



Taxi Unmet Demand Survey

**Perth & Blairgowrie
April 2018**

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Executive Summary

This Taxi Unmet Demand Survey has been undertaken on behalf of Perth & Kinross 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 and relevant case history in regard to unmet demand.

Within the Council licensing area, the council maintains a limit regarding the number of taxis which may be licensed in two areas. The current limit is set at 70 taxi vehicles in Perth and 12 taxi vehicles in Blairgowrie.

Data has been collected through consultation with stakeholders, the trade and members of the public. In addition, observations of activity at taxi ranks were undertaken to record volumes of taxis and passengers using each rank and whether any passengers had to wait for taxis to arrive at the ranks.

Surveys were undertaken at taxi ranks in Perth and Blairgowrie, over three days, from Thursday 26th October 2017 to the early hours of Sunday the 29th October 2017. Video cameras were used to record activity at the taxi ranks during this period and the levels of activity during active periods were tabulated and analysed.

The relative levels of activity at the ranks are presented in the following figures.

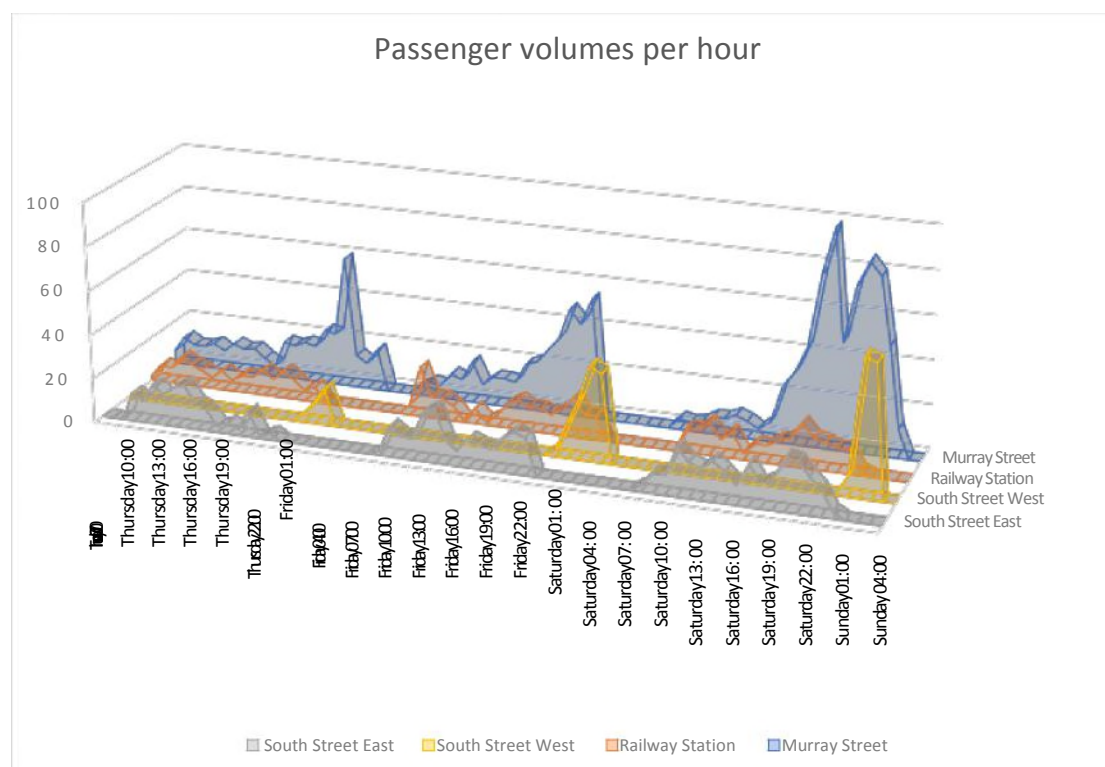


Figure 1 - Passenger volumes through ranks in Perth

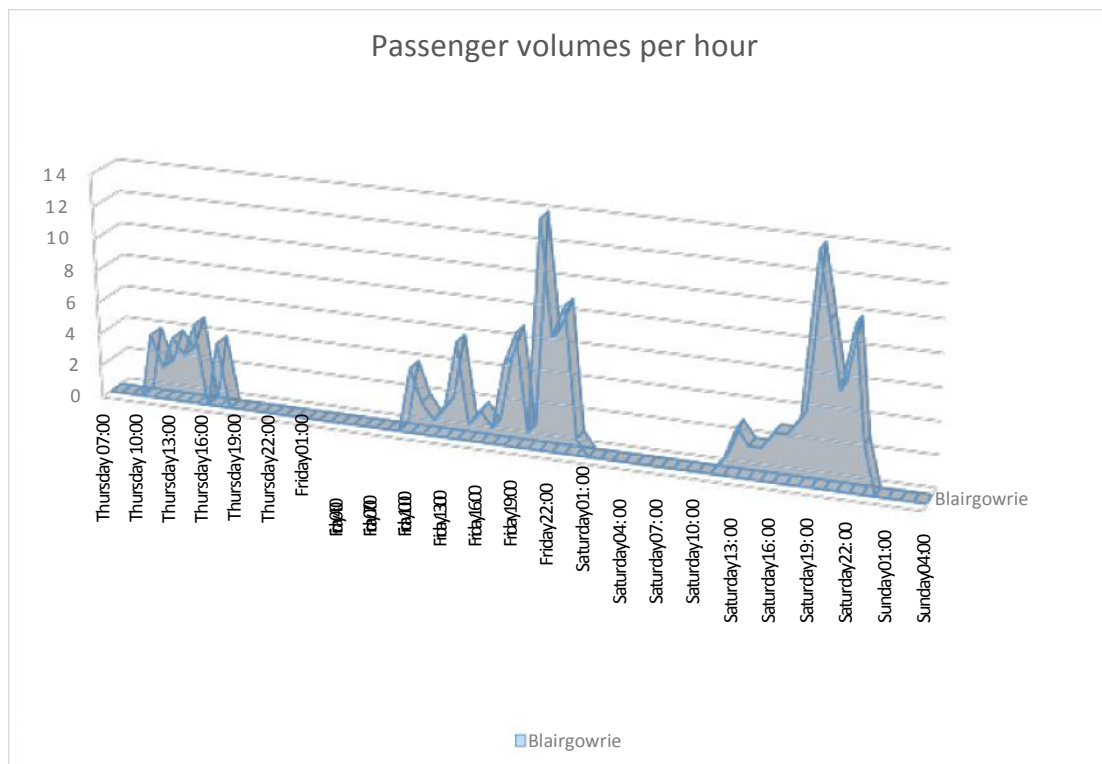


Figure 2 - Passenger volumes through the rank in Blairgowrie

Some passengers were observed waiting from time to time at the ranks, for Taxis to arrive at the ranks. The waiting passengers were observed at various times during periods of low activity as well as during periods of high activity. The length of time that passengers had to wait was generally low. The number of passengers who had to wait was a relatively low proportion of all passengers and occurrences were normally infrequent. The normal situation was that Taxis were waiting at ranks when passengers arrived at the ranks in order to hire one. There were no extensive periods of continuous passenger waiting and no lengthy queues of passengers formed for extended periods of time.

