

Transport and Environment Committee

10 am, Tuesday, 4 June 2013

Survey of Demand for Taxis within the City of Edinburgh

Item number	8.1
Report number	
Wards	ALL

Links

Coalition pledges	See attached report
Council outcomes	See attached report
Single Outcome Agreement	See attached report

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Terms of Referral

Survey of Demand for Taxis within the City of Edinburgh

Terms of referral

The Regulatory Committee on 3 May 2013 considered a report on the results of research carried by consultants Halcrow Ltd reviewing the level of demand for taxis in the city.

The Regulatory Committee agreed:

- 1) To note the content of the report by the Director of Services for Communities.
- 2) To accept the conclusion from the commissioned Halcrow study that there was no 'significant unmet demand' for taxis within the city.
- 3) To agree that no new taxi licences require to be issued at this time.
- 4) To agree that the next demand survey will take place in three years and to authorise the Director of Services for Communities to procure interim demand monitoring arrangements as specified in paragraph 1.5 of the Directors report.
- 5) To refer the report to the Transport and Environment Committee for information.
- 6) To note that the Director of Services for Communities would consult on the disability access issues raised in the report.

For decision/action

1. The Regulatory Committee has referred the attached report to the Transport and Environment Committee for information.

Links

Coalition pledges	See attached report
Council outcomes	See attached report
Single Outcome Agreement	See attached report
Appendices	Report by the Director of Services for Communities Survey of Demand for Taxis within the City of Edinburgh

Regulatory Committee

10:00 am Friday, 3 May 2013

Survey of Demand for Taxis within the City of Edinburgh

Item number

Report number

Wards

All Wards

Links

Coalition pledges

[P28](#)

Council outcomes

[C08](#)

Single Outcome Agreement

[S01](#)

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Executive summary

Survey of Demand for Taxis within the City of Edinburgh

Summary

The Council has a policy of limiting the number of taxi licences issued within the City, utilising the powers available to it under Section 10 (3) of the Civic Government (Scotland) Act 1982. This power can only be used if the Council is satisfied that there is 'no significant demand' for taxis which is unmet. The Council is required to keep this position under regular review.

At the Regulatory Committee on 16 November 2012 the Regulatory Committee Workplan was approved. Committee agreed to commission consultants to review the provision of taxis within the City, and specifically to identify whether there is any 'significant unmet demand' for taxis.

Halcrow Ltd was commissioned in November 2012 to undertake this work and undertook the research between December 2012 and February 2013. Attached at Appendix 1 is a copy of the Halcrow Ltd report which representatives from Halcrow will present at the meeting.

Recommendations

- 1 It is recommended that Committee:
 - a) notes the content of this report.
 - b) accepts the conclusion from the commissioned Halcrow study that there is no 'significant unmet demand' for taxis within the City.
 - c) agrees that no new taxi licences require to be issued at this time.
 - d) agrees that the next demand survey will take place in three years and authorises the Director of Services for Communities to procure interim demand monitoring arrangements as specified in paragraph 1.5 of this report.

Measures of success

That the City has sufficient taxis to meet the customer demand placed upon the fleet

Financial impact

The cost of the Halcrow research is contained within the income from the taxi licence fees.

The cost of interim demand monitoring arrangements will also be contained within the income from taxi licence fees.

Equalities impact

There is no relationship to the public sector general equality duty to matters described in this report and no direct equalities impact arising from this report.

Sustainability impact

Any increase in the taxi fleet by increasing the number of licences issued would have an impact on the Environment within the City, potentially including levels of pollution.

Consultation and engagement

The tender issued by the Council for the consultants required that the research include specific and extensive consultations with interest groups. Full details are contained in the Halcrow report at Appendix 1, but these groups included;

1. Representatives of the taxi trade.
2. The Public.
3. Lothian and Borders Police, in particular the Cab Inspector and officers with responsibility for the City Centre.
4. Council Officers with responsibility for Community Safety, Transport and Economic Development.
5. Disability Groups

Background reading / external references

[Restriction of Taxi Numbers In Edinburgh: report to full Council 23 August 2007.](#)

[Regulatory Committee Workplan 16 November 2012](#)

[Minute of Regulatory Committee 16 November 2012](#)

Survey of Demand for Taxis within the City of Edinburgh

1. Main report

Background

- 1.1 The Council acts as a Licensing Authority for the purpose of licensing taxis within the City of Edinburgh. In line with the powers contained in the Civic Government (Scotland) Act 1982, the Council has adopted a policy of limiting the number of taxi licences issued where there is no evidence of significant unmet demand. The Council last formally reviewed this position in 2009, and at that time the Council agreed to increase the number of licences within the city by 30. There have also been a number of appeals to the Sheriff which have resulted in 20 additional licences being granted. At present there are 1316 licenses for taxis within the city. All applications for taxi licences are currently referred to the Licensing Sub-Committee for a hearing and decision.
- 1.2 The policy of restricting the number of taxi licences within the city attracts considerable debate. One view, generally held by taxi licence holders, is strongly in favour of retaining the restriction on licence numbers, on the grounds that overprovision would harm the viability of the trade. There are other groups which strongly argue that the policy is a restraint on trade, and seek the removal of the restriction. Typically these will include people who do not currently have a taxi licence, but wish to obtain one, or licensed taxi drivers who wish to operate their own taxi as opposed to driving shifts in taxis licensed by others.
- 1.3 The restriction policy is routinely challenged. This typically takes the form of appeals to the Sheriff against decisions of the Licensing Sub-Committee to refuse applications for taxi licences based on the committees' assessment that there is no significant unmet demand
- 1.4 The Scottish Government has issued guidance for licensing authorities which operate a limitation policy. Additionally the decisions of the courts clearly indicates that the level of unmet demand must be kept under regular review. The Committee is asked to note that the consultants Halcrow were instructed to follow this guidance in carrying out their research.
- 1.5 The Halcrow research provides Committee with an up to date review of the level of demand for taxis in the City. If approved, this will form the basis on which individual licences will be considered until the next formal review which will be in three years time. In addition Committee approval is requested to procure interim demand research at a frequency of six months. This will ensure that the service

is operating in line with best practice and will provide a robust basis for decisions should legal challenge be made.

1.6 The Halcrow report concludes that overall:

- a) there is no evidence of significant unmet demand;
- b) there is some evidence that the taxi fleet is insufficiently deployed at periods of peak demand e.g. late on weekend evenings;
- c) that the size of the fleet compares favourably with other UK cities.

2. Recommendations

2 It is recommended that Committee:

- a) notes the content of this report.
- b) accepts the conclusion from the commissioned Halcrow study that there is no 'significant unmet demand' for taxis within the City.
- c) agrees that no new taxi licences require to be issued at this time.
- d) agrees that the next demand survey will take place in three years and authorises the Director of Services for Communities to procure interim demand monitoring arrangements as specified in paragraph 1.5 of this report.

Mark Turley

Director of Services for Communities

Links

Coalition pledges	Further strengthen our links with the business community by developing and implementing strategies to promote and protect the economic well being of the city
Council outcomes	Edinburgh's economy creates and sustains job opportunities
Single Outcome Agreement	Edinburgh's Economy delivers increased investment, jobs and opportunities for all
Appendices	Appendix 1: Draft policy 2013



Taxi Demand Review

City of Edinburgh Council

April 2013



Taxi Demand Review

City of Edinburgh Council

April 2013

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Document history

Taxi Demand Review

City of Edinburgh Council

This document has been issued and amended as follows:

Version	Date	Description	Created by	Verified by	Approved by
1.0	April 13	Draft Report	Aidan Shearer		

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Appendices

1 Introduction

1.1 General

This study has been conducted by Halcrow on behalf of City of Edinburgh Council (CEC). The overall objective is to provide a full survey of demand for taxis in Edinburgh and to determine whether or not significant unmet demand for taxis exists in terms of section 10(3) of the Civic Government (Scotland) Act 1982. Specific objectives are:

- To measure demand, including latent demand, for taxi services to the general public in order to determine whether there is any significant unmet demand in Edinburgh city as a whole, or any part thereof;
- To determine public perception of the taxi service provided in Edinburgh;
- To determine perception of the taxi service provided in Edinburgh amongst wheelchair users and other people with disabilities and/or special needs;
- To comment on any areas within Edinburgh city where there may be concern over the provision of a taxi service;
- To comment on any peak demand times where there may be concern over the provision of a taxi service in Edinburgh city;
- To assess and comment on the impact of large events in the city e.g., Festival, Christmas and New Year Events and Rugby International Fixtures on the supply and demand for taxis in the city.
- To assess and comment on whether there are any features of the taxi market that have an impact (adverse or beneficial) on the city's economy.
- To assess and comment on whether there are any features of the taxi market that have an impact (adverse or beneficial) on the city's night time economy, safe dispersion of the city centre in the evenings and on crime and disorder generally.
- To assess and comment on the operations of the private hire car sector in the city and the impact its operations have on the taxi market in the city.

In 2007 the Scottish Government issued Best Practice Guidance for Taxi and Private Hire licensing. The Scottish Government reissued this guidance in April 2012 in recognition of a number of legislative changes. Essentially, the Government stated that the present legal position on quantity restrictions for taxis is set out in section 10(3) of the 1982 Act. The Scottish Government takes the view that decisions as to the case for limiting taxi licences should remain a matter for licensing authorities in the light of local circumstances. 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 are still to come into play.

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 will allow taxi drivers to apply to their licensing authority for an exemption from Section 165 of the Equality Act 2010. The UK Government are still considering the commencement strategy for Section 165. This section when commenced will impose a duty on taxi and private hire car drivers with wheelchair accessible vehicles to provide assistance to disabled passengers.

2 Background

2.1 General

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

2.2 Edinburgh

Edinburgh is the capital city of Scotland and covers some 259 square kilometres. Edinburgh's resident population 476,600 (Office for National Statistics, 2013). The city has a large student and visitor population and demand for taxis fluctuates across the year.

2.3 Background to the Taxi Market in Edinburgh

Historically there was no limit on the number of taxi licences in Edinburgh until 1990, when it was decided to introduce a limit of 1,030. Matters were reviewed in 1993 and 1995 and the limit was raised by 181. In 2001, the limit was increased by a further 49, to 1,260. Following a survey in 2005, the Council decided that there was no evidence of significant demand for taxis which was unmet and resolved not to issue any new licences at that time.

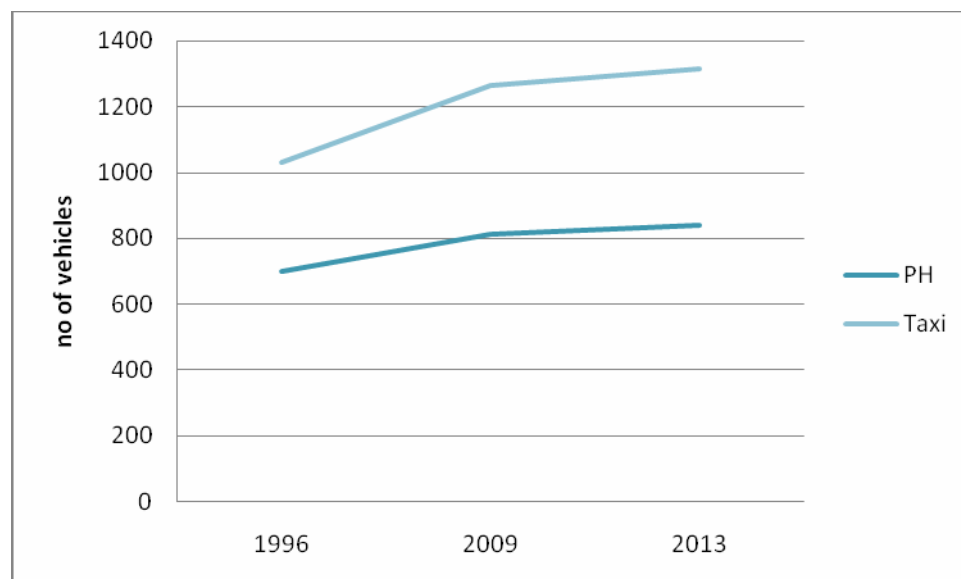
In February 2007, the Council considered an update to the 2005 Survey, involving stance surveys and questionnaires to stakeholders, and concluded that there was no significant demand for taxi services which was unmet. On 25th October 2007, the Council reaffirmed its existing policy to restrict the number of taxi licences issued to 1,260 and instructed the Director of Corporate Services to commission a comprehensive report on taxi demand approximately every three years.

An unmet demand study was commissioned in 2008. The report identified that there was evidence of significant unmet demand for taxi services and a recommendation was made for 30 new taxi licences be issued to meet this demand. In addition to these 30 licences a further 20 more taxi licences were issued on appeal.

City of Edinburgh Council currently licences 1,316 taxis. This provides Edinburgh with a taxi provision of around one taxi per 362 resident population. The Edinburgh taxi fleet consists of approximately two thirds TX4's with the remaining third comprised of Vitos and E7s. City of Edinburgh Council also licence approximately 841 private hire vehicles.

Vehicle numbers have continued to increase since 1996 as demonstrated in Figure 2.1

Figure 2.1 Changes in Fleet Size 1996 – 2013



2.4 Taxi Fares and Licence Premiums

Taxi fares are regulated by the Local Authority. There are four tariffs across the following periods;

- Monday- Friday Daytime (06:00 – 18:00)
- Monday to Friday Night time (1800 - 06:00), Saturday to Monday (0600-1800)
- Monday to Friday Christmas and New Year (06:00 on 24th December – 06:00 on 27th December, 06:00 on 31st December – 00:00 on 2nd January)
- Saturday to Monday Christmas and New Year (0600-0600, same dates as above)

The standard charge tariff is made up of two elements; an initial fee (or “drop”) for entering the vehicle, and a fixed price addition of 25p for each subsequent 195 meters or part thereof until 2080 meters and then fixed additions of 25p for each subsequent 225 meters or part thereof, plus fixed additions depending on drop off destination, payment method and passenger number. Table 2.1 outlines the fare structure in more detail.

Table 2.1 Edinburgh Taxi Fare Tariff

THE CITY OF EDINBURGH COUNCIL

FARE TABLE FOR TAXIS

Approved by Regulatory Committee on 6 December 2011

FOR UP TO 2 PASSENGERS

TARIFF 1 Monday - Friday 8am – 8pm	TARIFF 2 Monday – Friday 8pm – 8am the following day 8am Saturday – 8am Monday
TARIFF 3 Monday - Friday 8am – 8pm during Christmas and New Year	TARIFF 4 Monday – Friday 8pm – 8am the following day 8am on Saturday – 8am Monday during Christmas and New Year
CHRISTMAS NEW YEAR	8pm on 24 December to 8am on 27 December 8pm on 31 December to midnight on 2 January

CHARGES	TARIFF 1	TARIFF 2	TARIFF 3	TARIFF 4
<ul style="list-style-type: none"> ▪ Initial hire not exceeding 520m ▪ Initial 105 seconds of waiting time ▪ Combination of initial time and distance 	£2.00	£3.00	£3.00	£4.00
<ul style="list-style-type: none"> ▪ Each additional 195m up until 2080m and thereafter each additional 225m ▪ Each additional 42 seconds of waiting time ▪ Combination of additional time and distance 	£0.25	£0.25	£0.35	£0.45

EXTRA PAYMENTS

When more than 2 passengers	Each	£0.20
Note: Only 2 children under 12 years will be reckoned as one passenger. No extra fare will be charged for one child under 5 years of age.		
Each Passenger must be properly seated		
Hires ending at Edinburgh Airport Inner Drop-off Zone (See Note 4 below)		£1.00
Call Out Charge	£0.80	Airport Pickup
Applicable when pre-booked		For hires Commencing at Edinburgh airport
Cancellation Fee	£2.20	Payment Of Fare By Credit/Debit Card
Applicable when taxi is pre-booked but not used		Extra applicable when fare paid by the above means
Cleaning Fee Applicable when taxi is soiled (by travel sickness)		5.0 %
		£23.00

NOTES

- (1) The above Tariff is applicable only within the City of Edinburgh.
- (2) Any hire which terminates outside the City of Edinburgh area – FARE MUST BE NEGOTIATED AND AGREED WITH DRIVER BEFORE THE JOURNEY COMMENCES.
- (3) A copy of the Licensing Conditions can be inspected at the Council's Licensing Offices, 249 High Street, Edinburgh, EH1 1YJ and downloaded from edinburgh.gov.uk/downloads/file/843/taxi_licensing_conditions.
- (4) **The Airport Extra** is only payable if passenger is dropped off in the covered inner drop-off zone at Edinburgh Airport and the driver has explained to the passenger before the start of the journey - (1) He will take the passenger to the drop off point just beside the airport terminal and that there is a £1 extra for this. (2) If the passenger states he is disabled, the £1 extra still has to be paid, but the driver understands that the passenger can reclaim this from the airport at the drop-off point. (3) If the passenger wishes to avoid the £1 extra, he can be taken to an outer drop-off point. However, this is further from the airport terminal, involves the use of a free shuttle bus and will require more time for the passenger to get to the airport terminal.

