FINAL REPORT

Bristol Hackney Carriage Unmet Demand Survey

Prepared for

Bristol City Council

January 2017

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1. Introduction

1.1 General

This study has been conducted by CH2M on behalf of Bristol City Council (Bristol CC). Bristol CC requires an independent survey of demand for hackney carriages across Bristol. The purpose of the study is to determine:

- Whether there is any evidence of significant unmet demand for hackney carriage services in Bristol; and
- The level at which a new limit for hackney carriage licenses should be introduced if necessary.

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.

The Equality Act 2010 provides a new 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.

The provisions in the Equality Act will come into force at different times to allow time for the people and organisations affected by the new laws to prepare for them. The Government is considering how the different provisions will be commenced so that the Act is implemented in an effective and proportionate way. Some provisions came into force on the 1st October 2010 however most of the provisions for taxi accessibility were not planned to come into effect until after April 2011 and have not yet done so.

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. In Bristol all Hackney Carriage Vehicles are wheelchair accessible. From 1 October 2010, Section 166 will allow taxi drivers to apply to their licensing authority for an exemption from Section 165 of the Equality Act 2010. Sections 165 and 167 have not yet come into effect.

Section 161 of the Equality Act 2010 qualifies the law in relation to unmet demand, to ensure licensing authorities that have 'relatively few' wheelchair accessible taxis operating in their area, do not refuse licences to such vehicles for the purposes of controlling taxi numbers. For section 161 to have effect, the Secretary of State must make regulations specifying:

- the proportion of wheelchair accessible taxis that must operate in an area before the respective licensing authority is lawfully able to refuse to license such a vehicle on the grounds of controlling taxi numbers; and
- the dimensions of a wheelchair that a wheelchair accessible vehicle must be capable of carrying in order for it to fall within this provision.

The DfT plans to consult on the content of regulations before section 161 comes in to force and to date has not set a timetable to do so.

2. Background

2.1 General

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

2.2 Bristol

The City of Bristol lies in the South West and with a population of approximately 428,000 is the largest city in the region. In recent years Bristol has emerged as the regional entertainment centre with in excess of 100 late night bars and clubs. The city also has a significant student population which increases the night time economy during term time and exerts considerable pressure on the transport infrastructure during this period.

Bristol is also a destination for numerous events and festivals throughout the year

2.3 Background to the Hackney Carriage Market in Bristol

Over the years Bristol has amended their hackney carriage limitation policies in line with the market. In 1997 Bristol City Council operated a restricted hackney carriage market with 273 hackney carriages and 950 private hire vehicles. During this period the market in Bristol was characterised by significant passenger queues at ranks and a high level of illegal plying by private hire vehicles. In 1997 the authority removed the numerical restriction on hackney carriages. In 2002 following an unmet demand survey the authority decided to re impose the numerical restriction. This was subsequently removed in 2008. In April 2015 a moratorium was put in place preventing the determination of any new hackney carriage vehicle licences (except those on order).

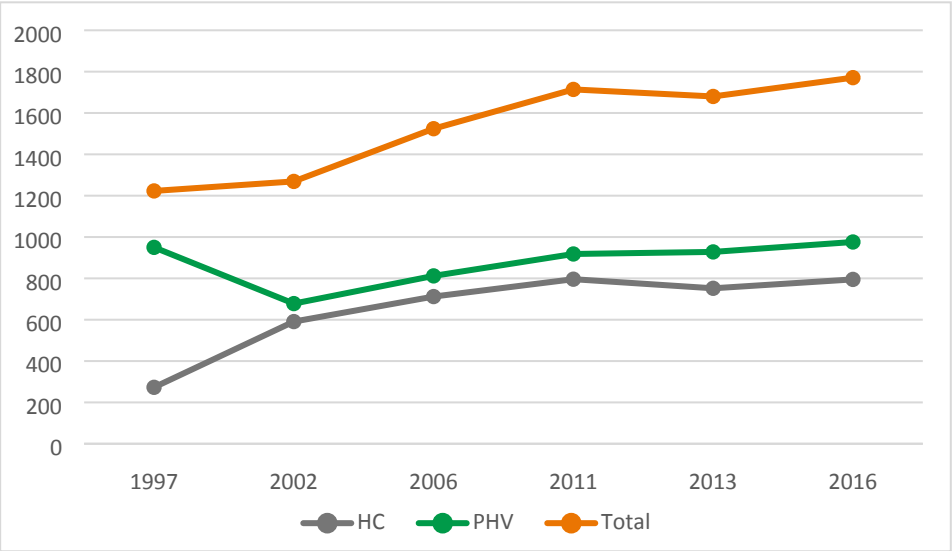
In 2008 a new vehicle policy was introduced. This required all hackney carriages to be 'Bristol Blue' in livery and new hackney carriage licences would only be granted to brand new fully wheelchair accessible purpose built hackney carriages. Grandfather rights included that all existing hackney carriages that did not comply with the new policy would need to be replaced by 2016 when the full policy requirement would apply to the whole fleet. This policy was amended in 2015 to extend grandfather rights for a further 12 months to 30 April 2017.

Bristol CC currently licences 795 full-time hackney carriages vehicles, all of which are wheelchair accessible vehicles. This provides Bristol with a hackney carriage provision of one hackney per 538 resident population. Bristol CC currently allows purpose built hackneys and people carriers to be licensed as hackney carriages.

The private hire fleet consists of 976 vehicles (as at October 2015). The number of private hire vehicles is greater than that of hackney carriage vehicles, but only by 23% which is a reflection of the derestricted policy in place.

The graph in Figure 2.1 provides an illustration of the trend in hackney carriages as well as private hire numbers. This indicates that hackney carriage numbers have increased since 1988 but been fairly static in recent years.

Figure 2.1 Trends in Hackney Carriage and Private Hire Car Numbers (1997 - 2016)



2.4 Comparison with the Core Cities

In order to assess the current level of taxi provision in Bristol, it is necessary to benchmark Bristol against other similar authorities. In this instance the Core Cities have been used as a comparison comprising Birmingham, Leeds, Liverpool, Manchester, Newcastle, Nottingham and Sheffield.

Bristol has been benchmarked against these authorities on the following characteristics:

- Population per hackney;
- Fares; and
- Ratio of private hire vehicles to hackney carriage vehicles.

Figure 2.2 demonstrates that Bristol has the fourth lowest number of people per hackney carriage, thereby indicating that its provision is average among the authorities shown. Liverpool has the lowest number of people per hackney carriage, and therefore the best provision, whilst Leeds has the highest number of people per hackney carriage, therefore the lowest provision of the core cities.

Figure 2.2 Population per hackney

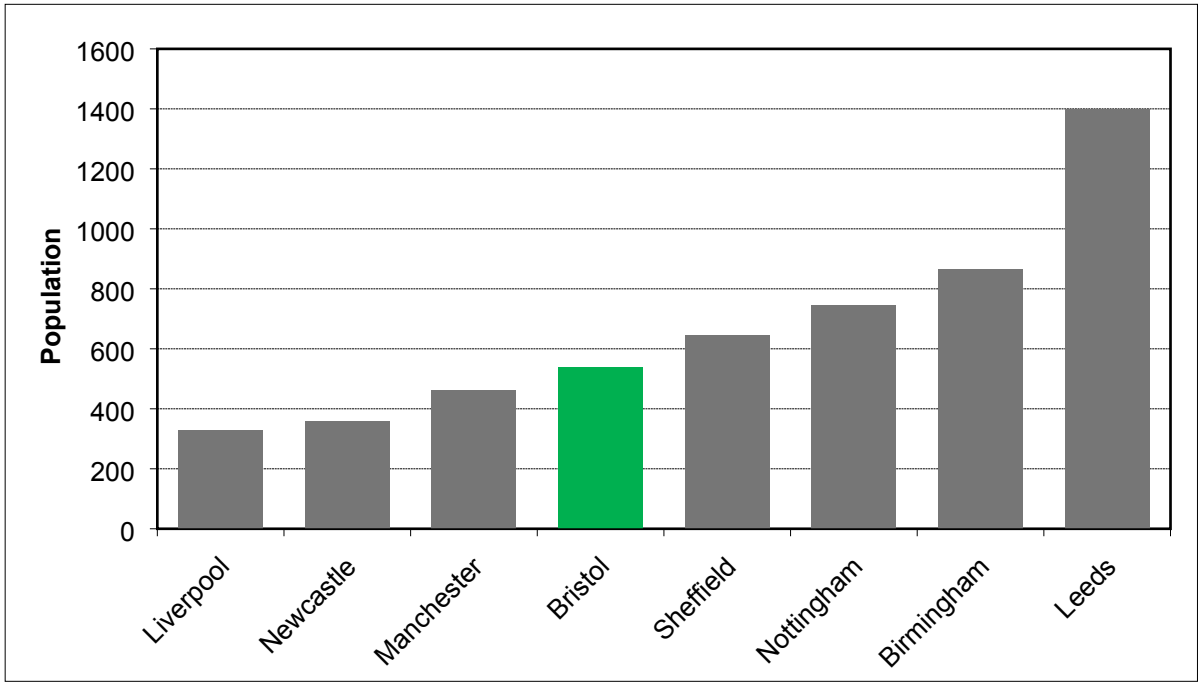


Figure 2.3 documents the total fleet size for the Core Cities. Birmingham has the largest total fleet size (5,293 vehicles) and largest private hire vehicle fleet (4,052 vehicles) however, Liverpool has the largest hackney carriage fleet (1,426 vehicles). Bristol has one of the smallest total fleets (1,771 vehicles) after Nottingham (1,450 vehicles).

