response to the latest DfT guidance.

The product of these six measures provides an index value. The index is exponential and values above the 80 mark have been found to indicate significant unmet demand. This benchmark was defined by applying the factor to the 25 or so studies that had been conducted at the point it was developed. These earlier studies had used the same principles but in a less structured manner. The highest ISUD value for a study where a conclusion of no significant unmet demand had been found was 72. The threshold was therefore set at 80. The ISUD factor has been applied to over 80 studies by Halcrow and has been adopted by others working in the field. It has proved to be a robust, intuitively appealing and reliable measure.

Suppressed/latent demand is explicitly included in the above analysis by the inclusion of the LDF factor and because any known illegal plying for hire by the private hire trade is included in the rank observation data. This covers both elements of suppressed/latent demand resulting from the Maud case referred to above and is intended to provide a 'belt and braces' approach. A consideration of latent demand is also included where there is a need to increase the number of hackney carriage licences following a finding of significant unmet demand. This is discussed in the next section.

3.5 Determining the Number of New Licences Required to Eliminate Significant Unmet Demand

To provide advice on the increase in licences required to eliminate significant unmet demand, Halcrow has developed a predictive model. SUDSIM is a product of over 20 years' experience of analysing hackney carriage demand. It is a mathematical model, which predicts the number of additional licences required to eliminate significant unmet demand as a function of key market characteristics.

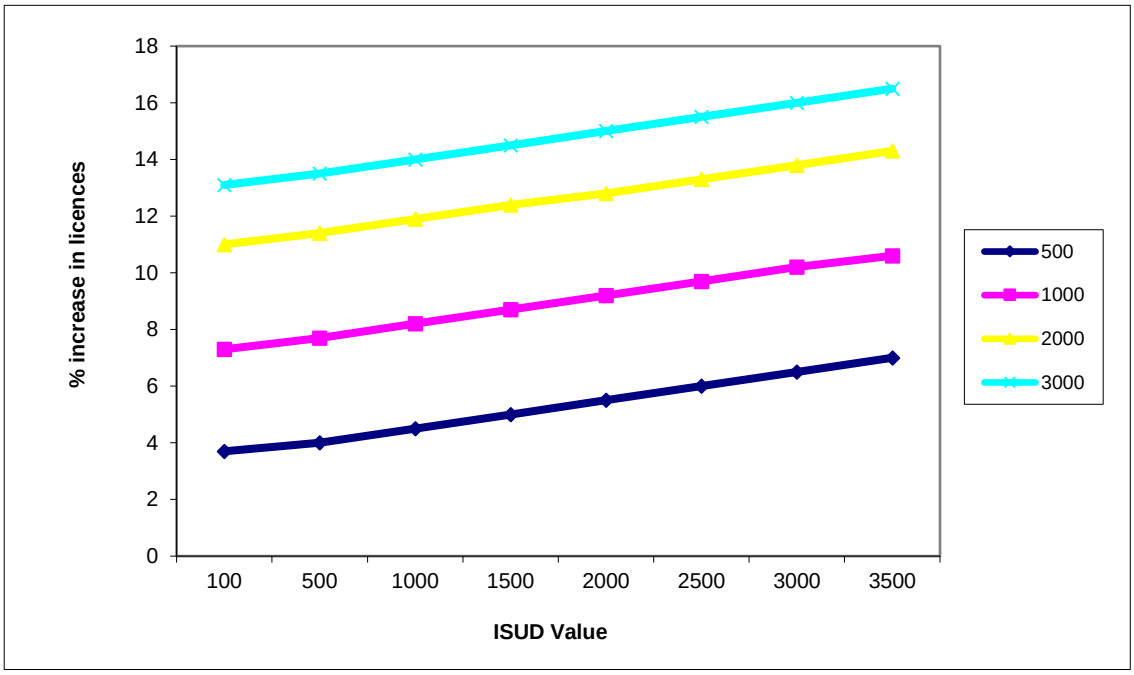
SUDSIM represents a synthesis of a queue simulation work that was previously used (1989 to 2002) to predict the alleviation of significant unmet demand and the ISUD factor described above (hence the term SUDSIM). The benefit of this approach is that it provides a direct relationship between the scale of the ISUD factor and the number of new hackney licences required.

SUDSIM was developed taking the recommendations from 14 previous studies that resulted in an increase in licences, and using these data to calibrate an econometric model. The model provides a relationship between the recommended increase in licences and three key market indicators:

- the population of the licensing Authority;
- the number of hackneys already licensed by the licensing Authority; and
- the size of the SUD factor.

The main implications of the model are illustrated in Figure 3.1 below. The figure shows that the percentage increase in a hackney fleet required to eliminate significant unmet demand is positively related to the population per hackney (PPH) and the value of the ISUD factor over the expected range of these two variables.

Figure 3-1: Forecast Increase in Hackney Fleet Size as a Function of Population Per Hackney (PPH) and the ISUD Value



Where significant unmet demand is identified, the recommended increase in licences is therefore determined by the following formula:

New Licences = SUDSIM x Latent Demand Factor

Where:

Latent Demand Factor = (1 + proportion giving up waiting for a hackney at either a rank or via flagdown)

3.6 Note on Scope of Assessing Significant Unmet Demand

It is useful to note the extent to which a licensing authority is required to consider peripheral matters when establishing the existence or otherwise of significant unmet demand. This issue is informed by R v Brighton Borough Council, exp p Bunch 1989[2]. This case set the precedent that it is only those services that are exclusive to hackney carriages that need concern a licensing authority when considering significant unmet demand.

2 See Button JH 'Taxis – Licensing Law and Practice' 4th edition Tottel 2017 P379

Telephone booked trips, trips booked in advance or indeed the provision of bus type services are not exclusive to hackney carriages and have therefore been excluded from consideration.

4. Evidence of Patent Unmet Demand – Rank Observation Results

4.1 Introduction

This section of the report highlights the results of the rank observation survey. The rank observation program covered a period of 232 hours during October 2019 and November 2019, some additional observations were undertake in January 2020. Some 7,645 passengers and 7,102 departures were recorded across twelve ranks. A summary of the rank observation programme is provided in Appendix 2.

- The results presented in this section summarise the information and draw out its implications. This is achieved by using five indicators:
- The Balance of Supply and Demand – this indicates the proportion of the time that the market exhibits excess demand, equilibrium and excess supply;
- Average Delays and Total Demand – this indicates the overall level of passengers and cab delays and provides estimates of total demand;
- The Demand/Delay Profile – this provides the key information required to determine the existence or otherwise of significant unmet demand;
- The Proportions of Passengers Experiencing Given Levels of Delay – this provides a guide to the generality of passenger delay.

4.2 The Balance of Supply and Demand

The results of the analysis are presented in Table 4.1 below. The predominant market state is one of equilibrium. Excess supply (queues of cabs) was experienced during 3% of the hours observed while excess demand (queues of passengers) was experienced 13% of the hours observed. Conditions are generally favourable to customers at all times of the day, with periods of excess demand occurring during the weekday and weekend daytime and on an evening at a weekend.

Table 4.1 – The balance of supply and demand in the Halton rank-based taxi market (percentage of hours observed)

Period		Excess Demand (Max Passenger Queue ≥ 3)	Equilibrium	Excess Supply (Min Cab Queue ≥ 3)
Weekday *(Monday to Friday daytime)*	Day	**13**	75	12
	Night	11	89	0
Weekend *(Saturday day and Friday and Saturday night)*	Day	14	84	2
	Night	19	81	0
Sunday	Day	7	93	0
Total 2019		**13**	**84**	**3**

NB – Excess Demand = Maximum passenger queue ≥3. Excess Supply = Minimum Cab Queue ≥3 – values derived over 12 time periods within an hour.

4.3 Average Delays and Total Demand

The following estimates of average delays and throughput were produced for each selected rank in Halton (Table 4.2).

