



Clackmannanshire Taxi Unmet Demand Survey

Final Report

January 2016





EXECUTIVE SUMMARY

Key points

This study has been conducted by Vector Transport Consultancy on behalf of Clackmannanshire Council.

The study is intended to fulfil the requirements set out in the Civic Government (Scotland) Act 1982 (CGSA) and Best Practice Guidance (BPG) issued by the Scottish Government.

The objectives of the study include:

- Gather evidence to establish whether there is any unmet demand for Taxis.
- Assess the effectiveness of existing taxi ranks.
- Consult with stakeholders, members of the trade and members of the public, regarding the service provided by Taxis and any issues associated with these services.

Taxi rank surveys were undertaken at five locations in Alloa. These included three taxi ranks in common usage [Drysdale Street, Mill Street and Railway Station], one old rank location which is no longer in use [Mar Street] and a location which is used from time to time to service the night time economy [Bank Street].

Rank surveys were undertaken for a continuous period of 96 hours from 7:00 on Thursday 10th December 2015 to 7:00 on Monday 14th December 2015.

The estimated weekly volumes at the taxi ranks in Alloa are presented below. The totals are calculated, based on the assumption that the Thursday results are representative of week days, i.e. (4 x Thursday) + Friday + Saturday + Sunday.

RANK LOCATION	TOTAL TAXIS DEPARTING RANK EMPTY	TOTAL TAXIS DEPARTING RANK WITH PASSENGERS	TOTAL TAXIS DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER TAXI
Drysdale Street	279	799	1078	1129	1.4
Mill Street	88	87	175	137	1.6
Railway Station	228	177	405	275	1.6
Bank Street	1	6	7	11	1.8
Total	596	1069	1665	1552	1.5

Around a third of all taxis which stopped at the ranks, left the ranks empty. Taxis were also frequently seen passing the ranks.

There were 57 taxis licenced, at the time of the survey. Based on the estimate of weekly hires, this would equate to around 19 hires per week, per taxi, or, assuming a five day working week, around four hires per day per taxi. This is a very low level of rank hire activity and is a key consideration when evaluating the conduct of the trade.

One of the principal indicators of unmet demand is the presence of passenger queues at taxi stances for lengthy periods. The observations recorded some periods of passenger queuing on Friday and Saturday nights. Passengers were also occasionally observed waiting at the ranks on Thursday and Friday afternoon.



Approximately 85% of all passenger wait times occurred on Friday and Saturday nights. On Friday night, passenger waiting was observed between midnight and 1:00 on Saturday morning. On Saturday night, passenger waiting was observed between midnight and 2:00 on Sunday morning.

The remaining 15% of passenger wait time occurred over the remaining period surveyed. These were concentrated on Thursday and Friday afternoons between 14:00 to 16:00 each day. Passenger waiting observed during the day may be characterised as occasional queues by individuals or groups of passengers travelling together, rather than periods of continuous queuing. On Friday and Saturday nights, the passenger waiting observed was a mix of occasional queues and brief periods of persistent queueing, when additional people arrived at the ranks, before earlier arrivals had been picked up by taxis.

The Index of Significant Unmet Demand (ISUD) value was calculated as an indicator of the level of unmet demand which was present.

Summary of key findings

The ISUD value calculated was **35.18**. Values below 80 are generally considered to indicate that there is no significant unmet demand for Taxis.

Parking on the ranks by private cars and goods vehicles was identified as a persistent problem by the trade. This was verified during the rank observations. The rank on Mill Street was generally occupied by several vehicles and on occasions, the rank was fully occupied by parked vehicles and taxis could not access the rank.

The rank location on Mar Street was marked and signed as parking space. Consequently, the space was generally fully occupied by parked vehicles. This location is not used by passengers to wait for taxis or by taxis to wait for passengers.

Stakeholders and members of the public indicated that they felt there were not always taxis available on Friday and Saturday nights, when the pubs and clubs closed. In addition, school run times on weekday afternoons were identified as times when taxis were in short supply.

Feedback from the trade indicated that they relied heavily on pre-booked hire, to supplement the income derived from rank based hire. Few drivers rely primarily on rank based hire. Most of the trade undertake school transport contracts and this is seen as a staple source of income.

As one may expect, patterns of work vary, with some drivers concentrating on day time hires, some on evening hires and some topping up day time activity with Friday and Saturday night working. Few taxis are driven by more than one driver.

Many drivers approach the taxi ranks and service demand from ranks as though they were hailing points, as opposed to ranks. The layout of the traffic circulation system and rank locations in Alloa facilitates this approach. Drivers can approach the rank on Drysdale Street and as they reach the High Street, can see if there are any taxis waiting on the rank or if there are any intending passengers waiting. If the rank is full, or if empty and there are no people waiting, the drivers can turn down the High Street towards Mill Street. At the junction with Mill Street, drivers can check the Mill Street rank for waiting passengers before deciding whether to turn left towards the rank, or to turn right. The active night time economy venues are concentrated to the right, along Mill Street and on to Bank Street or around Candleriggs.

As the night time economy is concentrated to the south west of the taxi rank locations, drivers indicated that they tend to drive around this area when checking the ranks,



especially late at night. Some drivers also wait close to the pubs and clubs around closing time to pick up fares.

The Taxi fleet was generally held to be clean and in good condition with helpful and well presented and knowledgeable drivers. However, there was a significant minority of respondents who indicated that some taxis were sometimes dirty and untidy. Some members of the public indicated that they used a regular service provider and hire by telephone was a popular means of obtaining a taxi. This corroborates feedback from the trade, that many drivers have regular clients and that they feel they need to offer good levels of service to these clients to retain their custom.

Public consultation was undertaken through questionnaire surveys conducted on street and online.

Stakeholder consultation and trade consultation was undertaken with representatives of the taxi trade, minority group representatives, hotels and licenced premises, local businesses, the police, fire brigade and ambulance service.

The public and stakeholder consultation feedback indicated that:

- The public and stakeholders are generally content with the level of service provided by Taxis.
- Some members of the public had a preference for specific operators.
- Representatives of elderly and mobility impaired users indicated that most people who rely on licenced vehicles for transport, have a preferred provider who they use.
- Local residents with mobility impairments know the taxi service and generally use the same regular provider. However, visitors to the area can find it difficult to identify an operator who can provide an accessible vehicle. Whilst there are accessible and wheel chair equipped vehicles in the taxi fleet, the information on how to obtain one of these vehicles is not readily available. Wheel chair accessible vehicles cannot always be identified easily at ranks. Some vehicles equipped with wheelchair ramps are the same model as other vehicles without ramps. Some means of identifying wheel chair accessible vehicles, such as a sticker or sign, would be helpful.
- Generally, people with mobility impairments can obtain a taxi when they need one. However, the principal exception to this situation is at school pick up times, on weekday afternoons. At these times, there are often few or no taxis available.
- Driver training regarding the barriers faced by people with mobility impairments would be beneficial in ensuring that all drivers can provide a reasonable level of service and address a broad spectrum of passenger needs.

Unmet need assessment

Data from the taxi rank surveys was used, together with any indication from the public consultation surveys, of frustration with non-availability of Taxis, to calculate an Index of Significant Unmet Demand (ISUD). The ISUD index value calculated from the survey results indicates that the level is below the threshold which is held to indicate that the level of unmet demand is significant.

Trade Consultation

Trade representatives and drivers were consulted to seek their views on the Taxi trade in Clackmannanshire. The principal issues which were raised by the trade were:

- Frustration with parked private cars occupying taxi rank space.
- A minority of drivers damage the reputation of the trade by providing poor customer service. Most drivers offer good service and have good local knowledge.



- A desire for new ranks night time demand from pubs and clubs. Bank Street was identified as a preferred location.
- There is little multi-shift operation of vehicles. Therefore, vehicles which operate primarily during daytime weekdays, generally do not operate at nights or on the weekends. Similarly, those which serve the night time economy, generally are often not in operation during the day.

Conclusions

The primary purpose of this study is to determine whether there is evidence of significant unmet demand. The conclusion is that there is **no significant unmet demand**.

Users and stakeholders are generally content with the service provided by Taxis.

The volume of rank based hires is low, relative to the number of taxis in the fleet. The trade rely on pre-booked hires and school contracts to generate sufficient income. This can lead to shortages of availability at times when much of the fleet is engaged in school transport contracts and on Friday and Saturday nights, when peak demand is associated with the night time economy.

Recommendations

Vehicles parking on ranks and a desire for additional ranks to cater for night time demand were the key issues identified by the trade. Better rank marking and signage, for existing ranks would help improve public awareness, both of rank location and of parking restrictions.

Additional rank space close to the core of the active night time economy venues may encourage more taxis to wait on the rank on Friday and Saturday nights.

There is **no significant unmet demand**. Therefore, there is no compelling need for more taxis, on the basis of public benefit. However, if more drivers can be encouraged to operate on Saturday nights, at times of peak demand, this would address the wait times experienced by the small proportion of passengers who need to wait for a Taxi to come to the rank.

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

- Maintain the current number of licenced taxis
- Issue any number of additional plates as it sees fit,
- Have no numerical limit

Some benefits to the public could be realised by applying a cap, retaining experienced drivers in the taxi fleet and with additional training to help drivers appreciate and address the needs of those travellers with a range of impairments which can present an obstacle to travel.

Whilst only taxis may pick up passengers from taxi ranks, a relatively small proportion of capacity is devoted to servicing demand from the taxi ranks. Indeed, the level of use of taxi ranks, by passengers would only provide a handful of hires per vehicle each day, if all taxis were all limited to only taxi rank based hire. Much of the work serviced by taxis is serviced by telephone bookings. This is also a sector of provision which is addressed by Private Hire Cars. As the number of Private Hire Cars is uncapped, the scope for addressing growth in demand from telephone bookings is essentially not limited.

The unmet demand survey relates primarily to how well demand from passengers at taxi ranks is served. The level of service received at taxi ranks is affected more by



competition between telephone bookings and rank hire bookings and between regular contract hires and rank hires, than the number of licenced taxis. There were clearly not enough rank hires to support the full taxi fleet through rank hire work alone.

The number of taxis would be able to service all of the demand through the ranks, without any appreciable passenger waiting, if capacity at peak times were not taken up by telephone bookings and to a lesser extent, by school contract work.

It is recommended that a cap is introduced on the number of taxi licences at the present day level, with some provisos. These are that:

- The trade are offered the opportunity to address the shortage of supply during school run times and at club closing times, through cooperative working. This may require measures such as allocating a rota of drivers who service the ranks rather than accept telephone bookings at these times.
- If public perception and evidence from rank observation indicate that passengers still face shortages of supply at the ranks at these times, then the limit may be reviewed.
- Additional taxi licences may be issued to approved wheelchair accessible vehicles.
- New drivers should undertake a defined and approved training course on disability awareness and customer service.

A further recommendation is that taxi livery and wheelchair accessible vehicle identification markings are reviewed, to enable wheelchair users and those who book taxis by telephone, to identify relevant vehicles more readily at locations such as the Railway Station.





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1 STUDY OBJECTIVES

1.1 General

This study has been conducted by Vector Transport Consultancy on behalf of Clackmannanshire Council.

The study is intended to fulfil the requirements set out in the Civic Government (Scotland) Act 1982 (CGSA) and Taxi and Private Hire Car Licensing: Best Practice Guidance (BPG) issued by the Scottish Government.

The objectives of the study include:

- Gather evidence to establish whether there is any unmet demand for Taxis.
- Assess the effectiveness of existing taxi stances and the demand and suitability of additional stance locations.
- Consult with stakeholders, members of the trade and members of the public, regarding the service provided by Taxis and any issues associated with these services.

The Best Practice Guidance recommends that where the number of Taxis is limited, or if the licensing authority wishes consider implementing a limit, that an unmet demand survey should be undertaken to establish whether there is any significant unmet demand.



2 BACKGROUND

2.1 Definitions

Both Taxis and Private Hire Cars are licensed to operate within the Clackmannanshire Council area.

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

Private Hire Cars may only be hired through advance booking. This is generally done by telephone, mobile application or internet booking, or at a Private Hire Car operator's office.

In this report, the term 'Licenced Vehicles' is also used to encompass both Private Hire and Taxi vehicles.

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

2.2 Best Practice Guidance (BPG)

The Scottish Government issued 'Taxi and Private Hire Car Licensing: Best Practice Guidance for licensing authorities'. This guidance was updated in April 2012. It includes advice on the measurement of unmet demand.

Significant Unmet Demand (SUD) has two components:

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

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

2.3 Observed unmet demand

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

2.4 Latent unmet demand

Where potential passengers are deterred from using taxis through the assumption or knowledge that waiting times will be high, these passengers may decide not to



travel or use an alternative means of transport. These passengers will not feature in the taxi rank surveys. Therefore to get an estimate of this latent demand an alternative form of survey is required. This generally consists of face to face interviews with pedestrians to enquire about their experience in hiring and using Taxis and additional surveys such as online surveys. Such a survey can also provide other information on Taxi use.

2.5 Other Surveys

The Government guidance also recommends that stakeholders such as Taxi providers and representatives of groups which rely heavily on Taxis are contacted for their opinions on the number of Taxis and the possible impact of licence quantity controls.