COMPLAINTS

Any hirer aggrieved at the level of the fare charged for any hire or for any other reason may discuss the matter with the Taxi Licensing Officer (0131 529 4250). Any complaint must be made in writing and addressed to the Complaints Officer, Licensing Section, The City of Edinburgh Council, 249 High Street, Edinburgh EH1 1YJ, and should include the vehicle's licence number and time and date of the incident.

Source: City of Edinburgh Council

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 February 2013 tables show Edinburgh ranked 179th in the table – therefore Edinburgh has average fares. Table 2.3 provides a comparison of where other statistically similar as well as geographically close authority's rank in terms of fares. It shows that fares in Edinburgh are slightly below average for the area.

Table 2.3 Comparison of Neighbouring Authorities in Terms of Fares (figures are ranked out of a total of 363 Authorities with 1 being the most expensive)

Local Authority	Stance
Midlothian	119
East Lothian	133
Fife	153
Edinburgh	179
West Lothian	216

Source: *Private Hire and Taxi Monthly, February 2012*

2.5 Local Policy

Edinburgh Evening Economy

In March 2010 a report was produced for the council by an independent consultant reviewing Edinburgh's Evening Economy. The report identified the scale of the evening economy in terms of the number of businesses and jobs that are directly supported, and the Gross Added Value that these businesses (and employees) generate. The document outlines the benefits of the evening economy and the integral part it plays in the cultural offer for visitors, tourists and residents, and reviews best practice in terms of managing the night time economy in other cities across the UK.

Safety and security is one of the issues that can deter people from remaining in the city of an evening time, and this was evidenced in the research from other cities. The report cites an example of Hastings. In an effort to provide public reassurance about safety and security in Hastings a number of initiatives were introduced, one of which was covered taxi ranks overseen by security marshals. Furthermore the document goes on to highlight the importance of good city centre management and how this contributes to a maintaining a positive vibrant night time economy.

Taxis play a key role in this city centre management, providing a safe and convenient form of transport, and aiding the flow of people out of the city from pubs and clubs, reducing the likelihood of antisocial behaviour.

Edinburgh Violence Reduction Program

Edinburgh has introduced a violence reduction program with the aim of 'Creating a safer environment in Edinburgh where violence is deemed unacceptable'. The program involves a co-ordinated multi agency approach to tackling crime and disorder, and highlights the importance of the committed involvement of many sectors and disciplines in reducing levels of crime and violence. One of the three work streams in the program is 'Alcohol and the night time economy'. Much of the night time economy in Edinburgh is centred around the entertainment areas of the city, including the numerous bars, pubs and clubs in the concentrated central area. The report acknowledges that while the majority of people will consume alcohol and not be

involved in any violent incidents, the report highlights evidence linking the influence of alcohol to an increased likelihood of violence or crime. In order to tackle this issue a number of initiatives have been put in place across the city, one of which is the Transport Marshals Scheme and assistance at nominated ranks, which was extended beyond the initial festival period during which it was trialled.

Taxis provide a pivotal role in transporting people out of the city centre following a night out, and in doing so reduce the likelihood of concentrations of people gathering which could potentially spark an increase in the likelihood of antisocial behaviour.

3 Benchmarking

3.1 Introduction

A benchmarking exercise has been undertaken to compare taxi provision in Edinburgh with that of the Scottish cities and the English core cities. This exercise presents information for the remaining six cities in Scotland, and the eight core cities in England. The core cities comprise those cities that are considered the economically most important cities outside of London in England. Table 3.1 shows the cities used in this benchmarking exercise.

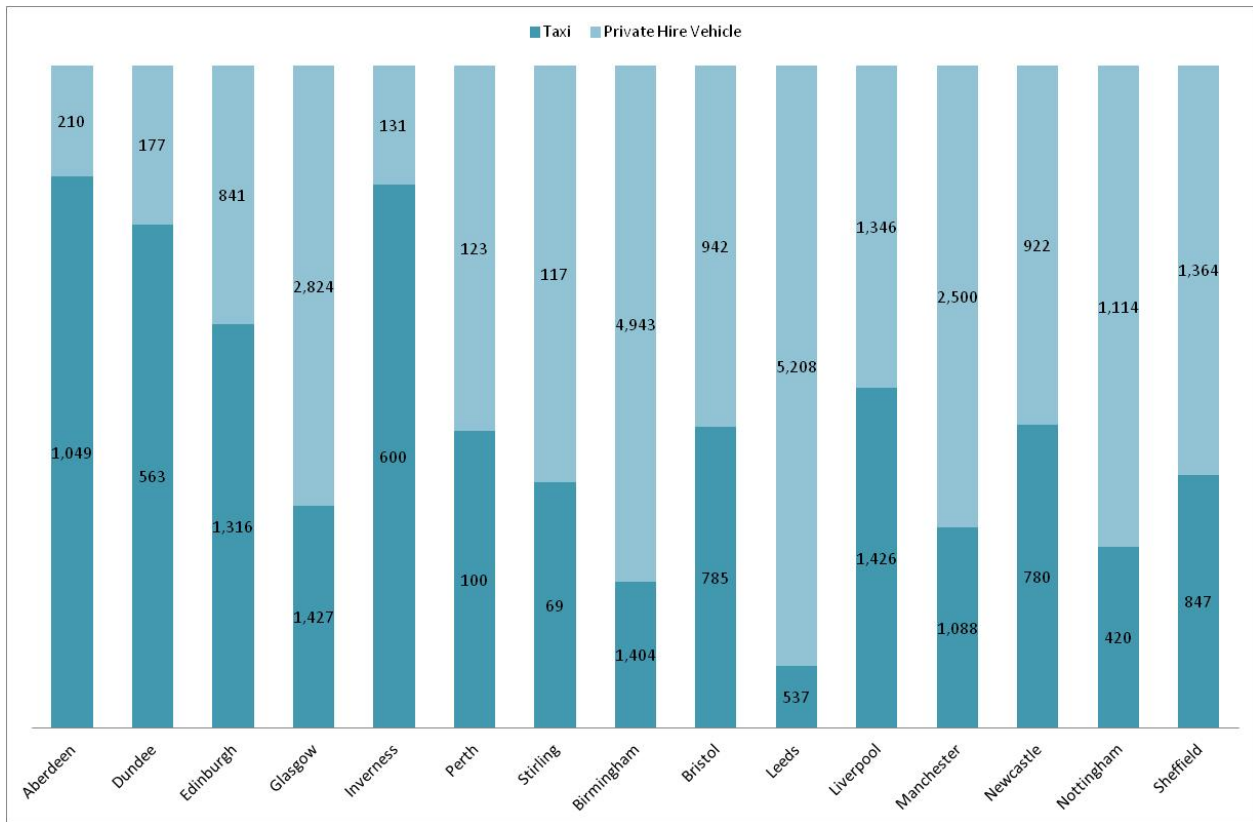
Table 3.1 – Cities used in benchmarking exercise

Scottish Cities	Core Cities
Aberdeen	Birmingham
Dundee	Bristol
Edinburgh	Leeds
Glasgow	Liverpool
Inverness	Manchester
Perth	Newcastle
Stirling	Nottingham
	Sheffield

3.2 Fleet Composition

Figure 3.1 documents the fleet size for Edinburgh along with the other benchmarked authorities. Glasgow, Liverpool and Birmingham have the largest fleets of taxis (1,427, 1,426 and 1,404 vehicles respectively), while Birmingham has the largest combined (taxi and private hire vehicles) fleet at 6,347 vehicles. Of the other Scottish cities, Glasgow has the largest combined fleet at 4,251 vehicles. Stirling has the smallest taxi fleet (69 vehicles) whilst Perth and Stirling have the smallest private hire fleets at 123 and 117 vehicles.

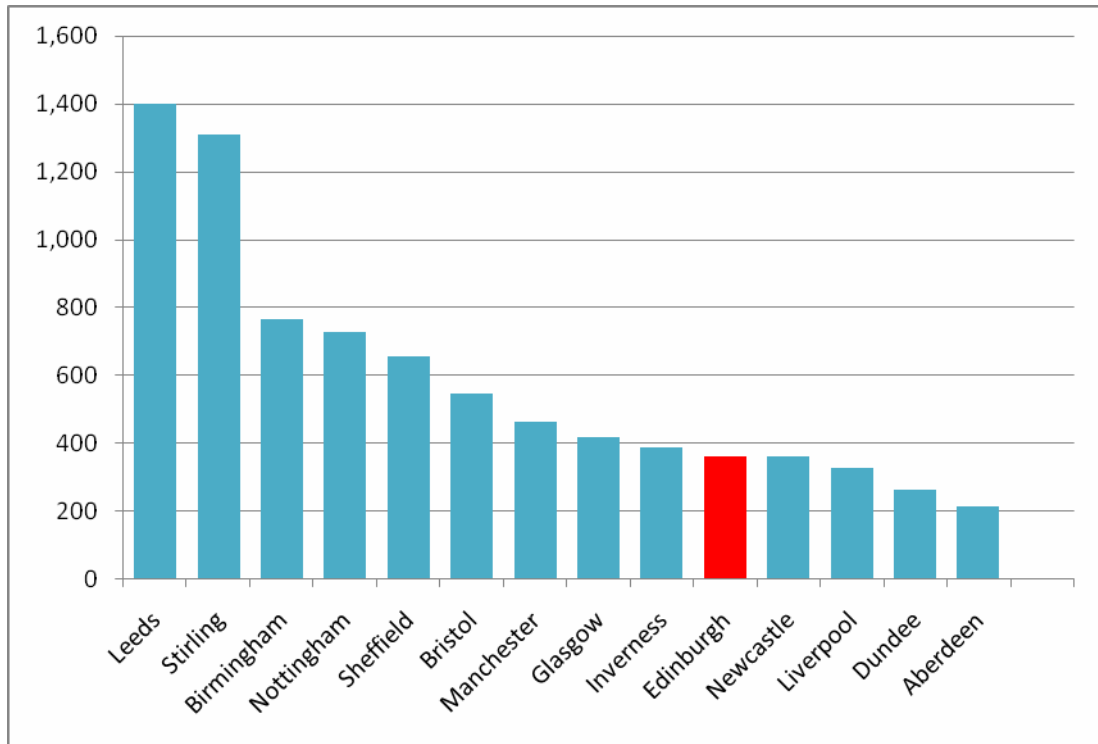
Figure 3.1 Fleet Composition



Edinburgh has the fourth largest taxi fleet and the sixth smallest private hire fleet, placing it in mid range of the comparable authorities in terms of its overall fleet size.

Figure 3.2 shows taxi per capita provision in each authority. This demonstrates that Inverness has the lowest number of people per taxi, thereby indicating that it has the best provision of the authorities shown. Leeds has the highest number of people per taxi, and therefore the worst provision. Edinburgh has the fifth best taxi provision per capita.

Figure 3.2 Population per taxi across the different licensing authorities

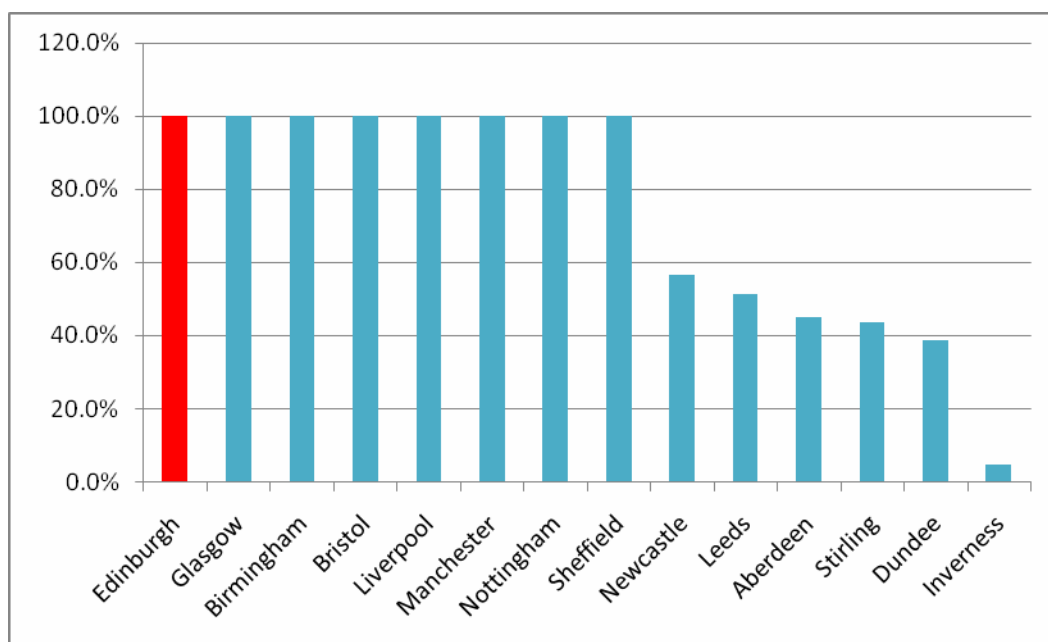


3.3 Wheelchair Accessible Vehicles

Wheelchair access data for taxis could only be gathered for 14 cities. Of these, Edinburgh ranked in joint first position. This is due to all taxis being wheelchair accessible, a move which seven other cities have also taken. The remaining six locations have around 50% or less of their taxis able to accommodate wheelchairs.

Figure 3.4 shows the percentage of taxis in each authority which are wheelchair accessible:

Figure 3.4 Proportion of the taxi fleet that is wheelchair accessible



3.4

Entry Control

Table 3.1 documents the entry control policies for the 15 authorities. Edinburgh is one of nine authorities which do not impose a numerical limit on the number of taxis licensed.

Table 3.1 Entry Control Policy for the Authorities

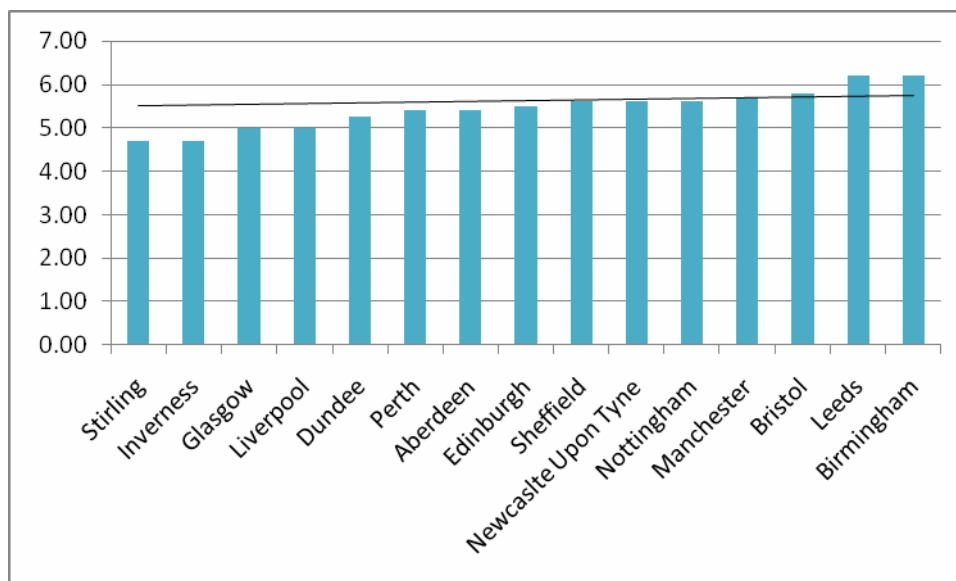
Authority	Entry Control Policy
Aberdeen	Restricted
Birmingham	Derestricted
Bristol	Derestricted
Dundee	Derestricted
Edinburgh	Restricted
Glasgow	Restricted
Inverness	Derestricted
Leeds	Restricted
Liverpool	Restricted

Manchester	Restricted
Newcastle	Restricted
Nottingham	Restricted
Perth	Restricted
Sheffield	Restricted
Stirling	Restricted

3.5 Fares

Figure 3.5 details the average fare for a two mile journey across the core cities and Scottish cities. The average cost of a two mile journey in Edinburgh is £5.50, thereby highlighting that fares in Edinburgh are marginally more expensive than the average at £5.44. Of the authorities included in this benchmarking exercise, fares are most expensive at £6.20 in Birmingham and Leeds and lowest at £4.70 in Stirling and Inverness at £4.70.

Figure 3.5 Fare for a two mile journey



Source: Derived from Private Hire and Taxi Monthly, February 2012

4 Public Transport Review

4.1 Introduction

There are a variety of measures put in place by both City of Edinburgh Council and the public transport providers working within the city to try and encourage use of public transport. These can often provide a viable alternative to taxi journeys.

4.2 City of Edinburgh Council

The council offer 3 main incentives in order to promote the use of public transport within the city.

The first is a BusTracker service. This displays real time information for passengers relating to the arrival times of bus services. A code specific to a bus stop is typed into a website and the departures from this stop as well as the route each bus will take are then available to the passenger. This service can be accessed both via computers and smartphones.

The second incentive promoted by the council is the One Ticket. It allows convenience, choice and value by enabling passengers to use more than one bus service provider with one single ticket. The ticket can be purchased online, by phone or from any PayPoint outlet, 600 of which are located within the One Ticket travel area. The time period which the ticket is valid for is also able to be varied, a single day, 7 day, 28 day or annual optional all being available. The price of the ticket varies with the length of the journey however once purchased, the ticket can be used as many times as required, on that specific journey.