The survey suggests some 7,645 passenger departures occur per week from ranks in Halton involving some 7,102 cab departures. The taxi trade is concentrated at the rank at ASDA in Widnes, accounting for 30.4% of the total passenger departures. On average cabs wait 8.51 minutes for a passenger. On average passengers wait 0.91 minutes for a cab. At many of the ranks, hackney carriages were observed leaving without a passenger, presumably having taken a booking via a radio circuit.

Observations were also undertaken at Public Hall Street in Runcorn, and the two ranks by High Street Chambers but were removed from the analysis as neither the public or trade were using the rank as no passenger or cab departures were observed. The observations did demonstrate that private cars occasionally used it for parking.

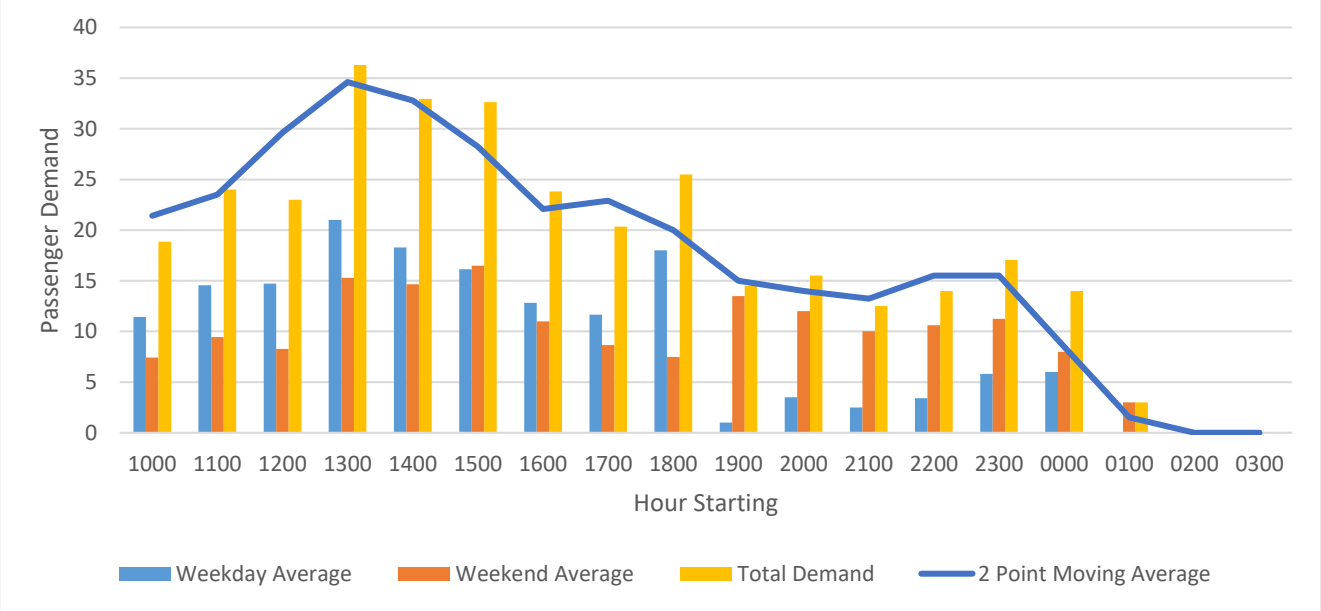
Table 4.2 Average Delays and Total Demand (Delays in Minutes)

Rank	Passenger Departures	Cab Departures	Average Passenger Delay in Minutes	Average Cab Delay in Minutes
ASDA, Widnes	2,335	1,824	1.53	6.41
Morrisons , Widnes	1,740	1,500	0.15	10.16
Albert Road, Widnes	284	227	3.67	4.92
Victoria Square, Widnes	27	23	4.17	6.00
Rear of Iceland Supermarket, Widnes	41	92	4.44	9.51
Widnes North Station, Widnes	157	141	0.00	4.25
Runcorn Rail Station, Runcorn	741	953	0.82	11.41
Co op, Runcorn	695	789	0.67	5.33
High Street, Runcorn	725	757	0.80	6.75
Trident Retail park, Runcorn	899	797	0.13	13.33
TOTAL	***7,645***	***7,102***	***0.91***	***8.51***

4.4 The Delay/Demand Profile

Figure 4.1 provides a graphical illustration of passenger demand for the Monday to Saturday period between the hours of 10:00 and 03:00. It shows that demand peaks at 1300 and then reduces as the day progresses .

Figure 4.1 Passenger Demand by Time of Day in 2019 (Monday to Saturday)



The profile of demand shows a peak at 1300 which is much greater demand that at all other times of day. This has implications for the interpretation of the results and is classed as 'highly peaked' and therefore a factor of 0.5 is assigned to this in the results.

Figure 4.2 Passenger Delay by Time of Day in 2019 (Monday to Saturday)

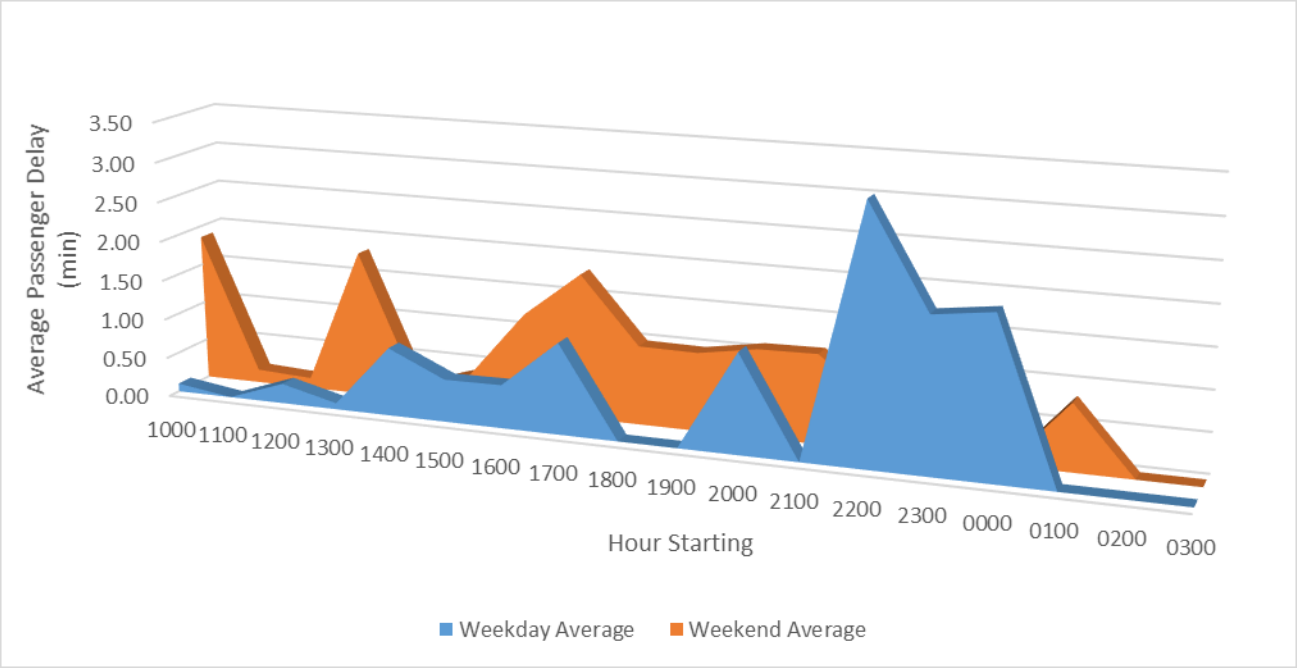


Figure 4.2 provides an illustration of passenger delay by the time of day for the weekday and weekend periods. It shows that delay peaks on weekdays between 1400 and 1700 and at 2200, and 1700 on weekends.

4.5 The General Incidence of Passenger Delay

The rank observations data can be used to provide a simple assessment of the likelihood of passengers encountering delay at ranks. The results are presented in Table 4.3 below.