2.6 Breakdown of the Taxi trade

Markets and hire methods typically targeted by Taxis include:

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

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

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

The market for Taxis – both Private Hire Cars (PHC) and Taxis is therefore influenced by many factors – both on the demand and the supply side. Demand for example is influenced by:

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

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



3 TAXI RANK SURVEYS

3.1 Rank survey locations

There were five locations surveyed. All were located in Alloa. The locations surveyed were:

- Drysdale Street Taxi Rank
- Mill Street Taxi Rank
- Railway Station Taxi Rank
- Mar Street
- Bank Street

The ranks on Drysdale Street, Mill Street and the Railway Station are formal marked ranks. The location on Mar Street covered a previously existing taxi rank location. However, this location was no longer marked or signed as a taxi rank. The location surveyed on Bank Street is close to two night time economy venues and whilst not a formal rank, was surveyed to assess the level of any demand satisfied through informal ranking.

3.2 Rank survey results

Full details of tabulated arrival frequencies and waiting times for Taxis and passengers are presented in Appendix A. Summary results are presented below.

Rank surveys were undertaken for a continuous period of 96 hours from 7:00 on Thursday 10th December 2015 to 7:00 on Monday 14th December 2015.

The survey locations were surveyed, using video cameras fixed to nearby lamp posts.

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

It is worth noting that when ranks were active, the prevalent condition at the active taxi ranks was that Taxis queue at the ranks, waiting for passengers, or the ranks were empty of both Taxis and waiting passengers. For the majority of the times surveyed, passengers arrived at the taxi ranks and a Taxi was waiting and ready for immediate boarding. On these occasions, the recorded passenger wait time was zero.



Drysdale Street

The rank on Drysdale Street has six marked spaces for taxis. Beyond the six spaces marked for Taxis, there are several spaces marked for parking and loading for other vehicles.

Private Cars and vans frequently parked on the taxi rank, in the marked Taxi spaces. However, the rank was never fully occupied by parked cars.

Taxis frequently passed the rank when the rank was occupied with waiting Taxis and when the rank was empty. If passengers waited at the rank during periods when the rank was unoccupied, they were generally picked up by one of the passing Taxis, within a short period.

It was common practice for those passengers who arrived at the rank and found it unoccupied, to make a telephone call from a mobile phone and to be picked up by a Taxi or Private Hire Car a few minutes later. It is assumed that many of these calls were to book a licenced vehicle.

Whilst most passengers arriving at the rank, hired the vehicle in position 1 at the head of the rank, there were some incidences of passengers arriving at the rank and choosing to hire a vehicle further back in the queue. Based on feedback from the public and from members of the trade, it appears that many of these hires were from regular customers of the vehicle further back in the queue.

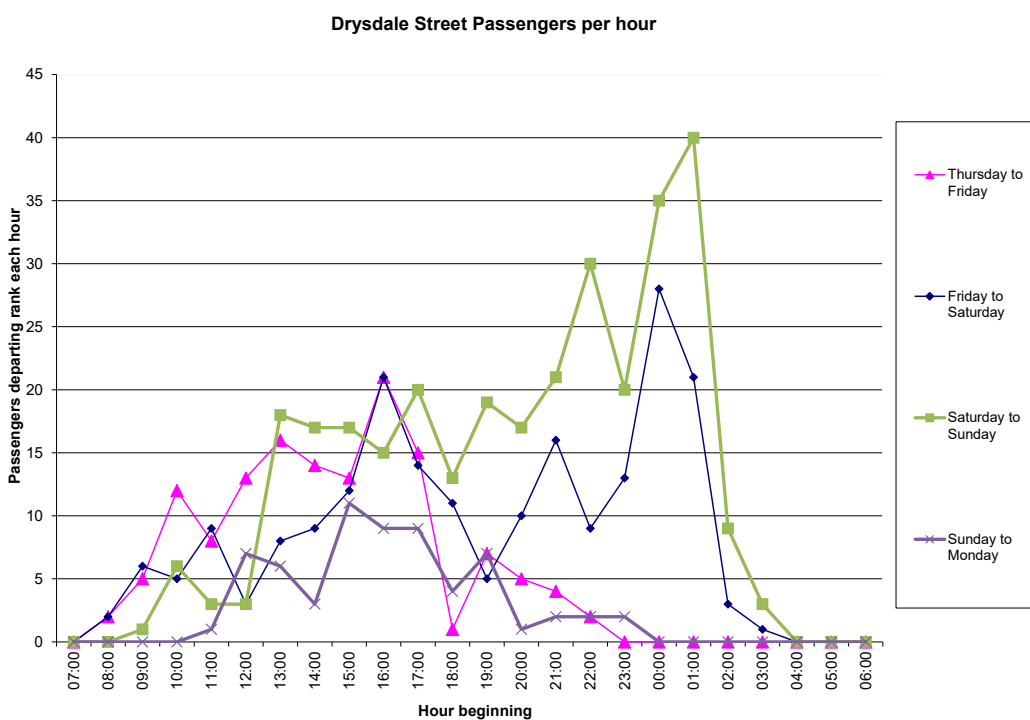


Figure 1 - Hourly departures of passengers at Drysdale Street rank

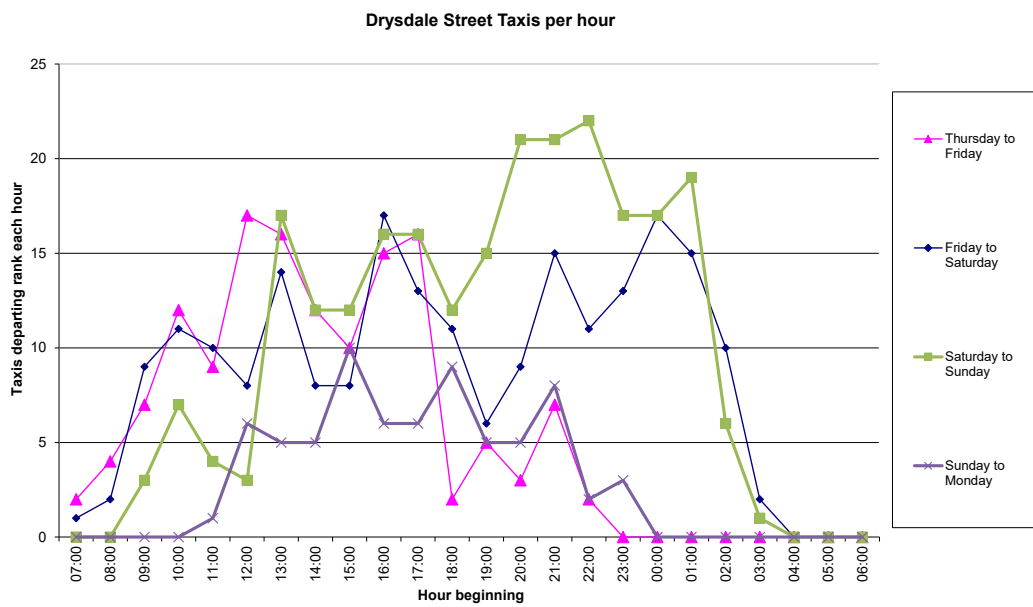


Figure 2 - Hourly departures of Taxis at Drysdale Street rank

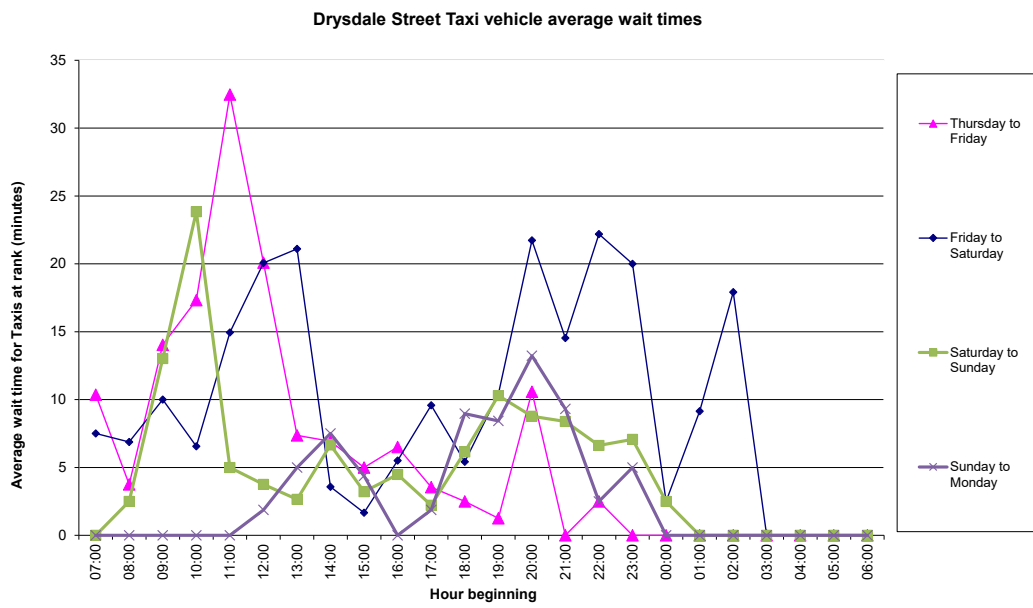


Figure 3 - Average time taxis spent waiting at the Drysdale Street rank

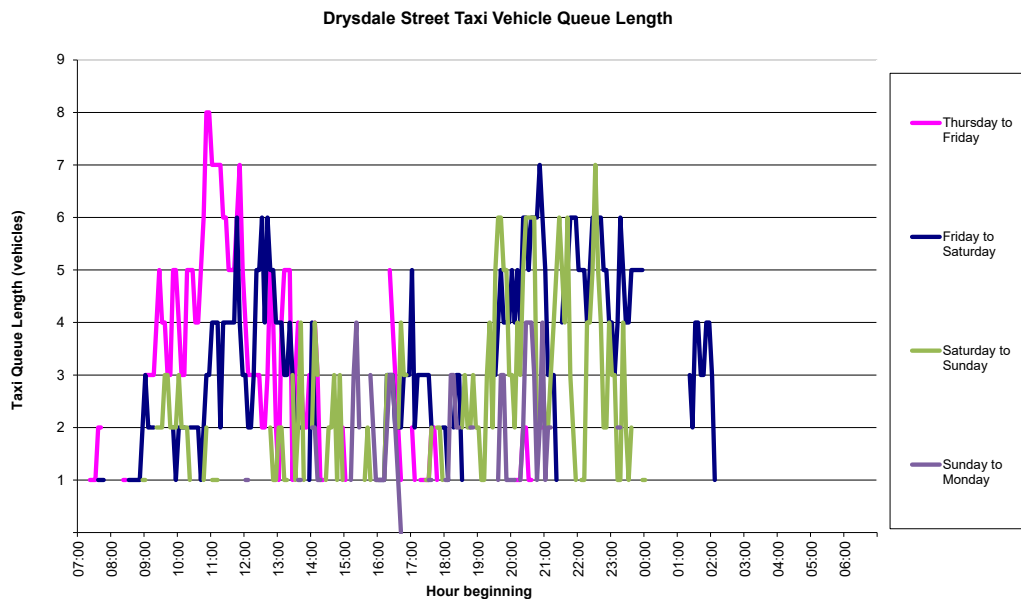


Figure 4 - Taxi vehicle queue length at Drysdale Street rank

Mill Street

The rank on Mill Street is a continuous bay, marked as a taxi rank, with space for approximately 7 vehicles. This rank had a significantly lower throughput of passengers than the rank on Drysdale Street. The marked rank space was frequently occupied by private cars and vans. From time to time, all of the rank space was occupied by cars or vans and Taxis were not able to enter the rank to wait for passengers.