The final public transport measure supported by the City of Edinburgh Council is the Taxicard scheme. This is a service for disabled users who have a severe permanent disability who can't use ordinary buses or can only use them with assistance. The card lasts for 3 years and entitles the holder to 104 trips per year, the equivalent of one return journey per week.

4.3 Lothian Buses

Lothian Buses are the main service provider in Edinburgh City Centre, running 70 services in the Edinburgh, Mid Lothian and East Lothian area. The fleet of buses which they operate are all low floor access vehicles, expelling the problem of disabled access onto buses within the city. The average age of the bus fleet is 4.9 years, one of the lowest age figures in Scotland.

Normal fares for travel in and out as well as around the city can be seen in the table below:

Ticket Type	Single ticket	Day Ticket	Night ticket	Senior/Concessions
Adult	£1.50	£3.50	£3.00	Free
Child	£0.70	£2.00	£1.50	Free

Lothian buses also provide an alternative for regular travellers called the RIDACARD. This provides the lowest prices as well as reductions for students and on night bus services. A further cost can be achieved if paid by direct debit. The cost of the RIDACARD can be seen below:

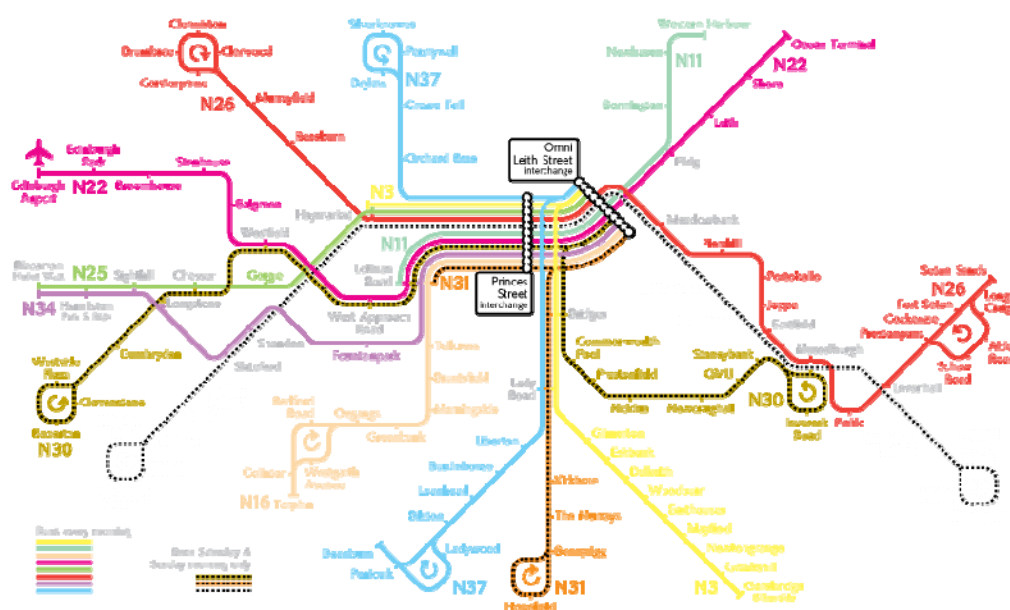
Ticket Type	1 week	4 week	Annual	Direct Debit*
Adult	£17	£51	£612	£48
Student	£13	£40	£468	£36
Junior	£9	£29	£324	£25

*An initial one-off payment of £62.00 is needed, followed by the rates set out in the table.

4.4 Night Buses

There are a series of night buses operating throughout Edinburgh in the early hours of the morning. They consist of 11 services which cover the majority of the city and follow much of the same routes as their daytime counterparts. Operation of each service is usually hourly between 00:00 and 04:00 however these times vary depending on the individual service and the day of the week. The cost of the service is £3.00, which then allows passengers to use all services as many times as they require in one night. There is also a reduction with a RIDACARD, this price falling to £1.50.

A map of the various routes the services take in relation to Edinburgh City Centre can be seen below:



4.5 Community Transport

City of Edinburgh Council fund a number of 'demand responsive' transport services for people unable to use conventional public transport. All services need to be pre booked and can be used for various shopping trips.

5 Definition, Measurement and Removal of Significant Unmet Demand

5.1 Introduction

Section 5 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 taxi 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 taxis.

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

5.3 Defining Significant Unmet Demand

The provision of evidence to aid licensing authorities in making decisions about taxi provision requires that surveys of demand be carried out. Results based on observations of activity at taxi stances 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 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 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 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 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 taxi.

If demand remained at a constant level throughout the day and week, the identification and treatment of significant unmet demand would be more straightforward. If there were more cabs than required to meet the existing demand there would be queues of cabs on stances 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 taxis 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.

5.4 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 5.1.

Table 5.1 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 stances. 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 stance 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.

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

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 stances).

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 taxi 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 taxi 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 taxi at either a stance 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 stance 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 taxi licences following a finding of significant unmet demand. This is discussed in the next section.

5.5 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 taxi 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.

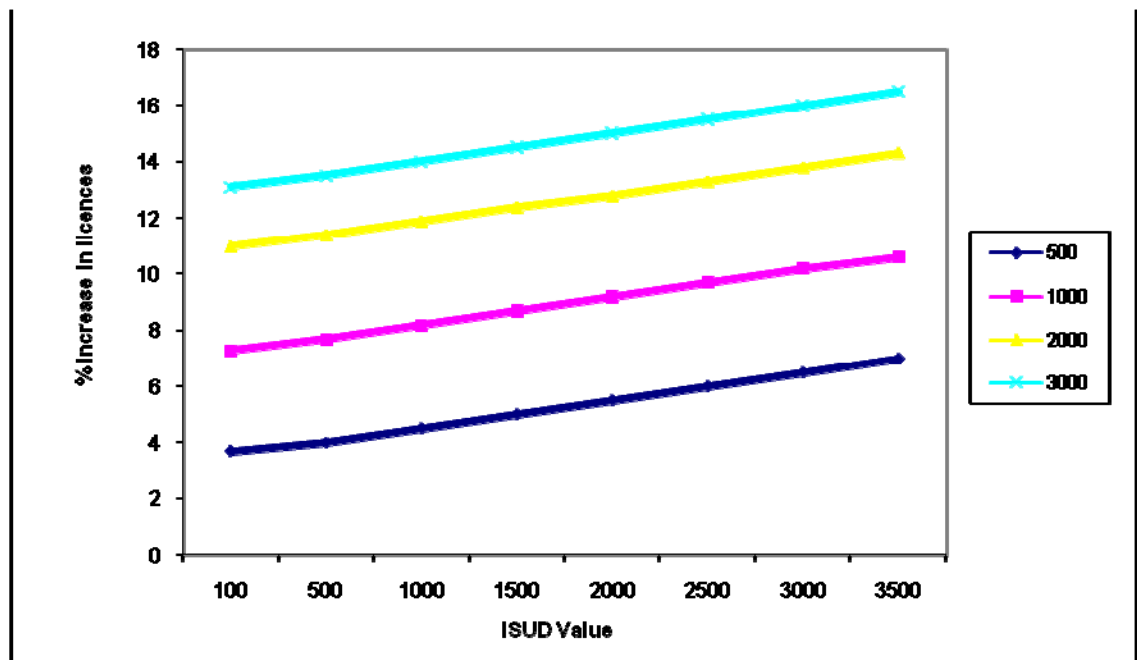
SUDSIM represents a synthesis of a queue simulation work that was previously used (1989 to 2002) to predict the alleviation of significant unmet demand and the ISUD factor described above (hence the term SUDSIM). The benefit of this approach is that it provides a direct relationship between the scale of the ISUD factor and the number of new taxi 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 taxis already licensed by the licensing Authority; and
- the size of the SUD factor.

The main implications of the model are illustrated in Figure 5.1 below. The figure shows that the percentage increase in a taxi fleet required to eliminate significant unmet demand is positively related to the population per taxi (PPT) and the value of the ISUD factor over the expected range of these two variables.

Figure 5-1: Forecast Increase in Taxi Fleet Size as a Function of Population Per Taxi (PPT) and the ISUD Value



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

$$\text{New Licences} = \text{SUDSIM} \times \text{Latent Demand Factor}$$

Where:

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

5.6 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 taxis 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 taxis and have therefore been excluded from consideration.

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

6 Evidence of Patent Unmet Demand – Stance Observation Results

6.1 Introduction

This section of the report highlights the results of the stance observation survey. The stance observation programme covered a period of 300 hours during February and March 2013. Some 42,228 passengers and 27,697 cab departures were recorded. A summary of the stance 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; and
- The Effective Supply of Vehicles – this indicates the proportion of the fleet that was off the road during the survey.

6.2 The Balance of Supply and Demand

The results of the analysis are presented in Table 6.1 below. The predominant market state is one of excess supply. Excess supply (queues of cabs) was experienced during 52% of the hours observed while excess demand (queues of passengers) was experienced 6% of the hours observed. Conditions are favourable to customers at all times of day with the most favourable time being the weekday and weekday night periods. The hours where excess demand was observed have decreased since the previous study from 20% to 6%.

Table 6.1
observed)

The Balance of Supply and Demand in the Edinburgh Stance-Based Taxi Market (Percentage of hours

Period		Excess Demand (Maximum Passenger Queue ≥ 3)	Equilibrium	Excess Supply (Minimum Cab Queue ≥ 3)
Weekday	Day	4	32	64
	Night	6	45	54
Weekend	Day	0	45	55
	Night	21	40	38
Sunday	Day	2	57	40
Total 2013		6	42	52
Total 2008/2009		20	51	28

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

6.3 Average Delays and Total Demand

The following estimates of average delays and throughput were produced for each stance in Edinburgh (Table 6.2).

The survey suggests some 42,228 passenger departures occur per week from stances in Edinburgh involving some 27,697 cab departures. The taxi trade is concentrated at the stance at Waverley Station accounting for 27.5% of the total passenger departures. On average cabs wait 12.07 minutes for a passenger. On average passengers wait 0.32 minutes for a cab.

The average length of time passengers wait at the stances has reduced since the previous study despite passenger demand increasing.

Table 6.2
seconds)

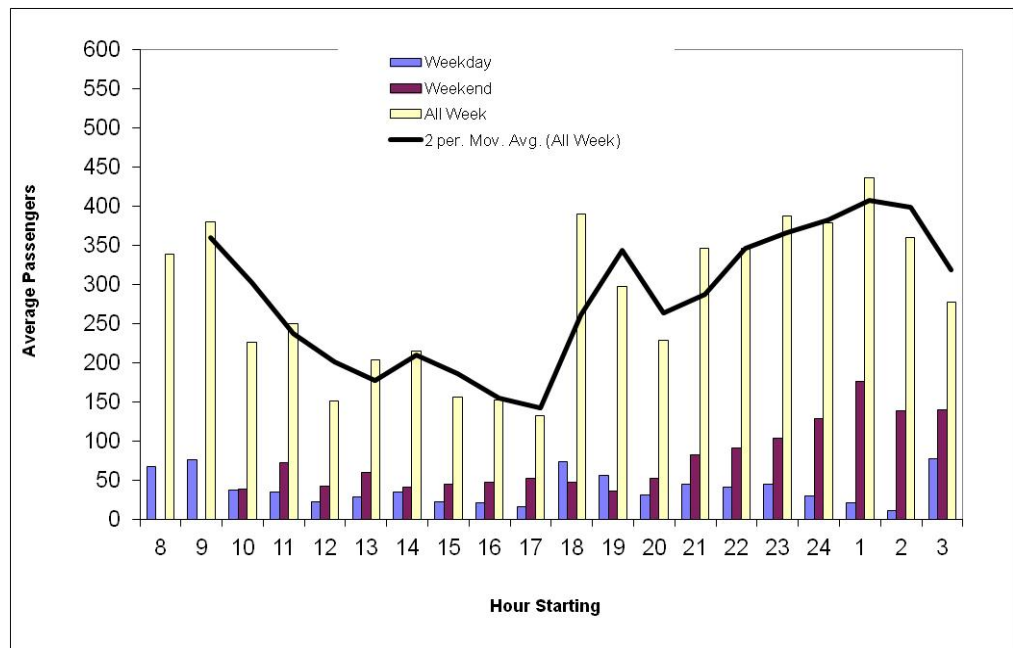
Average Delays and Total Demand (Delays in Minutes i.e. 0.22 minutes is 13.2

Stance	Passenger Departures	Cab Departures	Average Passenger Delay in minutes	Average Cab Delay in minutes
Waverley Bridge	4,037	2,406	0.51	18.56
Queensferry Street	1,315	825	0.06	11.11
High Street	5,298	3,270	0.50	12.63
Rutland Street	1,926	1,259	0.01	17.00
Leith Walk	5,414	3,216	0.11	10.04
Wester Hailes	758	542	0.02	18.66
Waverley Station	11,605	8,294	0.46	6.91
Cameron Toll	1,329	1,340	0.00	18.28
Airport	8,367	4,846	0.25	12.74
Little France	1,129	938	0.40	15.29
Hannover Street	1,051	761	0.00	22.94
TOTAL 2013	42,228	27,697	0.32	12.07
TOTAL 2008/2009	37,518	23,411	1.27	12.64

6.4 The Delay / Demand Profile

Figure 6.1 provides a graphical illustration of passenger demand for the Monday to Sunday period between the hours of 07:00 and 04:00.

Figure 6.1 Passenger Demand by Time of Day in 2013 (Monday to Sunday)



The profile of demand shows a number of small peaks in demand at 09:00, 18:00, and late at night at 01:00. We therefore conclude that this is NOT a 'highly peaked' demand profile. This has implications for the interpretation of the results (see Chapter 11 below).

Figure 6.2 Passenger Delay by Time of Day in 2012 (Monday to Sunday)

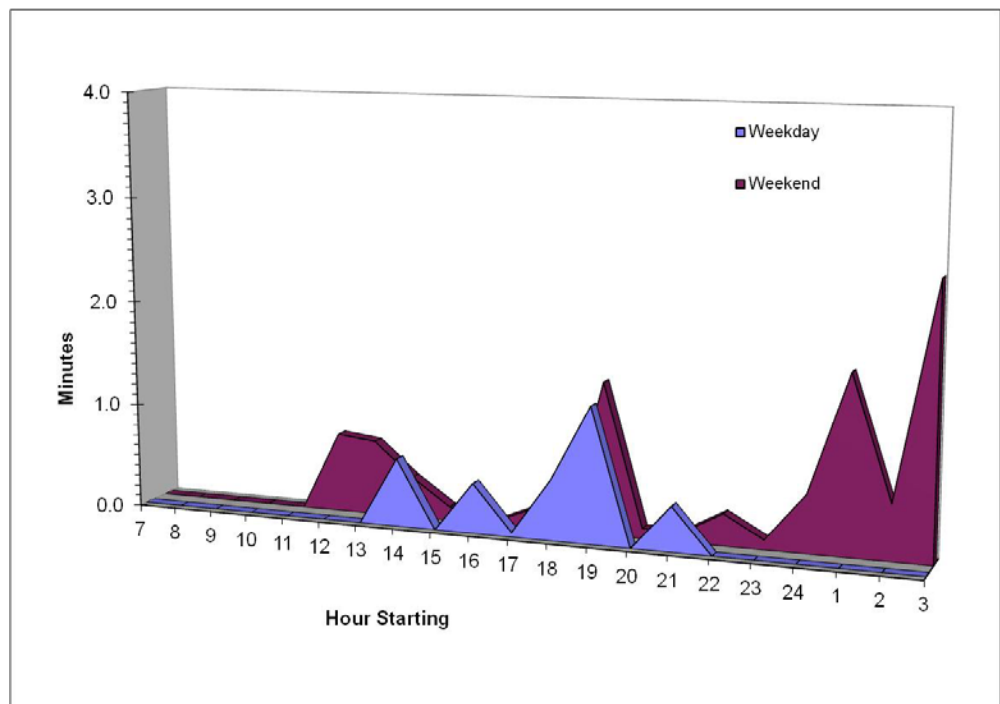


Figure 6.2 provides an illustration of passenger delay by the time of day for the weekday and weekend periods. It shows periods of delay on weekday afternoons and evenings. There is also some delay for a more extended period of time at

weekends, from 11:00 to 03:00, peaking between 11:00 - 15:00, 18:00 – 20:00 and 00:00 to 03:00.

6.5 The General Incidence of Passenger Delay

The stance observation data can be used to provide a simple assessment of the likelihood of passengers encountering delay at stances. The results are presented in Table 6.3 below.

Table 6.3 General Incidence of Passenger Delay (percentage of Passengers travelling in hours where delay exceeds one minute)

Year	Delay > 0	Delay > 1 minute	Delay > 5 minutes
2013	5.66	2.73	0.17
2008/2009	12.27	7.35	2.60

In 2013 2.73% passengers are likely to experience more than a minute of delay. It is this percentage that is used within the ISUD as the ‘Generality of Passenger Delay’. These figures have significantly reduced since the previous study.

6.6 The Effective Supply of Vehicles

Observers were required to record the taxi licence plate number of vehicles departing from stances. In this way we are able to ascertain the proportion of the fleet that was operating during the survey.