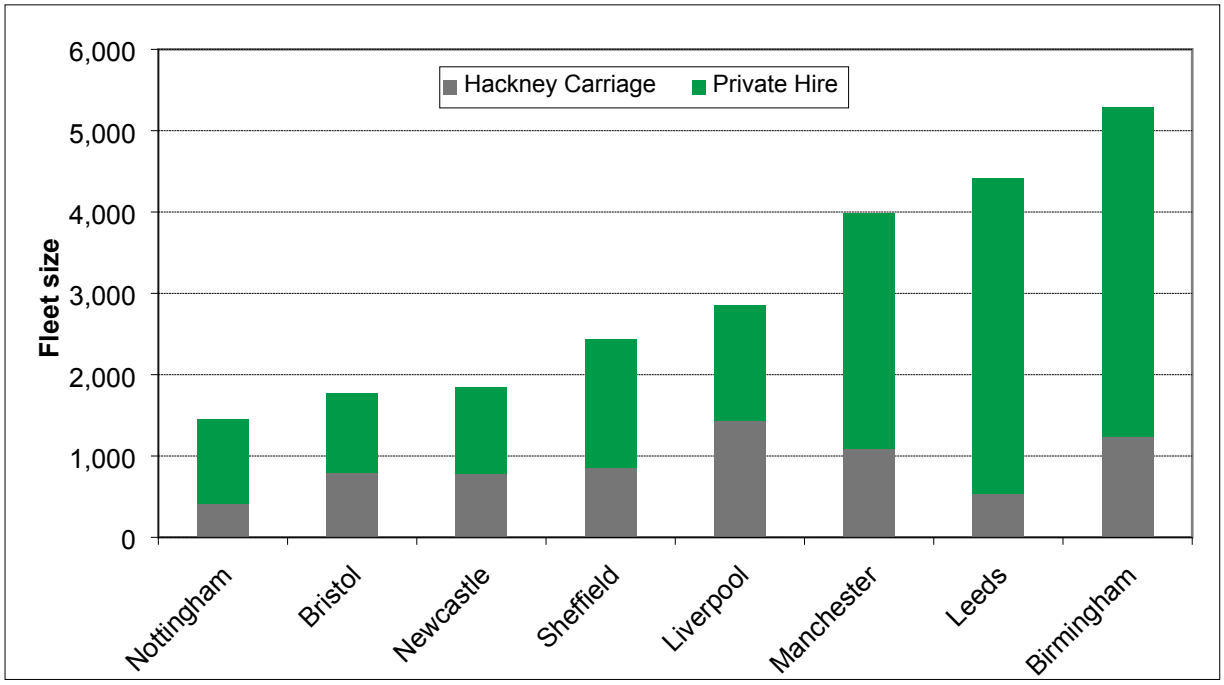
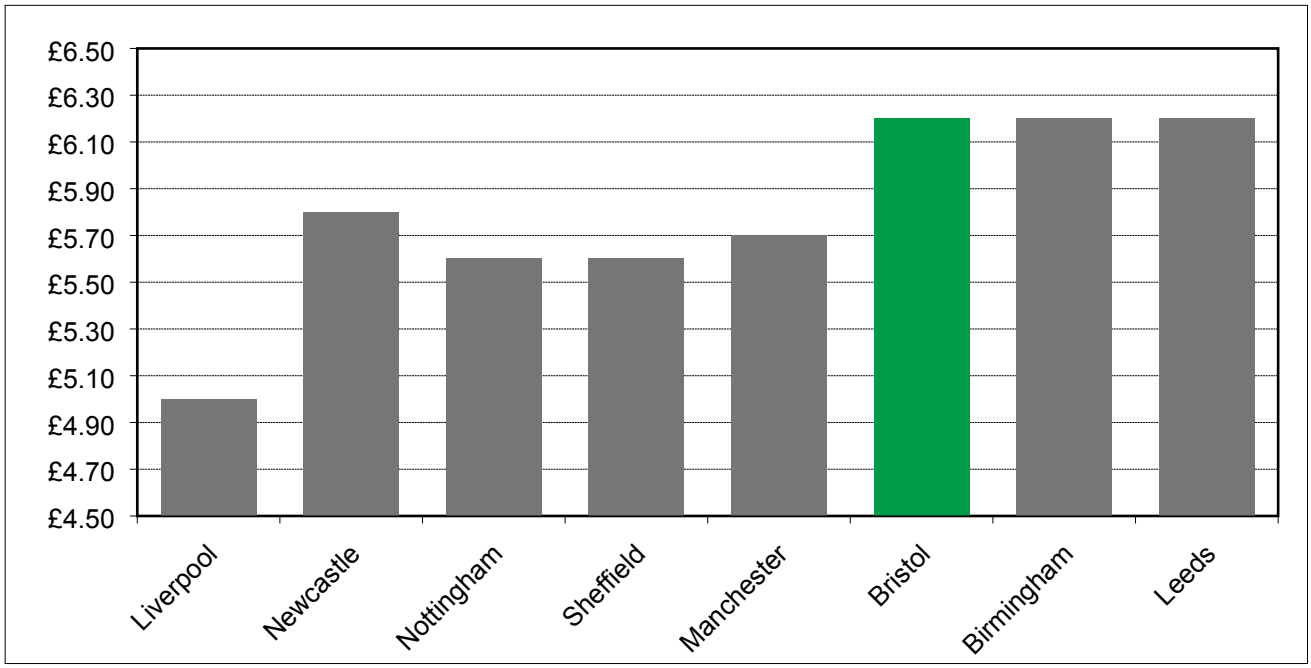


Figure 2.3 Fleet Size

Figure 2.4 details the average fare for a two mile journey across the Core Cities. The average cost of a journey across these cities is £5.79, thereby indicating that fares in Bristol are above the average for the core cities. Leeds, Bristol and Birmingham are the most expensive cities at £6.20 and Liverpool is the cheapest at £5.00.

Figure 2.4 Average fare



2.5 Hackney Carriage Fares and Licence Premiums

Hackney carriage fares are regulated by the Local Authority. There are six tariffs across the following periods;

- Day (Monday to Friday, 6am until 10pm)
- Night (Monday to Friday, 10pm until 6am)
- Weekend Day Rate (Saturday & Sunday, 6am until 10pm)
- Weekend Night Rate (Saturday & Sunday, 10pm until 6am)
- Bank / Public Holiday Rate (from 12.01am until 6 am the following day)
- Christmas and New Year Night Rate (From 10pm on Christmas Eve to 6am on 27th December and from 10 pm on New Year's Eve to 6am on 2nd January)

There are extras chargeable, to a maximum of £6.00, for waiting time, extra passengers, journeys from Temple Meads Railway Station, bags and pushchairs, bicycles, animals and bulky items.

The standard charge tariff is made up of two elements; an initial fee (or 'drop') for entering the vehicle, and a fixed price addition for each mile or uncompleted part thereof travelled, plus fixed additions for waiting time. A standard two-mile weekday daytime fare undertaken by one individual would therefore be £6.20. The tariffs are outlined in detail in the fare card below.

Bristol City Council Hackney Carriage Table of Maximum Fares - Part A						OCT 2013
Fares for distance And time	TARIFF 1 Day Rate Monday to Friday 06:00 to 22:00	TARIFF 2 Night Rate Monday to Friday 22:00 to 06:00	TARIFF 3 Weekend Day Rate Saturday & Sunday 06.00 to 22.00	TARIFF 4 Weekend Night Rate Saturday & Sunday 22.00 to 06.00	TARIFF 5 Bank / Public Holiday Rate (excluding when tariff 6 applies) from 00.01 to 06.00 the following day	TARIFF 6 Christmas and New Year Night Rate From 22.00 hours on 24/12 to 06.00 on 27/12, from 22.00 on 31/12 to 06.00 on 2/1
Initial Hiring	£2.60 for the first 194.4yds (177.7 metres) or part thereof	£3.40 for the first 160 yds (146.3 metres) or part thereof	£3.20 for the first 194.4yds (177.7 metres) or part thereof	£3.40 for the first 153 yds (139.9 metres) or part thereof	£3.40 for the first 195.5yds (179.8 metres) or part thereof	£4.40 for the first 160 yds (146.30 metres) or part thereof
Plus approx per mile (not including waiting time)	£1.80	£2.20	£1.80	£2.30	£2.70	£3.30
By taximeter units of	20p for every subsequent 194.4 yds (177.7 metres) or part thereof	20p for every subsequent 160 yds (146.3 metres) or part thereof	20p for every subsequent 194.4 yds (177.7 metres) or part thereof	20p for every subsequent 153 yds (139.9 metres) or part thereof	30p for every subsequent 195.5yds (179.8 metres) or part thereof	30p for every subsequent 160 yds (146.3 metres) or part thereof
Waiting time	20p per 40 seconds (£18/hour)	20p per 31 seconds (£23.20/hour)	20p per 31 seconds (£23.20/hour)	20p per 28.7 seconds (£25.10/hour)	30p per 43 seconds (£25.10/hour)	30p per 43 seconds (£25.10/hour)

Extras	
Extra charges (excluding spoilage or fouling charge) limited to a maximum of	£6.00
Every hiring commencing at Temple Meads Railway Station (unless pre-booked)	20p
Every adult after the first one, not including children under 14	30p
Every medium holdall/rucksack/suitcase	20p
Every large/heavy holdall/rucksack/suitcase/pram/push chair	30p
Every folding bicycle	£1.00
Every non folding (rigid frame) bicycle	£2.00
Every caged animal	£1.00
Every uncaged animal (except for assistance dogs)	£2.00
Items of bulk or weight	By negotiation
Spoilage or fouling of the vehicle	£100.00
Assistance dogs, wheelchairs and any assistance aid used by a disabled passenger carried free of charge	

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The meter to start with a zero reading and show fares when the vehicle starts to move subject to the variation for private hire journeys (Part B of table). For private hire (pre-booked) journeys (not flagged down or hired at a rank) Part A maximum charges apply save that: All meters to bear a zero reading either: when the passengers are seated and the vehicle is ready to move or, in the event of the vehicle having arrived at the agreed departure point, but the passenger not being ready to board at the appointed time: from the appointed time.

The taximeter must be engaged for journeys within the city boundary. For journeys beyond the city boundary a set fare or rate must be negotiated before the journey commences otherwise the taximeter must be used.

Any complaint of overcharging, or about this taxi or its driver, should be sent in writing to the Licensing Office, Princess Street, Bristol, BS3 4AG, or by email to licensing@bristol.gov.uk, quoting the number of the taxi or its driver. Enquiries regarding any lost property accidentally left in a taxi should be made to the police.