Public and stakeholder perception of the Taxi fleet was generally favourable with features such as vehicle condition, availability, driver professionalism, knowledge and appearance rated highly. Feedback suggested that for a minority of the trade, driver knowledge, appearance and standards of hygiene were poor.

Several coefficients are calculated from the rank survey results and from public consultation. The coefficients are entered into a formula to calculate the Index of Significant Unmet Demand (ISUD). The index value for the 2017 survey was 6.7 for Perth and 17.3 for Blairgowrie. These values fall below the threshold value of 80, and suggests that there is **no significant unmet demand** in either area.

The ISUD value, considered along with feedback from stakeholders and the public leads to the conclusion that there is **no significant unmet demand** in either Perth or in Blairgowrie.

In conclusion, there is no need to increase the number of licences to meet demand.

The elderly and people with mobility impairments rely more heavily on the services of licensed vehicles, than the population at large. Feedback from consultation with stakeholders and with the trade, suggested that there are issues with the availability of wheelchair accessible vehicles across Perth and Kinross as a whole. The availability of wheelchair accessible vehicles is concentrated in Perth and when vehicles are required in other areas, then they are often dispatched from Perth. This results in additional cost for the time and distance to get to the required location. In addition, the vehicles are unavailable for longer periods, for other users.

The market for providing licensed vehicle services to the elderly and mobility impaired is a growing market and in Perth and Kinross, is growing faster than for Scotland as a whole. It is recommended that the Council work with the licensed vehicle trade to help identify and quantify the potential market growth in this sector and help to encourage investment by the trade towards targeting this market. As a consequence, such measures should help to increase the level of provision of wheelchair accessible vehicles in the licensed vehicle fleets, both taxis and private hire cars.

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Contents

Executive Summary	ii
Contents	vi
1 General introduction and background	1
2 Local background and context	2
3 Patent demand measurement (rank surveys)	6
4 General public views	14
5 Key stakeholder consultation.....	24
6 Trade consultation	28
7 Evaluation of unmet demand and its significance	31
8 Comments on railway statistics and mobility impairment	35
8 Summary and study conclusions.....	37
9 Recommendations	40
Appendix A Rank Survey Data.....	41

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1 General introduction and background

Perth & Kinross Council is responsible for the licensing of Taxi and Private Hire Vehicles operating within the Council area. It retains a limit on the number of Taxi vehicles licensed.

This 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.

Current taxi, private hire and operator licensing is undertaken within the legal frameworks set by the Civic Government (Scotland) Act 1982 (CGSA).

Leeds University Institute for Transport Studies developed a tool by which unmet demand could be evaluated and a determination made if this was significant or not. The tool was taken forward and developed as more studies were undertaken. Over time this 'index of significance of unmet demand' (ISUD) has become established as an industry standard tool to be used for this purpose.

In general, the determination of conclusions about significance of unmet demand must take into account the practicability of improving the standard of service through the increase of supply of vehicles. It is also important to have consistent treatment of authorities as well as for the same authority over time.

In conclusion, the present legislation in Scotland sees public fare-paying passenger carrying vehicles firstly split by passenger capacity. All vehicles able to carry nine or more passengers are dealt with under national public service vehicle licensing. Local licensing authorities have jurisdiction over vehicles carrying eight or fewer passengers.

These are split between taxis which are alone able to wait at ranks or pick up people in the streets without a booking, and private hire who can only be used with a booking made through an operator. If any passenger uses a private hire car without such a properly made booking, they are generally not insured for their journey.

2 Local background and context

The authority has a current population of 150,680 using the 2016 estimates currently available from the 2011 census.

All licensing authorities have full powers over licensing the vehicles, drivers and operators serving people within their area. Perth & Kinross Council has chosen to utilize its power to limit Taxi vehicle numbers.

Perth & Kinross Council undertakes regular review of its policy to limit Taxi vehicle numbers in line with the BPG.

Table 1 and Figure 3 illustrate the fleet composition for the licensing authorities in Scotland. The authorities are arranged in order of increasing licensed vehicles per 1,000 population.

Licensed Vehicle numbers and proportions are based on 2016 figures and Mid 2016 population data.

Table 1 - Comparison of Licenced Vehicles per 1,000 population

Licensing Area	Population	Taxi Vehicles	Private Hire Cars	Total Licensed Vehicles	Taxis per 1,000 population	Private Hire Cars per 1,000 population	Total licensed vehicles per 1,000 population
Angus	116,520	121	57	178	1.0	0.5	1.5
East Ayrshire	122,200	126	86	212	1.0	0.7	1.7
North Ayrshire	135,890	216	57	273	1.6	0.4	2.0
Midlothian	88,610	52	128	180	0.6	1.4	2.0
Perth and Kinross	150,680	109	202	311	0.7	1.3	2.1
Clackmannanshire	51,350	57	52	109	1.1	1.0	2.1
Stirling	93,750	73	128	201	0.8	1.4	2.1
Orkney Islands	21,850	30	17	47	1.4	0.8	2.2
Fife	370,330	477	329	806	1.3	0.9	2.2
Dumfries and Galloway	149,520	207	135	342	1.4	0.9	2.3
Moray	96,070	203	23	226	2.1	0.2	2.4
East Lothian	104,090	126	126	252	1.2	1.2	2.4
South Ayrshire	112,470	132	158	290	1.2	1.4	2.6
Scottish Borders	114,530	232	70	302	2.0	0.6	2.6
Argyll and Bute	87,130	191	52	243	2.2	0.6	2.8
West Lothian	180,130	128	378	506	0.7	2.1	2.8
Highland	234,770	547	171	718	2.3	0.7	3.1
Aberdeenshire	262,190	504	302	806	1.9	1.2	3.1
Falkirk	159,380	430	129	559	2.7	0.8	3.5
Inverclyde	79,160	243	56	299	3.1	0.7	3.8
Na h-Eileanan Siar	26,900	90	20	110	3.3	0.7	4.1
West Dunbartonshire	89,860	336	56	392	3.7	0.6	4.4
North Lanarkshire	339,390	494	1,255	1,749	1.5	3.7	5.2
South Lanarkshire	317,100	344	1,362	1,706	1.1	4.3	5.4
Dundee City	148,270	585	218	803	3.9	1.5	5.4
City of Edinburgh	507,170	1,316	1,471	2,787	2.6	2.9	5.5
Aberdeen City	229,840	989	290	1,279	4.3	1.3	5.6
East Renfrewshire	93,810	63	476	539	0.7	5.1	5.7
Renfrewshire	175,930	235	805	1,040	1.3	4.6	5.9
East Dunbartonshire	107,540	369	303	672	3.4	2.8	6.2
Shetland Islands	23,200	92	57	149	4.0	2.5	6.4
Glasgow City	615,070	1,419	3,153	4,572	2.3	5.1	7.4
Scotland	5,404,700	10,536	12,122	22,658	1.9	2.2	4.2