Mill Street Passengers per hour

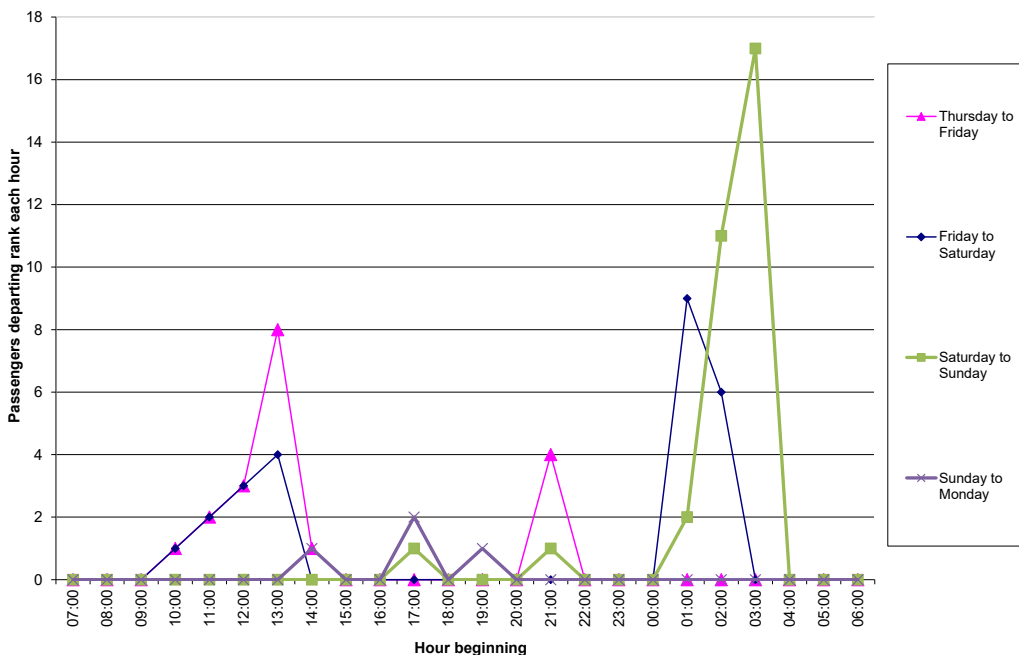


Figure 5 - Hourly departures of passengers at Mill Street Rank

Mill Street Taxis per hour

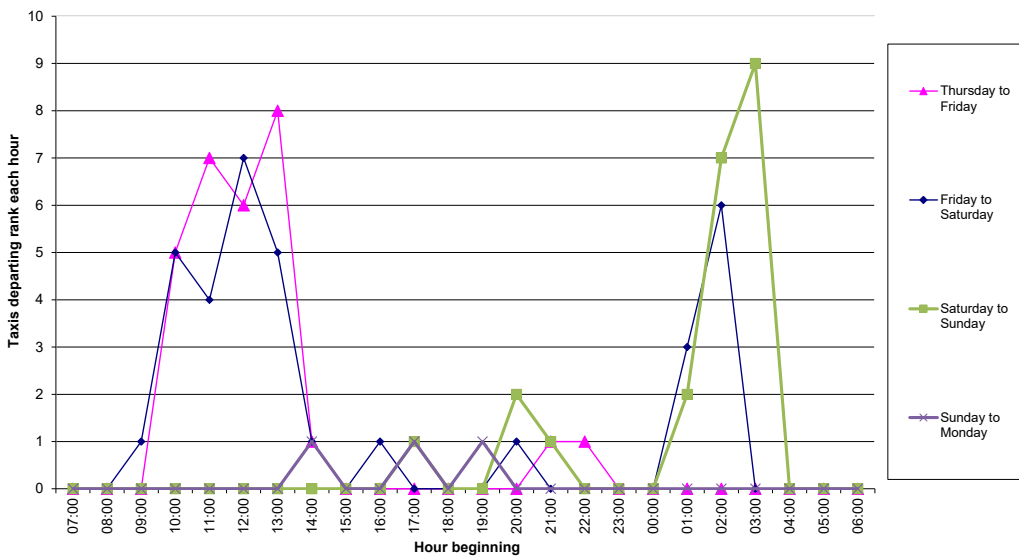


Figure 6 - Hourly departures of Taxis at Mill Street Rank

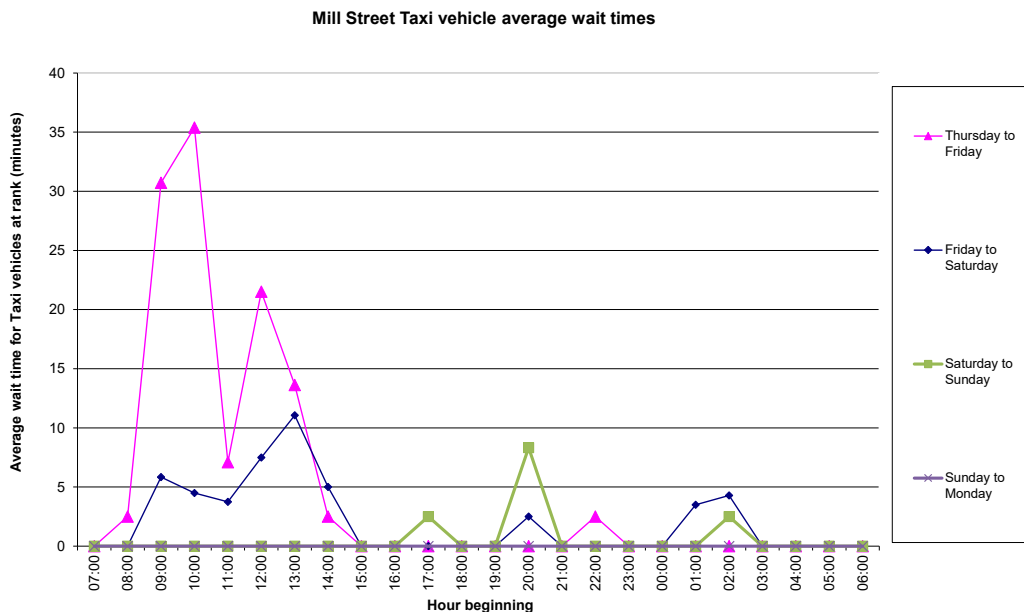


Figure 7 - Average time taxis spent waiting at the Mill Street Rank

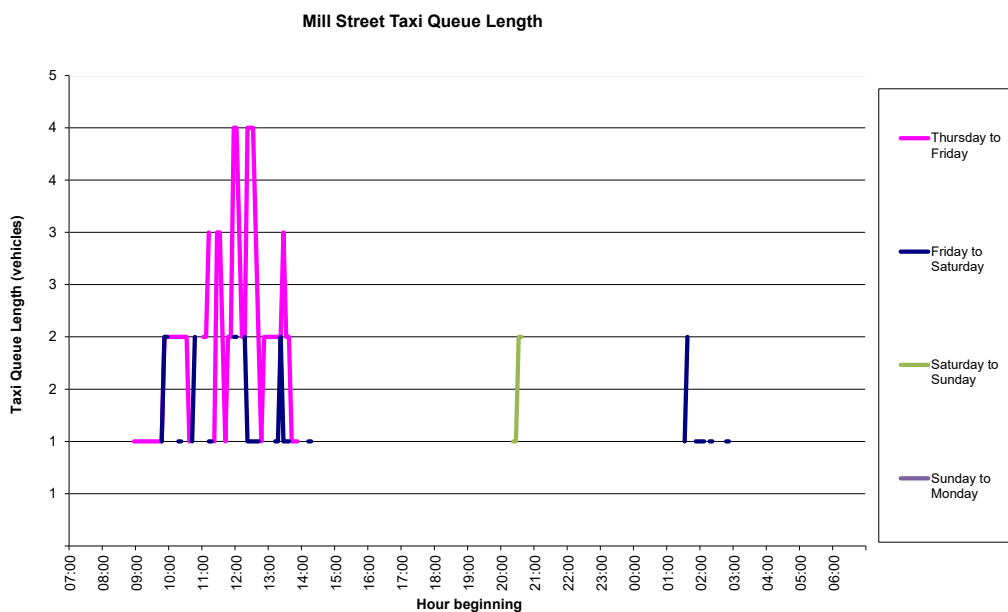


Figure 8 - Taxi vehicle queue length at Mill Street Rank



Railway Station

The rank at the railway station is formed in part of a bay, which is marked in separate areas as a bus stop, pick up area and taxi rank. The marked taxi rank has capacity for four vehicles. The rank was serviced by taxis which generally arrived a few minutes before trains were due. Many of the Taxis which picked up passengers at this rank appeared to have been pre-booked. Passengers were often observed making enquiries at several Taxis before boarding one.