If you would like this information in another language, Braille, audio tape, large print, easy English, BSL video or CD rom or plain text please contact: Licensing Office on 0117 914 2500

The Private Hire and Taxi Monthly magazine publish monthly league tables of the fares for 363 authorities over a two mile journey. Each journey is ranked with one being the most expensive. The January 2016 table shows Bristol rated 77th in the table, indicating that Bristol has considerably higher than average fares, although these have recently been reduced. Table 2.1 provides a comparison of where other authorities near

Bristol rank in terms of fares, showing that fares in Bristol are very similar to those in neighbouring authorities.

Table 2.1 - Comparison of neighbouring authorities in terms of fares for a 2-mile journey (Source Private Hire and Taxi Monthly, January 2016)

Local Authority	Rank
South Gloucester	£ 6.40
Bath and North East Somerset	£ 6.40
Stroud	£ 6.40
City of Bristol	**£ 6.20**
Mendip	£ 6.20
Sedgemoor	£ 6.20
Taunton Deane	£ 6.20
North Somerset	£ 5.70
Cotswold	£ 5.35

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 of 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 (Indic 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 Great Castle Point Borough Council ex p Maude (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 than 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 part of the Authority in relation to the particular time of day. The authority 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 Maude 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 Maude, there are two components to what Lord Justice Keene prefers to refer to as 'suppressed demand':

- What can be determined 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 the 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 – Existing of SUD determined by comparing demand and delay profiles

Demand is:	Delays during peak only	Delays during peak and other times
Highly peaked	No SUD	Possibly a SUD
Not highly peaked	Possibly a SUD	Possible 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; and
- 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 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.

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/CH2M 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 Maude 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 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.

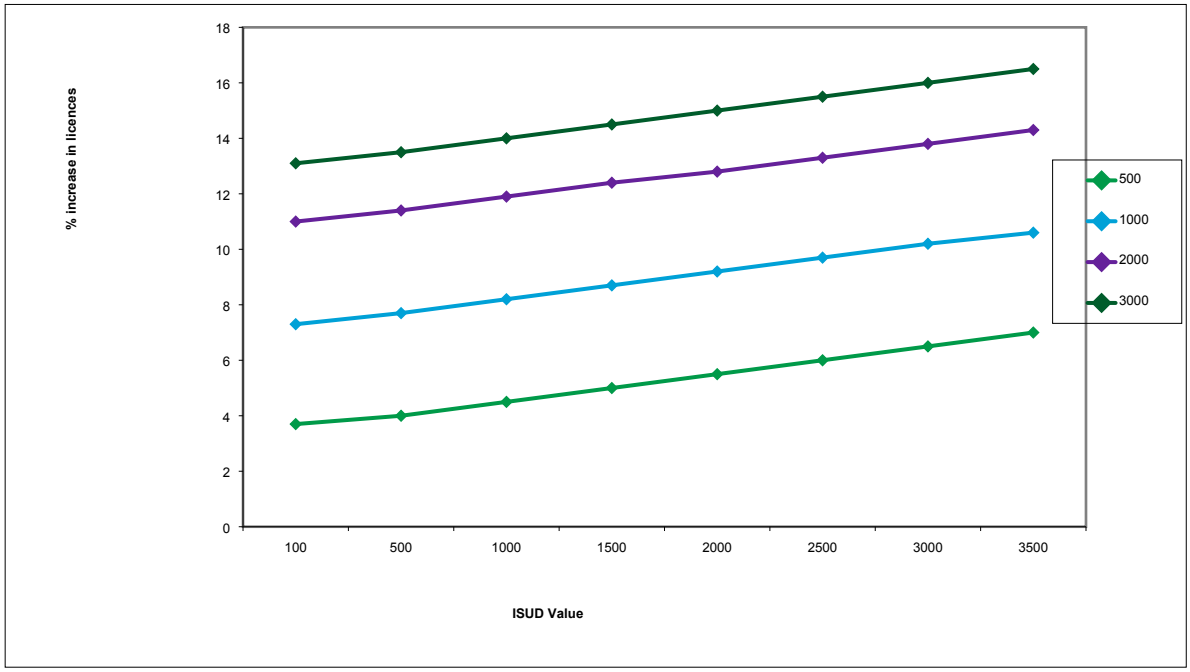
SUDSIM represents a synthesis of a queue simulation work that was previously used (1989 to 2002) to predict the alleviation of significant unmet demand and the ISUD factor described above (hence the term SUDSIM). The benefit of this approach is that it provides a direct relationship between the scale 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 carriage 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[1]. 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. 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.

1 See Button JH 'Taxis – Licensing Law and Practice' 2nd edition Tottel 2006 P226-7

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 305 hours during August 2015 to March 2016. Some 29,973 passengers and 21,971 departures were recorded. A summary of the rank observation programme is provided in Appendix 1.

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 taxis) was experienced during 26% of the hours observed while excess demand (queues of passengers) was experienced 20% of the hours observed. Conditions are favourable to customers at all times of the day with most favourable time being the weekday and weekday night periods.

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

Period		Excess Demand (Max Passenger Queue ≥ 3)	Equilibrium	Excess Supply (Min Taxi Queue ≥ 3)
Weekday	Day	**6**	65	29
	Night	10	46	44
Weekend	Day	30	58	12
	Night	34	44	23
Sunday	Day	20	55	25
Total 2015		**20**	**54**	**26**
Total 2006		***13***	***72***	***15***

Period	Excess Demand (Max Passenger Queue ≥ 3)	Equilibrium	Excess Supply (Min Taxi Queue ≥ 3)
Total 2002	***10***	***64***	***26***

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

As detailed in Table 4.1 conditions have become less favourable to passengers since the last study. The number of hours where excess demand was observed have increased from 13% to 20%.

4.3 Average Delays and Total Demand

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

The survey suggests some 29,973 passenger departures occur per week from ranks in Bristol involving some 21,971 taxi departures. The taxi trade is concentrated at the rank at Temple Meads Station accounting for 34% of the total passenger departures. On average cabs wait 13.63 minutes for a passenger. On average passengers wait 0.91 minutes for a taxi. The passenger numbers observed are very different to those observed in 2006. Passenger demand has increased by 79%. However passenger delay has decreased meaning that passengers are being served well by the current hackney fleet from the ranks.

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

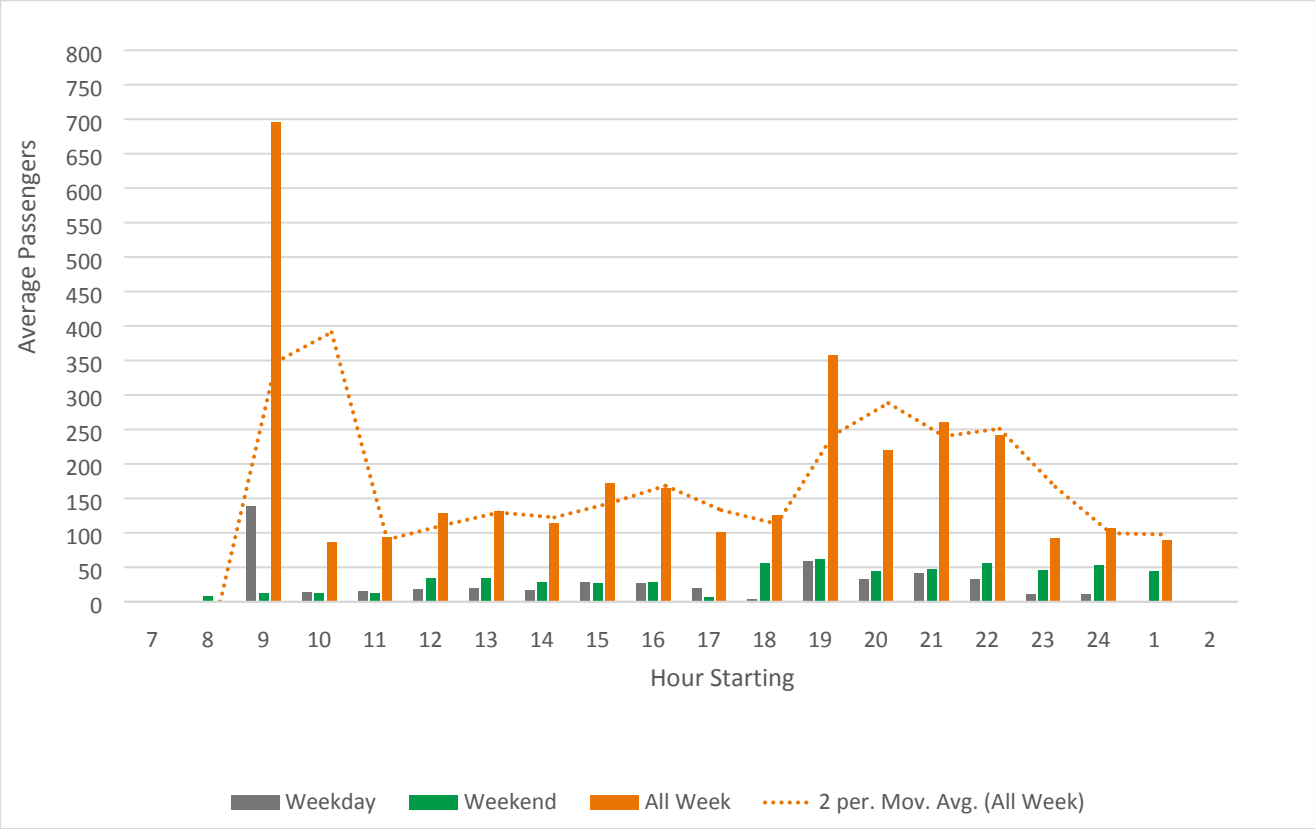
Rank	Passenger Departures	Taxi Departures	Average Passenger Delay in Minutes	Average Taxi Delay in Minutes
Temple Meads Station	10,008	9,680	0.42	10.24
Colston Avenue	3,160	1,933	3.06	12.77
Bus Station	2,583	1,796	0.11	27.71
Horsefair (outside M&S)	1,041	820	0.12	13.23
St Augustine's Parade/Morrisons Local	2,296	1,082	1.97	7.42
Penn Street	3,195	1,870	0.33	16.05
Queens Road	3,439	2,030	1.08	15.76
Baldwin Street	876	627	0.07	9.40
Clifton Down	1,085	667	0.39	28.82
Whiteladies Road	1,485	924	1.98	14.45

Rank	Passenger Departures	Taxi Departures	Average Passenger Delay in Minutes	Average Taxi Delay in Minutes
Union Street	805	544	0.18	12.14
Total 2015/16	**29,973**	**21,971**	**0.91**	**13.63**
Total 2006	***16,721***	***11,177***	***0.95***	***12.76***
Total 2002	***28,950***	***18,080***	***1.85***	***10.67***

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 08:00 and 03:00.