During the daytime period (0700 to 1800) some 812 (61.7%) of the taxi fleet were observed at least once during the period of the study. During the evening/night-time period (1800 to 0700) some 789 (60.0%) of the taxi fleet were also observed at least once during the stance observations. In total 81.2% of the trade was observed at least once.

6.7 Comparing the results for Edinburgh with those of other unmet demand studies

Comparable statistics are available from 64 local authorities that Halcrow have recently conducted studies in and these are listed in Table 6.4. The table highlights a number of key results including:

- population per taxi at the time of the study (column one);
- the proportion of stance 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 stance 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 stance demand is highly peaked (column eleven); and
- a numerical indicator of significant unmet demand.

6.8 Summary

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

- population per taxi is lower than the average overall value i.e. provision is better;
- the proportion of passengers, who travel in hours where some delay occurs, is 5.7%, which is much lower than the average (21%) for the districts analysed;
- overall average passenger delay at 0.32 minutes is lower than the average value (1 minute);
- overall average cab delay at 12.07 minutes is lower than the average for the districts shown (14 minutes); and
- the proportion of weekday daytime hours with excess demand conditions observed was 6%, lower than the average value.

Table 6.4 A Comparison of Edinburgh with Other Authorities Studied (values in italics make up ISUD)

District and Year of Survey	Population per Hackney	Proportion Waiting at Ranks	<i>Proportion Waiting >= 1 Min</i>	Proportion Waiting >= 5 Mins	<i>Average Passenger Delay</i>	Average Cab Delay	% Excess Demand	Demand Peaked, Yes=0.5 No=1	ISUD Indicator Value
Edinburgh 13	362	5.67	2.73	0.17	0.32	12.07	5	1	5
Edinburgh 08/09	370	12.27	7.35	2.6	1.27	12.64	11	1	129
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
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
York 11	1,118	14	5.96	0.77	0.93	8.25	9	1	59.1
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
York 08	1,146	31	11.5	6.74	3.21	5.42	31	0.5	645
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
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
KEY	* Derestricted Authorities		28						

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
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	1,280	20	10	3	1	14	6		
KEY	* Derestricted Authorities								

7 Seasonality

7.1 Introduction

City of Edinburgh Council recognises that demand for taxis is very seasonal. Demand for taxis fluctuates throughout the year. As part of this study City of Edinburgh Council wishes to identify the impact of events such as rugby internationals and Christmas on the supply and demand for taxis in the city.

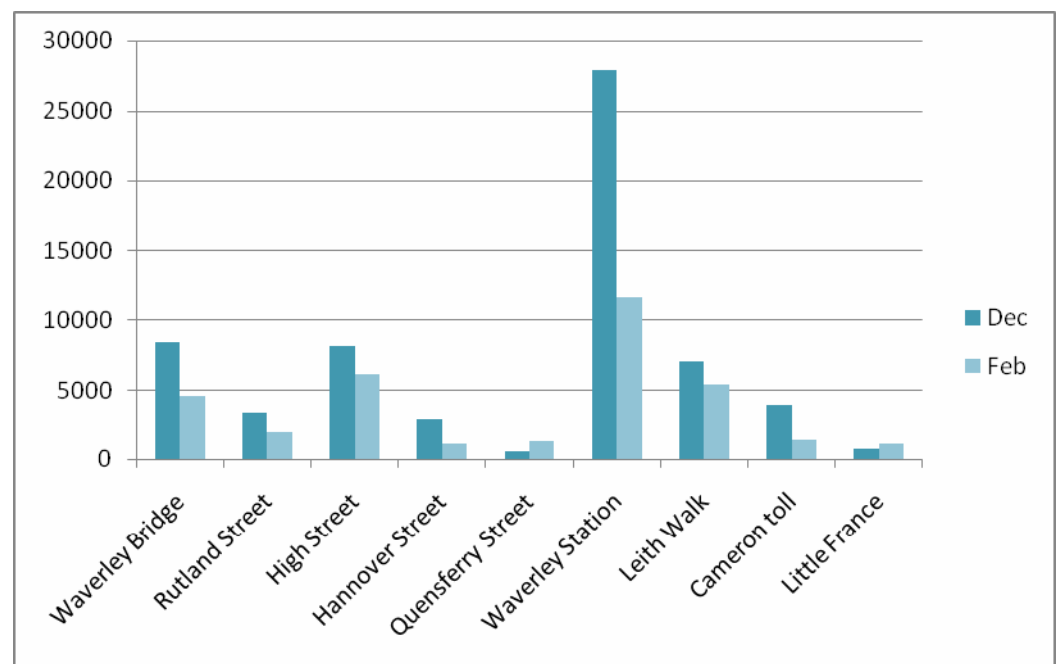
In order to determine seasonality a series of stance observations were undertaken in Edinburgh in December and during the period of Rugby Internationals in February. Selected stances were observed solely to identify the impact of events on the demand and supply of taxis. As unmet demand studies should be undertaken in typical conditions the observations do not form part of the unmet demand calculation.

7.2 Christmas

Stance observations were undertaken at stances across Edinburgh between Thursday 20th December and Sunday 23rd December 2012. All stances surveyed in February were observed with the exception of the Airport.

Figure 7.1 compares passenger demand at stances in December and February.

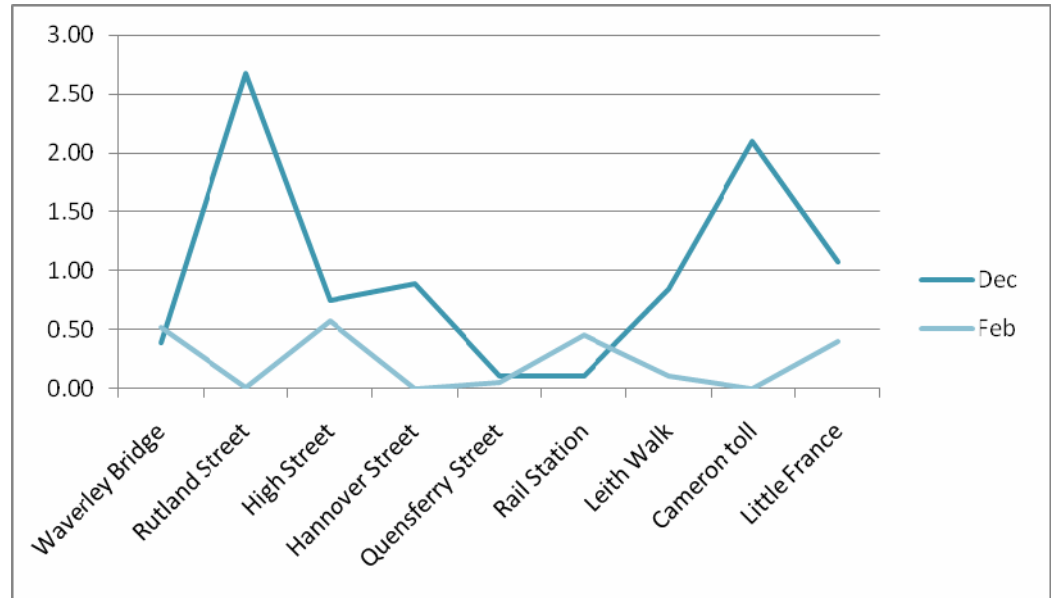
Figure 7.1 Passenger Demand



Passenger Demand was higher in December at all stances apart from Queensferry Street and Little France. Demand was 268% greater in December than February at Hannover St and 240% greater at Waverley Station.

Figure 7.2 compares passenger delay across both observation periods.

Figure 7.2 Passenger Delay



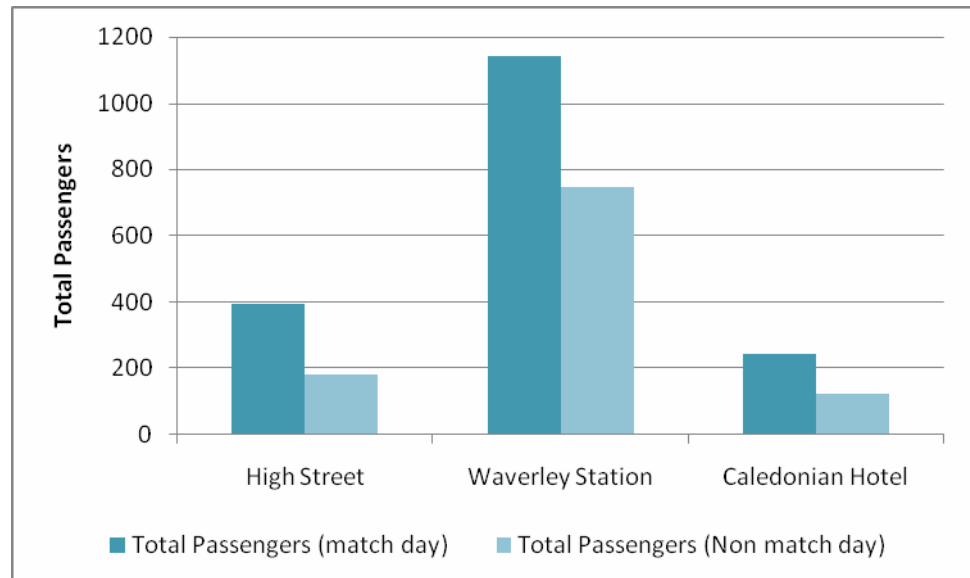
Average passenger delay was much greater in December compared to February for the majority of stances. Despite the higher numbers of passengers at the Rail Station in December, average passenger delay was lower. Average passenger delay peaked at 2.68 minutes at Rutland Street in December.

7.3 Rugby Internationals

During February and March 2013 Edinburgh was host to a number of international rugby matches as part of the Six Nations tournament at Murrayfield stadium. Due to the need to undertake an unmet demand study in typical periods stance observations on international days were not used in the unmet demand calculation. However in order to determine the impact of rugby internationals on taxi demand a number of observations were undertaken on Saturday 9th February. For comparison purposes observations were undertaken at High Street, Waverley Station and Rutland Street.

Figure 7.3 illustrates the variation in demand through passenger departures across these three stances on an average Saturday when compared with a match day Saturday.

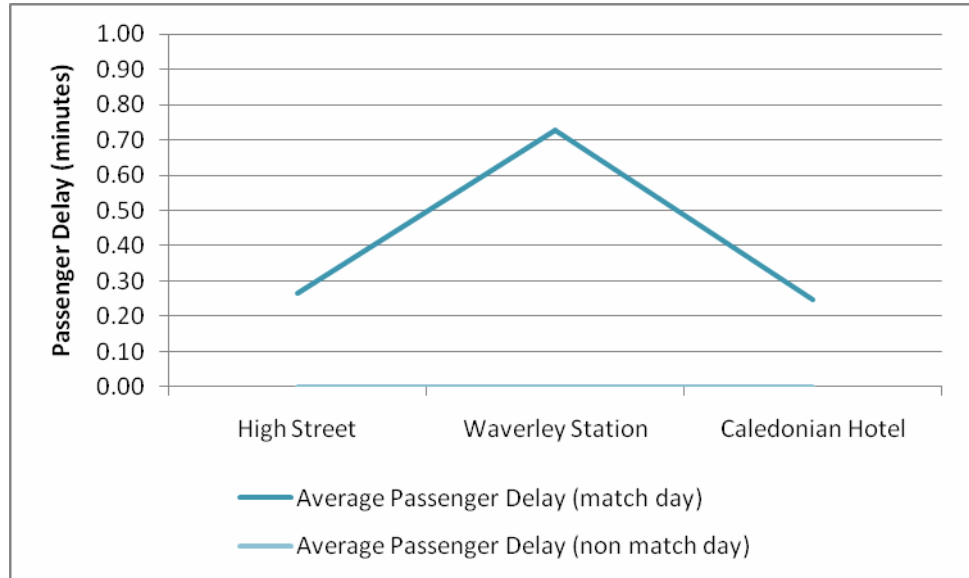
Figure 7.3 – Passenger Demand – Match Day Variation



The results in Figure 7.3 show that passenger demand at all three locations is significantly higher on a match day, compared to an average Saturday in the same period, with demand being highest at Waverley Station. At High Street and at the Caledonian hotel rank on Rutland St demand more than doubles on a match day, whilst at the station observations indicate there is an approximately 50% higher demand than an average Saturday.

Figure 7.4 illustrates the variations in passenger delay across the three stances on an average Saturday when compared with a match day Saturday. Again, the results show that the increase in demand has created an increase in passenger delay. Whilst on an average Saturday there is no passenger delay, even on a match day, this delay remains below 1 minute in all locations.

Figure 7.4 – Passenger Delay– Match Day Variation



8 Evidence of Suppressed Demand – Public Attitude Pedestrian Survey Results

8.1 Introduction

A public attitude survey was designed with the aim of collecting information regarding opinions on the taxi market in Edinburgh. In particular, the survey allowed an assessment of flagdown, telephone and stance delays, the satisfaction with delays and general use information.

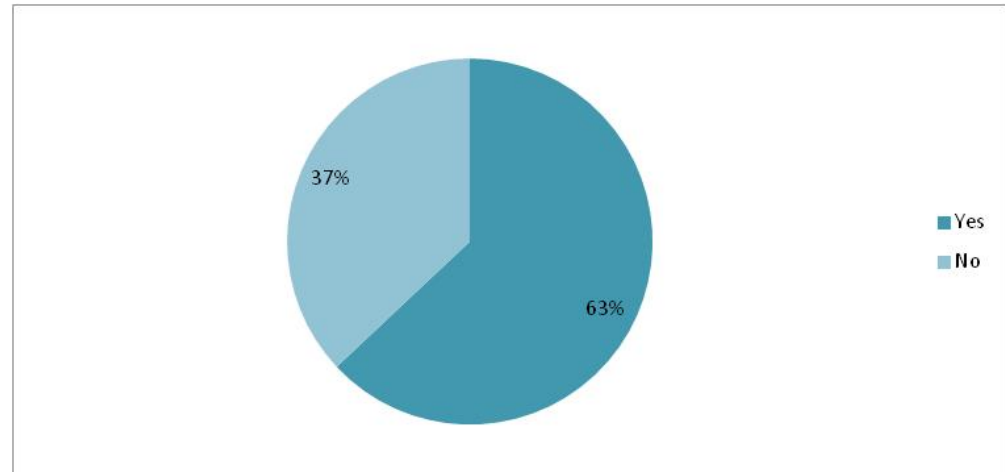
Some 913 on-street and telephone public attitude surveys were carried out in February and March 2013. The surveys were conducted across a range of locations within the Edinburgh licensing area. It should be noted that in the tables and figures that follow the totals do not always add up to the same amount. This 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.

A full breakdown and analysis of the results are provided in Appendix 2.

8.2 General Information

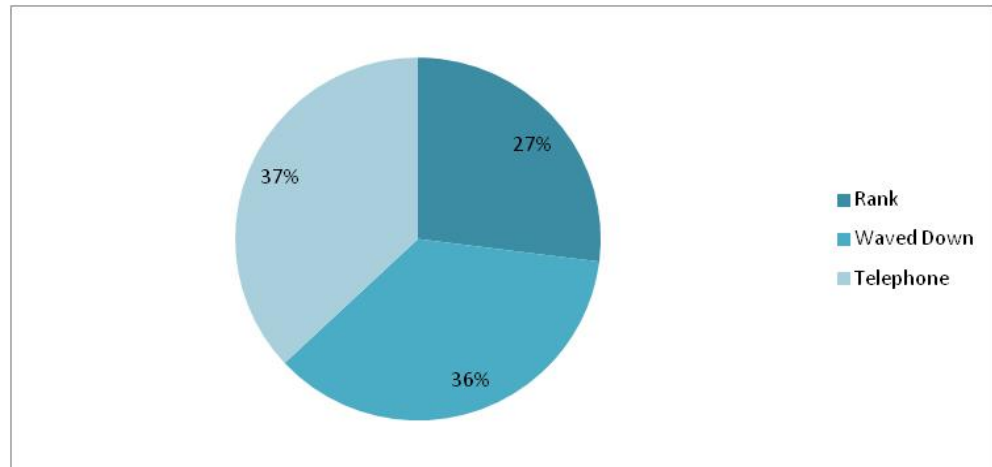
Respondents were each asked if they had made a journey by taxi in Edinburgh within the last three months. The survey found that 62.9% had used a taxi within this period. The results are displayed in Figure 8.1.

Figure 8.1 Have you made a trip by taxi (BLACK CAB) vehicle in the last three months?



Trip makers were asked how they obtained their taxi. Some 27.1% of trip makers stated that they hired their taxi at a stance. Some 37.3% of hirings were achieved by telephone, with 35.6% of trip makers obtaining a taxi by on-street flagdown. Figure 8.2 reveals the patterns of hire.