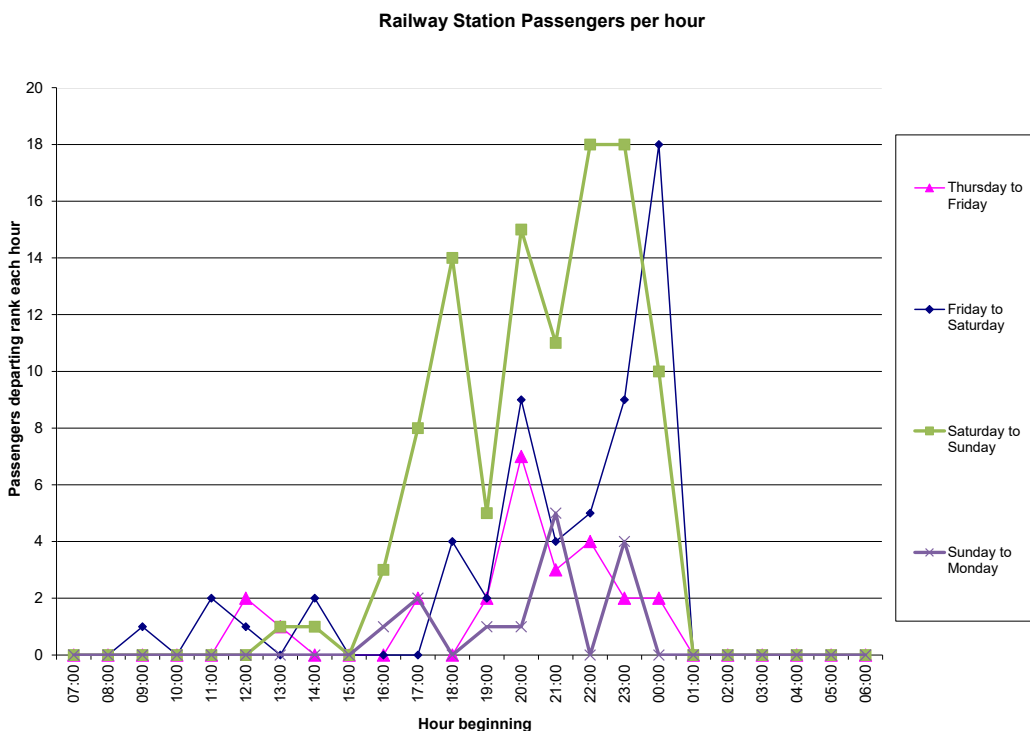


Figure 9 - Hourly departures of passengers at Railway Station Rank

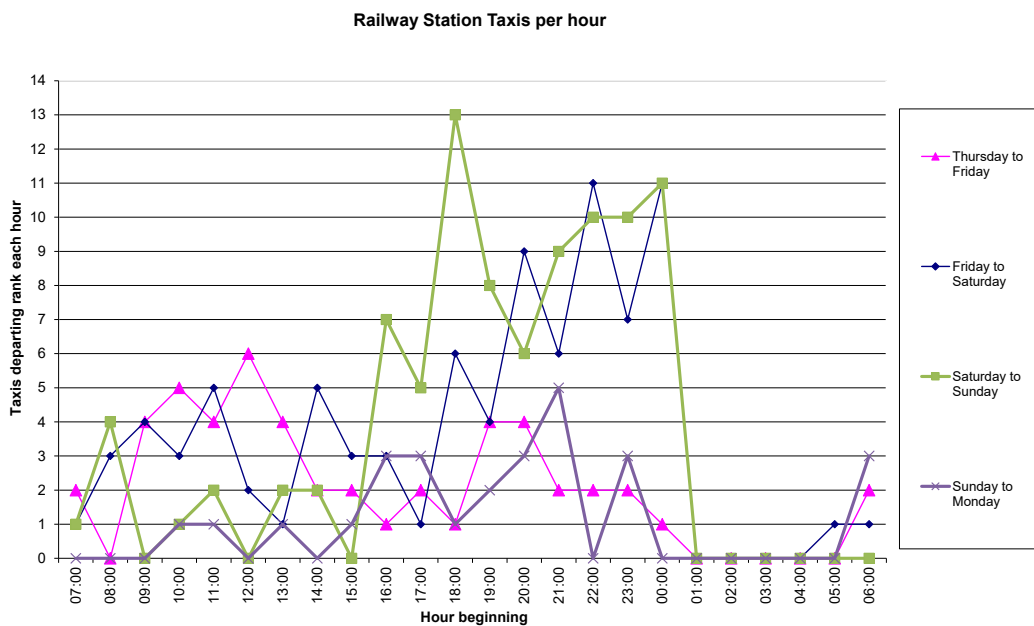


Figure 10 - Hourly departures of Taxis at Railway Station Rank

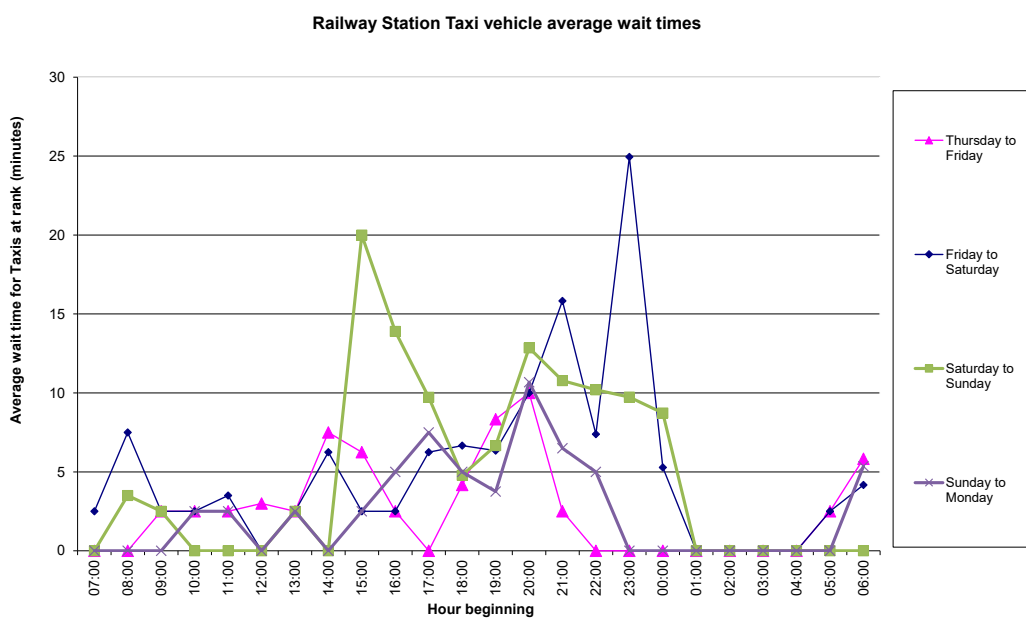


Figure 11 - Average time Taxis spent waiting at the Railway Station Rank

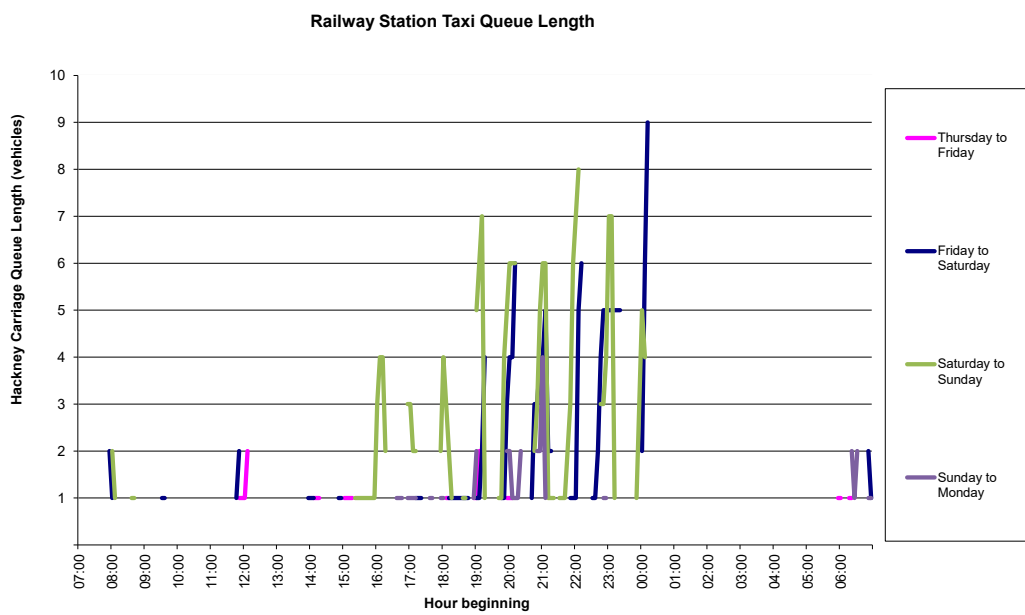


Figure 12 - Taxi vehicle queue Length at Railway Station Rank

Bank Street

Activity at Bank Street was limited to six Taxi hires late on Saturday night. No other hires were observed.

Mar Street

No hires were observed on Mar Street.



The number of hires (i.e. the numbers of Taxis which left ranks with passengers) were aggregated across all ranks. The results are presented in Figure 13.

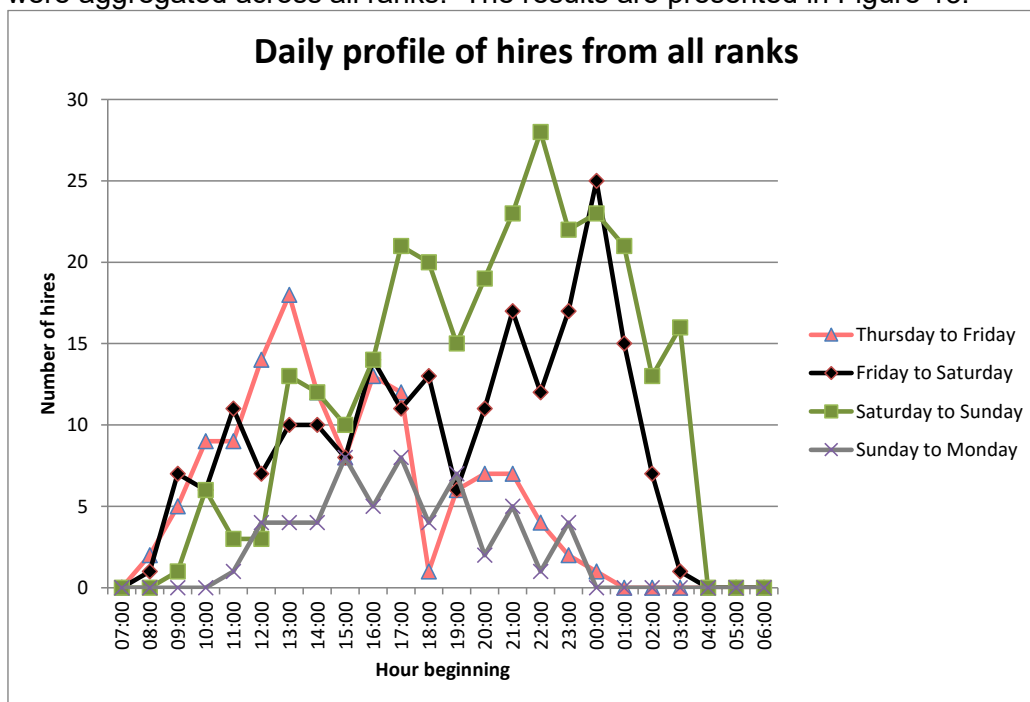


Figure 13 - Total hires across all ranks

The total daily volumes of passengers and Taxis passing through each rank have been tabulated for comparison and are presented in the following pages.

Table 1 - Total volumes through each rank on Thursday to Friday

RANK LOCATION	TOTAL TAXIS DEPARTING RANK EMPTY	TOTAL TAXIS DEPARTING RANK WITH PASSENGERS	TOTAL TAXIS DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER TAXI	AVERAGE WAIT TIME AT THE RANK PER TAXI (MINUTES)
Drysdale Street	38	101	139	138	1.4	10
Mill Street	17	12	29	19	1.6	16
Railway Station	33	17	50	25	1.5	3
Bank Street	0	0	0	0	0.0	11
Total	88	130	218	182	1.4	10

Table 2 - Total volumes through each rank on Friday to Saturday

RANK LOCATION	TOTAL TAXIS DEPARTING RANK EMPTY	TOTAL TAXIS DEPARTING RANK WITH PASSENGERS	TOTAL TAXIS DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER TAXI	AVERAGE WAIT TIME AT THE RANK PER TAXI (MINUTES)
Drysdale Street	57	153	210	206	1.3	12
Mill Street	18	16	34	25	1.6	6
Railway Station	47	40	87	57	1.4	8
Bank Street	0	0	0	0	0.0	0
Total	122	209	331	288	1.4	10



Table 3 - Total volumes through each rank on Saturday to Sunday

RANK LOCATION	TOTAL TAXIS DEPARTING RANK EMPTY	TOTAL TAXIS DEPARTING RANK WITH PASSENGERS	TOTAL TAXIS DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER TAXI	AVERAGE WAIT TIME AT THE RANK PER TAXI (MINUTES)
Drysdale Street	43	198	241	307	1.6	6
Mill Street	2	20	22	32	1.6	2
Railway Station	32	59	91	104	1.8	8
Bank Street	1	6	7	11	1.8	0
Total	78	283	361	454	1.6	6

Table 4 - Total volumes through each rank on Sunday to Monday

RANK LOCATION	TOTAL TAXIS DEPARTING RANK EMPTY	TOTAL TAXIS DEPARTING RANK WITH PASSENGERS	TOTAL TAXIS DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER TAXI	AVERAGE WAIT TIME AT THE RANK PER TAXI (MINUTES)
Drysdale Street	27	44	71	64	1.5	7
Mill Street	0	3	3	4	1.3	0
Railway Station	17	10	27	14	1.4	5
Bank Street	0	0	0	0	0.0	0
Total	44	57	101	82	1.4	6

An estimate of weekly volumes was made by combining four times the Thursday volumes, plus Friday, Saturday and Sunday volumes.

Table 5 - Estimated weekly volumes through each rank

RANK LOCATION	TOTAL TAXIS DEPARTING RANK EMPTY	TOTAL TAXIS DEPARTING RANK WITH PASSENGERS	TOTAL TAXIS DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER TAXI
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Railway Station	228	177	405	275	1.6
Bank Street	1	6	7	11	1.8
Total	596	1069	1665	1552	1.5

3.3 Commentary on results

Saturday was the busiest day in terms of total Taxi hires. Friday volumes were lower than Saturday volumes, but higher than the Sunday or Monday results. The majority of Friday and Saturday hires occurred at night.

From the weekly estimate results, 36% of Taxis departed the ranks empty. Generally, the principal reason that Taxis leave ranks empty, is in order to respond to a pre-booked hire.

3.4 Passenger queuing

Some passenger waiting was observed on Thursday, Friday afternoons and on Friday and Saturday nights.



Observed waiting was generally characterised as occasional waiting by individual passengers or groups of passengers travelling together. On the majority of occasions when passenger waiting was observed, the arrival of a single Taxi at the stance would clear all waiting passengers. However, on Friday and Saturday nights, passenger waiting was characterised by a mixture of occasional waiting by individuals passengers and short periods of continuous queuing of passengers.

All observed passenger waiting occurred on Drysdale Street.

Passenger queuing is quantified in terms of passenger minutes, for the purposes of calculating the Index of Significant Unmet Demand. Approximately 85% of all passenger wait times occurred on Friday and Saturday nights. On Friday night, passenger waiting was observed between midnight and 1:00 on Saturday morning. On Saturday night, passenger waiting was observed between midnight and 2:00 on Sunday morning.

The remaining 15% of passenger wait time occurred over the remaining period surveyed. These were concentrated on Thursday and Friday afternoons between 14:00 to 16:00 each day. Passenger waiting observed during the day may be characterised as occasional queues by individuals or groups of passengers travelling together, rather than periods of continuous queuing. On Friday and Saturday nights, the passenger waiting observed was a mix of occasional queues and brief periods of persistent queueing, when additional people arrived at the ranks, before earlier arrivals had been picked up by Taxis..

The incidence of queuing at ranks in Clackmannanshire is taken into account when calculating the Index of Significant Unmet Demand (ISUD).

3.5 Wheelchair users

The number of wheelchair users obtaining Taxis at ranks, was recorded. This provides a useful insight into how much reliance wheel chair users place on obtaining Taxis without pre-booking the service.

Only two wheelchair user hires were observed. Both were observed at the Drysdale Street rank. Both hires involved groups of people travelling, rather than the wheelchair user travelling on their own. On both occasions, the wheelchair user got out of the chair and boarded the Taxi unaided. The wheel chairs were stowed by the Taxi driver on both occasions. One of the vehicles had deployed a wheelchair ramp to the rear, but the passenger still chose to board the Taxi unaided, so the driver wheeled the empty wheelchair into the rear of the vehicle.



4 PUBLIC CONSULTATION

4.1 Public consultation questionnaires

A public attitude survey was undertaken in Alloa, Tullibody, Alva, Tillicoultry and Dollar, from the 11th to 13th December 2015 and 200 responses were collected. In addition, a further 86 responses were collected via an online survey.

The terms Taxi and Private Hire Car are used in relation to these specific vehicle types. The term Licenced Vehicles is used to encompass both Private Hire Car and Taxi.

In order to establish a level of understanding of respondents knowledge, regarding differences between how Taxis and Private Hire Vehicles may be hired, the questionnaire included questions asking respondents to indicate the ways in which a Private Hire Car and a Taxi may be hired. 23% of respondents indicated methods other than pre-booking, as ways in which to hire a Private Hire Vehicle. The other methods indicated included hailing a passing vehicle, hiring a Private Hire Vehicle waiting on the street or in a car park and hiring one off a rank. In many similar surveys, the majority of respondents were not fully aware of the differences between Taxis and Private Hire Cars. In comparison with these other surveys, the results in Clackmannanshire demonstrated a relatively good understanding of the differences between Taxis and Private Hire Vehicles. It is not clear why the respondent knowledge should be better than in other areas.

The differences between how each type of licenced vehicle may be hired, were explained to respondents who chose ineligible means of hire.

Respondents were asked if they had made one or more trips by Taxi in Clackmannanshire in the last three months. Responses were as follows:

Yes, Private Hire	26.5%
Yes, Taxi	19.7%
Yes, both types / don't know	45.3%
No	8.5%

How frequently do you travel by Taxi or Private Hire Car in Clackmannanshire?

Almost Daily	10.2%
Once a week	17.1%
A few times a month	36.8%
Once a month	6.8%
Less than once a month	23.9%
Never	5.2%



How do you normally obtain a licenced vehicle in Clackmannanshire?

Respondents were invited to include all methods used, i.e. more than one answer. The percentages given are the percentage of all respondents who included each of the options as one of the methods identified.

The most popular methods of obtaining a licenced vehicle are by telephone or smart phone. Rank hire is a relatively infrequently identified means of obtaining a licenced vehicle.

At rank	23.7%
Hail on Street	2.6%
Telephone company	80.7%
Freephone	3.5%
Smartphone	31.6%
Other	2.6%

Is there any location in Clackmannanshire where you would like to see a rank?

If so, where?

Suggestions were received for new ranks to be located in non specific locations in Clackmannan, Tullibody, Tillicoultry, and Dollar.

Within Alloa, new rank locations were identified for Tesco and Asda and Morrisons supermarkets and outside night clubs.

Have you had any problem with the local Taxi service?

Delay in obtaining a Taxi was identified as the most common issue. This was seen as more prevalent at night, after 10:00 pm. Drivers smoking in or by Taxis was also identified by several respondents as a problem.