Table 4.3 – General incidence of passenger delay (percentage of passengers travelling in hours where delay exceeds one minute)

Year	Delay > 0	Delay > 1 min	Delay > 5 min
2019	**11.48**	***7.17***	**0.70**

In 2019, 7.17% of passengers are likely to experience more than a minute of delay. It is this proportion (7.17%) that is used within the ISUD as the 'Generality of Passenger Delay'.

5. Public Consultation

5.1 Introduction

A public attitude survey was designed with the aim of collecting information regarding opinions on the taxi market in Halton.

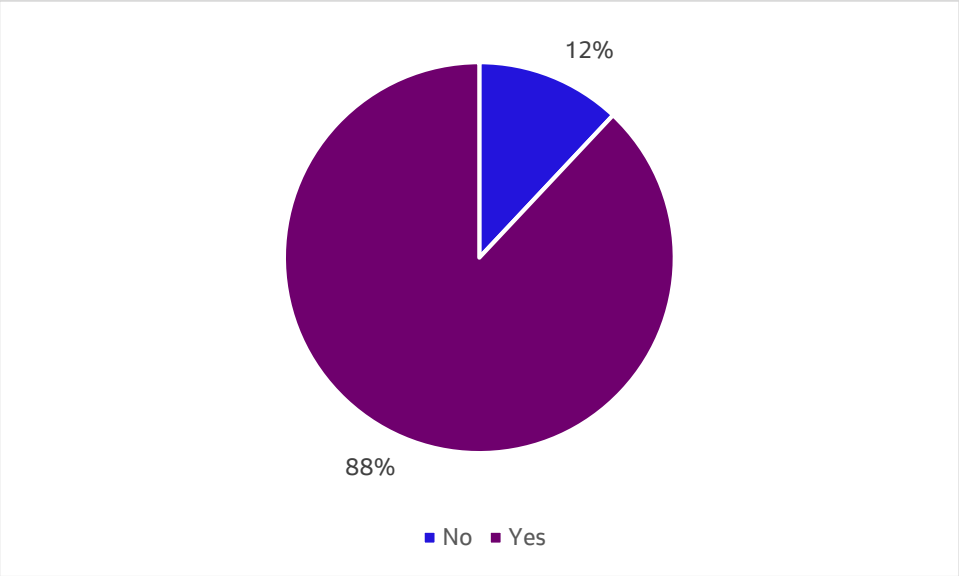
The survey was hosted online and promoted via Halton Borough Council's website and the link was emailed to a range of stakeholders. In total, 241 people responded to the survey. Of these, 39 respondents identified themselves as being involved in the taxi trade in Halton, whether that be as a driver, owner or operator of the taxi trade or private hire car trade. This screening question was designed to remove bias, we have discarded their responses meaning that 202 responses were taken forward for analysis, portraying the views of the general public.

It should be noted that in the tables and figures that follow the totals do not always add up to the same amount which is due to one of two reasons. First, not all respondents were required to answer all questions; and second, some respondents failed to answer some questions that were asked.

5.2 General Information

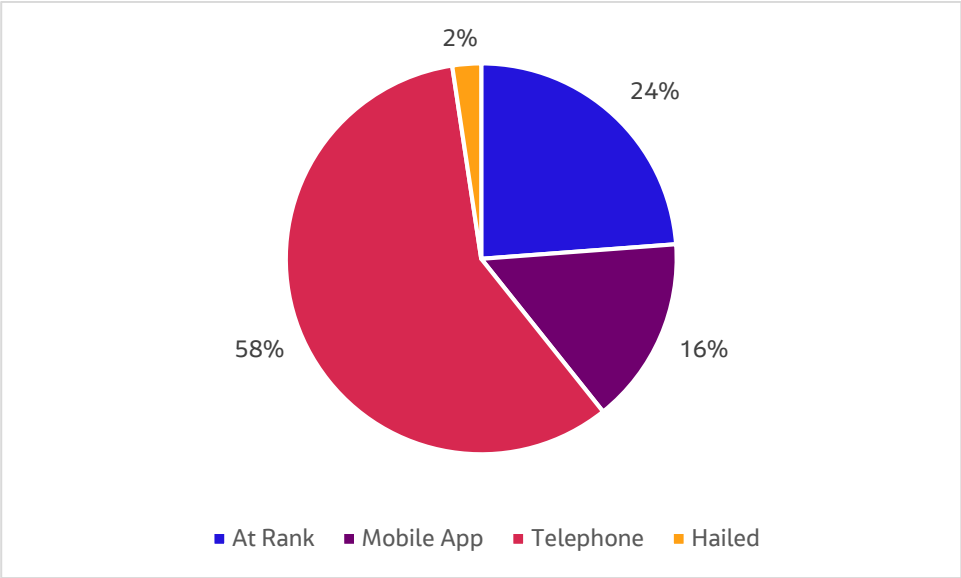
Respondents were asked whether they had made a trip by taxi(hackney carriage or private hire) in the past three months. Figure 5.1 shows that 88% (176) of the survey population that had responded to the question had made a trip by taxi in the last three months and only 12% (24) had not.

Figure 5.1 – Have you made a trip by taxi in the last three months?



Respondents that had identified themselves as trip makers were asked how they obtained their taxi or private hire vehicle (Figure 5.2). Of the responses, the most common answer (58%) stated that they obtained their taxi by telephone. Some 24% hired their taxi at a rank whereas obtaining it via an app accounted for 16%. Respondents who used an app (mobile, smartphone or tablet) to obtain their taxi (26 people) were asked which app they used to obtain their taxi – the only response received stated 'Britannia'.

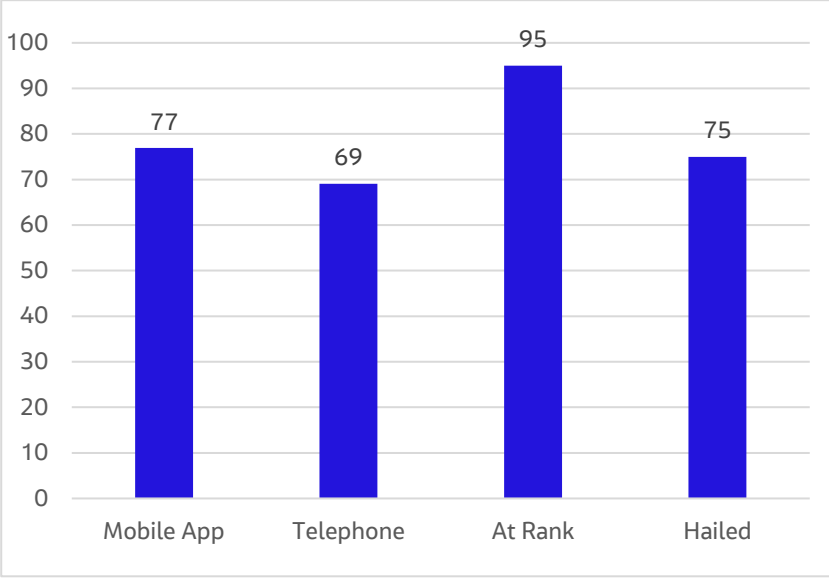
Figure 5.2 – Method of hire for last trip



Respondents were asked what type of vehicle they had obtained on their last trip. Some 70% were saloons, and 25% were wheelchair accessible – the remaining 5% were categorised as other and varied from cars to mini busses.

Trip makers were then asked if they were satisfied with the time taken and the promptness of the vehicles arrival. When considering all hiring's, the majority of respondents (77%) were satisfied with the promptness of their last taxi journey. Figure 5.3 looks at the individual methods of hire and how that transpires to the satisfaction (presented as a percentage) with the time taken and promptness of its arrival. Obtaining your taxi at a taxi rank presented the most satisfied respondents (95%) and the least satisfied were those who ordered by telephone (69%).