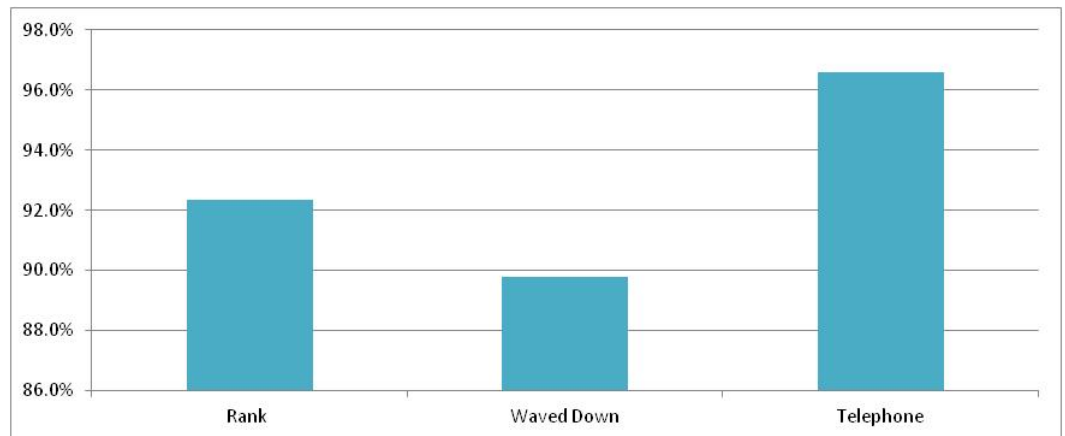
Figure 8.2 Method of hire for last trip



Respondents were asked if they were satisfied with the time taken and the promptness of the vehicles arrival. The majority of people were satisfied with the time taken to obtain their vehicle (93.8%).

Figure 8.3 shows that for each method of obtaining a vehicle, the majority were satisfied with the length of time they had to wait. Those obtaining their taxi by telephone provided the highest levels of satisfaction.

Figure 8.3 Satisfaction with delay on last trip by method of hire



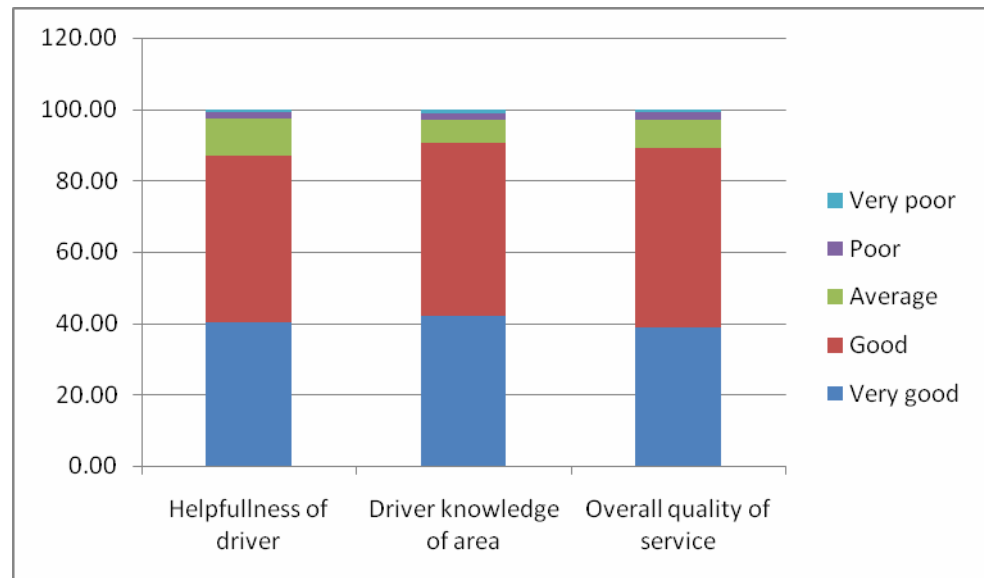
Respondents were asked to rate three elements from their last taxi journey on a scale from very poor to very good. The results in Figure 8.4 show that the respondents generally consider helpfulness of driver, driver knowledge of area and overall quality of service to be good or very good.

However those stating that quality was poor or very poor gave the following reasons:

- 'poor knowledge of the route'
- 'don't know directions'
- 'expensive'
- 'rude'

- 'didn't help with bags'

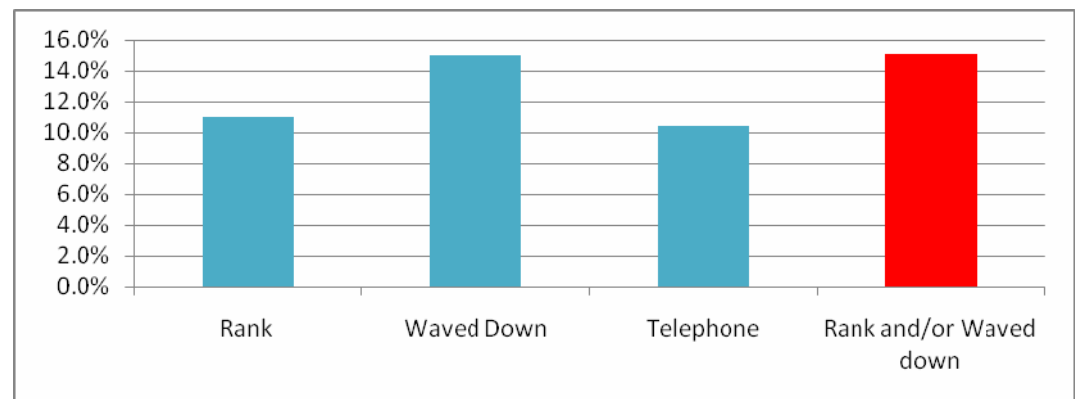
Figure 8.4 Rating of Last Journey



8.3 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 taxi at a stance, by flagging a taxi on the street or by prebooking a taxi by telephone in Edinburgh in the last three months. The results are documented in Figure 8.5.

Figure 8.5 Latent demand by method of hire – Given up trying to make a hiring?



As indicated in Figure 8.5, some 15.1% of respondents (132 respondents out of 875 answering this question) had given up waiting for a taxi at a stance and/or waving a taxi down in the last three months. This has implications for the interpretation of the results (see Chapter 11 below).

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 George Street, Leith Walk and Princes St.

8.4 Improvements

Respondents were asked whether they felt that taxi services in Edinburgh could be improved. Some 46.7% of respondents considered that taxi services could be improved.

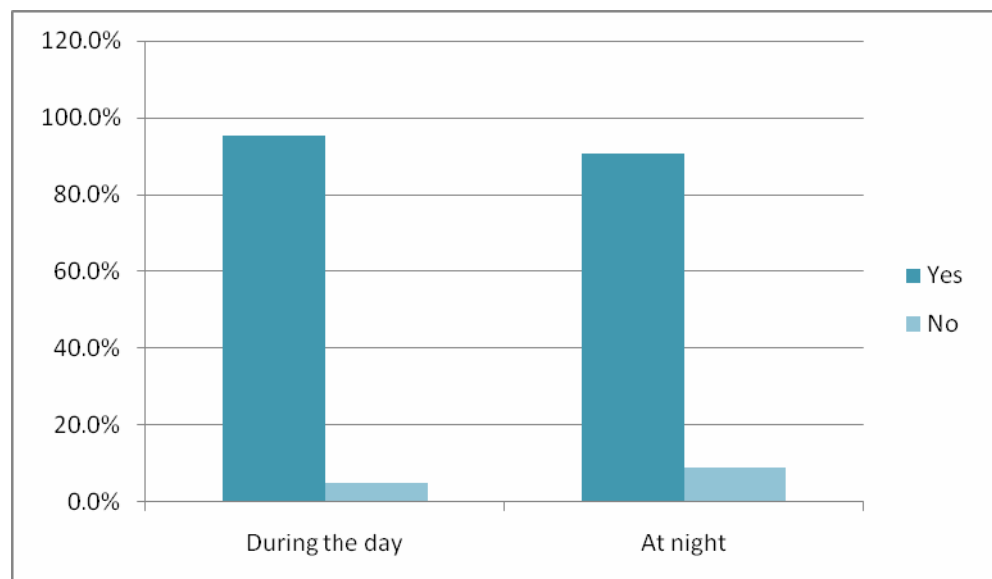
Of those who felt improvements were required the following were the most popular responses:

- Better drivers;
- Better knowledge of the local area;
- Cheaper fares;
- Drivers to be more polite and friendlier;
- Introduction of flat fare tariffs.

8.5 Safety

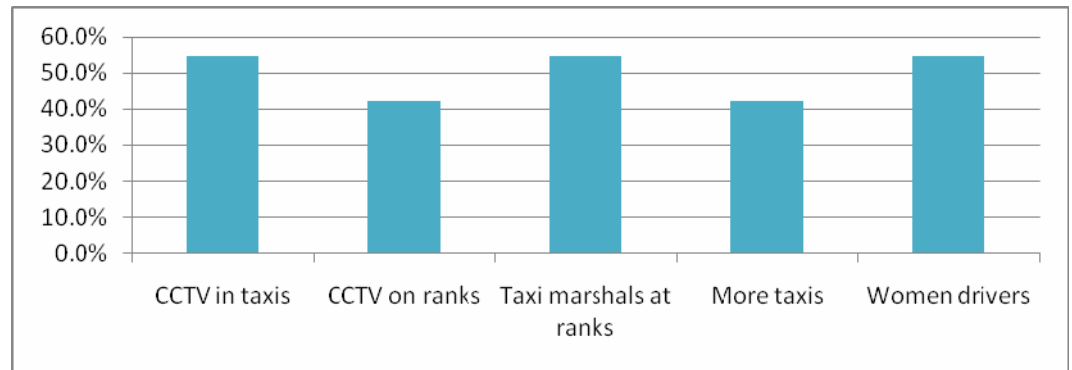
Respondents were asked whether they felt safe when using taxis in Edinburgh. The majority of respondents felt safe using them during the day (95.5%) and at night (90.5%) in Edinburgh.

Figure 8.6 Do you feel safe using taxis in Edinburgh?



Those respondents who commented that they did not feel safe all or some of the time were given a series of options and asked if any of them would improve their feeling of safety. The results show that the most popular suggestions were CCTV in taxis, taxi marshals at stances and women drivers.

Figure 8.7 What could be done to improve your safety and security when using taxis in Edinburgh?



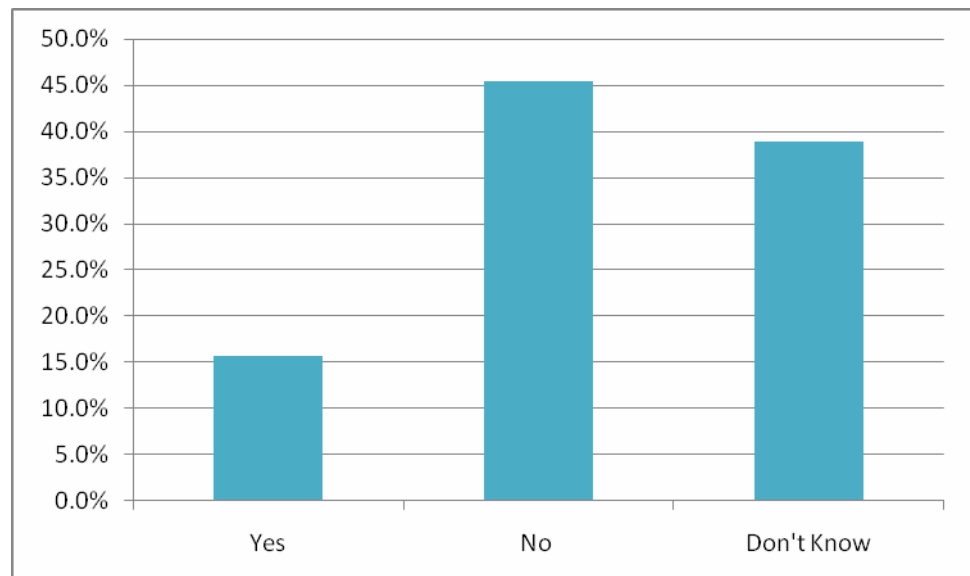
8.6 Stances

Respondents were asked if there were any locations in Edinburgh where new stances were needed. A total of 45.4% said that no new stances were needed in Edinburgh whilst 38.9% did not know.

Respondents who stated they would like to see a new stance (15.7%) were subsequently asked to provide a location. The most common locations included;

- Princes Street;
- West End;
- George Street;
- Dalry.

Figure 8.8 Are there any locations where you would like to see anew stance in Edinburgh?



8.7 Summary

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

- Some 27.1% of hiring's are from a stance;

- High levels of satisfaction with delay on last trip (93.8%) – telephone providing the highest levels;
- Some 15% of people had given up trying to obtain a taxi at a stance or by flagdown;
- Some 15.7% of people felt that new stances were needed in Edinburgh.

9 Public Consultation – Disability Groups

9.1 Introduction

In order to measure satisfaction with the taxi service for people with a disability the public attitude survey was modified for self completion and circulated to disability groups via ECAS.

Some ten surveys were returned.

9.2 General Information

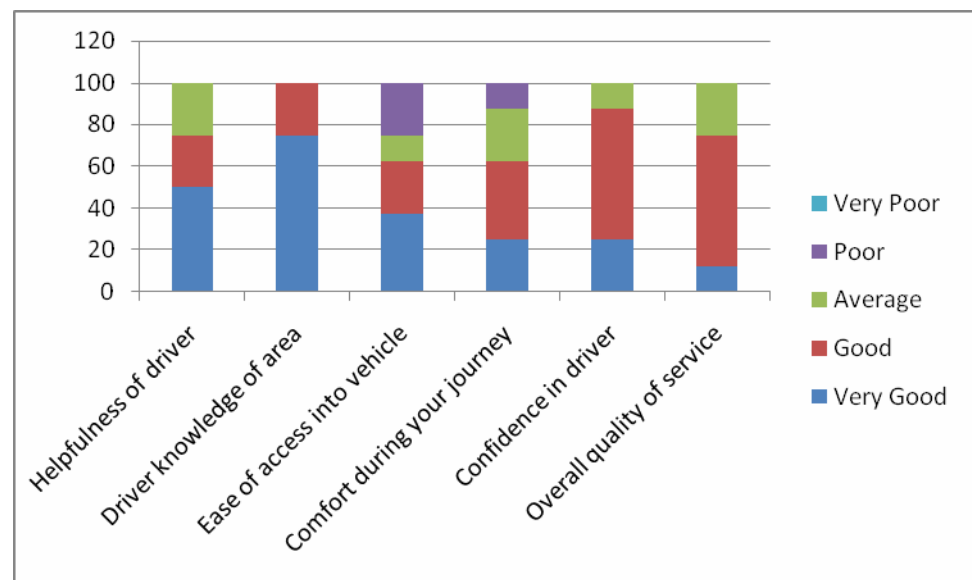
Respondents were each asked if they had made a journey by taxi in Edinburgh within the last three months. The survey found that 80% (8 respondents) had used a taxi within this period.

Trip makers were asked how they obtained their taxi. All trip makers had prebooked their journey via telephone.

Respondents were asked if they were satisfied with the time taken and the promptness of the vehicles arrival. The majority of people were satisfied with the time taken to obtain their vehicle (90%). One person was not satisfied with the length of time they had to wait because they felt that waiting 30 minutes was too long.

Respondents were asked to rate a number of elements from their last taxi journey on a scale from very poor to very good. The results in Figure 9.1 show that the respondents generally rated the experience to be good or very good.

Figure 9.1 Rating of Last Journey



Firstly, information on the helpfulness of the driver was asked for. This ranged from very good (50% of respondents giving this rating) to average (25% of respondents giving this rating). The remaining 25% rated the helpfulness of their driver good. Notably, no respondents gave negative feedback on this factor.

The second factor assessed was driver knowledge of the area. All responses were either very good or good. Some 75% of respondents rated their drivers knowledge of the area as very good, the remaining 25% noting that it was good.

Thirdly, the ease of access into the vehicle was assessed. Overall, this was rated lower than the previous two factors. Although over a third (37.5%) of respondents said it was very good, 25% said that it was poor. The remaining 37.5% rated the service either good or average.

The comfort during the journey was also asked to be rated by respondents. There is a fairly even split in the responses received, the most popular being good which received 37.5%. Very good and average each received 25% while poor received 12.5% of the ratings.

How confident the passenger felt in their driver was another factor which was investigated. The majority, 62.5%, of respondents said that they felt this was good while the remaining 37.5% were split between very good and average ratings.

The final factor assessed was the overall quality of the service which the passenger received. The majority of passengers, 62.5%, rated this as good. Some 12.5% of respondents went further, rating it as very good while the remaining 25% rated the service as average.

Respondents were then asked to elaborate on anything which they had rated as poor. Some reasons for these low ratings were cited as the quality of the roads being poor and this having a knock on effect on their journey as well as a lack of space making a respondent feel 'cramped when inside a taxi'. A respondent also commented that it was difficult to access the taxi in their manual wheelchair.