What would encourage you to use Taxis or use them more? often (indicate top two reasons)

A reduction in the cost of Taxi fares was the most common feature identified with more reliable availability in the town centre at night as another feature identified by several respondents.

Do you consider you, or anyone you know, to have a disability that means you need an adapted vehicle? (Not necessarily a licenced vehicle)

No	73.6%
Yes – I need a wheelchair accessible vehicle	0.3
Yes – Someone I know needs a wheelchair accessible vehicle	13.8
Yes – I need and adapted vehicle but not a wheel chair accessible vehicle	8.0
Yes – Someone I know needs an adapted vehicle but not wheel chair accessible	4.3



Have you wanted to hire a Taxi in the last three months at a rank and given up or made alternative arrangements for travel because none were available?

Yes	8%
No	92%

If the answer to the previous question is yes, could you state where you tried to hire the Taxi?

Drysdale Street	100%
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Have you wanted to hire a Taxi in the last three months by flagging down and given up or made alternative arrangements for travel because none were available?

Yes	2%
No	98%

Locations were given around Alloa town centre on Sunday afternoon and Saturday night. Also in Dollar on Saturday evening.

Have you wanted to book a Taxi specifically, as opposed to a Private Hire Vehicle, by telephone or online, for immediate travel, in the last three months and had to make alternative arrangements because a Taxi was not available within a reasonable time? [Remember, this relates to Taxis not Private Hire]

Yes	24%
No	76%

If the answer to the previous question is yes, how long approximately was the wait time quoted?

Up to 15 minutes	13.2%
Up to 30 minutes	15.1%
Up to 45 minutes	13.2%
Up to 60 minutes	13.2%
Over 60 minutes	15.1%
No availability	30.2%

Do you have regular access to a car?

Yes	78.7%
No	21.3%

Are you a student or permanent resident in Clackmannanshire?

Permanent Resident	88.8%
Student	2.2%
Non-resident	9.0%



Is the respondent Male 1 or Female 2

Male	46.1%
Female	53.9%

What age group does the respondent fall within?

16 – 30	34.9%
31 – 55	52.3%
56+	12.8%

4.2 Comments on results

The use of licenced vehicles in the last three months, by participants in the survey, was relatively high. However, there were a lot of refusals, by members of the public, to be interviewed. Many of those who refused to participate answered an initial question that they had not used a licenced vehicle in the last three months. Indeed, less than 20% of people approached, agreed to participate in the survey. Virtually all of those who did not participate, indicated that they had not used a licenced vehicle in the last three months and were not interested in participating in the survey.

The majority of participants were aware of the differences between Taxis and Private Hire Vehicles. The most common means of obtaining a licenced vehicle was by telephone.

There was relatively little desire for additional ranks. However, there was an issue with availability of Taxis at night.

8% of respondents had indicated that they had given up trying to hire a Taxi. This statistic reflects a low level of latent unmet demand.

Respondents were asked if they had any other comments that they would like to make, regarding Taxi services. Few of those interviewed in the face to face interviews made further comments, however, those who did, mentioned that there were occasions on Saturday nights when passengers had to wait at the Drysdale Street rank and that it can be difficult to find a Taxi at school run times. Around a third of those who completed online questionnaires, also provided additional comments. The principal comments included:

- Some Taxi drivers exceed speed limits, and exhibit poor driving behaviour.
- Some drivers need to improve their manners and be more helpful
- There are not enough Taxis available on the ranks after 8:00 pm.
- There is little or no visible identifiable signage on Taxis and Private Hire Cars. So when a Taxi is booked, for example, to pick up from the railway station, it cannot be identified from company markings, so several drivers have to be asked, before the correct booked vehicle is found.
- Taxis often smell strongly of cigarette smoke and are sometimes dirty and untidy.
- Taxis (and Private Hire Cars) are often late for bookings.



Many of the comments relate to both Taxis and Private Hire Cars. The majority of the additional comments were highlighting faults and problems with the services provided by licenced vehicles. The relatively high proportion of online respondents who raised issues, suggests that this avenue of response was most appealing to those who had complaints to make and is likely to over represent this section of the community. However, the purpose of consultation is to enable people to raise issues and identify aspects which don't work well, or indeed which do work well. It is not intended to function as a randomly collected and representative cross section of the community.

Respondents were asked to provide the first half of their home post code, to enable us to evaluate the geographical spread of survey coverage. Respondents from throughout Clackmannanshire provided responses.



5 STAKEHOLDER CONSULTATION

5.1 Background

In order to gather information from a variety of sources and gather views of the Taxi industry and levels of service from different perspectives, consultation was undertaken with a range of stakeholders. These included representatives of groups or organisations which use Taxis, or undertake related activities and representatives from the Taxi business itself.

5.2 Taxi trade consultation

Discussions were held with representatives of the Taxi trade, from Clackmannanshire. A postal return questionnaire was sent to all licenced Taxi drivers in Clackmannanshire. This included the majority of drivers who drove Private Hire Cars, but had a Taxi licence, which enabled them to drive Taxis (Taxis) as well as Private Hire Cars. In addition, an online survey questionnaire was available for drivers to complete and provide feedback

Valid postal and online survey responses were received from 18 drivers. The survey asked several specific questions, along with further open questions inviting drivers to provide comments on any other issues which affect the trade or which they felt were worthy of note.

As one may expect, working patterns vary from driver to driver. Some work day times, others focus on evening work. It is understood that some driver work predominantly days, but also work Saturday nights or Friday and Saturday nights. It was also alleged that some drivers only work Friday and Saturday nights, when demand peaks.

Drivers were asked how many hires they typically pick up from ranks, roadside hailing and telephone bookings. The majority of drivers indicated that they relied heavily on telephone bookings. In most cases, the majority of hires were obtained from telephone bookings. However, in a minority of cases, drivers focussed on rank hire, rather than telephone bookings. The number of hires by roadside hailing varied. Those who worked evenings were more likely to pick up hires from hailing. Those who did pick up hires from hailing averaged around five per week. The average number of rank hires per day, by those who serviced both rank hires and telephone bookings, was around six per day. Those who focussed on rank hire rather than telephone bookings, indicated that they could receive over 15 hires per day on average. Some respondents indicated that rank hires tend to be shorter distance than telephone hires. Longer journeys out of area or to airports are almost all booked by telephone.

Drivers were asked if they undertook journeys from regular contracts. The majority of respondents indicated that they undertook regular contract hires. Most of these drivers undertook school transport contracts, with some also undertaking other regular transport contracts on a daily or weekly basis.



The majority of respondents undertook hires from telephone bookings. The number of hires ranged from one or two per day, to 10 or more.

Most drivers rarely picked up wheelchair passengers. Those who did pick up wheelchair passengers more regularly, indicated that these hires were generally booked by telephone, by regular clients.

Most respondents indicated that their vehicles were not driven by more than one driver.

The majority of drivers felt there were enough or too many Taxis in Clackmannanshire. Similarly, the majority of respondents felt there were enough Private Hire Vehicles to satisfy demand.

Conveyance of wheelchair passengers is undertaken by a section of the trade which operates wheel chair accessible vehicles. This demand is serviced by both wheel chair accessible Taxis which serve regular customers with specific needs.

Several respondents felt that the relationship and level of communication with the Council licensing officers could be improved. Feedback from some members of the trade indicated that regular and structured meetings would be desirable. Further suggestions were made that, perhaps with a formal agenda and pre-submitted questions or issues to be discussed, in order to ensure that meetings are focussed and structured and address germane issues.

It was generally recognised, amongst respondents, that there was a peak in demand on Saturday nights and some drivers indicated that at these times, passenger may face a wait for Taxis to arrive at the ranks. However, respondents commonly felt that at other times, there is generally a queue of Taxis waiting for passengers at the ranks.

Drivers felt that on Friday and Saturday nights, demand is centred on the night clubs, which are located to the South and Southwest of the Drysdale Street and Mill Street ranks. Taxis sometimes drive by or wait near the clubs, to pick up passengers. Passengers know to walk to the Drysdale Street rank to wait for a Taxi and the drivers often pick up passengers on the way to the Drysdale Street rank.

A common suggestion from the trade was that a new rank closer to the night clubs would be desirable, along with ranks at the supermarkets. Some ranks in the outlying towns, such as in Dollar, were also requested by some drivers.

Private cars parking on ranks, was raised as a persistent issue. This affects the rank on Drysdale Street and Mill Street. At times, the rank on Mill Street is fully occupied by private cars and cannot be accessed by Taxis. The Railway Station rank is also occupied by private cars from time to time. Several drivers pointed out that the rank on Mar Street was removed when the road was re-surfaced.

Some feedback from a minority of drivers suggested that not all drivers adhere to the dress code and not all are polite, courteous and provide good service. Some suggested that a Taxi enforcement officer could visit the ranks and check vehicles, behaviour and drivers from time to time.



5.3 Non Trade Consultation

Views on the Taxi trade and Taxi services were sought from user groups, representing elderly and disabled groups, hotels and licenced premises, transport providers, police, fire and ambulance services and local businesses, councillors and community councils.

Feedback was generated through a combination of email and telephone contact and face to face contact.

Most hotels and licenced premises indicated that they or their customers generally called one of the Private Hire Operators to book a vehicle, as opposed to specifically ordering Taxis. Generally, respondents found that there were licenced vehicles available for customers when required. However, some did identify issues. These issues were:

- Customers sometimes preferred to order Private Hire Cars, owing to lower cost.
- Late on Saturday nights, there is a shortage of both Private Hire Cars and Taxis and there can be substantial wait times for bookings.
- Pre-booked hires frequently do not turn up at the booked time.
- Taxis sometimes wait near the clubs at closing time, in order to pick up fares. If patrons leaving the clubs need a Taxi, most will phone, but some will walk to Drysdale Street rank.
- It is generally expected that at club closing times, it can take a while to get a Taxi, but one can generally be obtained within 10 to 15 minutes.

Supermarkets all had Freephone booking services available in the shop and not indicated that they were aware that any customers ever faced difficulty hiring a licenced vehicle. At each supermarket, staff were not really aware of any difference between Taxis and Private Hire Vehicles. All trips were booked by telephone.

Feedback from representatives of elderly or mobility impaired users indicated that those who depend on licenced vehicles for transport, tend to have a regular provider that they use. However, at 'school run' times, both regular providers or alternative providers are often unavailable.

On occasions when a mobility impaired user has booked travel and a replacement driver has been provided, rather than a regular driver, the replacement driver was not able to fully appreciate and meet the needs of the passenger. Examples include:

- Partially sighted travellers who could not identify which vehicle they had booked (at the railway station), despite the driver waving to them to indicate.
- Drivers who turned up to pick up visually impaired passengers, but didn't open the door, or explain which way the vehicle was pointing (i.e. which were the front and rear doors of the vehicle)
- A traveller with a speech impediment trying to book a Taxi by phone and being treated as though they were drunk and the call rejected.



Regular service providers are generally aware of the needs of their clients with mobility impairments or other impairments, such as speech or learning difficulties. However, the examples above illustrate how some drivers are not always aware of how to deal with clients with additional needs. Some driver training on disability awareness and how to deal with passengers with additional needs, would be welcomed.

Regular travellers, with mobility impairments, know which Taxi operators to contact to book travel. For example, to book a wheelchair user hire. However, visitors to the area struggle to find information regarding which Taxi companies offer wheel chair accessible vehicles, or to identify wheel chair accessible vehicles at a rank, such as at the Railway Station.

There is a perception that travellers with wheelchairs or other mobility impairments are charged more to travel, than able bodied people.

People with hearing impairments have difficulty hiring a Taxi by phone. Some facility for hiring Taxis by text would be welcomed.

Councillor and Community Council comments include the following statements, which are representative of several submissions received.

“There are a limited number wheelchair access Taxis operating in the Alloa area bearing in mind they need to have additional licences to operate these Taxis. Wheelchair access Taxis have to be booked in advance and this is not widely known by members of the public especially if they are visiting the town by bus or rail.”

“It is difficult to get Taxi around 3 pm as most are taken up with school runs. Also between 5pm and 6.30pm due to change over of drivers. This is a busy time of day for everyone else trying to get home particularly off trains.”

“Some Taxi drivers have complained to me that they now are expected to wear dark clothing but only some adhere to this.”

“Taxis dropping of in the town often can't get into the bays to drop off passengers. In Mill Street and Drysdale Street, private cars are constantly parked in the Taxi spaces. Taxis have difficulty dropping off at the Post Office as there is no drop off provision outside it.”

“Taxis tend to ignore the 20mph limits throughout the town area and are often seen in excess of 30mph”

“Taxis in general are clean and the drivers polite.”

“There are issues with irresponsible parking by car users in Taxi ranks but until the Council has a facility, by bye-law or other means, tackling this issue is always going to be difficult”

“I believe that any new Taxis should be able to carry wheelchair using passengers (and their carers if necessary). I also believe that there is an insufficient number of adapted vehicles.”



“The drivers who regularly carry passengers with a disability are, to the best of my knowledge, extremely respectful to the needs of that person.”

“There is a problem with the availability of Taxis, particularly at the start and end of the school day with Taxis regularly being unavailable for approximately one hour at a time”

“Whilst I don't expect drivers, who, whilst licensed by the authority are in effect ambassadors of the Council, to be wearing shirts and ties at all times they should be tidily dressed and the conditions by which a license is issued clearly state the requirements.”