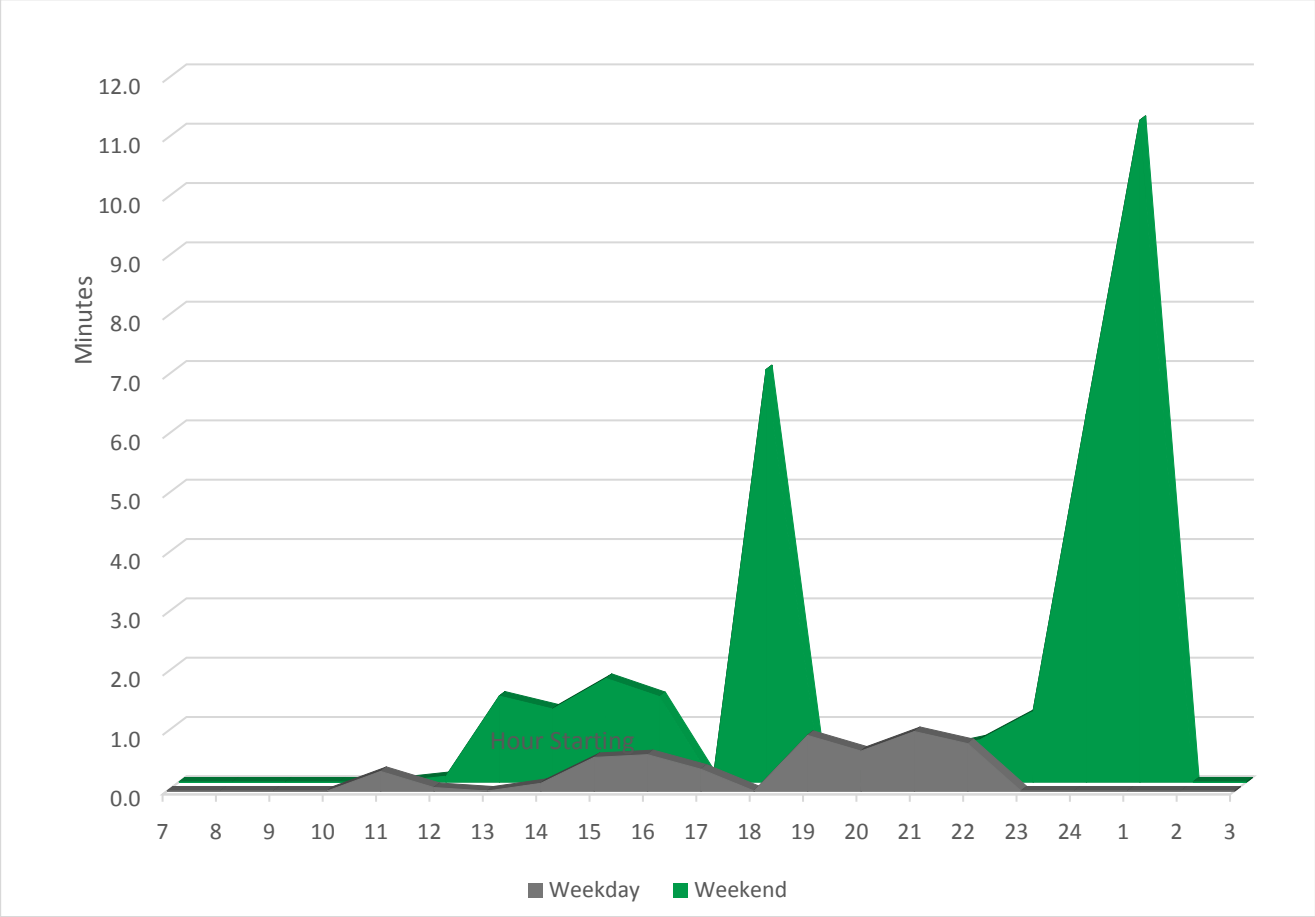
Figure 4.1 Passenger Demand



The profile of demand shows a number of peaks in demand at 9am and then 7pm. We therefore conclude that this is not a 'highly peaked' demand profile. This has implications for the interpretation of the results (see Chapter 9 below.

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 during the night on weekends.

Figure 4.2 Passenger Delay



4.5 The General Incidence of Passenger Delay

The rank observations data can be used to provide a simple assessment of the likelihood of passenger encountering delay at rank. 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
2015/16	**11.43**	***8.02***	**1.46**

In 2015 8.02% of passengers are likely to experience more than a minute of delay. It is this proportion that is used within the ISUD as the 'Generality of Passenger Delay'.

5. Evidence of Suppressed Demand – Public Attitude Pedestrian Survey Results

5.1 Introduction

A public attitude survey was designed with the aim of collecting information regarding opinions on the taxi market in Bristol. In particular, the survey allowed an assessment of flagdown, telephone and rank delays, the satisfaction with delays and general use information. The generic term 'taxi' was used given that typically members of the public do not distinguish between hackney carriage and private hire. If a question was specifically aimed at hackney carriage the public were provided detail of the difference.

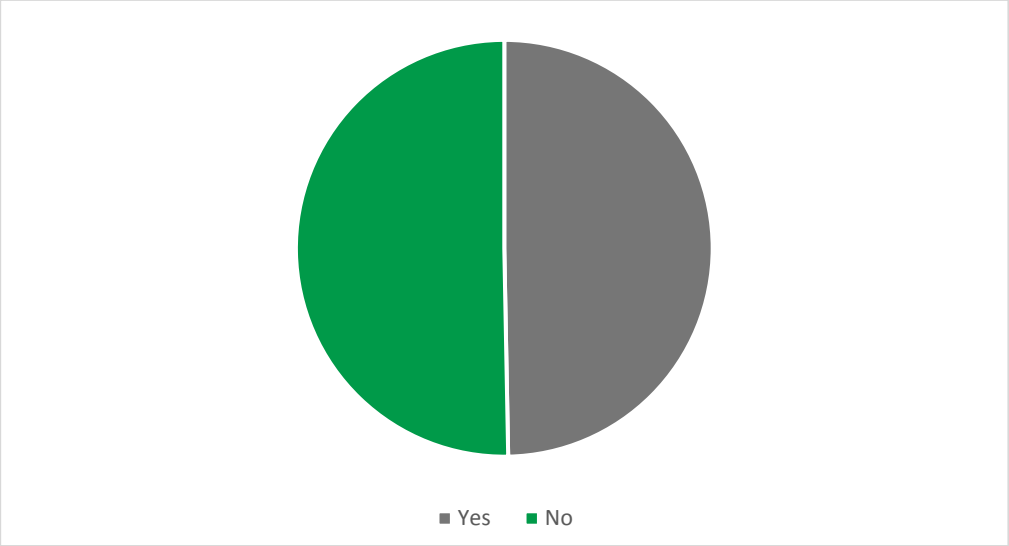
Some 503 on-street public attitude surveys were carried out between December 2015 and February 2016. The surveys were conducted across a range of locations within the Bristol licensing area.

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

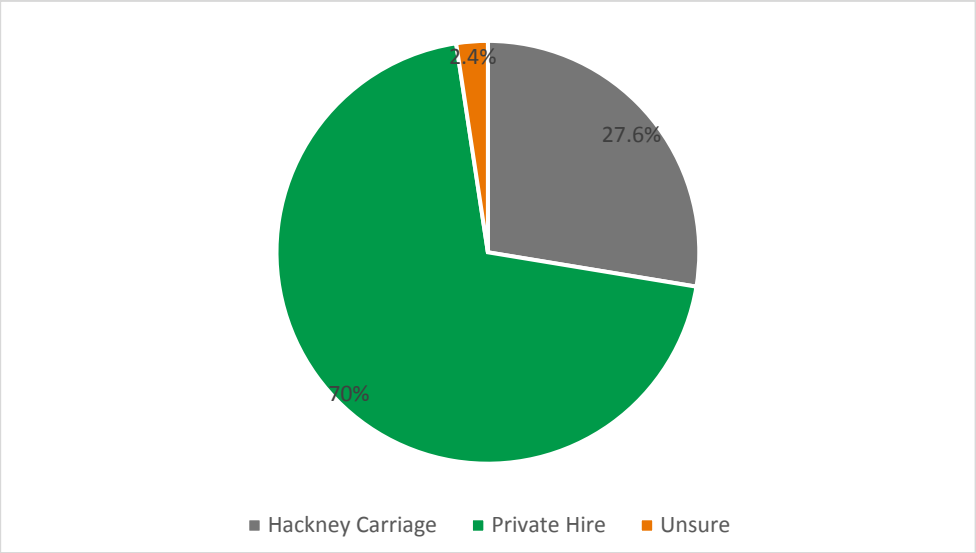
Respondents were asked whether they had made a trip by taxi in the past three months. Figure 5.1 shows that 49.7% (250) of the 503 people surveyed had made a trip by taxi in the last three months.

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



Passengers who had undertaken a journey in the last 3 months were then asked whether they obtained a hackney carriage or private hire vehicle during their last trip. Prior to being asked this question respondents were informed about the difference between hackney carriages and private hire vehicles. Figure 5.2 shows that 27.6% (69) of passengers used a hackney carriage while 70% (175) obtained a private hire vehicle.