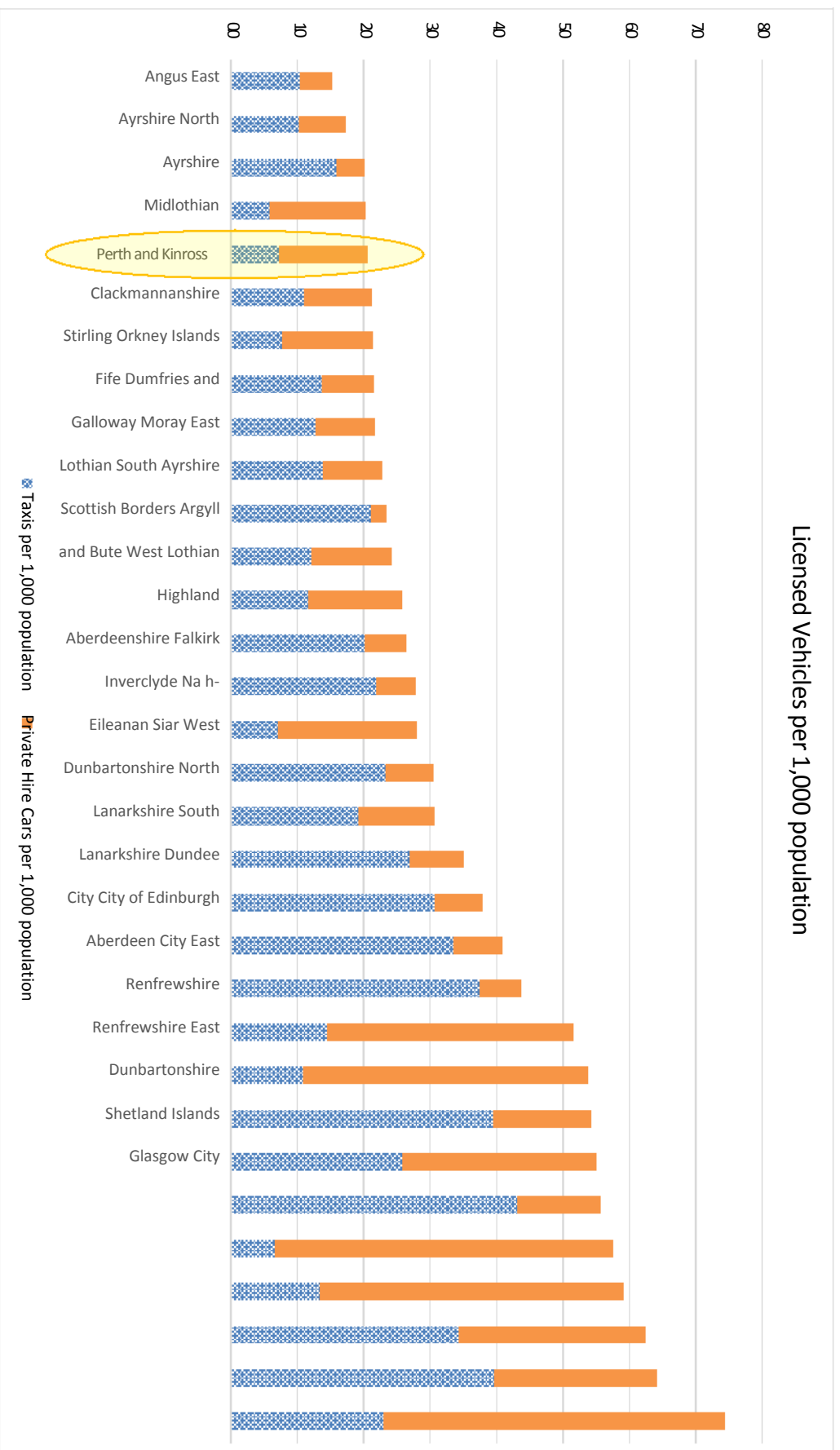


Figure 3 - Comparison of Licensed Vehicles per 1,000 population

Private Hire and Taxi Monthly magazine publish monthly league tables of the metred fares for taxis in Licensing Authorities in the UK. The Tariff 1 fares for a two mile journey (distance costs only) are compared and ranked. The lower the ranking (number), the more expensive the journey, compared with other authorities. The December 2017 table indicated that the fares in Perth & Kinross were ranked 259 out of 368 authorities listed. This indicates that taxis in Perth & Kinross are cheaper than for most authorities.

A comparison of the fares ranking of Scottish authorities is presented in Table 2

Table 2 - Comparison of Taxi fares ranks in Scottish authorities

Local Authority	Rank
East Lothian	24
Fife	44
Mid Lothian	91
Argyll & Bute	92
Shetland	126
Aberdeenshire	127
South Ayrshire	159
Clackmannan	166
Glasgow	169
Highland	172
East Ayrshire	184
Scottish Borders	185
Edinburgh	201
Orkney	211
Renfrewshire	213
West Lothian	219
Dundee	225
Angus	227
Dumfries & Galloway	231
Moray	242
Dunbarton	253
Perth & Kinross	259
East Dunbartonshire	271
East Renfrew	275
South Lanarkshire	298
Stirling	301
Inverclyde	305
North Lanarkshire	319
North Ayrshire	338
Falkirk	345
Western Isles	363

3 Patent demand measurement (rank surveys)

Perth taxi ranks

Within Perth & Kinross, Perth is defined as a separate taxi licensing zone, with a limit of 70 taxis licensed within the zone.