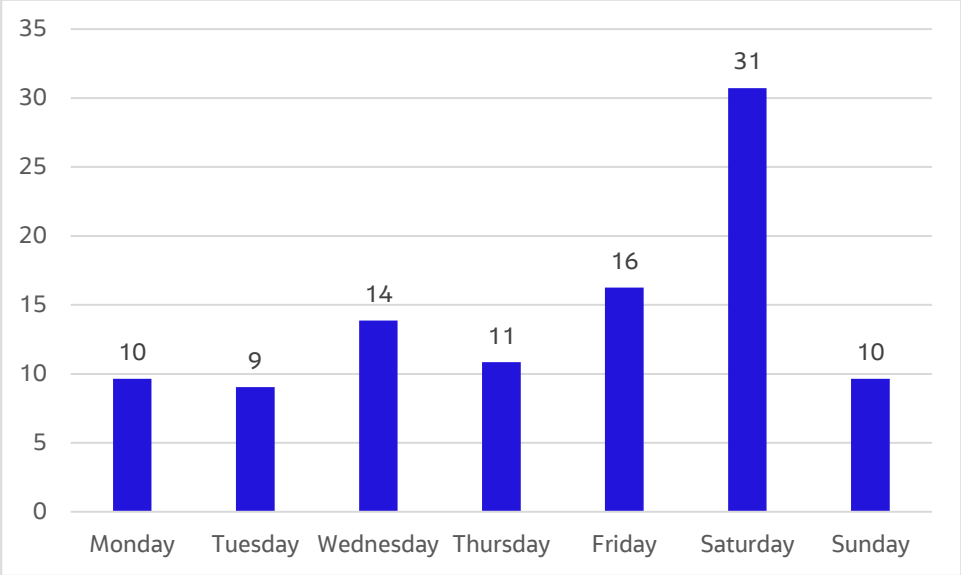
Figure 5.3 – Satisfaction with the promptness of vehicle arrival, split by method of hire



Respondents were also asked at what time of the day they obtained their taxi and on what day of the week it was. The results indicate that the majority (41%) took a taxi in the day time (before 6pm), followed by 39% in the evening (6pm-10pm) and 20% at night time (after 10pm). Figure 5.4 shows what day of the week respondents

obtained a taxi (as a percentage). Saturday was the most popular, with 31% of respondents journeys occurring on this day, followed by 16% happening on a Friday. Tuesday was the least popular day, with only 9% of journeys occurring; generally, the main demand for Taxi's came between Wednesday and Saturday.

Figure 5.4 – Day of the week respondents obtained a taxi



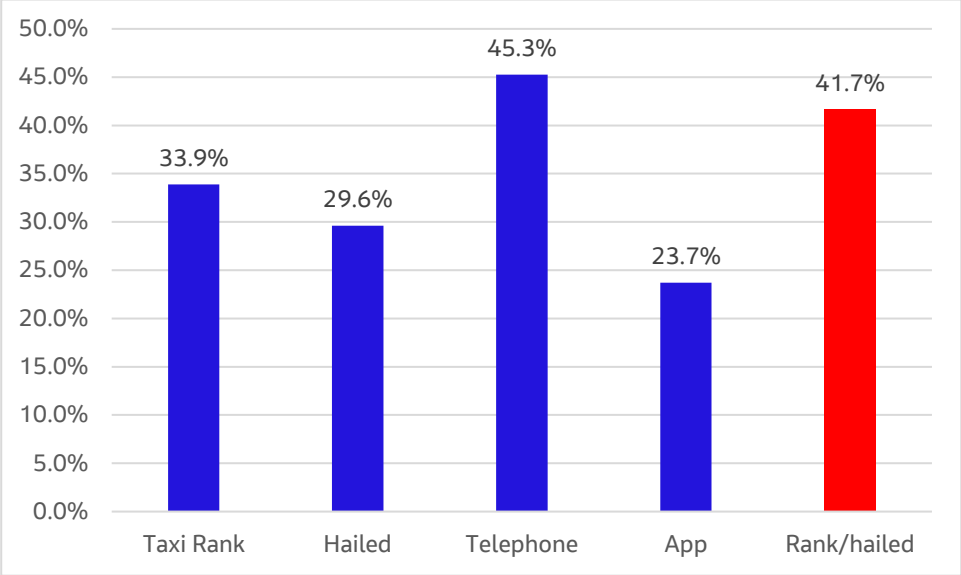
Respondents were asked to rate five elements from their last taxi journey in Halton from very poor to very good. The results in Figure 5.5 show that most elements were generally very good, apart from price which was good. When poor ratings were given respondents were asked to provide a reason for their rating. Negative ratings included reasons such as:

- Communication issues between booking the taxi and the taxi arriving;
- Prices too high/expensive;
- Dissatisfaction with the car being travelled in; and,
- Driver incompetency regarding local road knowledge.

Figure 5.5 – Rating of last journey

In order to measure demand suppression, all respondents were asked to identify whether they had given up waiting for a taxi at a rank, on the street, by telephone or through their app in Halton in the last three months. The results are summarised in Figure 5.6, as percentages of respondents that have given up. This indicates that most people gave up waiting for a taxi after ordering it via telephone, followed by waiting for a taxi at a rank. Some 41.7% of respondents had given up trying to obtain a taxi by rank or by flag down - this has implications for the interpretation of the results (see Chapter 8 below).

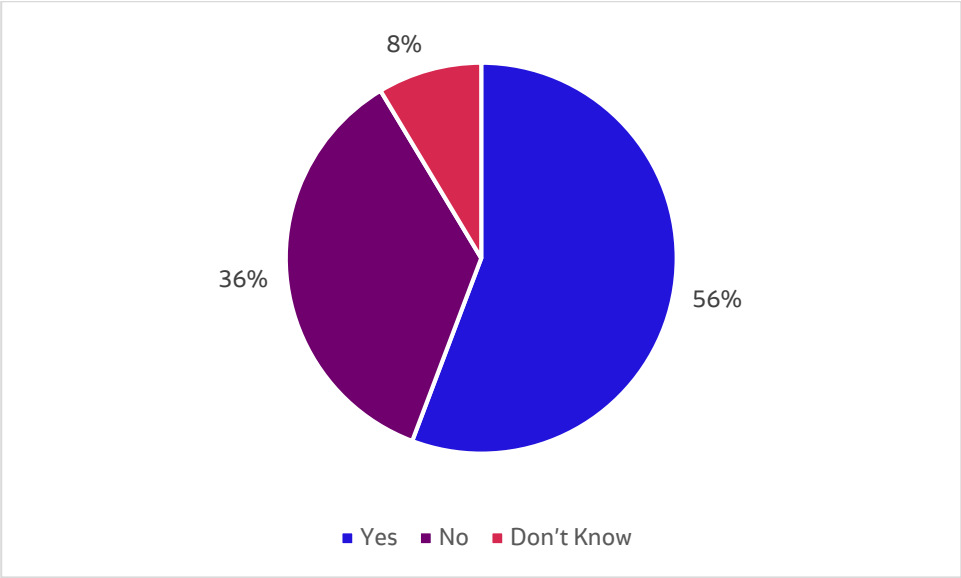
Figure 5.6 – Latent demand by method of hire – Given up trying to get a taxi?



Respondents who had given up trying to obtain a taxi in the last three months were asked the location where they had given up waiting for a taxi. The most common areas respondents gave were various locations throughout Runcorn, particularly the old town centre and Widnes, again, in the town centre and Hough Green train station. In addition, most respondents had given up waiting at night (from 19:00) and into the early hours of the morning (02:00). When asked how long they had waited before giving up, the average time was 30 minutes and the maximum recorded time was 45 minutes.

Participants were subsequently asked whether they feel there are enough taxis in Halton at the current time for their personal needs. Some 56% commented that there are enough taxis in Halton (see Figure 5.7).

Figure 5.7 – Do you think there are enough taxis in Halton to suit your needs?