Figure 5.2 – Vehicle type for last trip

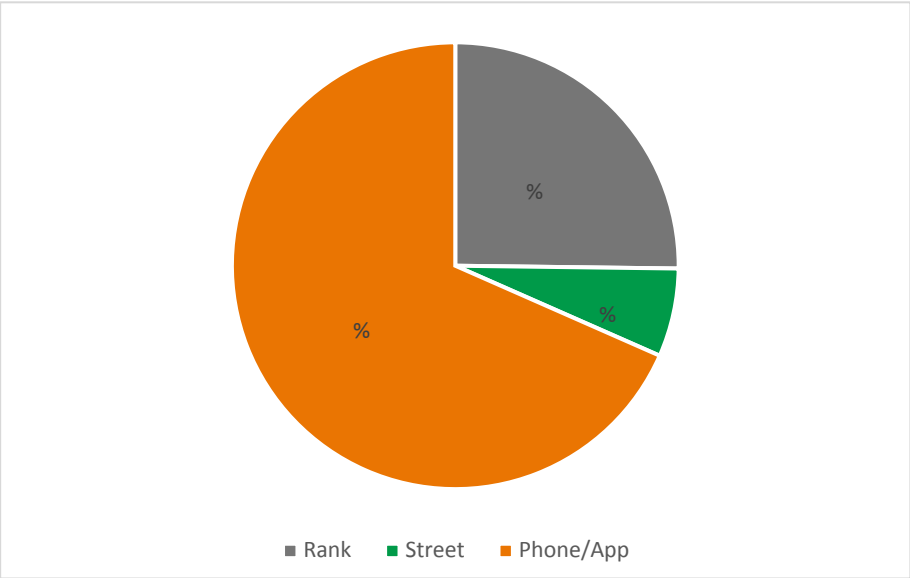


Hackney carriage passengers were also asked if their vehicle was the specified 'Bristol Blue' colour, a condition set by Bristol City Council to identify hackney carriages from private hire vehicles. Some 79.7% (55) of respondents said this condition was met while 4.3% (3) responded that it was not. The remaining 15.9% of respondents did not answer this question, indicating perhaps a lack of memory as to the vehicles colour or that they did simply not notice. Those stating that the vehicle was not blue in colour were asked if they saw where the vehicle was licenced. None of the three respondents could answer this question.

Some 14% of passengers stated that their vehicle was wheelchair accessible.

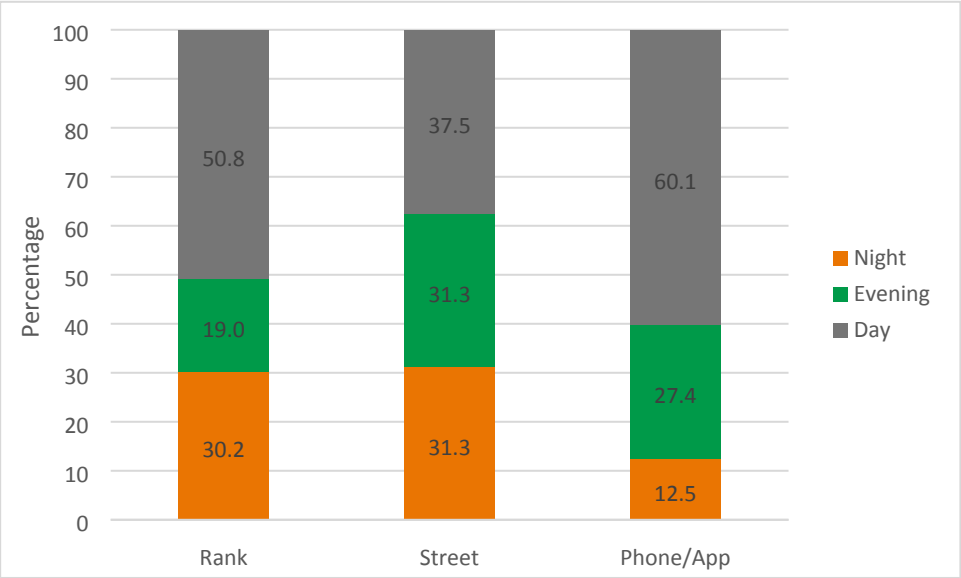
Trip makers were asked how they obtained their hackney carriage or private hire vehicle. Figure 5.3 identified that hiring via telephone or mobile apps was the most popular choice, with 68.4% (171) of journeys achieved by this manner. Some 25.2% (63) of respondents hired their taxi at a rank while 6.4% (16) obtained a taxi by on-street flagdown.

Figure 5.3 – Method of obtaining taxi



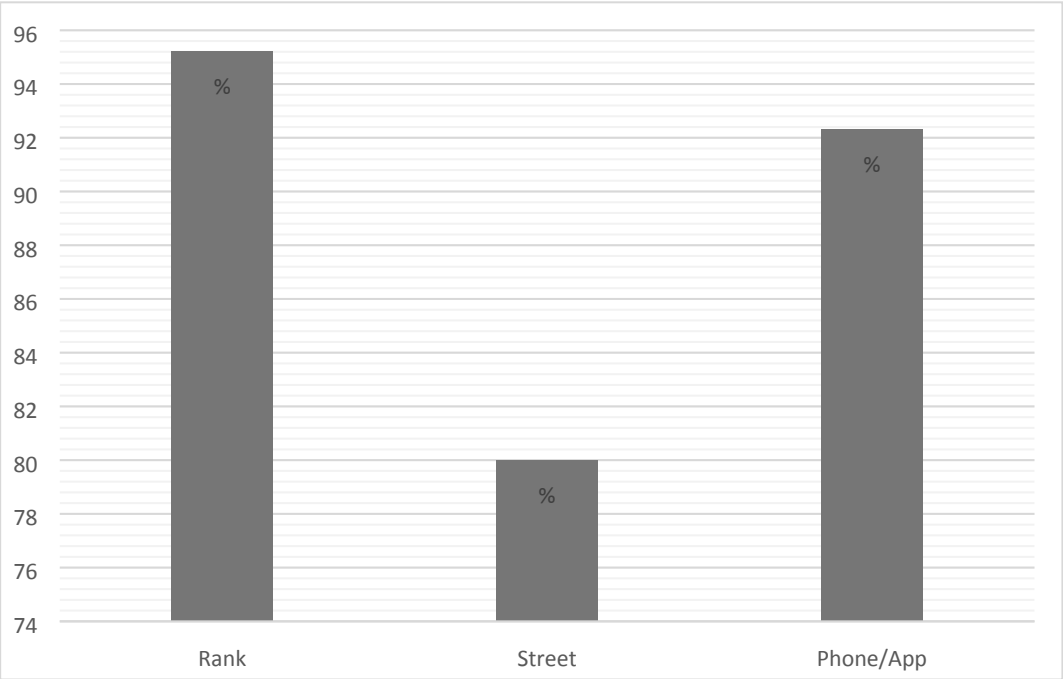
Passengers were asked at what time of day they had obtained their taxi. Some 56.3% (139) obtained taxis during the day (before 6pm), some 25.5% (63) in the evening (6pm-10pm), and 18.2% (45) at night (after 10pm). Figure 5.4 shows how method of obtaining a taxi varies by time of day, with the use of on street hirings more prevalent in the evening and night-time periods.

Figure 5.4 – Method of obtaining taxi by time of day



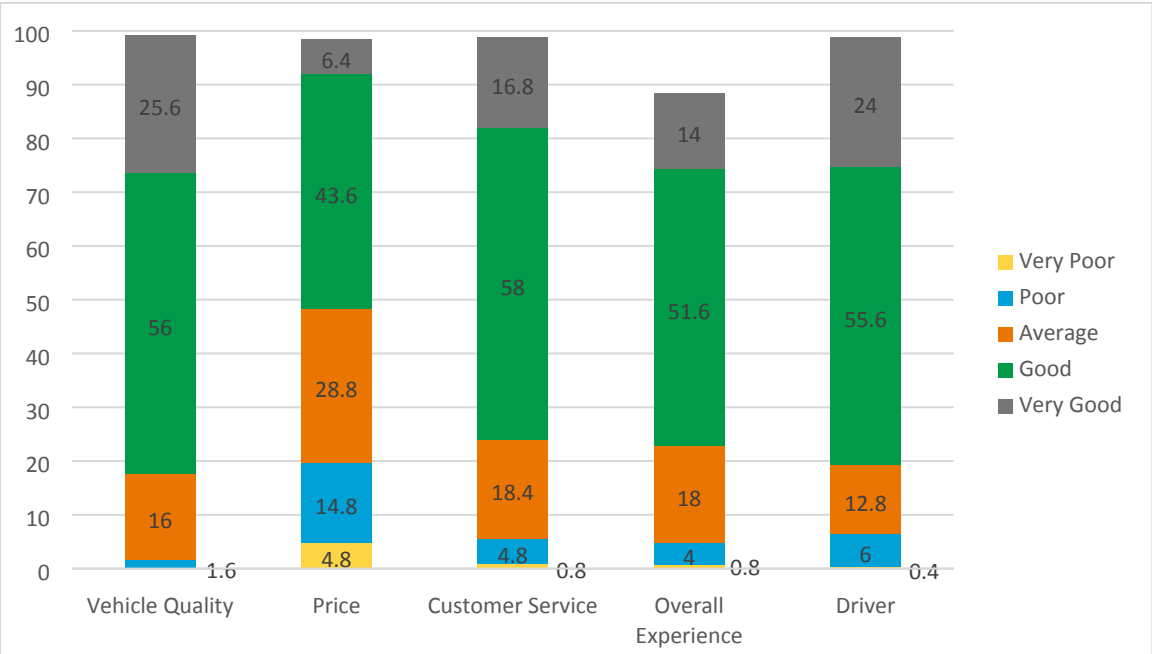
Respondents were asked if they were satisfied with the time taken and the promptness of the vehicles arrival. Some 92.3% (228) of respondents were satisfied with 7.7% (19) dissatisfied. Figure 5.5 shows that passengers acquiring their taxi at a rank experienced the highest satisfaction levels at 95.2% with the lowest levels experienced by passengers acquiring their taxi by on street flagdown at 80%.

Figure 5.5 – Satisfaction with time taken and promptness of taxi arrival by method of hire



Respondents were finally asked to rate five elements from their last taxi journey on a scale from very poor to very good. Figure 5.6 demonstrates that customer satisfaction was predominantly very good or good for all elements apart from price. Passengers were asked to explain any poor or very poor ratings given, with the most common reasons being the cost (37) and driver behaviour (14). The taxi being late (2), vehicle condition (2), and incomplete journey (1) were also listed as complaints by customers.