9.3 Attempted method of hire

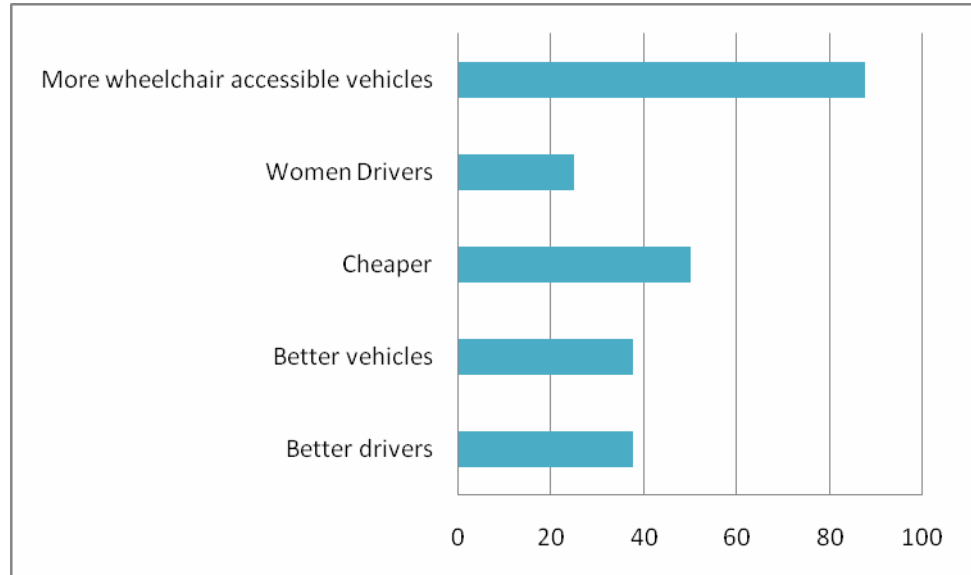
In order to measure demand suppression, respondents were asked to identify whether or not they had given up waiting for a taxi at a stance, by flagging a taxi on the street or by prebooking a taxi by telephone in Edinburgh in the last three months. A third of respondents said that they had given up trying to obtain a taxi by telephone.

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 George Street, Leith Walk and Princes St .

9.4 Improvements

Respondents were asked whether taxi services in Edinburgh could be improved. Some 80% of respondents felt that they could be improved. Figure 9.2 details how this could be achieved. Other suggestions included: not having to travel backwards and improving taxi design.

Figure 9.2 Suggested improvements



9.5 Safety

Respondents were asked whether they felt safe when using taxis in Edinburgh. All respondents felt safe using them during the day. However this dropped to 88% at night.

Those respondents who commented that they did not feel safe all or some of the time were given a series of options and asked if any of them would improve their feeling of safety. Taxi marshals and women taxi drivers were the two options which respondents felt would help them feel safer when travelling by taxi at night.

10 Consultation

10.1 Introduction

Guidelines issued by the Scottish Government 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 Edinburgh, face to face meetings and written consultation was undertaken.

10.2 Direct (Face to Face) Consultation

A number of stakeholders were invited to attend a series of focus groups. This assured the Scottish Government guidelines were fulfilled and all relevant organisations and bodies were provided with an opportunity to comment.

A summary of the responses received are provided below.

Disability Representatives

The representatives noted that they considered the number of taxis to be sufficient in Edinburgh; however they would like to see a greater proportion of larger vehicles i.e. Peugeot E7 and Mercedes M8. It was noted that pre booking a vehicle wasn't a guarantee of obtaining a vehicle as there could sometimes be issues with obtaining these larger vehicles. Some of the newer vehicles grab rails were located in the wrong place making it very difficult for people with limited mobility.

It was considered essential that all drivers should be disability awareness trained. Many drivers did not know how to use their restraints or ramps. Anecdotal evidence was provided of a driver moving from the front of the queue to the back to avoid a wheelchair fare at Waverley Station.

One of the attendees noted that on occasion pre booked taxis had been cancelled when they discovered it was a wheelchair fare.

There was confusion as to when the driver should put on the meter – on occasion the meter had been running prior to picking up a customer. The majority of drivers also started the meter prior to loading a wheelchair.

It was suggested that the taxi, user, council forum be restarted as this was very useful for dealing with numerous issues.

In terms of vehicle quality some people found the TX vehicles to be too small.

People with assistance dogs complained that the surface in many vehicles was too slippery for the dog and they preferred to use saloon vehicles.

The attendees wished to maintain the 100% wheelchair accessible vehicle policy in Edinburgh.

Police

Attendees at this group considered that there was a perceived issue with drivers working at night time. It was noted that there were very limited occasions of violence against drivers; however the threat of this may have put people off working at night.

It was felt that there was a shortage of vehicles at 3- 4am but this was not felt to be caused by the limitation policy.

With regard to CCTV it was noted that the trade wanted to see it introduced but that they did not want to pay for it. It was suggested that introducing CCTV would perhaps encourage drivers to work at night.

It was considered that there were not sufficient stances in Edinburgh as there was over ranking on a number of key stances.

CEC Transport Planning

The representative considered that taxis were an important part of the public transport mix in Edinburgh. Taxis in Edinburgh enabled people to facilitate a car free lifestyle which helps to reduce congestion in the city.

It was suggested that a quality taxi fleet should be one that is easily identifiable through a livery. This would help the public to differentiate between taxis and private hire vehicles.

Private Hire Association

The association felt that there were insufficient vehicles at peak times such as Hogmanay, the Festival and Rugby Internationals. It was considered that there was an issue with drivers working at night which may be down to safety concerns or simply the hours drivers choose to work.

It was suggested that driver training could be improved – the introduction of a driving ability test may be required.

It was felt that the current taxi and private hire fleet was very high quality but that there should be an approved list of vehicles that may be licensed as a private hire.

Taxi Trade Representatives

The representatives considered it to be fundamental to maintain the numerical limit. This would provide stability to the trade. There was considered to be no times of the day when taxi availability was an issue. It was felt that demand had decreased due to the economic situation. Less people are socialising in Edinburgh, there is less

corporate entertaining and therefore less people are using taxis. Night buses were also considered to be having an effect on the taxi trade.

The trade had mixed views in relation to vehicle type. Some wished to see a wider range of vehicles licensed but others felt the current range was adequate.

Driver quality was considered to be very high but standards needed to be raised in the private hire trade.

The trade considered the current training requirements to be poor especially the course operated by Telford College. It was noted that standards of dress were improving but the dress code required to be enforced more stringently.

It was felt that there was insufficient stance space in Edinburgh. Current stances were not considered to be long enough and there was little support in policing the stances.

The trade also wanted to have a greater dialogue with the Council – they were unhappy that the liaison committee had not been convened since February 2012 and wanted to see this reinstated.

It was noted that there were isolated safety incidents involving drivers but not felt to be any issue with drivers working at night. It was felt that CCTV should be looked at being introduced in Edinburgh but only if the authority were to pay for it.

The trade suggested that it would be beneficial if there was a sign showing where the head of the stance was – this would avoid any conflict at the stances.

Community Safety

The officers felt that the current limitation policy was not an issue; however as you move away from the city centre availability could be an issue in the early hours.

Driver behaviour was considered to be an issue. It was felt that some drivers had complete disregard for traffic regulations – this was a problem on Waverley Bridge and the High street.

It was suggested that drivers would benefit from attending a customer care focussed course where they looked at defensive driving, customer care and how to be a professional driver.

In terms of vehicle quality the fleet was considered to be well maintained and of a high quality.

It was felt that there needed to be something done to encourage drivers to work at night. Suggestions included increasing the number of marshalled stances, introduction of CCTV in vehicles and better media promotion.

It had been noted that there had been issues of taxis ranking in residential areas with their engines on – this was particularly an issue at Hillside Crescent.

It was suggested that more taxi marshals could be funded through imposing a charge on the taxi tariff when people travel from marshalled stances.

10.3 Indirect (Written) Consultation

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

In accordance with advice issued by the Scottish Government the following organisations were contacted;

- City of Edinburgh 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.

A summary of the responses received are provided below.

City of Edinburgh Council Policy and Planning

From a CEC transport policy perspective taxis are an important component of the public transport system, though not carrying significant volumes (Less than 1% of journeys to work in 2001 were by taxi) they facilitate car-free lifestyles.

CEC Transport recognises that the city, and especially the centre, has a 24 hour economy that relies on employees and customers, etc, based all over the city; and that other employment centres – South Gyle, the BioQuarter, the Waterfront, etc – will have transport requirements virtually around the clock.

The department wished to highlight the potential of minimising greenhouse gas emissions through vehicle specifications.

It was noted that drivers in Edinburgh are already required to undergo disability awareness training. However, there may be an issue whether this should be more extensive, and also whether drivers could be trained in safe and fuel efficient driving.

The department would also welcome cycle awareness training for taxi drivers - this is important as taxi drivers have access to bus lanes.

A wider range of vehicle types is now permitted than was the case some years ago. A side-effect is that taxi visibility has, arguably, reduced, and there may be a case for reintroducing a measure of uniformity in appearance

It was suggested that the issue is not whether taxis are 'wheelchair accessible', but whether all taxis can carry all types of wheelchair and user. Wheelchair manufacturers need to consider the practicality of some designs for use in public transport. Even so, there will always be some disabled (not just wheelchair) users whose needs cannot be met other than by a specialist vehicle which is not suitable for general public transport.

Lower fares could lead to higher taxi usage, which in could potentially help to reduce car dependency/ownership. On the other hand, higher use of taxis could lead to higher emission levels.

The Transport service recognises the importance of the night time culture and economy to Edinburgh, and also that many low-paid shift workers working anti-social hours may depend on taxis to commute between the home and workplace, and so night time fares should not be too much higher than day time fares.

It was considered that taxi marshals, especially at night or following major events, add value to the taxi service through increased security. There is normally good integration between rail and taxi at both Waverley and Haymarket, although tram and station improvement work are currently causing some disruption. CEC's new Local Transport Strategy intends to set out an objective to enhance Edinburgh's local stations, and this will include auditing the provision of cycle parking and taxi stances.

The department would also welcome greater integration between taxis and cycling. If taxis were equipped to take bicycles, e.g., by means of an attachable rack, this could enhance integration between cycling and taxi transport. The department considered the number of taxi stances to be sufficient. Whether they are as well-located as possible may need to be reviewed; and possibly elements of enforcement

Balmoral Hotel

The hotel noted that they were a considerable user of taxis for both guests and staff needs. Their supplier – Central Taxis were always able to meet the hotels requirements. In terms of the image of taxis in Edinburgh the hotel considered that some vehicles needed upgrading and cleaning. It was also considered that some drivers needed to improve their attitudes and that customer care training and social skills training should be introduced.

In terms of fares the hotel felt that there was little price resistance from guests.

Maggie Wright Associates

The respondent stated that she rarely had a problem obtaining a taxi in Edinburgh. She avoided using transit van conversions as she felt they were very awkward to get in and out of. She considered taxi fares to be too high and as a result had decreased her use of taxis.

11 Deriving the Significant Unmet Demand Index Value

11.1 Introduction

The data provided in the previous chapters can be summarised using Halcrow's ISUD factor described in Section 5.

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

Average Passenger Delay (Table 6.2)	0.32
Peak Factor (Figure 6.1)	1
General Incidence of Delay (Table 6.3)	2.73
Steady State Performance (Table 6.1)	4
Seasonality Factor (Section 5.4)	1.2
Latent Demand Factor (Section 8.3)	1.15
ISUD (0.32*1*2.73*4*1.2*1.15)	5

The cut off level for a significant unmet demand is 80. It is clear that Edinburgh is well below this cut off point as the ISUD is 5, indicating that there is **NO significant unmet demand**. This conclusion covers both patent and latent/suppressed demand.

12 Summary and Conclusions

12.1 Introduction

This study has been conducted by Halcrow on behalf of City of Edinburgh Council (CEC). The overall objective is to provide a full survey of demand for taxis in Edinburgh and to determine whether or not significant unmet demand for taxis exists in terms of section 10(3) of the Civic Government (Scotland) Act 1982. Specific objectives are:

- To measure demand, including latent demand, for taxi services to the general public in order to determine whether there is any significant unmet demand in Edinburgh city as a whole, or any part thereof;
- To determine public perception of the taxi service provided in Edinburgh;
- To determine perception of the taxi service provided in Edinburgh amongst wheelchair users and other people with disabilities and/or special needs;
- To comment on any areas within Edinburgh city where there may be concern over the provision of a taxi service;
- To comment on any peak demand times where there may be concern over the provision of a taxi service in Edinburgh city;
- To assess and comment on the impact of large events in the city e.g., Festival, Christmas and New Year Events and Rugby International Fixtures on the supply and demand for taxis in the city.
- To assess and comment on whether there are any features of the taxi market that have an impact (adverse or beneficial) on the city's economy.
- To assess and comment on whether there are any features of the taxi market that have an impact (adverse or beneficial) on the city's night time economy, safe dispersion of the city centre in the evenings and on crime and disorder generally.
- To assess and comment on the operations of the private hire car sector in the city and the impact its operations have on the taxi market in the city.

Objective 1: To measure demand, including latent demand, for any taxi services to the general public in order to determine whether there is any significant unmet demand in Edinburgh city as a whole, or any part thereof.

The 2013 study has identified that there is NO evidence of significant unmet demand for taxis in Edinburgh. This conclusion is based on an assessment of the implications of case law that has emerged since 2000, and the results of Halcrow's analysis.

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

- continue to limit the number of vehicles at 1,316;
- issue any number of additional plates as it sees fit, either in one allocation or a series of allocations; or
- remove the limit on the number of vehicles and allow a free entry policy.

The number of hours where excess demand was observed has reduced from 20% to 6%. This demonstrates that the increase of 50 licences since the last study has had a positive effect.

Objective 2: To determine public perception of the taxi service provided in Edinburgh.

Public perception of the taxi service in Edinburgh has been obtained through the undertaking of 913 face to face surveys. The key results from the survey highlight that

- Some 27.1% of hiring's are from a stance;
- High levels of satisfaction with delay on last trip (93.8%) – telephone providing the highest levels;
- Some 15% of people had given up trying to obtain a taxi at a stance or by flagdown;
- Some 15.7% of people felt that new stances were needed in Edinburgh.

Overall the public were generally satisfied with the taxi service in Edinburgh. Levels of satisfaction with delay were high. The majority of travellers felt safe using taxis during the day with a small proportion feeling unsafe.

Just under half of respondents (46.7%) consider that taxi services could be improved. These improvements related to better local knowledge, more polite drivers and cheaper taxi fares.

Objective 3: To determine perception of the taxi service provided in Edinburgh amongst wheelchair users and other people with disabilities and/or special needs

The views of wheelchair users and other people with disabilities/special needs were determined through a focus group and the distribution of postal surveys.

Overall respondents were satisfied with the current service. However comment was made as to the need to improve disability awareness training amongst the trade. Comment was also made as to the need to increase the number of larger vehicles in the taxi fleet to provide wheelchair users with a more comfortable journey.

Objective 4: To comment on any areas within Edinburgh city where there may be concern over the provision of a taxi service

Some 15% of respondents to the public consultation indicated that they had given up waiting for a taxi at a stance or by flag down in the last three months. The public consultation highlighted a number of areas across Edinburgh where people had given up waiting for a taxi. These included George St, Leith Walk and Princes St. However there was limited concern with availability of vehicles in general.

Objective 5: To comment on any peak demand times where there may be concern over the provision of a taxi service in Edinburgh city

Case law states that delays associated with peaks in demand are not significant. However guidance from the Scottish Government states that unmet demand at times of peaked demand should not be ignored. Local authorities should consider when the

peaks occur and who is being disadvantaged through restrictions on provision of taxi services.

The stance observations show that demand in Edinburgh exhibits a number of small peaks across the day and night time. When these peaks occur at night this correlates to peaks in passenger delay – however passenger delay is generally less than 3 minutes on average.

The rank observations demonstrated that 60% of the taxi fleet were observed working at night throughout the period of the study. Discussion with the Police and taxi trade has not identified significant safety issues with drivers working at night. Therefore we would suggest that the introduction of an additional night time tariff (midnight to 5am) may encourage a greater number of drivers to work at these times.

Objective 6: To assess and comment on the impact of large events in the city e.g., Festival, Christmas and New Year Events and Rugby International Fixtures on the supply and demand for taxis in the city

It is clear that both Christmas and rugby internationals have a significant impact on the supply and demand for taxis in the city. The stance observations have demonstrated that at these times of peaked demand passengers do have to wait longer for a taxi, however the average wait is still less than a minute. The main difference is the proportion of hours where excess demand is observed. Over the Christmas period this was significantly greater.

The trade are incentivised to work over the Christmas period through the use of Tariff 3 and 4 on the fare card. However given that this is an atypical period we would not recommend an increase in taxi licences given that demand is adequately met during a typical period.

Objective 7: To assess and comment on whether there are any features of the taxi market that have an impact (adverse or beneficial) on the city's economy

A report commissioned by the London Chamber of Commerce and Industry highlighted the significance of taxis to the city's economy². The same can be said for Edinburgh. Edinburgh taxis are often the first impression that a tourist or businessman gleans of the City. Feedback provided by the Balmoral hotel indicated that some taxi drivers could benefit from improved customer care training and that the quality of some vehicles would benefit from improvements.

We believe that taxi drivers should be ambassadors for a city as they are often the first point of contact. With this in mind we feel that there is scope to improve the training offered to drivers in order to improve the public's perception.

A number of business and tourist organisations were contacted during the study but failed to provide a response.

² London Chamber of Commerce and Industry – The London Taxi Trade

Objective 8: To assess and comment on whether there are any features of the taxi market that have an impact (adverse or beneficial) on the city's night time economy, safe dispersion of the city centre in the evenings and on crime and disorder generally

The Edinburgh Violence Reduction Program states that taxis provide a pivotal role in transporting people out of the city centre following a night out and in doing so reduce the likelihood of concentrations of people gathering which could potentially spark an increase in the likelihood of antisocial behaviour.