Five taxi ranks in Perth were surveyed from the morning of Thursday 26th October 2017 to the morning of Sunday 29th of October 2017

These locations were:

- 1 Murray Street
- 2 Railway Station
- 3 South Street East (outside Tesco)
- 4 South Street West (outside Loft)
- 5 Pomarium Street, near the bus station

Rank surveys

Surveys were undertaken using video cameras which recorded activity at the ranks from Thursday to the following Sunday morning. The active periods at each rank were processed from the video footage, to assess the level of usage of each rank and to record any incidences of passenger waiting. Footage was recorded from 7:00 on Thursday 26th October 2017 to 7:00 on Sunday 29th October. Footage from active periods at the ranks was processed and tabulated for further analysis.

Overview of observations

The levels of activity at ranks was initially classified to identify which were active periods in order to determine which hours of video footage should be fully processed to record volumes and waiting times at ranks.

Each hour was classified as follows:

- No taxis departing with passengers = N (None)
- Up to two taxis departing with passengers = L (Low activity)
- Three or more taxis departing with passengers = A (Active)

The following table indicates the activity level classification at each rank. Active hours at each rank were analysed to determine all passenger and vehicle volumes through the ranks and wait times at the ranks.

Perth & Blairgowrie Taxi Unmet Demand Survey

Table 3 - Identification of active hours at each taxi rank

Day	Date	Hour	Murray Street	Pomarium Street	Railway Station	South Street East	South Street West
Thursday	26/10/2017	0					
		1					
		2					
		3					
		4					
		5					
		6	L	N	L	N	N
		7	A	N	A	L	N
		8	A	N	A	N	N
		9	A	N	A	L	N
		10	A	N	A	A	N
		11	A	N	A	A	N
		12	A	N	A	A	N
		13	A	N	L	A	N
		14	A	N	A	A	N
		15	A	N	A	A	N
		16	A	N	A	A	N
		17	A	N	L	A	N
		18	A	N	A	A	N
		19	A	N	A	A	N
		20	A	N	A	A	N
		21	A	N	A	L	N
		22	A	N	A	L	N
		23	A	N	A	A	N
Friday	27/10/2017	0	A	N	A	L	A
		1	A	N	N	N	A
		2	A	N	N	N	A
		3	A	N	N	N	L
		4	L	N	L	N	N
		5	L	N	N	N	N
		6	A	N	L	N	N
		7	A	L	L	L	N
		8	A	N	A	L	N
		9	A	N	A	A	N
		10	A	L	A	A	N
		11	A	N	A	A	N
		12	A	N	L	A	N
		13	A	L	N	A	N
		14	A	N	A	A	N
		15	A	N	A	A	N
		16	A	N	L	A	N
		17	A	N	A	L	N
		18	A	N	A	L	N
		19	A	N	A	A	N
		20	A	N	A	A	N
		21	A	N	A	A	N
		22	A	N	A	A	L
		23	A	N	A	L	A
Saturday	28/10/2017	0	A	N	A	N	A
		1	A	N	A	L	A
		2	A	N	N	L	A
		3	A	N	N	L	A
		4	L	N	N	N	N
		5	L	N	L	N	N
		6	L	N	N	N	N
		7	L	N	L	L	N
		8	A	N	L	A	N
		9	A	N	A	A	N
		10	A	N	A	A	N
		11	A	N	A	A	N
		12	A	N	A	A	N
		13	A	N	A	A	N
		14	A	N	A	A	N
		15	A	N	A	A	N
		16	A	N	L	A	N
		17	A	N	A	A	N
		18	A	N	A	A	N
		19	A	N	A	A	N
		20	A	N	A	A	N
		21	A	N	A	A	N
		22	A	N	A	A	N
		23	A	N	A	A	L
Sunday	29/10/2017	0	A	N	A	A	A
		1	A	N	N	L	A
		2	A	N	N	L	A
		3	A	N	N	N	L
		4	A	N	N	N	L
		5	L	N	N	N	N
		6	L	N	N	N	N
		7	L	N	N	L	N
		8					
		9					
		10					
		11					
		12					
		13					
		14					
		15					
		16					
		17					
		18					
		19					
		20					
		21					
		22					
		23					

During the course of the survey, some 1,959 vehicles were observed departing the ranks, with passengers. This equates to approximately 30 hires per vehicle (with a fleet size of 70) over the three days of observation. The survey was conducted over the last weekend of the month which was also the Halloween weekend. It would be expected that this would be a relatively busy weekend and an average of 30 rank hires per vehicle over three days is lower than one would expect during this period, if taxis were reliant solely on rank hires for business. The proportion of taxis which left the rank empty was approximately 24%. Taxis normally leave ranks empty for a variety of reasons. These include moving to another rank, having waited unsuccessfully for a hire, or leaving the rank to service a booking sent over a radio or data circuit. Given the proportion of empty departures and the relatively low proportion of rank hires during a busy weekend, It is likely that many vehicles also participate in undertaking pre-booked hires, either as part of a booking circuit, or through personal direct hires, by telephone to the driver.

During the course of the surveys, seven passengers were observed, who used wheelchairs.

Few incidences of passenger waiting were observed. Out of 2,730 passengers observed using Taxis, 159 had to wait for a Taxi to arrive at a rank. This equates to approximately 6%. The maximum wait time observed was 12 minutes 26 seconds, observed at the Murray Street rank on Sunday morning during the hour beginning 00:00. The average waiting time for all passengers who had to wait for a Taxi, was 2 minutes and 8 seconds. The average waiting time for all passengers, including those who didn't have to wait, was 7 seconds.

The levels of passenger activity at the ranks were analysed and the graph presented below summarises the profile of activity across all of the ranks.