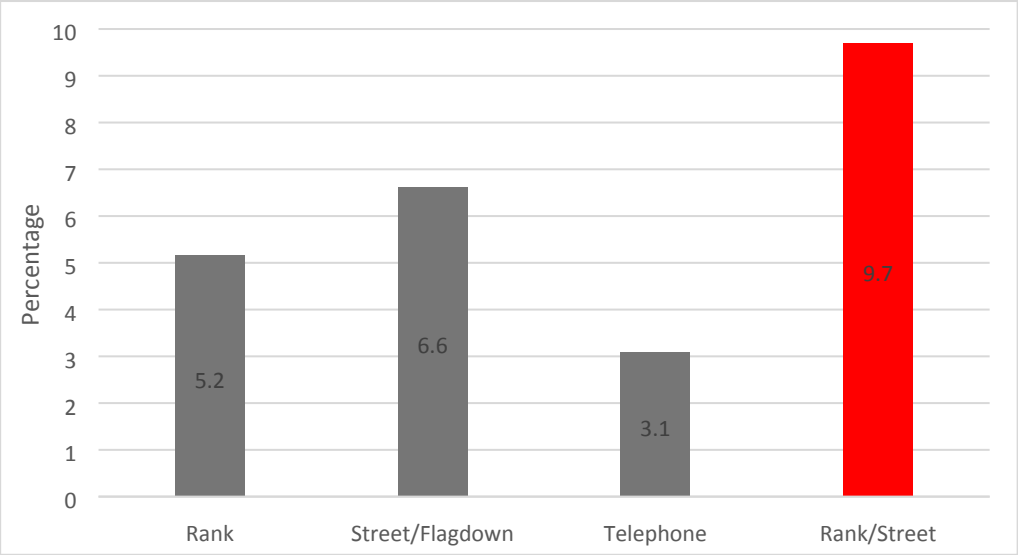
Figure 5.6 – Satisfaction with last taxi journey



5.3 Attempted method of hire

In order to measure demand suppression, respondents were asked to identify whether or not they had given up waiting for a hackney carriage or private hire vehicle at a rank, on the street, or by telephone in Bristol in the last three months. Results are shown in Figure 5.7. As indicated in Figure 5.7, some 9.7% of respondents had given up waiting for a taxi at a rank and/or by flagdown in the last three months. This has implications for the interpretation of the results (see Chapter 8 below).

Figure 5.7 – Latent demand by method of hire – Given up trying to make a hiring?

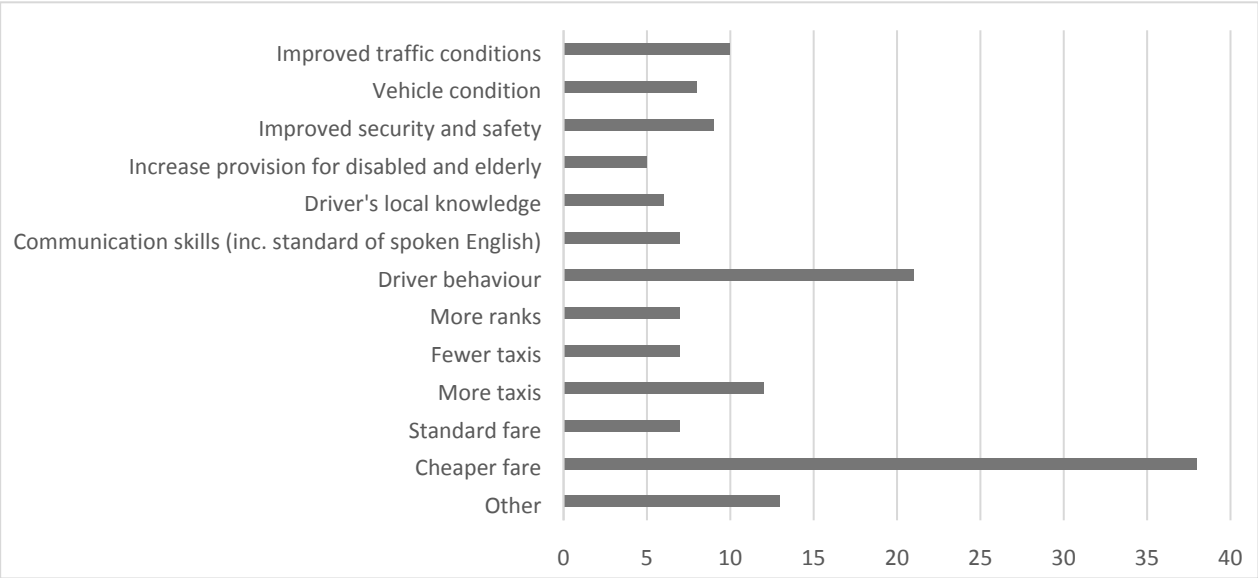


Respondents who had given up trying to obtain a taxi in the last three months were asked the location where they had given up waiting for a taxi. The most common areas were the city centre, Temple Meads and the waterfront area.

5.4 Service Provision

Participants were asked whether they felt there are enough taxis in Bristol at the current time. Some 62.5% (307) commented that there are sufficient, 7.1% (35) felt more were required and 30.3% (149) were unsure. The survey then asked respondents whether taxi services in Bristol could be improved. Some 31.5% (154) felt that they could be improved. These respondents were then asked what could be done to improve the service. The results are shown in Figure 5.8.

Figure 5.8 – Suggested improvements to taxi services in Bristol



The graph shows that the majority of responses felt that taxis should be cheaper and that improvements were needed in driver behaviour. Of those who stated 'other' responses included:

- Faster response times;
- Clear identification of taxis;
- More larger taxis available; and
- Introduction of wireless apps for mobile devices.

5.5 Ranks

Respondents were asked if they were satisfied with the provision of taxi ranks in Bristol. Some 46.8% (224) of respondents felt there were sufficient ranks, with 43.4% (208) unsure. Some 9.8% (47) of respondents felt improvements were needed, with the following suggestions made:

- Provide information on location of existing ranks – 23.4% (11)
- Improve signage of existing ranks – 21.3% (10)
- Provide new ranks – 55.3% (26)

Respondents were also asked if there were any locations in Bristol where new ranks were needed. The most common locations suggested included:

- The Fishponds area – 6
- Park Street – 5
- City centre – 2
- New Street – 2
- Bear Pit (Cabot) – 2
- Bedminster - 2

5.6 Summary

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

- Some 25.2% of hiring's are from a rank, with 68.4% by telephone or mobile app;
- Generally high levels of satisfaction with delay on last trip – hiring by rank providing the highest levels and on street flagdown providing the lowest levels;
- Some 9.7% of people had given up trying to obtain a taxi at a rank or by flagdown;
- Some 31.5% of people felt that taxi services could be improved – need to be cheaper and improved driver behaviour; and
- Some 9.8% of people found that new ranks were needed.

6. Consultation

6.1 Introduction

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

- All those working in the market;
- Consumer and passenger (include 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 Bristol, face to face meetings and written consultation was undertaken.

6.2 Direct (Face to Face) Consultation

A series of focus groups were held in Bristol with a range of stakeholders. Four focus groups were arranged covering hackney representatives, operators, disability organisations and the Police. Only the hackney trade and the operators attended the meetings.

<u>Hackney Carriage Trade</u>

Representatives of the hackney trade attended a meeting. The attendees were in agreement that they wished for the numerical limit to be reinstated. They felt that there were too many taxis in Bristol and that drivers could not earn enough to make a decent living. This could lead to poor maintenance of vehicles and a poor service to the public. It was suggested that there are '200' too many vehicles.

Concern was raised about drivers overcharging and not using the meter.

It was considered that the vehicle conditions introduced in 2008 are too onerous. By May 2017 all vehicles in Bristol are required to be wheelchair accessible. The attendees wanted to see a mixed fleet maintained in Bristol – it was felt that the ambulant disabled preferred saloon vehicles. It was also suggested that the requirement for brand new vehicles should be changed to allow vehicles to be licensed at new up to 3.5 years old. This was thought to help the trade.

Concern was also raised as to the knowledge test. It was felt that this wasn't executed properly given that it's a multiple choice computer exercise. Attendees liked the questions asked but not the manner in which they have to be answered. They felt that this doesn't help drivers to know where they are going to and therefore rely on sat navs.

Attendees had differing views on fares. One attendee wanted to see fares reviewed using a formula similar to the Brighton Fare formula. Others wanted a formula to be reviewed on an annual basis and taking into account the cost of living, wages and running costs.

The trade liked the idea of all hackney carriages being 'Bristol Blue', however they felt that it has been badly implemented.

With regard to ranks they felt that there are insufficient across the city, not signed or enforced and that private cars park on them. They were unhappy with the proposed city rank beyond the Cenotaph. They were concerned that there was no provision for them to 'get out' of the rank if required.

Concern was raised as to the issue with 'out of town' vehicles plying in Bristol.

Operators

Attendees were in favour of limiting the number of hackney carriage vehicles.

It was suggested that Bristol CC need to encourage the trade to upgrade vehicles but the current licensing conditions don't permit this. If the authority allowed new vehicles to be registered upto 3.5 years old fleet quality would increase.

Concern was raised as to drivers of wheelchair accessible vehicles refusing wheelchair work at ranks. They felt that drivers did not know how to operate their ramps correctly, they considered the work inconvenient and that they lose money undertaking wheelchair work.

In terms of hackney fares, the current fare structure was considered to be sufficient but they would like to see fare increases introduced on an annual basis linked to inflation, not vehicle running costs.

Concern was raised that some hackney drivers were not using meters and overcharging customers. They also wished to see additional driver training on how meters work and how to load wheelchairs.

In terms of ranks it was felt that these should be left alone until all roadworks are finished. The new proposed rank was not welcomed given it was a 'closed' rank.

Currently both hackney and private hire drivers can access bus gates in the city. This is due to change and attendees wanted to see private hire vehicles permitted in bus gates in the future.

Finally it was felt that there was no unity amongst drivers in Bristol. It was suggested that the NTA should a Private Hire drivers in the union.

6.3 Indirect (Written) Consultation

A number of stakeholders were contacted by letter and email. This ensured 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:

- Bristol City Council;
- 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.

Uber

Uber provided a written response and outlined ways in which they felt that Private Hire provision could be improved across the city.