Taxi marshals operate at a number of ranks across the City with a view to creating a safe night time economy.

The public consultation highlighted that the majority of people feel safe using taxis both during the day and at night. Those who stated that they didn't feel safe suggested that CCTV in taxis, more women drivers and taxi marshals would help.

The stance observations identified that 60% of the taxi trade were observed working at night during the February observations. The remaining 40% may be working from a radio circuit or simply not working. Encouraging a greater number of drivers to serve the ranks at night is crucial to maintaining a safe night time economy.

Objective 9: To assess and comment on the operations of the private hire car sector in the city and the impact its operations have on the taxi market in the city

At present there are 841 private hire vehicles across the city. The market is thriving and numbers have continued to grow in recent years. Since 2009 the number of private hire vehicles has increased by 3.2% compared to an increase of 3.9% of taxis. At the height of the recession the number of private hire vehicles increased in some authorities as individuals who had perhaps been made redundant sought other means of income. This doesn't seem to have been the case in Edinburgh. The Civic Government Act does not permit the authority to numerically limit the number of private hire vehicles thereby allowing the market to dictate the appropriate level. Discussion with the private hire association indicated that there were no issues of availability for private hire vehicles. It was also suggested that there should be an approved list of vehicles that are suitable for licensing as private hire vehicles.

12.2 Recommendations

The 2013 study has identified that there is NO evidence of significant unmet demand for taxis in Edinburgh. This conclusion is based on an assessment of the implications of case law that has emerged since 2000, and the results of Halcrow's analysis.

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

- continue to limit the number of vehicles at 1,316;
- issue any number of additional plates as it sees fit, either in one allocation or a series of allocations; or
- remove the limit on the number of vehicles and allow a free entry policy.

In addition we would recommend the following:

- undertake a review of the current training course provided to drivers in Edinburgh with a view to improving the element of disability awareness and customer care;
- introduce a new late night tariff in Edinburgh in order to encourage more drivers to work after midnight in Edinburgh in order to contribute towards maintaining a safe night time economy.

Waverley Bridge Thursday 07/02/2013 1200-1800

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
0800-0900	32	26	0	61	0.00	11.73	0	4	0	0	1
0900-1000	30	18	0	64	0.00	17.78	0	4	0	0	1
1000-1100	24	16	0	83	0.00	25.94	0	6	0	0	1
1100-1200	38	23	0	78	0.00	16.96	0	5	0	0	1
1200-1300	32	16	0	38	0.00	11.88	0	7	0	0	1
1300-1400	35	22	0	96	0.00	21.82	0	7	0	0	1
1400-1500	34	28	0	102	0.00	18.21	6	7	0	1	0
1500-1600	25	15	0	97	0.00	32.33	0	7	0	0	1
Total	250	164	0	619	0.00	18.87			0	1	7

Waverley Bridge Wednesday 06/02/2013 2000-0300

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	11	9	0	118	0.00	65.56	0	8	0	0	1
2100-2200	18	16	0	124	0.00	38.75	0	9	0	0	1
2200-2300	34	24	0	114	0.00	23.75	0	8	0	0	1
2300-0000	16	10	0	114	0.00	57.00	0	8	0	0	1
0000-0100	13	7	0	111	0.00	79.29	0	4	0	0	1
0100-0200	2	2	0	14	0.00	35.00	0	0	0	1	0
0200-0300	5	3	0	16	0.00	26.67	0	1	0	1	0
Total	99	71	0	611	0.00	43.03			0	2	5

Waverley Bridge Saturday 16/02/2013 1200-1800

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
1200-1300	70	36	0	77	0.00	10.69	0	6	0	0	1
1300-1400	70	33	0	94	0.00	14.24	0	3	0	0	1
1400-1500	68	36	0	100	0.00	13.89	0	6	0	0	1
1500-1600	59	25	0	101	0.00	20.20	0	7	0	0	1
1600-1700	69	32	0	85	0.00	13.28	0	5	0	0	1
1700-1800	59	25	0	87	0.00	17.40	0	7	0	0	1
Total	395	187	0	544	0.00	14.55			0	0	6

Waverley Bridge Saturday 09/02/2013 2000-0300

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	50	27	0	93	0.00	17.22	0	6	0	0	1
2100-2200	42	22	0	88	0.00	20.00	0	5	0	0	1
2200-2300	62	25	0	81	0.00	16.20	0	5	0	0	1
2300-0000	52	32	0	42	0.00	6.56	0	1	0	1	0
0000-0100	77	40	17	7	1.10	0.88	9	0	1	0	0
0100-0200	70	36	142	0	10.14	0.00	20	0	1	0	0
0200-0300	57	38	0	12	0.00	1.58	0	0	0	1	0
Total	410	220	159	323	1.94	7.34			2	2	3

Waverley Bridge Sunday 10/02/2013 1400-1800

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
1400-1500	51	30	0	78	0.00	13.00	0	4	0	0	1
1500-1600	61	38	0	41	0.00	5.39	0	3	0	0	1
1600-1700	38	18	0	92	0.00	25.56	0	6	0	0	1
1700-1800	61	35	0	83	0.00	11.86	0	4	0	0	1
Total	211	121	0	294	0.00	12.15			0	0	4

Queensferry St Tuesday 05/02/2013 1900-0300

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
1900-2000	16	17	0	60	0.00	17.65	0	1	0	1	0
2000-2100	26	19	0	57	0.00	15.00	0	1	0	1	0
2100-2200	20	10	0	30	0.00	15.00	0	2	0	1	0
2200-2300	10	13	0	40	0.00	15.38	0	1	0	1	0
2300-0000	21	20	0	57	0.00	14.25	0	3	0	0	1
0000-0100	8	8	0	42	0.00	26.25	0	42	0	0	1
0100-0200	2	6	0	21	0.00	17.50	0	0	0	1	0
Total	103	93	0	307	0.00	16.51			0	5	2

Queensferry St Saturday 16/02/2013 2000-0400

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	50	27	0	32	0.00	5.93	0	0	0	1	0
2100-2200	72	33	0	26	0.00	3.94	0	0	0	1	0
2200-2300	66	33	0	23	0.00	3.48	0	0	0	1	0
2300-0000	91	19	5	22	0.27	5.79	5	0	1	0	0
0000-0100	46	24	2	10	0.22	2.08	1	0	0	1	0
0100-0200	16	14	0	0	0.00	0.00	0	0	0	1	0
0200-0300	0	0	0	0	0.00	0.00	0	0	0	1	0
0300-0400	8	4	0	0	0.00	0.00	0	0	0	1	0
Total	349	154	7	113	0.10	3.67			1	7	0

High Street Thursday 07/02/2013 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	18	13	0	76	0.00	29.23	0	5	0	0	1
1100-1200	13	14	0	76	0.00	27.14	0	4	0	0	1
1200-1300	14	16	0	73	0.00	22.81	0	3	0	0	1
1300-1400	11	15	0	83	0.00	27.67	0	6	0	0	1
1400-1500	3	5	0	91	0.00	91.00	0	6	0	0	1
1500-1600	21	17	0	51	0.00	15.00	0	2	0	1	0
1600-1700	12	14	0	54	0.00	19.29	0	1	0	1	0
1700-1800	23	25	0	58	0.00	11.60	0	1	0	1	0
Total	115	119	0	562	0.00	23.61			0	3	5

High Street Tuesday 06/02/2013 1900-0300

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
1800-1900	35	28	0	81	0.00	14.46	0	4	0	0	1
1900-2000	37	28	0	72	0.00	12.86	0	1	0	1	0
2000-2100	16	15	0	96	0.00	32.00	0	8	0	0	1
2100-2200	10	10	0	96	0.00	48.00	0	8	0	0	1
2200-2300	48	28	0	94	0.00	16.79	0	7	0	0	1
2300-0000	88	47	0	91	0.00	9.68	0	7	0	0	1
0000-0100	82	52	0	90	0.00	8.65	0	7	0	0	1
0100-0200	66	41	0	93	0.00	11.34	0	7	0	0	1
Total	382	249	0	713	0.00	14.32			0	1	7

High Street Saturday 16/03/2013 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	8	11	0	50	0.00	22.73	0	3	0	0	1
1100-1200	17	13	0	48	0.00	18.46	0	3	0	0	1
1200-1300	26	18	0	23	0.00	6.39	0	0	0	1	0
1300-1400	28	18	0	15	0.00	4.17	0	0	0	1	0
1400-1500	28	16	0	24	0.00	7.50	0	0	0	1	0
1500-1600	27	14	0	33	0.00	11.79	0	1	0	1	0
1600-1700	30	17	0	39	0.00	11.47	0	1	0	1	0
1700-1800	16	9	0	25	0.00	13.89	0	0	0	1	0
Total	180	116	0	257	0.00	11.08			0	6	2

High Street Friday 08/02/2013 2000-0400

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	47	42	0	79	0.00	9.40	0	4	0	0	1
2100-2200	51	28	0	66	0.00	11.79	0	4	0	0	1
2200-2300	89	49	0	82	0.00	8.37	0	6	0	0	1
2300-0000	97	55	0	76	0.00	6.91	0	3	0	0	1
0000-0100	164	78	0	72	0.00	4.62	0	4	0	0	1
0100-0200	213	111	36	60	0.85	2.70	13	0	1	0	0
0200-0300	198	84	0	80	0.00	4.76	0	6	0	0	1
0300-0400	239	95	200	47	4.18	2.47	40	0	1	0	0
Total	1098	542	236	562	1.07	5.18			2	0	6

High Street Sunday 17/02/2013 1400-1800

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
1400-1500	24	13	0	42	0.00	16.15	0	3	0	0	1
1500-1600	40	17	0	37	0.00	10.88	0	2	0	1	0
1600-1700	28	14	0	37	0.00	13.21	0	2	0	1	0
1700-1800	23	14	0	33	0.00	11.79	0	2	0	1	0
Total	115	58	0	149	0.00	12.84			0	3	1

The Caledonian Wednesday 06/03/2013 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	10	6	0	68	0.00	56.67	0	4	0	0	1
1100-1200	9	10	0	63	0.00	31.50	0	4	0	0	1
1200-1300	10	6	0	63	0.00	52.50	0	2	0	1	0
1300-1400	12	7	0	61	0.00	43.57	0	0	0	1	0
1400-1500	11	9	0	65	0.00	36.11	0	4	0	0	1
1500-1600	19	14	0	48	0.00	17.14	0	2	0	1	0
1600-1700	15	12	0	24	0.00	10.00	0	0	0	1	0
1700-1800	10	10	1	0	0.50	0.00	0	0	0	1	0
Total	96	74	1	392	0.05	26.49			0	5	3

The Caledonian Tuesday 05/02/2013 1800-0200

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
1800-1900	16	14	0	22	0.00	7.86	0	1	0	1	0
1900-2000	23	18	0	17	0.00	4.72	0	0	0	1	0
2000-2100	12	8	0	20	0.00	12.50	0	1	0	1	0
2100-2200	4	4	0	22	0.00	27.50	0	1	0	1	0
2200-2300	12	10	0	40	0.00	20.00	0	2	0	1	0
2300-0000	25	14	0	43	0.00	15.36	0	2	0	1	0
0000-0100	7	6	0	17	0.00	14.17	0	2	0	1	0
0100-0200	20	11	0	40	0.00	18.18	0	2	0	1	0
Total	119	85	0	221	0.00	13.00			0	8	0

The Caledonian Saturday 16/02/2013 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	11	6	0	50	0.00	41.67	0	3	0	0	1
1100-1200	16	11	0	34	0.00	15.45	0	0	0	1	0
1200-1300	11	6	0	76	0.00	63.33	0	5	0	0	1
1300-1400	23	13	0	49	0.00	18.85	0	2	0	1	0
1400-1500	27	11	0	48	0.00	21.82	0	1	0	1	0
1500-1600	31	11	0	55	0.00	25.00	0	3	0	0	1
1600-1700	17	10	0	41	0.00	20.50	0	2	0	1	0
1700-1800	4	3	0	56	0.00	93.33	0	3	0	0	1
Total	140	71	0	409	0.00	28.80			0	4	4

The Caledonian Saturday 16/03/2013 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	18	11	0	36	0.00	16.36	0	0	0	1	0
2100-2200	35	18	0	33	0.00	9.17	0	1	0	1	0
2200-2300	40	20	0	11	0.00	2.75	0	0	0	1	0
2300-0000	25	15	0	27	0.00	9.00	0	1	0	1	0
Total	118	64	0	107	0.00	8.36			0	4	0

The Caledonian Sunday 03/03/2013 1400-1800

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
1400-1500	27	14	0	33	0.00	11.79	0	0	0	1	0
1500-1600	11	7	0	13	0.00	9.29	0	0	0	1	0
1600-1700	18	10	0	0	0.00	0.00	0	0	0	1	0
1700-1800	16	10	0	16	0.00	8.00	0	0	0	1	0
Total	72	41	0	62	0.00	7.56			0	4	0

Leith Walk Wednesday 06/02/2013 1200-1800

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
1200-1300	12	13	0	55	0.00	21.15	0	3	0	0	1
1300-1400	14	11	0	43	0.00	19.55	0	2	0	1	0
1400-1500	11	13	0	61	0.00	23.46	0	1	0	1	0
1500-1600	12	12	0	37	0.00	15.42	0	2	0	1	0
1600-1700	20	19	0	43	0.00	11.32	0	1	0	1	0
1700-1800	24	24	0	30	0.00	6.25	0	0	0	1	0
Total	93	92	0	269	0.00	14.62			0	5	1

Leith Walk Thursday 07/02/2013 2000-0400

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	45	27	0	84	0.00	15.56	0	5	0	0	1
2100-2200	42	28	0	103	0.00	18.39	0	8	0	0	1
2200-2300	43	22	0	86	0.00	19.55	0	6	0	0	1
2300-0000	73	37	0	79	0.00	10.68	0	2	0	1	0
0000-0100	40	25	0	87	0.00	17.40	0	5	0	0	1
0100-0200	14	8	0	48	0.00	30.00	0	3	0	0	1
0200-0300	18	10	0	46	0.00	23.00	0	3	0	0	1
0300-0400	78	72	0	26	0.00	1.81	0	0	0	1	0
Total	353	229	0	559	0.00	12.21			0	2	6

Leith Walk Saturday 23/02/2013 1200-1800

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
1200-1300	24	15	0	51	0.00	17.00	0	3	0	0	1
1300-1400	37	22	0	42	0.00	9.55	0	1	0	1	0
1400-1500	27	13	0	69	0.00	26.54	0	4	0	0	1
1500-1600	42	21	0	46	0.00	10.95	0	1	0	1	0
1600-1700	34	20	0	52	0.00	13.00	0	3	0	0	1
1700-1800	39	18	0	72	0.00	20.00	0	3	0	0	1
Total	203	109	0	332	0.00	15.23			0	2	4

Leith Walk Saturday 16/02/2013 2000-0400

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	93	42	0	99	0.00	11.79	0	6	0	0	1
2100-2200	98	42	0	89	0.00	10.60	0	5	0	0	1
2200-2300	172	81	31	60	0.90	3.70	10	0	1	0	0
2300-0000	177	81	0	56	0.00	3.46	0	0	0	1	0
0000-0100	236	98	24	18	0.51	0.92	8	0	1	0	0
0100-0200	184	99	0	39	0.00	1.97	0	2	0	1	0
0200-0300	48	24	0	62	0.00	12.92	0	3	0	0	1
0300-0400	91	38	0	0	0.00	0.00	0	0	0	1	0
Total	1099	505	55	423	0.25	4.19			2	3	3

Leith Walk Sunday 10/02/2013 1400-1800

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
1400-1500	28	17	0	51	0.00	15.00	0	2	0	1	0
1500-1600	67	28	0	39	0.00	6.96	0	0	0	1	0
1600-1700	24	15	0	58	0.00	19.33	0	3	0	0	1
1700-1800	37	27	0	63	0.00	11.67	0	3	0	0	1
Total	156	87	0	211	0.00	12.13			0	2	2

Wester Hailes Tuesday 05/03/2013 1200-1800

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
1200-1300	17	11	0	35	0.00	15.91	0	1	0	1	0
1300-1400	6	4	0	38	0.00	47.50	0	2	0	1	0
1400-1500	22	15	0	62	0.00	20.67	0	3	0	0	1
1500-1600	16	10	0	26	0.00	13.00	0	4	0	0	1
1600-1700	16	16	0	35	0.00	10.94	0	2	0	1	0
1700-1800	12	8	0	28	0.00	17.50	0	1	0	1	0
Total	89	64	0	224	0.00	17.50			0	4	2

Wester Hailes Saturday 16/02/2013 1200-1800

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
1200-1300	8	6	0	39	0.00	32.50	0	0	0	1	0
1300-1400	8	5	0	35	0.00	35.00	0	1	0	1	0
1400-1500	7	5	0	42	0.00	42.00	0	1	0	1	0
1500-1600	18	12	0	22	0.00	9.17	0	0	0	1	0
1600-1700	6	5	0	32	0.00	32.00	0	1	0	1	0
1700-1800	7	4	2	3	1.43	3.75	1	0	0	1	0
Total	54	37	2	173	0.19	23.38			0	6	0