The survey then asked respondents whether taxi services in Halton could be improved. Out of the response, 53% believed that taxi services in Halton could be improved and with 25% feeling that no improvement was needed, the rest (22%) didn't know at the time. Those that believed improvements could be made were asked how they could be improved. Some common suggestions were:

- Cheaper taxis/ more competitive pricing;
- Improved standard of driving;
- More competitive companies i.e. Uber;
- Better maintained taxis;
- Competent and nicer drivers;
- More taxis and especially at night.

Respondents were asked if they felt there was enough provision of taxi ranks in Halton. 55% of respondents felt that there are currently enough ranks in Halton and a quarter of respondents (25%) believe there are not, the remaining (21%) did not know at the time. Suggested improvements from respondents who answered 'no' are listed in Table 5.1.

Table 5.1 – Suggested improvements for taxi ranks in Halton

Suggested Improvement	No. of Responses
Provide information on location of existing	21
Provide new ranks	22
Improve signage of existing ranks	30
Other	10

Some of the other suggested improvements included:

- Having sheltered waiting areas at ranks;
- Improved reliability of taxis at the ranks.

Respondents were asked if there were any locations in Halton where new ranks were needed. In total, 25% of respondents said that no new ranks were needed in Halton whilst 54% stated they did not know. The remaining 21% of respondents who stated that they would like to see new ranks were asked to provide a location. The most common locations cited included:

- Near retail locations (Tesco, Aldi (Green Oaks Way) and B&M);
- The Hive;
- Hough Green Road.

5.3 Summary

Key points from the public attitude survey can be summarised as:

- 202 legitimate responses populated the public consultation section of the Halton taxi demand study report;
- 88% of respondents have used a taxi in Halton in the last 3 months;
- Over half (58%) of these journeys were obtained via booking over the telephone;
- Generally, respondents were satisfied with the promptness of their taxi arrival in Halton (77%), obtaining a taxi at a rank provided the greatest level of satisfaction (95%) and a telephone was the least (69%);
- Saturday was the most popular day for a taxi service to be used, across the week, the most popular time and the highest demand for a taxi was in the day time (pre 6pm);
- The journey was rated on various factors of satisfaction and price was remarked as the least satisfying aspect of a trip, all other factors were remarked as very good;
- Booking a taxi via the telephone had the most latent demand;
- 56% of respondents believe there are enough taxis in Halton and 36% believe there isn't;
- If improvements were to be made, the survey have revealed that the respondents desire cheaper taxis, a better standard of driving and more taxis available at night;
- 55% of respondents believe that there are enough taxi ranks throughout Halton, however if new ranks were to be made, then retail shops, The Hive and Hough Green Road have been identified as areas that would benefit from having a rank in place.

6. Consultation

6.1 Introduction

Guidelines issues by the Department for Transport state that consultation should be undertaken with the following organisations and stakeholders:

- All those working in the market;
- Consumer and passenger (including disabled) groups;
- Groups which represent those passengers with special needs;
- The Police;
- Local interest groups such as hospitals or visitor attractions; and
- A wide range of transport stakeholders such as rail/bus/coach providers and transport managers.

In order to consult with relevant stakeholders across Halton, written consultation was undertaken.

6.2 Indirect (Written) Consultation

A number of stakeholders were contacted by email. This assured the DfT guidelines were fulfilled and all relevant organisations and bodies were provided with an opportunity to comment.

In accordance with advice issued by the DfT the following organisations were contacted:

- Halton Borough Council;
- Trade representatives;
- User/disability groups representing those passengers with special needs;
- Local interest groups including hospitals, visitor attractions, entertainment outlets and education establishments; and
- Rail bus and coach operators.

A summary of the responses received are provided below.

Halton Taxis Ltd

A Director provided the following response:

- There are normally plenty of hackney vehicles available both on the ranks or by phoning a licensed Operator in the area at any time of day or night.
- Halton Council's policy on supply has always been led by demand, and this is monitored and reviewed regularly with the trade. It works well.
- All Private Hire companies in the Halton Borough operate 24/7/265. The public are well serviced.
- All taxis, private hire vehicles and Drivers licensed by Halton Council have to adhere to the criteria specified in regards to dress and age, size and condition of vehicles. The standards here are probably the highest and best monitored in the UK.
- Hackney ranks are mostly well placed and where changes to roads and infrastructure make it necessary, moved.
- The Council and Trade also have agreed part time ranks placed for specific demand at different times of day and night.

- No additional wheelchair access Hackneys are needed. They use the ranks and are available by phone from all Taxi Companies. Most are all custom built vehicles for purpose.
- By agreement, Halton's fare structure applies to all vehicles, Private Hire and Hackney. They are considered to be medium when compared nationally.
- Advertising is mainly down to the individual companies.
- As all hackneys are licensed and controlled by Halton Council. They are as safe as is possible. Any issues can be reported to the Taxi officer.
- Same applies to all locally licensed private hire drivers and vehicles. However, there is a problem with some uncontrolled vehicles and drivers from outside the borough that are not.
- Hackneys are an integral part of the local transport system.

District Taxis

District Taxis provide the following response:

"*So for the record you can not get a taxi on the ranks or train stations after 3pm as when all the drivers Have finished there school contracts they don't work . And on a weekends it's even worse . Also the problem is they have never addressed this fully wheel chair accessible H/C vehicles . People simply can not go out who have disabilities and the council is fully aware of the problem. As the ask the people who complain to ring my office which is in Cheshire West*"

7. Deriving the Significant Unmet Demand Index Value

7.1 Introduction

The data provided in the previous chapters can be summarised using Jacobs ISUD factor as described in Chapter 3.

The component parts of the index, their source and their values are given below;

Average Passenger Delay (Table 4.2)	**0.91**
Peak Factor (Figure 4.2)	0.5
General Incidence of Delay (Table 4.3)	7.17
Steady State Performance (Table 4.1)	13
Seasonality Factor (Section 3)	1
Latent Demand Factor (Section 5)	1.417
ISUD (0.91*0.5*7.17*13*1*1.417)	**60**

The cut off level for a significant unmet demand is 80. It is clear that Halton is below this cut off point as the ISUD is 60 indicating that there is NO **significant unmet demand**. This conclusion covers both patent and latent/suppressed demand.

8. Summary and Conclusions

8.1 Introduction

Jacobs has conducted a study of the taxi market on behalf of Halton Borough Council. The present study has been conducted in pursuit of the following objectives. To determine;

- Whether or not there is a significant unmet demand for taxi services within Halton as defined in Section 16 of the Transport Act 1985; and
- How many additional taxis are required to eliminate any significant unmet demand.

This section provides a brief description of the work undertaken and summarises the conclusions.

8.2 Significant Unmet Demand

The 2019 study has identified that there is NO evidence of significant unmet demand for taxis in Halton. This conclusion is based on an assessment of the implications of case law that has emerged since 2000, and the results of Jacobs's analysis.

8.3 Public Perception

Public perception of the service was obtained through the undertaking of an online survey. Overall the public were generally satisfied with the service – key points included:

- 88% of respondents have used a taxi in Halton in the last 3 months;
- Over half (58%) of these journeys were obtained via booking over the telephone;
- Generally, respondents were satisfied with the promptness of their taxi arrival in Halton (77%), obtaining a taxi at a rank had the greatest level of satisfaction (95%) and by telephone was the least (69%);
- 56% of respondents believe there are enough taxis in Halton and 36% believe there isn't;

8.4 Recommendations

Our 2019 study has identified that there is NO evidence of significant demand in Halton. This conclusion covers both patent and latent/suppressed demand and is based on an assessment of the implications of case law that has emerged since 2000, and the results of our analysis.

On this basis the authority has the discretion in its taxi licensing policy and may either:

- Maintain its current policy of limiting to 267 hackneys ;
- Issue any number of additional plates as it sees fit, either in one allocation or a series of allocations; or
- Remove the numerical restriction on licences.