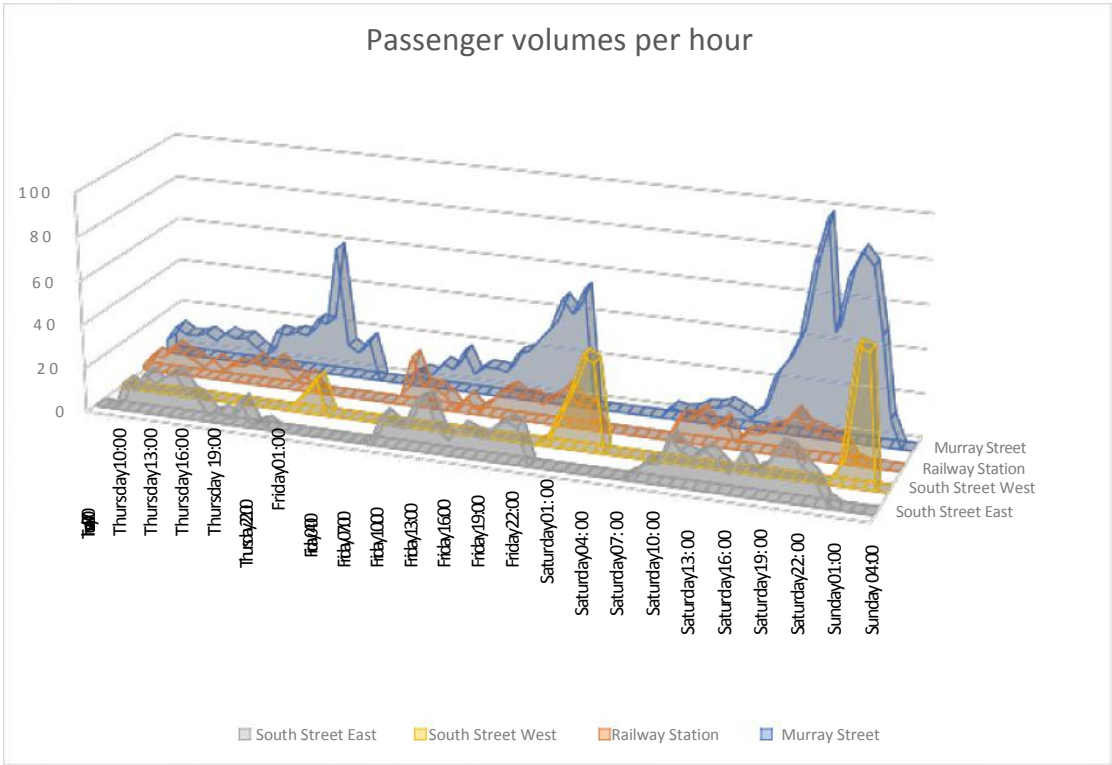
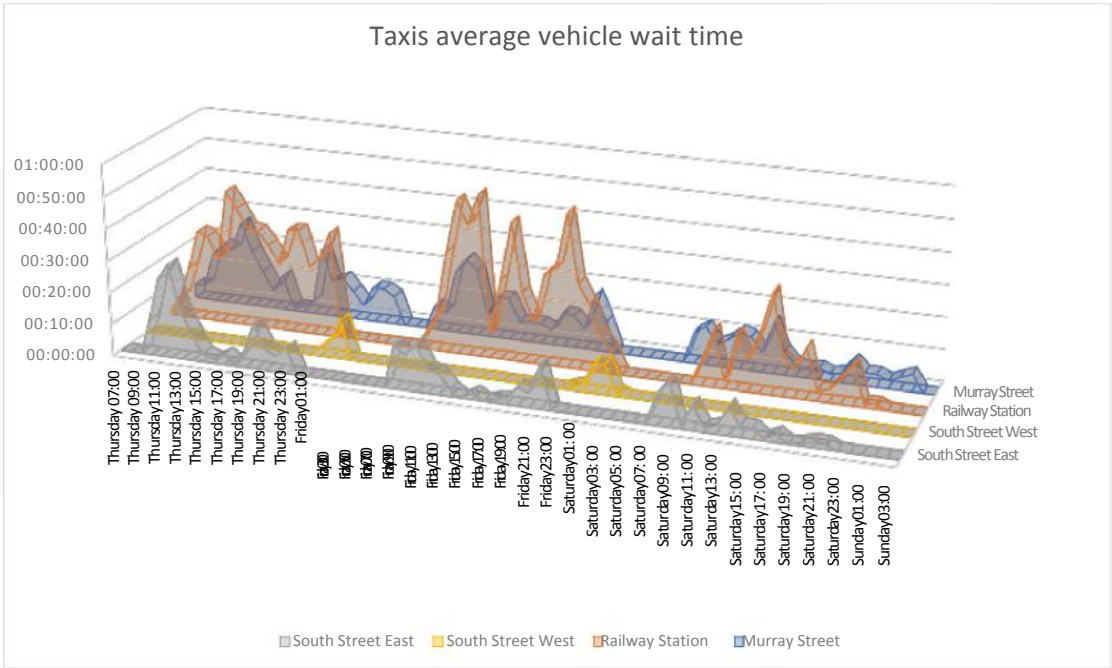


Figure 4 – Observed volumes of passengers through each rank

The profile of passenger demand is dominated by the Murray Street rank during the evenings. The South Street West rank operates intensively late on Friday and Saturday nights.

Taxi Vehicle Waiting Time at ranks

The time spent by Taxis waiting at the ranks was recorded. The average



hourly wait time is presented in the following figure:

Figure 5 - Taxis average vehicle wait time (HH:MM:SS)

The proportion of Taxis leaving the ranks empty, varied significantly by rank.

The following proportions of Taxis leaving the ranks empty were observed:

Table 4 - Proportion of Taxis leaving ranks empty

Rank	Proportion of Taxis leaving the rank empty
Murray Street	29.2%
Railway Station	14.1%
South Street East	24.2%
South Street West	20.9%
All ranks	24.4%

Blairgowrie taxi rank

Within Perth & Kinross, Blairgowrie is defined as a separate taxi licensing zone, with a limit of 12 taxis licensed within the zone.

In Blairgowrie, there is a single taxi rank, on Wellmeadow, near some bus stances. The rank is located in a marked area within a car park. The rank was surveyed from the morning of Thursday 26th October 2017 to the morning of Sunday 29th of October 2017.

The survey was undertaken using a video camera which recorded activity at the rank from Thursday to the following Sunday morning. The active periods at each rank were processed from the video footage, to assess the level of usage of each rank and to record any incidences of passenger waiting. Footage was recorded from 7:00 on Thursday 26th October 2017 to 7:00 on Sunday 29th October. Footage from active periods at the ranks was processed and tabulated for further analysis.

Overview of observations

The levels of activity at ranks was initially classified to identify which were active periods in order to determine which hours of video footage should be fully processed to record volumes and waiting times at ranks.