“The prevailing weather conditions can and do have a major impact on the outside of a vehicle. There can be no excuse for vehicles not to be clean and tidy on the inside.”

“Areas of loose trim around seats catching legs etc is an issue that passengers have complained about before and it should be the driver and/or the operator to ensure that these issues are regularly checked and, if necessary, be dealt with.”

“Drivers must also be aware of the legal penalties for smoking in a public place and a regular inspection of Taxis would go some way to addressing this.”

“I do feel that we fail disabled users quite badly, we do not insist on training for restraint of wheelchairs/users, we have no manual handling training in place and Taxi's, (anecdotally) are not always available for wheelchair users.”

“It would be useful to have recognised taxi ranks at transport hubs such as the Rail station / Bus Terminus Alloa-these are already provided but new ones should be considered at all of the new community hubs in Clackmannanshire.”

“taxi ranks should ideally have an orientation board,-cycle rack nearby”

“I see opportunity for Taxi drivers to step up to be part of the public transport network-perhaps have a dedicated service route Along Hillfoots to Alloa providing discount fare”

5.4 Summary of trade and stakeholder consultation

The key aspects from trade and stakeholder consultation were:

- The majority of drivers feel they need to undertake a significant proportion of their work through advanced bookings or immediate bookings by telephone. As such, rank based hire forms a minor share of the workload, albeit a significant component.
- Many drivers undertake school contract hires on a regular basis. This can lead to shortages in availability during ‘school run’ times. The shortages extend to both rank availability and availability for telephone bookings.
- Many of the wheel chair accessible vehicles are regularly engaged in school contract hires and so are not available to regular users, during school run times.



- There is a peak in demand late on Friday and Saturday nights, when the night clubs close. During these peaks of demand, there are not sufficient licenced vehicles available to cater for demand and passengers have to wait for Taxis.
- Drivers operate on a variety of work patterns. Some focus on week day, day time, others focus on weekday night time, some focus on weekend working and some work a variety of week day and weekend, days and nights. Few vehicles are driven by more than one driver. Hence, those vehicles driven in the day are not driven at night and vice versa.
- Vehicles parking on the taxi ranks is a significant issue. There is a perception that there is little enforcement of parking restrictions.
- A new rank to service the night time economy would be useful. This would better serve patrons of the night clubs.
- Elderly and mobility impaired travellers, who rely on taxis for travel, generally use a regular provider and generally receive good service. However, some drivers are not fully aware of the barriers to travel that some users face and would benefit from some awareness training.
- There is little or no livery advertising on vehicles. This can make it difficult to identify which taxi is servicing a pre-booked hire.
- Wheel chair accessible vehicles are not readily identifiable. There is no exterior signage identifying accessible vehicles.
- Travellers with a hearing impairment find difficulty booking a taxi by telephone.



6 DETERMINATION OF UNMET DEMAND

6.1 Quantitative Assessment

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

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

where:

ISUD = Incidence of Significant Unmet Demand

APD = Average passenger delay across the entire week, in minutes

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

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

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

SF = Seasonality Factor

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

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

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

6.2 Calculation of ISUD variables for Clackmannanshire

APD: The average delay is determined by calculating the total passenger delay as aggregate passenger delay minutes, then dividing by the total number of passengers, including those who did not suffer any delay.

The aggregate delay in passenger minutes was 1,196 minutes. When divided by the total weekly passengers of 1,552, the Average Passenger Delay was **0.77** minutes (approximately 46 seconds).



PF Whilst demand on Friday and Saturday nights is higher than at other times, the increase in demand is not sufficient to consider that there is a significant peak. Therefore the **PF value is 1.0**

SSP Weekday daytime hours are deemed to be between 7.00 am and 6.00 pm on the Friday and the Monday surveyed. Within these eleven hour periods, there were occasions when passengers were delayed by more than a minute, waiting for Taxis to arrive at the ranks. 4.1% of the time surveyed recorded passenger wait times of over one minute. Therefore the **SSP proportion is 4.1**.

GID The percentage of Taxi users travelling in hours where the average passenger delay exceeds one minute was weighted to represent values throughout the week, by taking four times the Thursday values plus Friday Saturday and Sunday.

Total weighted passengers travelling during hours when the average passenger delay exceeded 1 minute was 200. Weighted weekly passengers were 1,552.

To GID percentage was calculated as follows:

$$\frac{200}{1,552} = 12.9\%$$

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

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

The public consultation survey results indicate that no respondents have given up trying to hire a Taxi by hailing or at a stance. Therefore, the **LDF factor is 1.08**.

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

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

$$\text{ISUD} = 0.77 \times 1.0 \times 4.1 \times 12.9 \times 0.8 \times 1.08 = 35.18$$



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

6.3 Consideration of wider factors.

Whilst the ISUD value of 35.18 is below the threshold for significant unmet demand, it is good practice that the ISUD index value should not be taken in isolation, as the sole indicator of no significant unmet demand. Other available evidence should also be considered.

Passenger delay was focussed during one hour on Friday night and two hours on Saturday night. These are periods of peak demand from the night time economy.

Feedback from the trade indicated that many drivers rely heavily on pre-booked hires, either by direct telephone booking (to the driver) or through a Taxi / Private Hire booking system.

Feedback from stakeholders and the public suggests that Taxis are generally available except for the peak period of demand on Saturday night and on weekday afternoons (during school run times). It is notable that the latent demand indicator from public consultation indicated that few of the members of the public interviewed felt that they had been unable to obtain a Taxi at any time by stance hire or hailing. However, availability by telephone booking was seen as a slightly more significant issue, especially with the online responses.

Discussion with representatives of the night time economy indicated that there were no issues with the availability of licensed vehicles except perhaps late on Friday and Saturday nights.

Taking the ISUD value and other evidence gathered from consultation, it is considered that there is **no Significant Unmet Demand**.



7 PUBLIC BENEFIT

7.1 Public Benefit assessment

A principal consideration when assessing whether a cap on Taxi numbers should be introduced or maintained, is whether or how a cap can benefit the public.

As part of the trade consultation, members of the trade were asked to provide input on the benefits which the public may derive, if the number of Taxis is capped.

The trade identified the following benefits.

7.2 Benefits to the public of capping the number of Taxis in Clackmannanshire

Many members of the public have a close relationship with one or more small independent Taxi company. This enables the trade to offer more personal efficient services to the public. This personal service would be eroded if the number of licences were to grow significantly. The trade would become more dependant on a predominantly transactional and impersonal service, rather than a relationship and service quality based business. This would lead to a drop in customer standards.

The Alloa area is presently well serviced and the public are provided with good personal service which has been built up over the years. Following the increase in licences over previous months. The trade feels that it is becoming increasingly difficult to maintain the professional service standards which is offered to the public. If the number of licenses were to be increased further, this would dilute earnings from the existing customer base. More drivers would compete for the same income. As a result, experienced drivers would be forced out of the trade, leading to a lowering of standards and professionalism. The public would eventually suffer when this current generation of Taxi Owners retire out and possibly be replaced by a new uncapped generation. The personal touch will cease to exist. This is not what the public desire or deserve and certainly not what many of our loyal customers expect.

Rank space has not been increased in line with the increase in Taxi licenses in recent times. Therefore there is no space for the additional vehicles to wait on ranks. If further licences were introduced, this would lead to additional vehicle mileage and emissions as vehicles are forced to drive around, looking for fares or a rank to wait at. There would be no provision for these extra vehicles to wait at ranks with engines switched off. This would result in extra diesel and petrol emissions being pumped into the clean air space of the town centre. Taxis which could not access the ranks, may be forced to use public parking spaces to wait. This would irritate the local residents and retailers.

Long serving and experienced drivers who undertake school transport contracts are known to local children. This trusted relationship enhances the experience of the children as they grow up. through school days, and then on to night clubs, are become young adults with children of their own. Such customers feel safer and



benefit from the service they continue to receive from drivers they have known for years in some cases.

Experienced drivers from a regular business relationship with many older customers and provide full service by, for example, loading groceries into the vehicle and helping to deliver the groceries from the vehicle to the home. Such service levels are likely to decline with a more transactional and less service orientated provision, should the number of licences be unlimited.

Whilst operating as individual businesses, many drivers operate cooperatively, providing holiday cover and absence cover and cover bookings in the case of vehicle breakdown, to ensure that customers are always serviced. This cooperative basis of operation would be eroded and service levels diminished, if the number of licences was unlimited.

7.3 Evaluation of trade feedback and public benefit

The benefits identified in paragraph 7.2 are a summary of opinions put forward by the trade. The evaluation presented in this paragraph is based on evaluation of evidence and data gathered throughout the study, from different sources.

Based on trade and stakeholder feedback and observation of rank activity, it appears that many Taxi users do have a preference for particular drivers or companies. It is likely that such preferences are based either on the level of service provided or on price differential, with service emerging as the most prevalent influence in developing and maintaining such relationships.

Entry to the Taxi trade is often driven by need and lack of alternative sources of employment (such as following redundancy), rather than driven by identification of demand for service. For example, it is not uncommon for people to enter the trade with no market research and no evaluation of demand for service. Therefore, not all growth in the number of licenced vehicles is driven by growth in passenger demand. Such features of the trade are frequently indicated by a relatively large turnover in drivers who register for licences and do not renew after their initial period as a licenced driver. One of the outcomes of an uncapped licencing policy can be an increase in vehicle mileage per passenger, as more vehicles seek rank spaces or cruise around streets plying for hire, as passenger demand growth falls behind the increase in provision.

An increase in licences can lead to dilution of earnings, which, in turn, can lead to experienced drivers leaving the trade and less experienced drivers entering the trade. Unless there is evidence that existing and experienced drivers provide poor service, a secondary effect of such a change can be a lowering of service levels, poorer local knowledge and fewer full time drivers as more new entrants to the trade work part time, focussing on peak periods at the weekends.

If an increase in licences were to lead to a greater proportion of drivers only working part time at periods of peak demand, this could lead to fewer periods of passenger queueing at peak times on Friday and Saturday nights. However, this could also lead to lower availability at school run times, with fewer drivers working weekday day shifts.



Whilst some drivers focus their attention on servicing demand for rank hires, others focus on telephone hires, with the opportunity to pick up a rank hire viewed as a secondary opportunity, between booked hires. This practice weakens the argument that more rank space is needed. For much of the time observed, the biggest impediment to accessing rank space, was the presence of parked vehicles. Measures to discourage parking would be an alternative consideration to increasing rank space.



8 CONCLUSIONS AND RECOMMENDATIONS

8.1 Unmet demand

Analysis of the taxi rank survey data and consultation data indicate that there are generally sufficient Taxis available to cater for demand for all but the peak of demand on a Friday and Saturday night and on weekdays between 14:00 and 16:00 hours. Whilst there was some passenger queuing observed on Friday and Saturday nights, and Thursday and Friday afternoons, this was not sufficient, in the context of all passenger volumes in a week, to be deemed significant. .

The level of unmet demand is not significant, with respect to the ISUD index calculation.

8.2 Trade feedback

Some key concerns voiced by the trade were related to vehicles parking in Taxi ranks and lack of available rank space.

The trade is more heavily based on repeat business from regular customers, than is the case in many areas.

8.3 Public and stakeholder consultation issues

In general, the public and stakeholders appear content with Taxi services. It was, however, noted that there can be a wait for a Taxi on a Friday and Saturday night and a shortage of availability at school run times.

The availability of wheelchair accessible Taxis and driver training for wheel chair transport and disability awareness have been identified. However, for most users, the service provided is perceived as good.

It is difficult to identify wheelchair accessible Taxis at ranks as there is no distinguishing marking to identify such vehicles, compared with non-equipped Taxis which are the same model of vehicle. It can be difficult for visitors to identify and book a wheelchair accessible Taxi to book by telephone.

Given the proportion of hires which are pre-booked, it is difficult to identify Taxi operators through vehicle signage and markings.

Ability to book Taxis by text message or similar would be appreciated by hearing impaired users.

8.4 Recommendations

Consideration should be given to allowing operators to display the operator name on vehicles, in a way that would allow vehicles to be identified by customers who had pre-booked that vehicle.



A form of identification of wheelchair accessible vehicles could aid wheelchair users to identify suitable vehicles at ranks and on street. This may also encourage more wheelchair users to hire Taxis.

A register of contact details for wheelchair accessible Taxis could be published on the Council's web site. This could help visitors to the area or irregular users, to book wheelchair accessible Taxis.

Mobile application and internet based booking systems could, in time, enable hearing impaired travellers to book Taxis without the need to telephone. However, few of the existing Taxi operators have such systems at present. The majority of Taxi drivers have mobile phones which are used to accept bookings. Possible options to encourage drivers to accept bookings by text message could be explored.

There is little evidence of unmet demand at present and the level is below that which would be considered to be significant. Therefore, the survey has concluded that there is **no significant unmet demand** for Taxis in Clackmannanshire.

There is no compelling need to increase the number of Taxis to meet demand..

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

- Apply a numerical limit
- Issue any number of additional plates as it sees fit,
- Have no numerical limit

In addition to the options above, there are also potential options for changes to other aspects of licencing policy, such as vehicle type, vehicle age limits and driver training requirements.