Wester Hailes Sunday 17/02/2013 1200-1800

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
1200-1300	2	1	0	6	0.00	30.00	0	0	0	1	0
1300-1400	3	2	0	11	0.00	27.50	0	0	0	1	0
1400-1500	0	0	0	0	0.00	0.00	0	0	0	1	0
1500-1600	1	1	0	14	0.00	70.00	0	0	0	1	0
1600-1700	0	0	0	19	0.00	0.00	0	0	0	1	0
1700-1800	0	0	0	4	0.00	0.00	0	0	0	1	0
Total	6	4	0	54	0.00	67.50			0	6	0

Waverley Station Tuesday 05/03/2013 0800-1800

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
0800-0900	72	49	0	77	0.00	7.86	0	2	0	1	0
0900-1000	90	54	0	79	0.00	7.31	0	3	0	0	1
1000-1100	119	88	0	79	0.00	4.49	0	1	0	1	0
1100-1200	109	73	0	112	0.00	7.67	0	5	0	0	1
1200-1300	104	69	0	127	0.00	9.20	0	7	0	0	1
1300-1400	98	64	0	142	0.00	11.09	0	8	0	0	1
1400-1500	75	41	0	130	0.00	15.85	0	9	0	0	1
1500-1600	64	63	0	137	0.00	10.87	0	10	0	0	1
1700-1800	114	79	34	28	1.49	1.77	10	2	1	0	0
Total	845	580	34	911	0.20	7.85			1	2	6

Waverley Station Wednesday 20/02/2013 1800-2300

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
1800-1900	138	107	34	61	1.23	2.85	10	3	0	1	0
1900-2000	162	122	56	36	1.73	1.48	10	1	1	0	0
2000-2100	33	32	0	120	0.00	18.75	0	10	0	0	1
2100-2200	122	102	27	44	1.11	2.16	7	0	1	0	0
2200-2300	60	41	0	108	0.00	13.17	0	2	0	1	0
Total	515	404	117	369	1.14	4.57			2	2	1

Waverley Station Saturday 16/02/2013 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	47	18	0	111	0.00	30.83	0	6	0	0	1
1100-1200	100	59	0	2	0.00	0.17	0	2	0	1	0
1200-1300	145	67	0	84	0.00	6.27	0	3	0	0	1
1300-1400	95	45	0	120	0.00	13.33	0	7	0	0	1
1400-1500	116	62	0	118	0.00	9.52	0	6	0	0	1
1500-1600	82	42	0	6	0.00	0.71	0	6	0	0	1
1600-1700	97	45	0	111	0.00	12.33	0	6	0	0	1
1700-1800	64	36	0	6	0.00	0.83	0	6	0	0	1
Total	746	374	0	558	0.00	7.46			0	1	7

Waverley Station Friday 08/02/2013 2100-0000

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
2100-2200	150	122	11	149	0.37	6.11	0	0	0	1	0
2200-2300	53	53	0	208	0.00	19.62	0	8	0	0	1
2300-0000	121	87	0	129	0.00	7.41	0	4	0	0	1
Total	324	262	11	486	0.17	9.27			0	1	2

Waverley Station Sunday 17/02/2013 1400-1800

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
1400-1500	74	45	0	71	0.00	7.89	0	0	0	1	0
1500-1600	110	66	0	100	0.00	7.58	0	3	0	0	1
1600-1700	103	56	0	103	0.00	9.20	0	5	0	0	1
1700-1800	108	52	11	38	0.51	3.65	5	0	1	0	0
Total	395	219	11	312	0.14	7.12			1	1	2

Cameron Toll Wednesday 20/02/2013 1200-1800

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
1200-1300	26	18	0	81	0.00	22.50	0	6	0	0	1
1300-1400	14	10	0	84	0.00	42.00	0	6	0	0	1
1400-1500	23	13	0	88	0.00	33.85	0	7	0	0	1
1500-1600	17	11	0	91	0.00	41.36	0	7	0	0	1
1600-1700	25	76	0	77	0.00	5.07	0	4	0	0	1
1700-1800	22	12	0	76	0.00	31.67	0	5	0	0	1
Total	127	140	0	497	0.00	17.75			0	0	6

Cameron Toll Saturday 23/02/2013 1200-1800

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
1200-1300	16	14	0	83	0.00	29.64	0	6	0	0	1
1300-1400	26	18	0	77	0.00	21.39	0	5	0	0	1
1400-1500	26	20	0	78	0.00	19.50	0	6	0	0	1
1500-1600	29	21	0	81	0.00	19.29	0	5	0	0	1
1600-1700	40	26	0	65	0.00	12.50	0	4	0	0	1
1700-1800	18	15	0	72	0.00	24.00	0	4	0	0	1
Total	155	114	0	456	0.00	20.00			0	0	6

Cameron Toll Sunday 24/02/2013 1400-1800

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
1400-1500	6	8	0	70	0.00	43.75	0	5	0	0	1
1500-1600	20	16	0	66	0.00	20.63	0	3	0	0	1
1600-1700	24	16	0	32	0.00	10.00	0	0	0	1	0
1700-1800	14	13	0	49	0.00	18.85	0	1	0	1	0
Total	64	53	0	217	0.00	20.47			0	2	2

Airport Friday 15/03/2013 0800-1600

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
0800-0900	99	54	0	117	0.00	10.83	0	5	0	0	1
0900-1000	108	68	0	108	0.00	7.94	0	3	0	0	1
1000-1100	46	19	0	151	0.00	39.74	0	8	0	0	1
1100-1200	36	21	0	152	0.00	36.19	0	8	0	0	1
1200-1300	50	28	0	139	0.00	24.82	0	10	0	0	1
1300-1400	71	37	0	114	0.00	15.41	0	1	0	1	0
1400-1500	141	70	45	91	1.60	6.50	14	0	1	0	0
1500-1600	8	8	0	162	0.00	101.25	0	13	0	0	1
Total	559	305	45	1034	0.40	16.95			1	1	6

Airport Thursday 21/02/2013 1600-2300

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
1600-1700	85	34	0	102	0.00	15.00	0	7	0	0	1
1700-1800	87	68	0	97	0.00	7.13	0	3	0	0	1
1800-1900	107	69	0	97	0.00	7.03	0	4	0	0	1
1900-2000	42	42	0	84	0.00	10.00	0	4	0	0	1
2000-2100	75	47	0	120	0.00	12.77	0	10	0	0	1
2100-2200	100	86	0	118	0.00	6.86	0	8	0	0	1
2200-2300	82	72	8	73	0.49	5.07	8	1	1	0	0
Total	578	418	8	691	0.07	8.27			1	1	6

Airport Saturday 16/02/2013 1400-2200

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
1400-1500	68	27	0	121	0.00	22.41	0	8	0	0	1
1500-1600	91	30	0	59	0.00	9.83	0	1	0	1	0
1600-1700	79	32	0	77	0.00	12.03	0	4	0	0	1
1700-1800	38	14	0	107	0.00	38.21	0	7	0	0	1
Total	276	103	0	364	0.00	17.67			0	1	3

Airport Saturday 16/02/2013 1800-2200

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
1800-1900	44	21	0	78	0.00	18.57	0	4	0	0	1
1900-2000	31	14	21	36	3.39	12.86	9	0	1	0	0
2000-2100	14	9	6	76	2.14	42.22	6	2	1	0	0
2100-2200	101	36	0	80	0.00	11.11	0	5	0	0	1
Total	190	80	27	270	0.71	16.88			2	0	2

Airport Sunday 17/02/2013 1400-1800

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
1400-1500	71	35	0	110	0.00	15.71	0	6	0	0	1
1500-1600	51	24	0	123	0.00	25.63	0	8	0	0	1
1600-1700	141	67	0	85	0.00	6.34	0	3	0	0	1
1700-1800	81	47	0	100	0.00	10.64	0	8	0	0	1
Total	344	173	0	418	0.00	12.08			0	0	4

Little France Wednesday 06/02/2013 1200-1800

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
1200-1300	29	21	0	64	0.00	15.24	0	3	0	0	1
1300-1400	19	16	0	66	0.00	20.63	0	4	0	0	1
1400-1500	18	12	0	60	0.00	25.00	0	4	0	0	1
1500-1600	25	21	0	69	0.00	16.43	0	5	0	0	1
1600-1700	40	28	12	8	1.50	1.43	5	0	1	0	0
1700-1800	12	16	0	17	0.00	5.31	0	0	0	1	0
Total	143	114	12	284	0.42	12.46			1	1	4

Little France Saturday 16/02/2013 1200-1700

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	3	6	0	27	0.00	22.50	0	0	0	1	0
1300-1400	0	5	0	38	0.00	38.00	0	2	0	1	0
1400-1500	3	4	0	38	0.00	47.50	0	2	0	1	0
1500-1600	1	4	0	68	0.00	85.00	0	5	0	0	1
1600-1700	5	8	0	68	0.00	42.50	0	3	0	0	1
Total	12	27	0	239	0.00	44.26			0	3	2

Little France Sunday 17/02/2013 1400-1800

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
1400-1500	0	5	0	61	0.00	61.00	0	4	0	0	1
1500-1600	8	9	0	52	0.00	28.89	0	2	0	1	0
1600-1700	9	5	0	20	0.00	20.00	0	0	0	1	0
1700-1800	0	0	0	36	0.00	0.00	0	3	0	0	1
Total	17	19	0	169	0.00	44.47			0	2	2

Hannover Street Tuesday 05/02/2013 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	7	10	0	62	0.00	31.00	0	4	0	0	1
1100-1200	7	9	0	54	0.00	30.00	0	2	0	1	0
1200-1300	7	9	0	63	0.00	35.00	0	4	0	0	1
1300-1400	8	8	0	35	0.00	21.88	0	3	0	0	1
1400-1500	10	8	0	59	0.00	36.88	0	4	0	0	1
1500-1600	16	12	0	66	0.00	27.50	0	4	0	0	1
1600-1700	13	12	0	61	0.00	25.42	0	4	0	0	1
1700-1800	9	11	0	69	0.00	31.36	0	4	0	0	1
Total	77	79	0	469	0.00	29.68			0	1	7

Hannover Street Day Date Time

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	12	6	0	33	0.00	27.50	0	1	0	1	0
1100-1200	18	12	0	53	0.00	22.08	0	3	0	0	1
1200-1300	31	16	0	57	0.00	17.81	0	1	0	1	0
1300-1400	16	12	0	54	0.00	22.50	0	1	0	1	0
1400-1500	63	33	0	49	0.00	7.42	0	0	0	1	0
1500-1600	46	20	0	66	0.00	16.50	0	4	0	0	1
1600-1700	82	34	0	68	0.00	10.00	0	2	0	1	0
1700-1800	93	38	0	59	0.00	7.76	0	2	0	1	0
Total	361	171	0	439	0.00	12.84			0	6	2

Hannover Street Sunday 10/02/2013 1400-1800

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
1400-1500	49	19	0	33	0.00	8.68	0	0	0	1	0
1500-1600	23	13	0	37	0.00	14.23	0	0	0	1	0
1600-1700	16	18	0	24	0.00	6.67	0	0	0	1	0
1700-1800	6	5	0	65	0.00	65.00	0	0	0	1	0
Total	94	55	0	159	0.00	14.45			0	4	0

Technical note

Project Edinburgh Unmet Demand Study 2012
Subject Public Attitude Surveys
Author Aidan Shearer/Liz Richardson

Date 22 April 2013
Ref

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1 Introduction

The purpose of this technical note is to present the results of a public attitude survey undertaken by Halcrow on behalf of City of Edinburgh Council.

The public attitude interview was designed with the aim of collecting information regarding opinions on the taxi market in Edinburgh. In particular, the survey allowed an assessment of flagdown, telephone and rank delays, the satisfaction with delays and general use information.

Some 913 on-street and telephone public attitude surveys were carried out in February and March 2013. The surveys were conducted across a range of locations within the Edinburgh 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.

2 Survey Administration

The surveys were conducted during the day at a range of locations across the Edinburgh licensing area. The total of 913 interviews provides a robust basis for assessment, and the age and gender samples are given below in Table 2.1.

Table 21 – Target and actual samples for interview surveys by age and gender

Category	Frequency	Percentage
16-34	393	43.6
35-64	416	46.2
65+	92	10.2
Total	901	100.0
Male	419	46.8
Female	477	53.2
Total	896	100.0

The respondents were asked to give their economic status. The results are displayed in Table 2.2.

Table 2.2 – Economic Status

	Frequency	Percentage
Full-time employed	337	38.2
Part-time employed	140	15.9
Unemployed	70	7.9
Student/pupil	165	18.7
Retired	124	14.0
Housewife/husband	23	2.6
Other	24	2.7
Total	883	100.0

3 Characteristics of Last Trip

Respondents were each asked if they had made a journey by taxi (BLACK CAB) in Edinburgh in the last three months. The survey found that 62.9% had used a taxi within this period. The results are displayed in Table 3.1.

Table 3.1 – Have you made a trip by taxi in the past three months?

	Frequency	Percentage
Yes	574	62.9
No	339	37.1
Total	913	100

Respondents who had hired a taxi in the last three months were asked further questions about their experience. Some 27.1% of trip makers stated that they hired at a rank. Some 37.3% of hirings were achieved by telephone with 35.6% of trip makers obtaining a taxi by on-street flagdown. Table 3.2 reveals the pattern of taxi hire.

Table 3.2 – Method of hire for last trip

	Frequency	Percentage
Rank	151	27.1
Flagdown	198	35.6
Telephone	208	37.3
Total	557	100

Respondents were asked if they were satisfied with the time taken and promptness of the taxis arrival. The majority of people were satisfied with their last taxi journey (93.8%). Table 3.3 shows that for each method of obtaining a taxi, the majority were satisfied with the services. Satisfaction obtaining a taxi by rank was 92.4%, by telephone 96.6% and by flagdown 89.8%.

Table 3.3- Satisfaction with delay on last trip

	Frequency	Percentage
Rank	145	92.4
Flagdown	177	89.8
Telephone	199	96.6

Respondents were asked to rate a number of elements from their last taxi journey on a scale from very poor to very good. The results shown in Table 3.4 indicate that respondents generally consider the helpfulness of the driver and their knowledge of the area to be good. For those who rated any aspects as poor the most commonly stated reasons were:

- 'poor knowledge of the route'
- 'don't know directions'
- 'expensive'
- 'rude'
- 'didn't help with bags'

Table 3.4- Service Rating

	Very good	Good	Average	Poor	Very poor
Helpfulness of Driver	40.3%	46.6%	10.4%	2.1%	0.5%
Driver Knowledge of Area	42.1%	48.4%	6.3%	1.9%	1.2%
Overall Quality of Service	38.7%	50.6%	7.7%	2.1%	0.9%

4 Attempted Method of Hire

To provide evidence of suppressed demand in the event of finding significant patent unmet demand, all respondents were asked to identify whether or not they had given up waiting for a taxi at a rank, on the street, or by telephone in Edinburgh in the last three months; the results are summarised in Table 4.1.

Table 4.1- Satisfaction with delay on last trip (multiple responses)

	Yes	
	Frequency	Percent
Given up at a rank	97	11.0
Given up flagdown	132	15.0
Given up telephone	91	10.4%

The majority of respondents replied that they had not given up waiting for a taxi in the last three months. Some 15.1% had given up waiting for taxi by rank and/or flagdown.

Respondents who had given up trying to obtain a taxi in the last three months at a rank, by flagdown and/or by telephone were asked the location they had given up waiting for a taxi and what type of vehicle they required. The most common areas were the city centre, George St, Leith Walk and Princes St.

5 Improvements

Respondents were asked whether taxi services in Edinburgh could be improved. Table 5.1 documents the results.

Table 5.1 Could taxi services in Edinburgh be improved?

	Frequency	Percentage
Yes	407	46.7
No	465	53.3
Total	872	100.0

Some 46.7% of respondents considered that taxi services could be improved. Suggestions included Of those who felt improvements were required the following were the most popular responses:

- Better drivers;
- Better knowledge of the local area;
- Cheaper fares;
- Drivers to be more polite and friendlier;
- Introduction of flat fare tariffs.

6 Safety

Respondents were asked whether they feel safe whilst using taxis both during the day and night. The results are shown in Table 6.1. The majority of respondents felt safe across all times of the day.

Table 6.1- Safety using taxis in Edinburgh

	Day		Night	
	Frequency	Percent	Frequency	Percent
Yes	861	95.5	812	90.5
No	41	4.5	85	9.5

Those respondents who commented that they do not feel safe at all or some of the time were asked what would make them feel safer. Table 6.2 provides the detail.

Table 6.2- Safety improvements

	Frequency
CCTV in taxis	71
CCTV on ranks	55
Taxi marshals	61
More taxis	43
Women drivers	61

7 Ranks

Respondents were asked whether there were any locations in Edinburgh where they would like to see a new rank. Over a quarter of respondents (29.1%) stated that new ranks are needed. The results are shown in Table 7.1.

Table 7.1 – Are there any new ranks needed in Edinburgh?

	Frequency	Percentage
Yes	136	15.7
No	394	45.4
Don't know	338	38.9
Total	868	100.0

Those respondents who stated that they would like to see a new rank were subsequently asked to provide a location. A variety of locations were provided including:

- Princes Street;
- West End;
- George Street;
- Dalry.