Each hour was classified as follows:

- No taxis departing with passengers = N (None)
- Up to two taxis departing with passengers = L (Low activity)
- Three or more taxis departing with passengers = A (Active)

The following table indicates the activity level classification at the rank. Active hours at the rank were analysed to determine all passenger and vehicle volumes through the ranks and wait times at the ranks.

Perth & Blairgowrie Taxi Unmet Demand Survey

Table 5 - Identification of active hours at the taxi rank

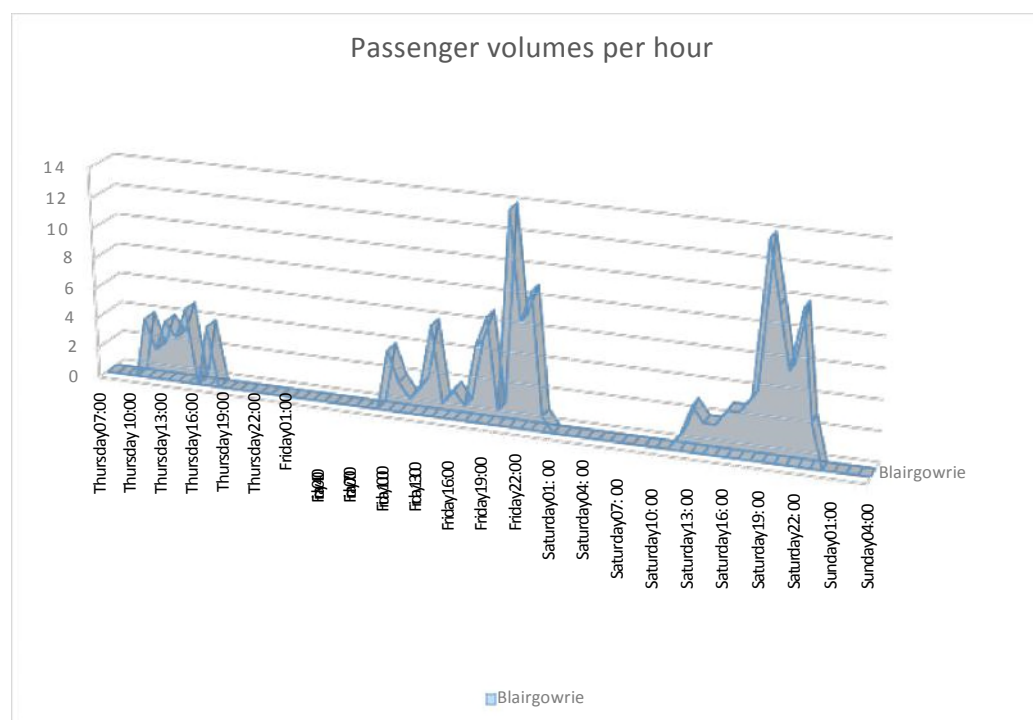
Day	Date	Hour beginning	Well meadow Blairgowrie
Thursday	26/10/2017	0	
		1	
		2	
		3	
		4	
		5	
		6	N
		7	L
		8	A
		9	A
		10	A
		11	A
		12	L
		13	A
		14	A
		15	L
		16	A
		17	A
		18	L
		19	L
		20	L
		21	L
		22	N
		23	L
Friday	27/10/2017	0	N
		1	N
		2	N
		3	N
		4	N
		5	N
		6	N
		7	L
		8	A
		9	L
		10	A
		11	L
		12	L
		13	A
		14	A
		15	A
		16	A
		17	A
		18	A
		19	A
		20	A
		21	A
		22	A
		23	A
Saturday	28/10/2017	0	L
		1	N
		2	N
		3	N
		4	N
		5	N
		6	N
		7	N
		8	L
		9	L
		10	L
		11	L
		12	A
		13	A
		14	A
		15	A
		16	A
		17	A
		18	A
		19	A
		20	A
		21	A
		22	A
		23	A
Sunday	29/10/2017	0	N
		1	N
		2	N
		3	N
		4	N
		5	N
		6	N
		7	N
		8	
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During the course of the survey, some 100 vehicles were observed departing the ranks, with passengers. This equates to approximately 8 hires per vehicle (with a fleet size of 12) over the three days of observation. The survey was conducted over the last weekend of the month which was also the Halloween weekend. It would be expected that this would be a relatively busy weekend and an average of 8 rank hires per vehicle over three days is lower than one would expect during this period, if taxis were reliant solely on rank hires for business. The proportion of taxis which left the rank empty was approximately 49%. Taxis normally leave ranks empty for a variety of reasons. These include moving to another rank, having waited unsuccessfully for a hire, or leaving the rank to service a booking sent over a radio or data circuit. As there is no other rank in Blairgowrie, it is assumed that virtually all empty departures were in order to participate in undertaking pre-booked hires.

During the course of the surveys, no passengers were observed, who used wheelchairs.

Few incidences of passenger waiting were observed. Out of 146 passengers observed using Taxis, 6 had to wait for a Taxi to arrive at a rank. This equates to approximately 4%. The maximum wait time observed was 8 minutes 27 seconds, observed on Thursday afternoon during the hour beginning 14:00. The average waiting time for all passengers who had to wait for a Taxi, was 2 minutes and 30 seconds. The average waiting time for all passengers, including those who didn't have to wait, was 6 seconds.

The levels of passenger activity at the ranks were analysed and the graph



presented below summarises the profile of activity across all of the ranks.

Figure 6 – Observed volumes of passengers through each rank

Taxi Vehicle Waiting Time at ranks

The time spent by Taxis waiting at the ranks was recorded. The average hourly wait time is presented in the following figure:

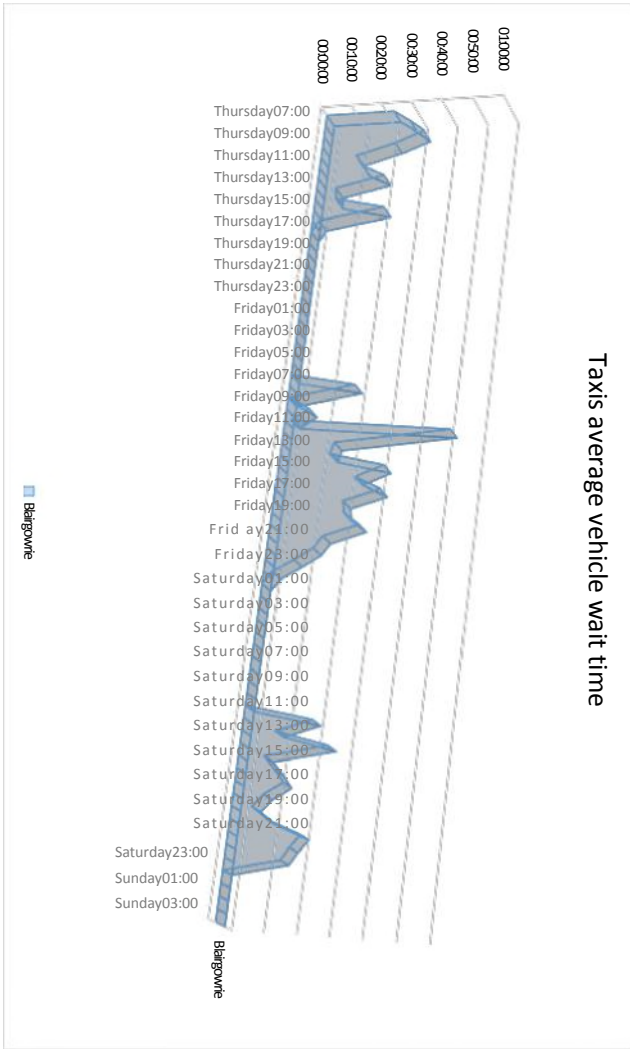


Figure 7 - Taxis average vehicle wait time (HH:MM:SS)

4 General public views

It is very important that the views of people within the area are obtained about the service provided by licensed vehicles. A key element which these surveys seek to discover is specifically if people have given up waiting for taxis at ranks (the most readily available measure of latent demand). However, the opportunity is also taken with these surveys to identify the overall usage and views of taxis and Private Hire Cars within the study area, and to provide an opportunity for people to identify current issues and factors which may encourage them to use licensed vehicles more.

Such surveys can also be key in identifying variation of demand for licensed vehicles across an area, particularly if there are significant areas of potential demand without ranks, albeit in the context that many areas do not have places apart from their central area with sufficient demand to justify taxis waiting at ranks.

Surveys of the public were undertaken around Perth. A total of 202 interviews were undertaken. A further survey was undertaken in Blairgowrie with 50 people interviewed.

The results of the surveys are presented in this chapter. Not all questions were answered by all respondents. The total number of answers to each question have been presented in this chapter along with percentages relating to the total responses to each question, rather than a percentage of all people interviewed.

Perth & Blairgowrie public attitude survey results

Interviewees were asked all the ways in which they could hire a Private Hire Car. This question was intended to establish the respondent's understanding of the differences between taxis and private hire cars. In Perth 44% of respondents chose one or more means of hiring a private hire car, which were only valid for taxis. In Blairgowrie, the proportion was 42%.

Interviewees were also asked all the ways in which they could hire a Taxi. Whilst all of the methods identified were valid, 45% of respondents in Perth did not identify hiring at a rank as one of the valid means of hiring a taxi. In Blairgowrie, 48% did not identify hiring at a rank.

Booking by telephone or mobile app was the most popular means identified for both private hire cars and for taxis in Blairgowrie and in Perth.

The public were asked if they had made one or more trips by taxi in the last three months.

Q2a. IN THE LAST 3 MONTHS, HAVE YOU MADE ONE OR MORE TRIPS BY TAXI?	BLAIRGOWRIE		Perth		TOTAL	
YES	24	48.00%	126	62.38%	150	59.52%
NO (GO TO Q7)	26	52.00%	76	37.62%	102	40.48%
TOTAL	50	100.00%	202	100.00%	252	100.00%

The proportion of people who had recently used a taxi was significantly higher in Perth than in Blairgowrie.

Respondents were asked how frequently they travel by Taxi, rather than Private Hire Car, results were:

Q2b. WAS YOUR TRIP MADE USING A TAXI OR PRIVATE HIRE	BLAIRGOWRIE		Perth		TOTAL	
PRIVATE HIRE	10	40.00%	56	42.42%	66	42.04%
TAXI	6	24.00%	32	24.24%	38	24.20%
HAVE USED BOTH	4	16.00%	12	9.09%	16	10.19%
DON'T KNOW	5	20.00%	32	24.24%	37	23.57%
TOTAL	25	100.00%	132	100.00%	157	100.00%

Private hire was more popular than taxi in both Perth and in Blairgowrie.

Interviewees were asked how often they use taxis, as opposed to private hire cars. Responses were as follows:

Q3. HOW FREQUENTLY DO YOU TRAVEL BY TAXI, AS OPPOSED TO PRIVATE HIRE CARS?	BLAIRGOWRIE		Perth		TOTAL	
3 OR MORE TIME A WEEK	1	4.17%	6	4.55%	7	4.49%
1 OR 2 TIMES A WEEK	7	29.17%	24	18.18%	31	19.87%
LESS THAN ONCE A WEEK / BUT MORE THAN TWICE A MONTH	1	4.17%	14	10.61%	15	9.62%
1 OR 2 TIMES A MONTH	7	29.17%	30	22.73%	37	23.72%
LESS THAN ONCE A MONTH / BUT MORE THAN TWICE A YEAR	2	8.33%	14	10.61%	16	10.26%
1 OR 2 TIMES A YEAR	3	12.50%	30	22.73%	33	21.15%
NEVER	3	12.50%	14	10.61%	17	10.90%
TOTAL	24	100.00%	132	100.00%	156	100.00%

Interviewees were asked the reason for their latest trip by taxi, answers included:

Q4a. WHAT WAS THE PURPOSE OF YOUR LAST TRIP?	BLAIRGOWRIE		Perth		TOTAL	
LEISURE	7	28.00%	40	42.55%	47	41.96%
WORK / EDUCATION	7	28.00%	34	36.17%	41	36.61%
SHOPPING	4	16.00%	20	21.28%	24	21.43%
PERSONAL BUSINESS	4	16.00%	20	21.28%	24	21.43%
HOSPITAL / MEDICAL	2	8.00%	14	14.89%	16	14.29%
LINK TO OTHER TRANSPORT MODE	1	4.00%	6	6.38%	7	6.25%
OTHER	0	0.00%	0	0.00%	0	0.00%
TOTAL	25	100.00%	94	100.00%	112	100.00%

Respondents were asked how they obtained a taxi the last time they hired one:

Q5a. REGARDING YOUR LAST TRIP, HOW DID YOU OBTAIN YOUR TAXI?	BLAIRGOWRIE		Perth		TOTAL	
AT A RANK (GO TO Q5b)	6	24.00%	42	31.34%	48	30.19%
HAILED ON STREET (GO TO Q5b)	2	8.00%	20	14.93%	22	13.84%
TELEPHONE FOR IMMEDIATE USE (GO TO Q5b)	15	60.00%	57	42.54%	72	45.28%
TELEPHONE FOR FUTURE USE (GO TO Q5c)	2	8.00%	14	10.45%	16	10.06%
other	0	0.00%	1	0.75%	1	0.63%
TOTAL	25	100.00%	134	100.00%	159	100.00%

The most popular method was to telephone for a taxi for immediate hire, in both Blairgowrie and in Perth.