If a limit is implemented, this can lead to Taxi licences having a value and becoming tradeable assets. Whilst there are some potential benefits to the public, through limiting the number of Taxi licences, there are also some potential disadvantages

Some benefits to the public could be realised by applying a cap, retaining experienced drivers in the Taxi fleet and with additional training to help drivers appreciate and address the needs of those travellers with a range of impairments which can present an obstacle to travel.

Whilst only Taxis may pick up passengers from Taxi ranks, a relatively small proportion of capacity is devoted to servicing demand from the Taxi ranks. Indeed, the level of use of Taxi ranks, by passengers would only provide a handful of hires per vehicle each day, if all Taxis were all limited to only Taxi rank based hire. Much of the work serviced by Taxis is serviced by telephone bookings. This is also a sector of provision which is addressed by Private Hire Cars. As the number of Private Hire Cars is uncapped, the scope for addressing growth in demand from telephone bookings is essentially not limited.

The unmet demand survey relates primarily to how well demand from passengers at Taxi ranks is served. The level of service received at Taxi ranks is affected more by competition between telephone bookings and rank hire bookings and



between regular contract hires and rank hires, than the number of licenced Taxis. There were clearly not enough rank hires to support the full Taxi fleet through rank hire work alone.

The number of Taxis would be able to service all of the demand through the ranks, without any appreciable passenger waiting, if capacity at peak times were not taken up by telephone bookings and to a lesser extent, by school contract work.

These capacity issues would not necessarily be addressed in the first instance, by the availability of more Taxi licenses. But an opportunity exists to encourage the trade to address the issues through cooperative working to ensure the rank based demand is serviced at times when availability is low, relative to demand, i.e. Friday and Saturday nights and school run times. By ensuring that demand is met, the trade could justify protecting the exclusive access to rank and hailing hire enjoyed by Taxis. Otherwise, removal of a cap, whilst likely to lead to lower levels of customer service, would also force some drivers to service the ranks at the school run times and peak demand periods on Friday and Saturday nights, through the application of market forces.

The cooperative approach has worked well in other areas and ensured that the number of Taxis operating is kept down and customer service levels are kept up.

The availability of wheelchair accessible vehicles was raised from several sources during the consultation process. One means of increasing the number of wheelchair accessible vehicles which is frequently employed by licensing authorities, is to apply a limit to non-wheelchair accessible Taxis, but allow additional Taxis to be licenced if they are approved wheelchair accessible vehicles. This approach can be coupled with a requirement for driver training with respect to customer service and serving the needs of travellers with a range of mobility impairments.

The implementation of a wheelchair accessible vehicle requirement and additional training requirement for new Taxi licences, is not without difficulties and obstacles to overcome. The type of vehicles which may be deemed to be suitable would need careful consideration, along with approved fixing types. There are no formally SQA accredited disability awareness courses, other than NVQ level courses which cover a significantly wider syllabus scope, than disability awareness and basic customer service. Whilst an approved syllabus could be developed for Clackmannanshire drivers, this would also have additional costs associated with developing and maintaining training standards.

It is recommended that a cap is introduced on the number of Taxi licences, at the present day level, with some provisos. These are that:

- The trade are offered the opportunity to address the shortage of supply during school run times and at club closing times, through cooperative working. This may require measures such as allocating a rota of drivers who service the ranks rather than accept telephone bookings at these times.
- If public perception and evidence from rank observation indicate that passengers still face shortages of supply at the ranks at these times, then the limit may be reviewed.
- Additional Taxi licences may be issued to approved wheelchair accessible vehicles.



- New drivers should undertake a defined and approved training course on disability awareness and customer service.

A further recommendation is that Taxi livery and wheelchair accessible vehicle identification markings are reviewed, to enable wheelchair users and those who book Taxis by telephone, to identify relevant vehicles more readily at locations such as the Railway Station.



APPENDIX A TAXI OBSERVATION RESULTS



Drysedale Street		Thursday to Friday				
Hour Beginning	Total Taxis Departing Rank Empty	Total Taxis Departing Rank With Passengers	Total Taxis Departing Rank	Total Passengers Departing Rank	Average Passengers per Taxi	Average Wait Time at the Rank per Taxi (Minutes)
07:00	2	0	2	0	0.0	10
08:00	2	2	4	2	1.0	4
09:00	2	5	7	5	1.0	14
10:00	4	8	12	12	1.5	17
11:00	2	7	9	8	1.1	32
12:00	7	10	17	13	1.3	20
13:00	4	12	16	16	1.3	7
14:00	1	11	12	14	1.3	7
15:00	2	8	10	13	1.6	5
16:00	2	13	15	21	1.6	7
17:00	5	11	16	15	1.4	4
18:00	1	1	2	1	1.0	3
19:00	1	4	5	7	1.8	1
20:00	0	3	3	5	1.7	11
21:00	3	4	7	4	1.0	0
22:00	0	2	2	2	1.0	3
23:00	0	0	0	0	0.0	0
00:00	0	0	0	0	0.0	0
01:00	0	0	0	0	0.0	0
02:00	0	0	0	0	0.0	0
03:00	0	0	0	0	0.0	0
04:00	0	0	0	0	0.0	0
05:00	0	0	0	0	0.0	0
06:00	0	0	0	0	0.0	0
Total	38	101	139	138	1.4	10
Drysedale Street		Friday to Saturday				
Hour Beginning	Total Taxis Departing Rank Empty	Total Taxis Departing Rank With Passengers	Total Taxis Departing Rank	Total Passengers Departing Rank	Average Passengers per Taxi	Average Wait Time at the Rank per Taxi (Minutes)
07:00	1	0	1	0	0.0	8
08:00	1	1	2	2	2.0	7
09:00	3	6	9	6	1.0	10
10:00	6	5	11	5	1.0	7
11:00	2	8	10	9	1.1	15
12:00	5	3	8	3	1.0	20
13:00	7	7	14	8	1.1	21
14:00	0	8	8	9	1.1	4
15:00	0	8	8	12	1.5	2
16:00	3	14	17	21	1.5	6
17:00	2	11	13	14	1.3	10
18:00	1	10	11	11	1.1	5
19:00	2	4	6	5	1.3	10
20:00	3	6	9	10	1.7	22
21:00	2	13	15	16	1.2	15
22:00	4	7	11	9	1.3	22
23:00	2	11	13	13	1.2	20
00:00	2	15	17	28	1.9	3
01:00	3	12	15	21	1.8	9
02:00	7	3	10	3	1.0	18
03:00	1	1	2	1	1.0	0
04:00	0	0	0	0	0.0	0
05:00	0	0	0	0	0.0	0
06:00	0	0	0	0	0.0	0
Total	57	153	210	206	1.3	12



Drysedale Street		Saturday to Sunday				
HOURLY BEGINNING	TOTAL TAXIS DEPARTING RANK EMPTY	TOTAL TAXIS DEPARTING RANK WITH PASSENGERS	TOTAL TAXIS DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER TAXI	AVERAGE WAIT TIME AT THE RANK PER TAXI (MINUTES)
07:00	0	0	0	0	0.0	0
08:00	0	0	0	0	0.0	3
09:00	2	1	3	1	1.0	13
10:00	1	6	7	6	1.0	24
11:00	1	3	4	3	1.0	5
12:00	0	3	3	3	1.0	4
13:00	5	12	17	18	1.5	3
14:00	1	11	12	17	1.5	7
15:00	2	10	12	17	1.7	3
16:00	4	12	16	15	1.3	4
17:00	1	15	16	20	1.3	2
18:00	2	10	12	13	1.3	6
19:00	4	11	15	19	1.7	10
20:00	8	13	21	17	1.3	9
21:00	5	16	21	21	1.3	8
22:00	3	19	22	30	1.6	7
23:00	4	13	17	20	1.5	7
00:00	0	17	17	35	2.1	3
01:00	0	19	19	40	2.1	0
02:00	0	6	6	9	1.5	0
03:00	0	1	1	3	3.0	0
04:00	0	0	0	0	0.0	0
05:00	0	0	0	0	0.0	0
06:00	0	0	0	0	0.0	0
Total	43	198	241	307	1.6	6
Drysedale Street		Sunday to Monday				
HOURLY BEGINNING	TOTAL TAXIS DEPARTING RANK EMPTY	TOTAL TAXIS DEPARTING RANK WITH PASSENGERS	TOTAL TAXIS DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER TAXI	AVERAGE WAIT TIME AT THE RANK PER TAXI (MINUTES)
07:00	0	0	0	0	0.0	0
08:00	0	0	0	0	0.0	0
09:00	0	0	0	0	0.0	0
10:00	0	0	0	0	0.0	0
11:00	0	1	1	1	1.0	0
12:00	2	4	6	7	1.8	2
13:00	1	4	5	6	1.5	5
14:00	2	3	5	3	1.0	8
15:00	2	8	10	11	1.4	4
16:00	2	4	6	9	2.3	11
17:00	0	6	6	9	1.5	2
18:00	5	4	9	4	1.0	9
19:00	0	5	5	7	1.4	8
20:00	4	1	5	1	1.0	13
21:00	6	2	8	2	1.0	9
22:00	1	1	2	2	2.0	3
23:00	2	1	3	2	2.0	5
00:00	0	0	0	0	0.0	0
01:00	0	0	0	0	0.0	0
02:00	0	0	0	0	0.0	0
03:00	0	0	0	0	0.0	0
04:00	0	0	0	0	0.0	0
05:00	0	0	0	0	0.0	0
06:00	0	0	0	0	0.0	0
Total	27	44	71	64	1.5	7



Mill Street		Thursday to Friday					
Hour Beginning	Total Taxis Departing Rank Empty	Total Taxis Departing Rank With Passengers	Total Taxis Departing Rank	Total Passengers Departing Rank	Average Passengers Per Taxi	Average Wait Time at the Rank per Taxi (Minutes)	
07:00	0	0	0	0	0.0	0	
08:00	0	0	0	0	0.0	3	
09:00	0	0	0	0	0.0	31	
10:00	4	1	5	1	1.0	35	
11:00	5	2	7	2	1.0	7	
12:00	4	2	6	3	1.5	22	
13:00	3	5	8	8	1.6	14	
14:00	0	1	1	1	1.0	3	
15:00	0	0	0	0	0.0	0	
16:00	0	0	0	0	0.0	0	
17:00	0	0	0	0	0.0	0	
18:00	0	0	0	0	0.0	0	
19:00	0	0	0	0	0.0	0	
20:00	0	0	0	0	0.0	0	
21:00	0	1	1	4	4.0	0	
22:00	1	0	1	0	0.0	3	
23:00	0	0	0	0	0.0	0	
00:00	0	0	0	0	0.0	0	
01:00	0	0	0	0	0.0	0	
02:00	0	0	0	0	0.0	0	
03:00	0	0	0	0	0.0	0	
04:00	0	0	0	0	0.0	0	
05:00	0	0	0	0	0.0	0	
06:00	0	0	0	0	0.0	0	
Total	17	12	29	19	1.6	16	
Mill Street		Friday to Saturday					
Hour Beginning	Total Taxis Departing Rank Empty	Total Taxis Departing Rank With Passengers	Total Taxis Departing Rank	Total Passengers Departing Rank	Average Passengers Per Taxi	Average Wait Time at the Rank per Taxi (Minutes)	
07:00	0	0	0	0	0.0	0	
08:00	0	0	0	0	0.0	0	
09:00	1	0	1	0	0.0	6	
10:00	4	1	5	1	1.0	5	
11:00	2	2	4	2	1.0	4	
12:00	4	3	7	3	1.0	8	
13:00	2	3	5	4	1.3	11	
14:00	1	0	1	0	0.0	5	
15:00	0	0	0	0	0.0	0	
16:00	1	0	1	0	0.0	0	
17:00	0	0	0	0	0.0	0	
18:00	0	0	0	0	0.0	0	
19:00	0	0	0	0	0.0	0	
20:00	1	0	1	0	0.0	3	
21:00	0	0	0	0	0.0	0	
22:00	0	0	0	0	0.0	0	
23:00	0	0	0	0	0.0	0	
00:00	0	0	0	0	0.0	0	
01:00	0	3	3	9	3.0	4	
02:00	2	4	6	6	1.5	4	
03:00	0	0	0	0	0.0	0	
04:00	0	0	0	0	0.0	0	
05:00	0	0	0	0	0.0	0	
06:00	0	0	0	0	0.0	0	
Total	18	16	34	25	1.6	6	