Appendix 1 Rank List

OFFICIAL HACKNEY CARRIAGE STANDS REGULATED BY HALTON BOROUGH COUNCIL UNDER SECTION 63 OF THE LOCAL GOVERNMENT (MISCELLANEOUS PROVISIONS) ACT 1976

WIDNES

Stand Number	Location	Order Plan Number	Permitted Maximum Number of Vehicles	Permitted Times of Use
1	Market Street	HCS 1	7	2100 - 0600
2	Alforde Street	HCS 2	6	2100 - 0600
3	Hale Road	HCS 3	8	Any
4	Upton Lane	HCS 4	3	Any
5	Dickson Street	HCS 5	5	Any
6	Victoria Square	HCS 6	8	2100 - 0600
7	Prescot Road	HCS 7	4	Any
8	Appleton Village	HCS 8	10	0000 - 0800 & 0930 - 1430 & 1630 - 0000
9	Cronton Lane	HCS 9	4	Any
10	Widnes Road	HCS 10	8	2300 - 0600
11	Albert Road (outside Wetherspoons)	HCS 11	3	1800 - 0600
12	Albert Road (feeder rank to Wetherspoons)	HCS 12	3	1800 - 0600
13	Albert Road (outside Imperial)	HCS 13	3	1800 - 0600

RUNCORN

Stand Number	Location	Order Plan Number	Permitted Maximum Number of Vehicles	Permitted Times of Use
14	Public Hall Street	HCS 14	8	Any
15	Shopping City (off Second Avenue)	HCS 15	3	Any
16	High Street (opposite side of road from Chambers)	HCS 16	5	2200 - 0600
17	High Street (in front of Chambers)	HCS 17	5	2200 - 0600
18	Bridge Street (in front of The Wilsons)	HCS 18	4	2200 - 0600
19	High Street (outside Bargain Booze adj Mersey Road)	HCS 19	8	2000 - 0600
20	High Street lay-by immediately east of entrance to Co-op car-park	HCS 20	6	2000 - 0600

Appendix 2 Rank Observations

Rank Observations on subsequent pages

Asda Widnes

Friday 25/10/2019 1000-1800

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1000-1100	23	23	0	57	0.00	12.39	0	1	0	1	0
1100-1200	29	26	0	41	0.00	7.88	0	1	0	1	0
1200-1300	34	28	12	33	1.76	5.89	6	0	1	0	0
1300-1400	56	33	3	34	0.27	5.15	2	0	0	1	0
1400-1500	47	25	33	6	3.51	1.20	8	0	1	0	0
1500-1600	48	30	22	7	2.29	1.17	5	0	1	0	0
1600-1700	23	16	15	17	3.26	5.31	5	0	1	0	0
1700-1800	35	24	6	28	0.86	5.83	5	0	1	0	0
Total	**295**	**205**	**91**	**223**	**1.54**	**5.44**			**5**	**3**	**0**

Thursday 24/10/2019 1800-0000

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1800-1900	18	14	0	25	0.00	8.93	0	1	0	1	0
1900-2000	1	10	0	22	0.00	11.00	0	0	0	1	0
2000-2100	5	8	4	18	4.00	11.25	2	0	0	1	0
2100-2200	1	5	0	6	0.00	6.00	0	0	0	1	0
2200-2300	3	1	12	0	20.00	0.00	3	0	1	0	0
2300-0000	3	2	5	0	8.33	0.00	2	0	0	1	0
Total	**31**	**40**	**21**	**71**	**3.39**	**8.88**			**1**	**5**	**0**

Saturday 26/10/2020 1000-1800

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1000-1100	12	11	0	31	0.00	14.09	0	1	0	1	0
1100-1200	16	16	0	33	0.00	10.31	0	2	0	1	0
1200-1300	20	15	0	51	0.00	17.00	0	2	0	1	0
1300-1400	25	23	6	18	1.20	3.91	2	0	0	1	0
1400-1500	33	21	7	47	1.06	11.19	7	0	1	0	0
1500-1600	40	22	6	20	0.75	4.55	4	0	1	0	0
1600-1700	19	14	24	16	6.32	5.71	6	0	1	0	0
1700-1800	16	18	13	18	4.06	5.00	5	0	1	0	0
Total	**181**	**140**	**56**	**234**	**1.55**	**8.36**			**4**	**4**	**0**

Saturday 26/10/2019 1800-0100

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1800-1900	11	11	1	14	0.45	6.36	1	0	0	1	0
1900-2000	11	8	3	12	1.36	7.50	3	0	1	0	0
2000-2100	4	8	0	6	0.00	3.75	0	0	0	1	0
2100-2200	6	9	0	7	0.00	3.89	0	0	0	1	0
2200-2300	0	0	0	0	0.00	0.00	0	0	0	1	0
Total	**32**	**36**	**4**	**39**	**0.63**	**5.42**			**1**	**4**	**0**

Sunday 27/10/2019 1400-1800

Cab Queue

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1200-1300	12	13	0	21	0.00	8.08	0	0	0	1	0
1300-1400	26	22	4	34	0.77	7.73	4	0	1	0	0
1400-1500	19	16	0	33	0.00	10.31	0	0	0	1	0
1500-1600	19	13	8	25	2.11	9.62	5	0	1	0	0
Total	**76**	**64**	**12**	**113**	**0.79**	**8.83**			**2**	**2**	**0**

Morrions Widnes

Friday 18/09/2019 1000-1800

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1000-1100	29	25	0	103	0.00	20.60	0	5	0	0	1
1100-1200	42	31	0	82	0.00	13.23	0	5	0	0	1
1200-1300	39	35	0	4	0.00	0.57	0	4	0	0	1
1300-1400	39	36	0	59	0.00	8.19	0	1	0	1	0
1400-1500	32	28	0	68	0.00	12.14	0	2	0	1	0
1500-1600	29	29	5	46	0.86	7.93	4	0	1	0	0
1600-1700	25	24	0	58	0.00	12.08	0	1	0	1	0
1700-1800	15	12	3	27	1.00	11.25	2	0	0	1	0
Total	**250**	**220**	**8**	**447**	**0.16**	**10.16**			**1**	**4**	**3**

Saturday 19/10/2019 1000-1600

Hour	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1000-1100	15	14	0	57	0.00	20.36	0	2	0	1	0
1100-1200	23	16	0	44	0.00	13.75	0	0	0	1	0
1200-1300	20	17	0	71	0.00	20.88	0	2	0	1	0
1300-1400	42	32	0	42	0.00	6.56	0	1	0	1	0
1400-1500	41	27	0	69	0.00	12.78	0	3	0	0	1
1500-1600	40	23	0	25	0.00	5.43	0	0	0	1	0
1700-1800	26	16	6	19	1.15	5.94	4	0	1	0	0
1800-1900	10	6	0	23	0.00	19.17	0	0	0	1	0
Total	217	151	6	350	0.14	11.59			1	6	1

Sunday 25/03/2018 1400-1800

Cab Queue

Hour	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1200-1300	11	11	0	11	0.00	5.00	0	0	0	1	0
1300-1400	10	9	0	14	0.00	7.78	0	0	0	1	0
1400-1500	15	12	4	5	1.33	2.08	2	0	0	1	0
1500-1600	4	9	0	32	0.00	17.78	0	1	0	1	0
Total	40	41	4	62	0.50	7.56			0	4	0

Albert Road

Thursday 17/10/2019 2000-0200

Hour	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
2000-2100	3	3	0	5	0.00	8.33	0	0	0	1	0
2100-2200	2	1	0	10	0.00	50.00	0	0	0	1	0
2200-2300	1	1	0	0	0.00	0.00	0	0	0	1	0
2300-0000	10	6	10	1	5.00	0.83	3	0	1	0	0
0000-0100	9	4	18	1	10.00	1.25	5	0	1	0	0
Total	25	15	28	17	5.60	5.67			2	3	0

Saturday 19/10/2019 2000-0000

Hour	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
2000-2100	9	9	2	4	1.11	2.22	2	0	0	1	0
2100-2200	2	6	0	10	0.00	8.33	0	0	0	1	0
2200-2300	2	8	0	10	0.00	6.25	0	0	0	1	0
2300-0000	16	10	0	4	0.00	2.00	0	0	0	1	0
0000-0100	0	0	0	0	0.00	0.00	0	0	0	1	0
Total	29	33	2	28	0.34	4.24			0	5	0