They considered that there were too few private hire vehicles in Bristol when compared to cities they considered to be comparable. It was suggested that this lack of private hire vehicles had led to more expensive prices for consumers.

With this in mind Uber wish to see the number of private hire cars increased in Bristol for three reasons:

- Increasing public safety by ensuring more vehicles are operating within Bristol
- It will bring up standards by ensuring that taxi drivers are fully compliant with driver and vehicle conditions; and
- It will directly reduce fares.

In order to make this happen Uber wish to see:

1. The 'Gold' standard mandatory training qualification removed
2. The local topographical test removed
3. Allow enhanced disclosure and Barring Service checks to be processed by third parties.

7. Deriving the Significant Unmet Demand Index Value

7.1 Introduction

The data provided in the previous chapters can be summarised using CH2M's 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)	1
General Incidence of Delay (Table 4.3)	8.02
Steady State Performance (Table 4.1)	6
Seasonality Factor (Section 3)	1
Latent Demand Factor (Section 5)	1.097
ISUD (0.91*1*8.02*6*1*1.097)	48

The cut off level for a significant unmet demand is 80. It is clear that Bristol is below this cut off point as the ISUD is 48, indicating that there is **no significant unmet demand.** This conclusions covers both patent and latent/suppressed demand.

7.2 Comparing the results for Bristol with those of other unmet demand studies

Comparable statistics are available from a number of local authorities that CH2M have recently conducted studies in and these are listed in Table 7.1. The table highlights a number of key results including:

- population per hackney carriage at the time of the study (column one);
- the proportion of rank users travelling in hours in which delays of greater than zero, greater than one minute and greater than five minutes occurred (columns two to four);
- average passenger and cab delay calculated from the rank observations (columns five to six);
- the proportion of Monday to Thursday daytime hours in which excess demand was observed (column seven);
- the judgement on whether rank demand is highly peaked (column eleven); and
- a numerical indicator of significant unmet demand.

The following points (obtained from the rank observations) may be made about the results in Bristol compared to other areas studied:

- population per hackney carriage is lower than the average overall value i.e. provision is higher;
- the proportion of passengers, who travel in hours where some delay occurs, is 11.43% which is higher than the average for the districts analysed;
- overall average passenger delay at 0.91 minutes is lower than the average value;
- overall average cab delay at 13.63 minutes is slightly lower than the average for the districts shown; and
- the proportion of weekday daytime hours with excess demand conditions is 6%.

Table 7.1 A Comparison of Bristol with Other Authorities Studied (values in italics make up ISUD)

District and Year of Survey	Population per Hackney	Proportion Waiting at Ranks	*Proportion Waiting >= 1 Min*	Proportion Waiting >= 5 Mins	*Average Passenger Delay*	Average Cab Delay	*% Excess Demand*	Demand Peaked, Yes=0.5 No=1	ISUD Indicator Value
Bristol 2015*	**538**	**11.43**	***8.02***	**1.46**	***0.91***	**13.63**	***6***	**1**	**48**
Bristol 2006	**535**	**10**	***6***	**2**	***0.95***	**12.76**	***13***	**1**	**102**
Manchester 15	465	9.67	*4.2*	1.07	*0.59*	12.75	*10*	0.5	17
Rochdale15	1,922	2.64	*1.68*	0.58	*0.2*	11.04	*3*	0.5	1
Sunderland 14	789	3.69	*1.36*	0	*0.1*	20.41	*0*	0.5	0
Dover 14	1,619	5.83	*0.58*	0.08	*0.12*	15.17	*3*	1	0
Torbay 14	775	9.06	*5.7*	3.13	*0.7*	15.34	*8*	1	35
York 14	1,082	15	*9.34*	1.42	*1.02*	6.25	*4*	1	42
York 11	1,118	14	*5.96*	0.77	*0.93*	8.25	*9*	*1*	59.1
York 08	1,146	31	*11.5*	6.74	*3.21*	5.42	*31*	0.5	645
Sefton 13	1,010	2.76	*0.87*	0.05	*0.1*	11.4	*3*	1	0
Dundee 13	223	9.28	*2.93*	0.81	*0.28*	21.61	*0*	0.5	0
Edinburgh 13	362	5.67	*2.73*	0.17	*0.32*	12.07	*5*	1	5
Blackpool 12	556	9.06	*4.86*	0.53	*0.38*	16.25	*0*	1	0
Chorley 12	2,978	6	*0*	0	*0.02*	15.90	*0*	1	0
Torridge 12	1,306	3	*0*	0	*0.11*	16.76	*0*	1	0
Braintree 12	1,714	3	*0.63*	0.05	*0.09*	22.57	*0*	1	0
Manchester 12	482	4.89	*3.38*	0.96	*0.45*	14.41	*9*	0.5	9
Torbay 11	777	3	1.42	0.1	0.16	21.45	0	0.5	0
Wirral 11 *	1,080	4	0.41	0.16	0.12	20.19	0	0.5	0
Carrick 11	1,145	9	*5.55*	0	*0.39*	9.92	*4*	0.5	5
Penwith 11	1,261	14	*6.66*	2.29	*0.96*	7.98	*12*	0.5	41
Restormel 11	1,408	4	*3.41*	0	*0.26*	13.54	*0*	0.5	0
Crawley 11	924	6	*6.28*	0.64	*0.18*	21.88	*5*	1	6
Liverpool 11	308	5	*2.13*	0.37	*0.14*	20.64	*1*	*1*	0
West Berkshire 10 *	741	5	*3.84*	0.92	*0.37*	22.78	*3*	0.5	4
Sefton 10	1,015	7	*4.25*	0.55	*0.38*	19.15	*4*	*0.5*	2
Pendle 10	1,257	1	*0.03*	0.03	*0.03*	33.1	*0*	0.5	0
Brighton & Hove 09	474	11	*5.67*	1.19	*0.72*	8.91	*7*	0.5	16.2
Leicester 09	880	10	*9.53*	2.58	*1.52*	19.02	*0*	1	0
Oxford 09	1,266	10	*3.08*	0.07	*0.24*	10.43	*5*	1	4
Blackpool 09	556	4	*1*	0	*0.05*	18.96	*2*	0.5	1
Hull 09	1,465	12	*8.54*	0.99	*1.72*	9.34	*2*	0.5	18
Rochdale 09	1,937	3	*1.18*	0	*0.14*	12.92	*5*	1	1
North Tyneside 08	971	16	*1.18*	0.03	*0.38*	10.72	*8*	0.5	2
Rotherham 08	5,192	0	*0.09*	0	*0.01*	27.29	*0*	1	0
Preston 08	677	12	*5.28*	0	*0.61*	11.13	*7*	1.0	21
Scarborough 08	1,111	12	*5*	1.06	*0.49*	7.74	*7*	0.5	0
Barrow 08	474	14	*12.52*	0	*0.5*	6.85	*0*	0.5	0
Stirling 08	1,265	25	*18*	0.3	*0.7*	10.94	*2*	0.5	38
Torridge 08	1,202	7	*0.94*	0	*0.12*	14.99	*0*	1	0
Richmondshire 08	723	5	*1*	0.07	*0.22*	34.32	*1*	0.5	0.4
Exeter 07/08	1,883	7	*4*	0.6	*0.33*	15.27	*6*	1	9

KEY * Derestricted Authorities

District and Year of Survey	Population per Hackney	Proportion Waiting at Ranks	*Proportion Waiting >= 1 Min*	Proportion Waiting >= 5 Mins	*Average Passenger Delay*	Average Cab Delay	*% Excess Demand*	Demand Peaked, Yes=0.5 No=1	ISUD Indicator Value
Manchester 07	394	21	*6*	2.28	*1.59*	10.24	*14*	1	174
Bradford 07	1,630	18	*2*	0.03	*0.23*	17.64	*5*	1	2
Barnsley 07	3,254	5	*8*	0.22	*1.32*	11.93	*5*	1	58
Blackpool 06	556	31	*10*	0.34	*0.42*	10.34	*5*	0.5	11
Broadstairs 06	1,000	13	*13*	10	*3.25*	23.97	*4*	1	177
Margate 06	1,622	4	*1*	0	*0.05*	33.14	*0*	1	0
Ramsgate 06	1,026	2	*2*	2	*0.49*	19.57	*13*	1	13
Plymouth 06	669	7	*3*	1	*0.52*	11.58	*1*	1	2
Brighton 06	508	52	*23*	6	*0.73*	7.64	*6*	0.5	50
Thurrock 06	1,590	32	*13*	1	*0.22*	15.27	*0*	1	0
Trafford 06	2,039	55	*38*	6	*1.09*	13.15	*5*	1	249
Leicester05	880	21	*11*	1	*0.35*	19.36	*3*	1	12
Bournemouth 05	656	20	*11*	2	*0.37*	12.25	*1*	0.5	2
Bradford 03	2,171	19	*6*	0.77	*0.25*	14.89	*6*	1.0	9
Oldham 03	2,558	30	*12*	0.79	*0.48*	14.8	*7*	1.0	40
Thurrock 03	1,607	43	*14*	1.01	*0.50*	12.5	*2*	1.0	14
Blackpool 03	556	21	*4*	0.3	*0.13*	12.4	*6*	1.0	3
Wolverhampton 03	3,113	50	*31*	7.39	*1.49*	11.18	*14*	1.0	647
Carrick 02	1,335	28	*18*	7	*0.61*	10.53	*9*	1.0	99
Bournemouth 02	702	25	*15*	2	*0.67*	9.97	*1*	0.5	5
Brighton 02	540	60	*35*	12	*1.11*	8.31	*5*	0.5	97
Exeter 02	2,353	47	*18*	3	*0.71*	10.12	*20*	1.0	256
Wigan 02	2,279	28	*10*	0	*1.17*	11.98	*6*	1.0	70
Cardiff 01	656	51	*29*	6	*0.83*	8.77	*14*	0.5	168
Edinburgh 01	373	47	*29*	9	*1.27*	8.77	*13*	1.0	479
Torridge 01	1,298	25	*21*	0	*0.51*	9.32	*8*	0.5	43
Worcester 01*	941	40	*4*	1	*0.46*	12.3	*8*	0.5	7
Ellesmere Port 01	2,527	80	*48*	17	*2.49*	4.23	*49*	0.5	2,928
Southend 00	895	46	*29*	8	*1.92*	8.08	*4*	1.0	223
South Ribble 00 *	485	12	*0.25*	0.25	*0.07*	11.27	*0*	1.0	0
Leeds 00	1,693	83	*61*	33	*5.03*	7.92	*36*	1.0	11,046
Sefton 00	1,069	18	*8*	0.6	*0.28*	12.95	*6*	1.0	13
Leicester 00 *	956	10	*7*	3	*1.17*	20.19	*1*	1.0	8
Castle Point 00	2,286	28	*12*	3	*0.74*	8.6	*2*	0.5	9
AVERAGE	**1,232**	**19**	**10**	**2**	**1**	**14**	**6**		