Mill Street		Saturday to Sunday				
Hour Beginning	Total Taxis Departing Rank Empty	Total Taxis Departing Rank With Passengers	Total Taxis Departing Rank	Total Passengers Departing Rank	Average Passengers per Taxi	Average Wait Time at the Rank per Taxi (Minutes)
07:00	0	0	0	0	0.0	0
08:00	0	0	0	0	0.0	0
09:00	0	0	0	0	0.0	0
10:00	0	0	0	0	0.0	0
11:00	0	0	0	0	0.0	0
12:00	0	0	0	0	0.0	0
13:00	0	0	0	0	0.0	0
14:00	0	0	0	0	0.0	0
15:00	0	0	0	0	0.0	0
16:00	0	0	0	0	0.0	0
17:00	0	1	1	1	1.0	3
18:00	0	0	0	0	0.0	0
19:00	0	0	0	0	0.0	0
20:00	2	0	2	0	0.0	8
21:00	0	1	1	1	1.0	0
22:00	0	0	0	0	0.0	0
23:00	0	0	0	0	0.0	0
00:00	0	0	0	0	0.0	0
01:00	0	2	2	2	1.0	0
02:00	0	7	7	11	1.6	3
03:00	0	9	9	17	1.9	0
04:00	0	0	0	0	0.0	0
05:00	0	0	0	0	0.0	0
06:00	0	0	0	0	0.0	0
Total	2	20	22	32	1.6	2
Mill Street		Sunday to Monday				
Hour Beginning	Total Taxis Departing Rank Empty	Total Taxis Departing Rank With Passengers	Total Taxis Departing Rank	Total Passengers Departing Rank	Average Passengers per Taxi	Average Wait Time at the Rank per Taxi (Minutes)
07:00	0	0	0	0	0.0	0
08:00	0	0	0	0	0.0	0
09:00	0	0	0	0	0.0	0
10:00	0	0	0	0	0.0	0
11:00	0	0	0	0	0.0	0
12:00	0	0	0	0	0.0	0
13:00	0	0	0	0	0.0	0
14:00	0	1	1	1	1.0	0
15:00	0	0	0	0	0.0	0
16:00	0	0	0	0	0.0	0
17:00	0	1	1	2	2.0	0
18:00	0	0	0	0	0.0	0
19:00	0	1	1	1	1.0	0
20:00	0	0	0	0	0.0	0
21:00	0	0	0	0	0.0	0
22:00	0	0	0	0	0.0	0
23:00	0	0	0	0	0.0	0
00:00	0	0	0	0	0.0	0
01:00	0	0	0	0	0.0	0
02:00	0	0	0	0	0.0	0
03:00	0	0	0	0	0.0	0
04:00	0	0	0	0	0.0	0
05:00	0	0	0	0	0.0	0
06:00	0	0	0	0	0.0	0
Total	0	3	3	4	1.3	0



Railway Station		Thursday to Friday				
HOURLY BEGINNING	TOTAL TAXIS DEPARTING RANK EMPTY	TOTAL TAXIS DEPARTING RANK WITH PASSENGERS	TOTAL TAXIS DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER TAXI	AVERAGE WAIT TIME AT THE RANK PER TAXI (MINUTES)
07:00	2	0	2	0	0.0	0
08:00	0	0	0	0	0.0	0
09:00	4	0	4	0	0.0	3
10:00	5	0	5	0	0.0	3
11:00	4	0	4	0	0.0	3
12:00	4	2	6	2	1.0	3
13:00	3	1	4	1	1.0	3
14:00	2	0	2	0	0.0	8
15:00	2	0	2	0	0.0	6
16:00	1	0	1	0	0.0	3
17:00	1	1	2	2	2.0	0
18:00	1	0	1	0	0.0	4
19:00	2	2	4	2	1.0	8
20:00	0	4	4	7	1.8	10
21:00	0	2	2	3	1.5	3
22:00	0	2	2	4	2.0	0
23:00	0	2	2	2	1.0	0
00:00	0	1	1	2	2.0	0
01:00	0	0	0	0	0.0	0
02:00	0	0	0	0	0.0	0
03:00	0	0	0	0	0.0	0
04:00	0	0	0	0	0.0	0
05:00	0	0	0	0	0.0	3
06:00	2	0	2	0	0.0	6
Total	33	17	50	25	1.5	3
Railway Station		Friday to Saturday				
HOURLY BEGINNING	TOTAL TAXIS DEPARTING RANK EMPTY	TOTAL TAXIS DEPARTING RANK WITH PASSENGERS	TOTAL TAXIS DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER TAXI	AVERAGE WAIT TIME AT THE RANK PER TAXI (MINUTES)
07:00	1	0	1	0	0.0	3
08:00	3	0	3	0	0.0	8
09:00	3	1	4	1	1.0	3
10:00	3	0	3	0	0.0	3
11:00	4	1	5	2	2.0	4
12:00	1	1	2	1	1.0	0
13:00	1	0	1	0	0.0	3
14:00	3	2	5	2	1.0	6
15:00	3	0	3	0	0.0	3
16:00	3	0	3	0	0.0	3
17:00	1	0	1	0	0.0	6
18:00	3	3	6	4	1.3	7
19:00	2	2	4	2	1.0	6
20:00	4	5	9	9	1.8	10
21:00	2	4	6	4	1.0	16
22:00	6	5	11	5	1.0	7
23:00	1	6	7	9	1.5	25
00:00	1	10	11	18	1.8	5
01:00	0	0	0	0	0.0	0
02:00	0	0	0	0	0.0	0
03:00	0	0	0	0	0.0	0
04:00	0	0	0	0	0.0	0
05:00	1	0	1	0	0.0	3
06:00	1	0	1	0	0.0	4
Total	47	40	87	57	1.4	8



Railway Station		Saturday to Sunday				
HOURLY BEGINNING	TOTAL TAXIS DEPARTING RANK EMPTY	TOTAL TAXIS DEPARTING RANK WITH PASSENGERS	TOTAL TAXIS DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER TAXI	AVERAGE WAIT TIME AT THE RANK PER TAXI (MINUTES)
07:00	1	0	1	0	0.0	0
08:00	4	0	4	0	0.0	4
09:00	0	0	0	0	0.0	3
10:00	1	0	1	0	0.0	0
11:00	2	0	2	0	0.0	0
12:00	0	0	0	0	0.0	0
13:00	1	1	2	1	1.0	3
14:00	1	1	2	1	1.0	0
15:00	0	0	0	0	0.0	20
16:00	5	2	7	3	1.5	14
17:00	0	5	5	8	1.6	10
18:00	3	10	13	14	1.4	5
19:00	4	4	8	5	1.3	7
20:00	0	6	6	15	2.5	13
21:00	3	6	9	11	1.8	11
22:00	1	9	10	18	2.0	10
23:00	1	9	10	18	2.0	10
00:00	5	6	11	10	1.7	9
01:00	0	0	0	0	0.0	0
02:00	0	0	0	0	0.0	0
03:00	0	0	0	0	0.0	0
04:00	0	0	0	0	0.0	0
05:00	0	0	0	0	0.0	0
06:00	0	0	0	0	0.0	0
Total	32	59	91	104	1.8	8
Railway Station		Sunday to Monday				
HOURLY BEGINNING	TOTAL TAXIS DEPARTING RANK EMPTY	TOTAL TAXIS DEPARTING RANK WITH PASSENGERS	TOTAL TAXIS DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER TAXI	AVERAGE WAIT TIME AT THE RANK PER TAXI (MINUTES)
07:00	0	0	0	0	0.0	0
08:00	0	0	0	0	0.0	0
09:00	0	0	0	0	0.0	0
10:00	1	0	1	0	0.0	3
11:00	1	0	1	0	0.0	3
12:00	0	0	0	0	0.0	0
13:00	1	0	1	0	0.0	3
14:00	0	0	0	0	0.0	0
15:00	1	0	1	0	0.0	3
16:00	2	1	3	1	1.0	5
17:00	2	1	3	2	2.0	8
18:00	1	0	1	0	0.0	5
19:00	1	1	2	1	1.0	4
20:00	2	1	3	1	1.0	11
21:00	2	3	5	5	1.7	7
22:00	0	0	0	0	0.0	5
23:00	0	3	3	4	1.3	0
00:00	0	0	0	0	0.0	0
01:00	0	0	0	0	0.0	0
02:00	0	0	0	0	0.0	0
03:00	0	0	0	0	0.0	0
04:00	0	0	0	0	0.0	0
05:00	0	0	0	0	0.0	0
06:00	3	0	3	0	0.0	5
Total	17	10	27	14	1.4	5



Bank Street		Thursday to Friday					
Hour Beginning	Total Taxis Departing Rank Empty	Total Taxis Departing Rank With Passengers	Total Taxis Departing Rank	Total Passengers Departing Rank	Average Passengers Per Taxi	Average Wait Time at the Rank per Taxi (minutes)	
07:00	0	0	0	0	0.0	0	
08:00	0	0	0	0	0.0	0	
09:00	0	0	0	0	0.0	0	
10:00	0	0	0	0	0.0	0	
11:00	0	0	0	0	0.0	0	
12:00	0	0	0	0	0.0	0	
13:00	0	0	0	0	0.0	0	
14:00	0	0	0	0	0.0	0	
15:00	0	0	0	0	0.0	0	
16:00	0	0	0	0	0.0	0	
17:00	0	0	0	0	0.0	0	
18:00	0	0	0	0	0.0	0	
19:00	0	0	0	0	0.0	0	
20:00	0	0	0	0	0.0	0	
21:00	0	0	0	0	0.0	0	
22:00	0	0	0	0	0.0	0	
23:00	0	0	0	0	0.0	0	
00:00	0	0	0	0	0.0	0	
01:00	0	0	0	0	0.0	0	
02:00	0	0	0	0	0.0	0	
03:00	0	0	0	0	0.0	0	
04:00	0	0	0	0	0.0	0	
05:00	0	0	0	0	0.0	0	
06:00	0	0	0	0	0.0	0	
Total	0	0	0	0	0.0	0	
Bank Street		Friday to Saturday					
Hour Beginning	Total Taxis Departing Rank Empty	Total Taxis Departing Rank With Passengers	Total Taxis Departing Rank	Total Passengers Departing Rank	Average Passengers Per Taxi	Average Wait Time at the Rank per Taxi (minutes)	
07:00	0	0	0	0	0.0	0	
08:00	0	0	0	0	0.0	0	
09:00	0	0	0	0	0.0	0	
10:00	0	0	0	0	0.0	0	
11:00	0	0	0	0	0.0	0	
12:00	0	0	0	0	0.0	0	
13:00	0	0	0	0	0.0	0	
14:00	0	0	0	0	0.0	0	
15:00	0	0	0	0	0.0	0	
16:00	0	0	0	0	0.0	0	
17:00	0	0	0	0	0.0	0	
18:00	0	0	0	0	0.0	0	
19:00	0	0	0	0	0.0	0	
20:00	0	0	0	0	0.0	0	
21:00	0	0	0	0	0.0	0	
22:00	0	0	0	0	0.0	0	
23:00	0	0	0	0	0.0	0	
00:00	0	0	0	0	0.0	0	
01:00	0	0	0	0	0.0	0	
02:00	0	0	0	0	0.0	0	
03:00	0	0	0	0	0.0	0	
04:00	0	0	0	0	0.0	0	
05:00	0	0	0	0	0.0	0	
06:00	0	0	0	0	0.0	0	
Total	0	0	0	0	0.0	0	



Bank Street		Saturday to Sunday				
HOUR BEGINNING	TOTAL TAXIS DEPARTING RANK EMPTY	TOTAL TAXIS DEPARTING RANK WITH PASSENGERS	TOTAL TAXIS DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER TAXI	AVERAGE WAIT TIME AT THE RANK PER TAXI (MINUTES)
07:00	0	0	0	0	0.0	0
08:00	0	0	0	0	0.0	0
09:00	0	0	0	0	0.0	0
10:00	0	0	0	0	0.0	0
11:00	0	0	0	0	0.0	0
12:00	0	0	0	0	0.0	0
13:00	0	0	0	0	0.0	0
14:00	0	0	0	0	0.0	0
15:00	0	0	0	0	0.0	0
16:00	0	0	0	0	0.0	0
17:00	0	0	0	0	0.0	0
18:00	0	0	0	0	0.0	0
19:00	0	0	0	0	0.0	0
20:00	0	0	0	0	0.0	0
21:00	0	0	0	0	0.0	0
22:00	0	0	0	0	0.0	0
23:00	1	0	1	0	0.0	3
00:00	0	0	0	0	0.0	0
01:00	0	0	0	0	0.0	0
02:00	0	0	0	0	0.0	0
03:00	0	6	6	11	1.8	0
04:00	0	0	0	0	0.0	0
05:00	0	0	0	0	0.0	0
06:00	0	0	0	0	0.0	0
Total	1	6	7	11	1.8	0
Bank Street		Sunday to Monday				
HOUR BEGINNING	TOTAL TAXIS DEPARTING RANK EMPTY	TOTAL TAXIS DEPARTING RANK WITH PASSENGERS	TOTAL TAXIS DEPARTING RANK	TOTAL PASSENGERS DEPARTING RANK	AVERAGE PASSENGERS PER TAXI	AVERAGE WAIT TIME AT THE RANK PER TAXI (MINUTES)
07:00	0	0	0	0	0.0	0
08:00	0	0	0	0	0.0	0
09:00	0	0	0	0	0.0	0
10:00	0	0	0	0	0.0	0
11:00	0	0	0	0	0.0	0
12:00	0	0	0	0	0.0	0
13:00	0	0	0	0	0.0	0
14:00	0	0	0	0	0.0	0
15:00	0	0	0	0	0.0	0
16:00	0	0	0	0	0.0	0
17:00	0	0	0	0	0.0	0
18:00	0	0	0	0	0.0	0
19:00	0	0	0	0	0.0	0
20:00	0	0	0	0	0.0	0
21:00	0	0	0	0	0.0	0
22:00	0	0	0	0	0.0	0
23:00	0	0	0	0	0.0	0
00:00	0	0	0	0	0.0	0
01:00	0	0	0	0	0.0	0
02:00	0	0	0	0	0.0	0
03:00	0	0	0	0	0.0	0
04:00	0	0	0	0	0.0	0
05:00	0	0	0	0	0.0	0
06:00	0	0	0	0	0.0	0
Total	0	0	0	0	0.0	0