Victoria Square

Thursday 30/01/2020 2200-0200

Hour	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
2200-2300	0	0	0	0	0.00	0.00	0	0	0	1	0
2300-0000	0	0	0	0	0.00	0.00	0	0	0	1	0
0000-0100	0	0	0	0	0.00	0.00	0	0	0	1	0
0100-0200	0	0	0	0	0.00	0.00	0	0	0	1	0
Total	0	0	0	0	0.00	0.00			0	4	0

Saturday 01/02/2020 2200-0200

Hour	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
2200-2300	0	1	0	4	0.00	20.00	0	0	0	1	0
2300-0000	0	2	1	0	0.00	0.00	0	0	0	1	0
0000-0100	0	0	0	0	0.00	0.00	0	0	0	1	0
0100-0200	6	2	4	2	3.33	5.00	3	0	1	0	0
Total	6	5	5	6	4.17	6.00			1	3	0

Rear of Iceland

Friday 18/10/2019 1000-1800

Hour	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply

1000-1100	2	2	0	4	0.00	10.00	0	0	0	1	0
1100-1200	0	2	0	1	0.00	2.50	0	0	0	1	0
1200-1300	0	2	0	10	0.00	25.00	0	0	0	1	0
1300-1400	1	4	0	7	0.00	8.75	0	0	0	1	0
1400-1500	1	3	0	4	0.00	6.67	0	0	0	1	0
1500-1600	0	1	0	2	0.00	10.00	0	0	0	1	0
1600-1700	0	0	3	0	0.00	0.00	1	0	0	1	0
1700-1800	1	0	1	0	5.00	0.00	0	0	0	1	0
Total	**5**	**14**	**4**	**28**	**4.00**	**10.00**			**0**	**8**	**0**

Saturday 19/10/2019 1000-1800

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	**Passengers**	**Cabs**	**Passenger Queue**	**Cab Queue**	**Average Passenger Delay**	**Average Cab Delay**	**Maximum Passenger Queue**	**Minimum Cab Queue**	**Excess Demand**	**Equilibrium**	**Excess Supply**
1000-1100	1	4	2	5	10.00	6.25	0	0	0	1	0
1100-1200	1	1	0	0	0.00	0.00	0	0	0	1	0
1200-1300	0	1	0	4	0.00	20.00	0	0	0	1	0
1300-1400	3	2	6	0	10.00	0.00	3	0	1	0	0
1400-1500	0	0	0	4	0.00	0.00	0	0	0	1	0
1500-1600	3	2	1	2	1.67	5.00	1	0	0	1	0
1600-1700	0	0	0	0	0.00	0.00	0	0	0	1	0
1700-1800	3	2	3	1	5.00	2.50	3	0	1	0	0
Total	**11**	**12**	**12**	**16**	**5.45**	**6.67**			**2**	**6**	**0**

Rear of Iceland Sunday 20/10/2019 1200-1600

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	**Passengers**	**Cabs**	**Passenger Queue**	**Cab Queue**	**Average Passenger Delay**	**Average Cab Delay**	**Maximum Passenger Queue**	**Minimum Cab Queue**	**Excess Demand**	**Equilibrium**	**Excess Supply**
1200-1300	0	0	0	0	0.00	0.00	0	0	0	1	0
1300-1400	0	0	0	0	0.00	0.00	0	0	0	1	0
1400-1500	0	0	0	0	0.00	0.00	0	0	0	1	0
1500-1600	0	0	0	0	0.00	0.00	0	0	0	1	0
Total	**0**	**0**	**0**	**0**	**0.00**	**0.00**			**0**	**4**	**0**

Widnes Rail Station

Friday 18/10/2019 1200-1800

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	**Passengers**	**Cabs**	**Passenger Queue**	**Cab Queue**	**Average Passenger Delay**	**Average Cab Delay**	**Maximum Passenger Queue**	**Minimum Cab Queue**	**Excess Demand**	**Equilibrium**	**Excess Supply**
1200-1300	2	3	0	11	0.00	18.33	0	0	0	1	0
1300-1400	1	1	0	2	0.00	10.00	0	0	0	1	0
1400-1500	0	2	0	2	0.00	5.00	0	0	0	1	0
1500-1600	0	1	0	0	0.00	0.00	0	0	0	1	0
1600-1700	2	1	0	0	0.00	0.00	0	0	0	1	0
1700-1800	2	1	0	0	0.00	0.00	0	0	0	1	0
Total	**7**	**9**	**0**	**15**	**0.00**	**8.33**			**0**	**6**	**0**

Thursday 17/10/2019 1800-2200

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	**Passengers**	**Cabs**	**Passenger Queue**	**Cab Queue**	**Average Passenger Delay**	**Average Cab Delay**	**Maximum Passenger Queue**	**Minimum Cab Queue**	**Excess Demand**	**Equilibrium**	**Excess Supply**
1800-1900	0	0	0	0	0.00	0.00	0	0	0	1	0
1900-2000	4	2	0	0	0.00	0.00	0	0	0	1	0
2000-2100	0	0	0	0	0.00	0.00	0	0	0	1	0
2100-2200	0	0	0	0	0.00	0.00	0	0	0	1	0
	4	**2**	**0**	**0**	**0.00**	**0.00**			**0**	**4**	**0**

Saturday 19/10/2019 1200-1800

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	**Passengers**	**Cabs**	**Passenger Queue**	**Cab Queue**	**Average Passenger Delay**	**Average Cab Delay**	**Maximum Passenger Queue**	**Minimum Cab Queue**	**Excess Demand**	**Equilibrium**	**Excess Supply**
1200-1300	0	1	0	0	0.00	0.00	0	2	0	1	0
1300-1400	1	1	0	0	0.00	0.00	0	0	0	1	0
1400-1500	1	1	0	0	0.00	0.00	0	0	0	1	0
1500-1600	0	1	0	1	0.00	5.00	0	0	0	1	0
1600-1700	0	1	0	1	0.00	5.00	0	0	0	1	0
Total	**2**	**5**	**0**	**2**	**0.00**	**2.00**			**0**	**5**	**0**

Friday 18/10/2019 1800-0000

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	**Passengers**	**Cabs**	**Passenger Queue**	**Cab Queue**	**Average Passenger Delay**	**Average Cab Delay**	**Maximum Passenger Queue**	**Minimum Cab Queue**	**Excess Demand**	**Equilibrium**	**Excess Supply**
1800-1900	5	2	0	0	0.00	0.00	0	0	0	1	0
1900-2000	6	5	0	1	0.00	1.00	0	0	0	1	0
2000-2100	0	0	0	0	0.00	0.00	0	0	0	1	0
2100-2200	2	2	0	0	0.00	0.00	0	0	0	1	0
2200-2300	2	2	0	0	0.00	0.45	0	0	0	1	0

Total	15	11	0	1	0.00	0.45			0	5	0

Sunday 16/06/2019 1200-1800

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1200-1300	0	0	0	0	0.00	0.00	0	0	0	1	0
1300-1400	0	0	0	0	0.00	0.00	0	0	0	1	0
1400-1500	2	1	6	0	15.00	0.00	2	0	0	1	0
1500-1600	3	2	0	0	0.00	0.00	0	0	0	1	0
Total	5	3	6	0	6.00	0.00			0	4	0

Runcorn Rail Station

Friday 18/10/2019 1200-1800

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1000-1100	4	11	0	73	0.00	33.18	0	2	0	1	0
1100-1200	4	11	0	30	0.00	13.64	0	0	0	1	0
1200-1300	10	11	0	7	0.00	3.18	0	0	0	1	0
1300-1400	6	9	0	20	0.00	11.11	0	0	0	1	0
1400-1500	11	13	0	32	0.00	12.31	0	0	0	1	0
1500-1600	4	13	0	35	0.00	13.46	0	2	0	1	0
1600-1700	9	11	0	9	0.00	4.09	0	0	0	1	0
1700-1800	9	11	0	20	0.00	9.09	0	0	0	1	0
Total	57	90	0	226	0.00	12.56			0	8	0