8. Supply of Taxis

8.1 Introduction

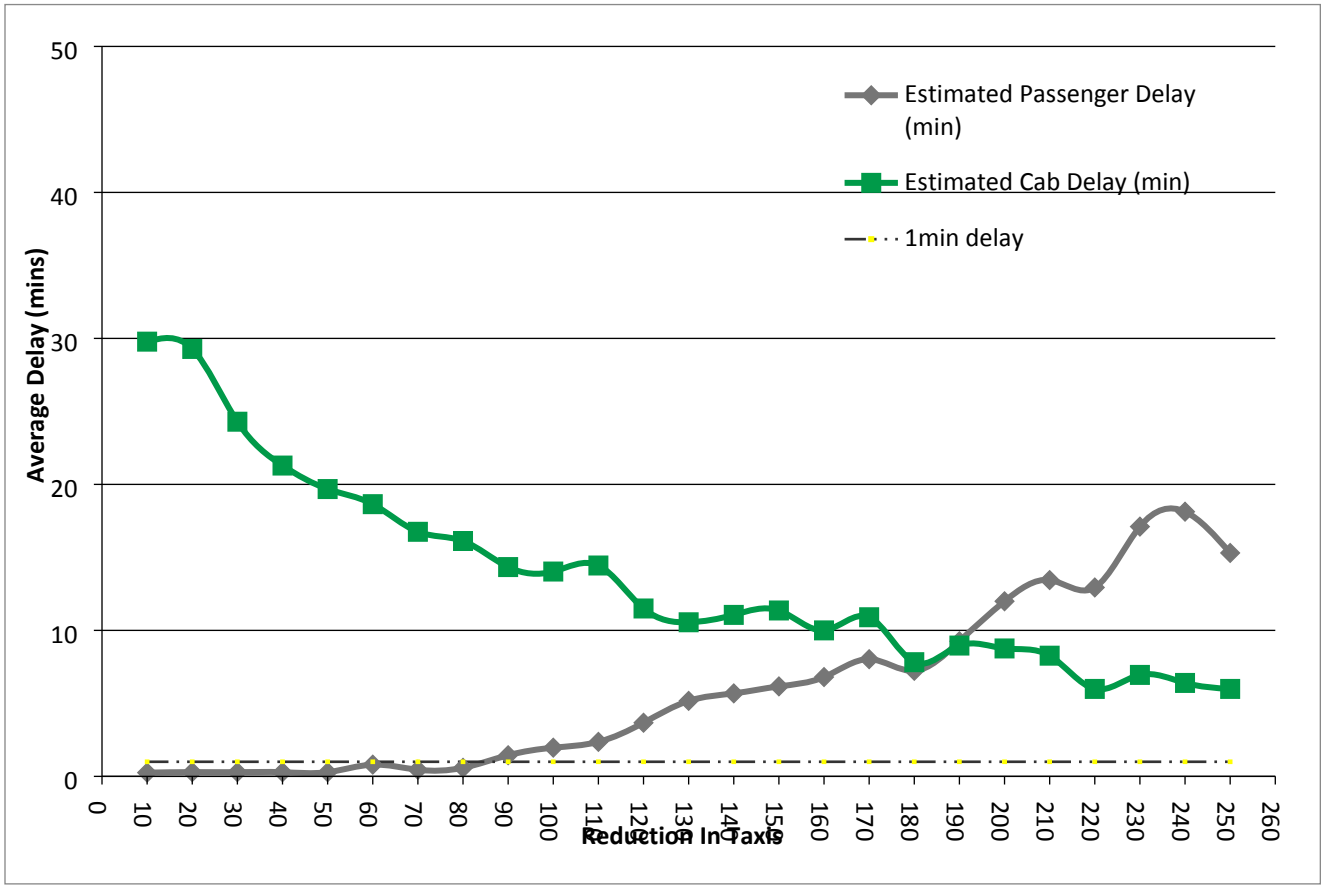
To examine the extent to which the recent increase in taxi numbers may have resulted in an excess supply of vehicles, relative to demand in Bristol, a simulation exercise has been conducted. The exercise used CH2M's STAR4 simulation model (Simulation of Taxis at Ranks). The simulation takes a typical daytime observation period (in this case Bus Station rank between 10am and 6pm on 14th October 2015) and estimates the impact of reducing the number of vehicles serving the rank on cab and passenger queues and delays. The analysis is intended to be indicative of the general impact of reduced supply and should not be interpreted as a recommendation for any given reduction in the size of the fleet. The results of the analysis are presented in Figure 8.1 below.

8.2 Analysis

The analysis shows that the removal of around 20 licences from circulation on the day in question would have been unlikely to have resulted in any passenger delay at the rank. On the other hand, cabs at the rank would have experienced significantly faster turn-around times. A reduction in the fleet beyond this would result in the introduction of passenger delay at the rank, with the level of passenger delay generally increasing as the fleet is reduced in size. Average passenger delay would reach 1 minute if the fleet were to be reduced by 41 vehicles.

This exercise was designed to show the effect of removing licenses during typical conditions however during non-typical conditions i.e. busy night time rank the effect may be different.

Figure 8.1


Average Delay (mins)
50
40
30
20
10
0
Estimated Passenger Delay (min)
Estimated Cab Delay (min)
1min delay
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
210
220
230
240
250
260
Reduction In Taxis

9. Summary and Conclusions

9.1 Introduction

CH2M has conducted a study of the hackney carriage and private hire market on behalf of Bristol City 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 hackney carriage services within Bristol 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.

9.2 Significant Unmet Demand

The 2015 study has identified that there is NO evidence of significant unmet demand for taxis in Bristol. This conclusion is based on an assessment of the implications of case law that has emerged since 2000, and the results of CH2M's analysis.

The rank observation programme indicated that the level of passenger demand had significantly increased since the last study undertaken in 2006. However alongside this increase passenger delay has decreased. This indicates that the hackney trade are serving the ranks well.

The public consultation identified that the way people obtain taxi and private hire vehicles has changed – this maybe directly related to the presence of Uber in Bristol.

9.3 Public Perception

Public perception of the service was obtained through the undertaking of 503 surveys. Overall the public were generally satisfied with the service – key points included;

- Some 25.2% of hirings are from a rank, with 68.4% by telephone or mobile app;
- Generally high levels of satisfaction with delay on last trip – hiring by rank providing the highest levels and on street flagdown providing the lowest levels;
- Some 9.7% of people had given up trying to obtain a taxi at a rank or by flagdown;
- Some 31.5% of people felt that taxi services could be improved – need to be cheaper and improved driver behaviour; and
- Some 9.8% of people found that new ranks were needed.

9.4 Entry Control

Table 9.1 details the potential benefits and dis benefits of a number of policy changes. Introducing a policy of entry control would provide considerable benefit to the trade. The taxi trade have stated a clear desire for this policy to be introduced. In recent years a number of authorities have chosen to reintroduce the numerical limit and Bristol have restricted the market in recent years. Anecdotal evidence from taxi drivers across the UK suggests that the reintroduction of a numerical limit gives them the confidence to invest in newer vehicles.
However reintroducing the numerical limit brings about a need for regular (3 yearly) unmet demand surveys in order to comply with the Transport Act. The potential for litigation is also increased.

Table 9.1 Benefits and Disbenefits of Entry Control

	Potential benefit	Potential disbenefit
Maintain policy of no entry control	Promote innovation within the trade through competition; Reduce administrative costs by eliminating an area of potential litigation; Maintain low levels of passenger delay;	Potential demand for scarce road space for ranks
Reintroduce the numerical limit	Reduce the need for additional rank space; Reduce over ranking; Reduce vehicle emissions associated with circulating taxis;	Reintroduces the need for surveys; Reduce the availability of vehicles; Potential to increase passenger waiting times; Against best practice; Reduce the availability of wheelchair accessible vehicles.

Evidence from the consultation exercise with the taxi trade suggests that there is a sufficient number of hackneys across Bristol.

Members of the public were asked whether they perceive there to be a sufficient number of taxis across Bristol to meet their needs, and some 62.5% stated that there are enough.

There is no evidence to suggest that by limiting the number of taxis, the total fleet of vehicles available for hire (taxis and private hire) is reduced. Clearly there is a theoretical risk that restricting supply may have a number of side effects but this will be influenced by the level at which the limit on numbers is set. However, the evidence clearly suggests that in practice it is difficult to identify evidence that these unwanted effects are present.

Vehicles that form both elements of the trade are regulated and regularly checked for roadworthiness. In addition driver standards are maintained across both sections of the trade. Therefore it is difficult to accept that any limitation policy per se need have any adverse impact on customer safety.

Consultation and the rank observations conclude that there is no evidence of unmet demand in Bristol. Taxis have to wait on average 13.63 minutes for a taxi fare. In terms of consumer benefit the study highlighted high levels of satisfaction with delays encountered.

Only 9.7% of members of the public had given up waiting for taxi at a rank, however there were instances of passengers being present at ranks which were not being serviced by taxis at some point during the observation periods. This suggests that on occasion demand is not adequately being met by taxis at the ranks.

The rank observation programme highlighted that demand for hackney carriages at ranks is concentrated at the Temple Meads rail station taxi rank.

Demand peaks at night but passenger delay peaks across a range of day time and night time periods.

9.5 Recommendations

The 2015 study has identified that there is no significant unmet demand. 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 CH2Ms analysis.

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

- Impose a numerical limit of 795 licenses
- Issue any number of additional plates as it sees fit, either in one allocation or a series of allocations; or
- Maintain the policy of derestriction.