Thursday 17/10/2019 2000-0000

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
2000-2100	5	10	1	16	1.00	8.00	1	0	0	1	0
2100-2200	4	7	0	17	0.00	12.14	0	0	0	1	0
2200-2300	6	8	0	12	0.00	7.50	0	0	0	1	0
2300-0000	6	0	0	8	0.00	0.00	0	0	0	1	0
Total	21	25	1	53	0.24	10.60			0	4	0

Saturday 19/10/2019 1000-1800

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1000-1100	0	4	0	28	0.00	35.00	0	1	0	1	0
1100-1200	1	7	0	29	0.00	20.71	0	1	0	1	0
1200-1300	3	8	0	17	0.00	10.63	0	0	0	1	0
1300-1400	5	7	0	29	0.00	20.71	0	1	0	1	0
1400-1500	6	9	0	26	0.00	14.44	0	0	0	1	0
1500-1600	1	6	0	27	0.00	22.50	0	1	0	1	0
1600-1700	5	6	0	24	0.00	20.00	0	1	0	1	0
1700-1800	9	8	0	9	0.00	5.63	0	0	0	1	0
Total	30	55	0	189	0.00	17.18			0	8	0

Saturday 19/10/2019 1800-0200

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1800-1900	4	7	2	23	2.50	16.43	0	0	0	1	0
1900-2000	16	13	5	9	1.56	3.46	3	0	1	0	0
2000-2100	18	13	3	6	0.83	2.31	0	0	0	1	0
2100-2200	13	16	11	19	4.23	5.94	5	0	1	0	0
2200-2300	35	20	29	28	4.14	7.00	10	0	1	0	0
2300-0000	0	1	0	1	0.00	5.00	0	0	0	1	0
0000-0100	0	0	0	0	0.00	0.00	0	0	0	1	0
0100-0200	0	0	0	0	0.00	0.00	0	0	0	1	0
	86	70	50	86	2.91	6.14			3	5	0

Sunday 20/10/2019 1200-1600

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1200-1300	0	0	0	0	0.00	0.00	0	0	0	1	0
1300-1400	2	1	0	8	0.00	40.00	0	0	0	1	0
1400-1500	0	0	0	0	0.00	0.00	0	0	0	1	0
1500-1600	0	0	0	1	0.00	0.00	0	0	0	1	0
Total	2	1	0	9	0.00	45.00			0	4	0

Co op Runcorn

Thursday 18/10/2019 1000-1800

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1000-1100	7	11	1	22	0.71	10.00	1	0	0	1	0
1100-1200	16	15	0	16	0.00	5.33	0	0	0	1	0
1200-1300	6	9	0	10	0.00	5.56	0	0	0	1	0
1300-1400	18	18	1	16	0.28	4.44	1	0	0	1	0
1400-1500	14	13	7	5	2.50	1.92	3	0	1	0	0
1500-1600	17	17	2	15	0.59	4.41	1	0	0	1	0
Total	**78**	**83**	**11**	**84**	**0.71**	**5.06**			**1**	**5**	**0**

Saturday 19/10/2019 1200-1600

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1000-1100	13	16	3	14	1.15	4.38	1	0	0	1	0
1100-1200	14	16	0	13	0.00	4.06	0	0	0	1	0
1200-1300	4	8	0	27	0.00	16.88	0	1	0	1	0
1300-1400	8	14	1	12	0.63	4.29	1	0	0	1	0
Total	**39**	**54**	**4**	**66**	**0.51**	**6.11**			**0**	**4**	**0**

Sunday 20/09/2019 1200-1600

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1200-1300	3	3	0	3	0.00	5.00	0	0	0	1	0
1300-1400	3	5	1	5	1.67	5.00	1	0	0	1	0
1400-1500	3	6	0	9	0.00	7.50	0	0	0	1	0
1500-1600	1	6	0	11	0.00	9.17	0	0	0	1	0
Total	**10**	**20**	**1**	**28**	**0.50**	**7.00**			**0**	**4**	**0**

High Sreet, Runcorn

Thursday 17/10/2019 2000 - 0100

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
2000-2100	1	3	0	1	0.00	1.67	0	0	0	1	0
2100 -2200	3	4	0	17	0.00	21.25	0	0	0	1	0
2200-2300	7	8	3	7	2.14	4.38	2	0	0	1	0
2300-0000	10	14	0	24	0.00	8.57	0	0	0	1	0
0000-0100	9	13	0	16	0.00	6.15	0	0	0	1	0
	30	**42**	**3**	**65**	**0.50**	**7.74**			**0**	**5**	**0**

Saturday 19/10/2019 2000-0100

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
2000-2100	17	15	12	13	3.53	4.33	5	0	1	0	0
2100-2200	19	15	5	18	1.32	6.00	3	0	1	0	0
2200-2300	16	16	0	28	0.00	8.75	0	0	0	1	0
2300-0000	29	27	4	34	0.69	6.30	0	1	0	1	0
0000-0100	32	28	0	30	0.00	5.36	0	0	0	1	0
	113	**101**	**21**	**123**	**0.93**	**6.09**			**1**	**3**	**0**

Trident Retail Park

Friday 18/10/2019 1000-1800

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1000-1100	13	12	0	46	0.00	19.17	**0**	**3**	0	0	1
1100-1200	11	12	0	35	0.00	14.58	**0**	**1**	0	1	0
1200-1300	14	14	0	64	0.00	22.86	0	3	0	0	1
1300-1400	26	21	0	50	0.00	11.90	0	2	0	1	0
1400-1500	22	16	0	47	0.00	14.69	0	3	0	0	1
1500-1600	15	13	0	19	0.00	7.31	0	1	0	1	0
1600-1700	20	14	0	29	0.00	10.36	0	0	0	1	0
1700-1800	9	13	0	28	0.00	10.77	0	0	0	1	0
Total	**130**	**115**	**0**	**318**	**0.00**	**13.83**			**0**	**5**	**3**

Saturday 19/10/2019 1000-1800

	Rank Throughput	Queue 'Snap-Shot' Totals	Service Quality	Queue Extremes	Market Conditions

Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1000-1100	10	7	0	23	0.00	16.43	0	1	0	1	0
1100-1200	10	8	2	28	1.00	17.50	2	0	0	1	0
1200-1300	11	14	2	27	0.91	9.64	1	0	0	1	0
1300-1400	21	12	4	22	0.95	9.17	2	0	0	1	0
1400-1500	8	7	0	20	0.00	14.29	0	0	0	1	0
1500-1600	12	10	0	23	0.00	11.50	0	0	0	1	0
1600-1700	16	14	0	24	0.00	8.57	0	0	0	1	0
1700-1800	11	7	0	0	0.00	0.00	0	0	0	1	0
Total	**99**	**79**	**8**	**167**	**0.40**	**10.57**			**0**	**8**	**0**

Sunday 20/09/2019 1200-1600

	Rank Throughput		Queue 'Snap-Shot' Totals		Service Quality		Queue Extremes		Market Conditions		
Hour	Passengers	Cabs	Passenger Queue	Cab Queue	Average Passenger Delay	Average Cab Delay	Maximum Passenger Queue	Minimum Cab Queue	Excess Demand	Equilibrium	Excess Supply
1200-1300	5	7	0	20	0.00	14.29	0	0	0	1	0
1300-1400	7	7	5	1	3.57	0.71	1	0	0	1	0
1400-1500	6	5	1	12	0.83	12.00	1	0	0	1	0
1500-1600	7	8	0	32	0.00	20.00	0	1	0	1	0
Total	**25**	**27**	**6**	**65**	**1.20**	**12.04**			**0**	**4**	**0**