Of those obtaining a taxi at a rank, hailing on the street and phoning for immediate use, respondents were asked how long they waited for one.

In Perth, those who hired at a rank estimated that they waited on average around 2 minutes. Most people indicated no wait, however, a handful of respondents estimated up to 15 minutes wait time. For those who hailed on the street, the average estimated wait time was 8 minutes. For those who telephoned for immediate hire, the average estimated wait time was also approximately 8 minutes.

In Blairgowrie, those who hired at a rank estimated that they waited on average around 5 minutes. Two respondents indicated that they hailed on street. They estimated that they waited 5 and 10 minutes respectively. For those who telephoned for immediate hire, the average of estimated wait times was around 8.5 minutes.

Of those respondents booking a taxi for future use, they were asked how long they waited on their vehicle. Responses were:

Q5d. IF BOOKED FOR FUTURE USE, HOW LONG DID YOU HAVE TO WAIT FOR YOUR TAXI?	BLAIRGOWRIE		Perth		TOTAL	
1 MINUTE EARLY	0	0.00%	2	20.00%	2	16.67%
5 MINUTES EARLY	0	0.00%	2	20.00%	2	16.67%
ON TIME	1	50.00%	4	40.00%	5	41.67%
3 MINUTES LATE	1	50.00%	2	20.00%	3	25.00%
TOTAL	2	100.00%	10	100.00%	12	100.00%

Interviewees were asked to rate their last trip by Private Hire Car, in terms of value for money, 1 being very poor and 5 being very good. Results were as follows:

Q6a. HOW WOULD YOU RATE YOUR LAST TRIP BY PRIVATE HIRE, IN TERMS OF VALUE FOR MONEY?	BLAIRGOWRIE		Perth		TOTAL	
1	0	0.00%	2	1.37%	2	1.12%
2	3	9.38%	8	5.48%	11	6.18%
3	10	31.25%	48	32.88%	58	32.58%
4	9	28.13%	36	24.66%	45	25.28%
5	10	31.25%	52	35.62%	62	34.83%
TOTAL	32	100.00%	146	100.00%	178	100.00%

Similarly, interviewees were asked to rate their last trip by Taxi, in terms of value for money, 1 being very poor and 5 being very good. Results were as follows:

Q6b. HOW WOULD YOU RATE YOUR LAST TRIP BY TAXI, IN TERMS OF VALUE FOR MONEY?	BLAIRGOWRIE		Perth		TOTAL	
1	0	0.00%	0	0.00%	0	0.00%
2	3	9.68%	8	6.15%	11	6.83%
3	11	35.48%	46	35.38%	57	35.40%
4	6	19.35%	30	23.08%	36	22.36%
5	11	35.48%	46	35.38%	57	35.40%
TOTAL	31	100.00%	130	100.00%	161	100.00%

Private hire cars were generally rated slightly higher than taxis, in terms of value for money.

Respondents were asked to rate Taxi Vehicles in a number of categories including, vehicle cleanliness, vehicle condition, driver helpfulness, driver standard of dress, driver standard of hygiene, driver professionalism, driver

communication, and driver area knowledge. 1 being very poor and 5 being very good, results were as follows:

Q7a. WITH RESPECT TO THE STANDARD OF TAXI VEHICLES HOW WOULD YOU RATE VEHICLE CLEANLINESS ?	BLAIRGOWRIE		Perth		TOTAL	
1	0	0.00%	2	1.20%	2	0.97%
2	2	4.88%	4	2.41%	6	2.90%
3	15	36.59%	56	33.73%	71	34.30%
4	12	29.27%	52	31.33%	64	30.92%
5	12	29.27%	52	31.33%	64	30.92%
TOTAL	41	100.00%	166	100.00%	207	100.00%

Q7b. WITH RESPECT TO THE STANDARD OF TAXI VEHICLES, HOW WOULD YOU RATE VEHICLE CONDITION ?	BLAIRGOWRIE		Perth		TOTAL	
1	0	0.00%	2	1.20%	2	0.97%
2	2	4.88%	6	3.61%	8	3.86%
3	15	36.59%	56	33.73%	71	34.30%
4	14	34.15%	58	34.94%	72	34.78%
5	10	24.39%	44	26.51%	54	26.09%
TOTAL	41	100.00%	166	100.00%	207	100.00%

Q7c. WITH RESPECT TO THE STANDARD OF TAXI VEHICLES, HOW WOULD YOU RATE DRIVER HELPFULNESS ?	BLAIRGOWRIE		Perth		TOTAL	
1	1	2.44%	4	2.41%	5	2.42%
2	2	4.88%	4	2.41%	6	2.90%
3	16	39.02%	58	34.94%	74	35.75%
4	13	31.71%	54	32.53%	67	32.37%
5	9	21.95%	46	27.71%	55	26.57%
TOTAL	41	100.00%	166	100.00%	207	100.00%

Q7d. WITH RESPECT TO THE STANDARD OF TAXI VEHICLES, HOW WOULD YOU RATE DRIVER STANDARD OF DRESS?	BLAIRGOWRIE		Perth		TOTAL	
1	1	2.44%	4	2.41%	5	2.42%
2	2	4.88%	4	2.41%	6	2.90%
3	11	26.83%	52	31.33%	63	30.43%
4	19	46.34%	66	39.76%	85	41.06%
5	8	19.51%	40	24.10%	48	23.19%
TOTAL	41	100.00%	166	100.00%	207	100.00%

Q7e. WITH RESPECT TO THE STANDARD OF TAXI VEHICLES, HOW WOULD YOU RATE DRIVER STANDARD OF HYGIENE?	BLAIRGOWRIE		Perth		TOTAL	
1	0	0.00%	2	1.20%	2	0.97%
2	0	0.00%	4	2.41%	4	1.93%
3	13	31.71%	56	33.73%	69	33.33%
4	17	41.46%	56	33.73%	73	35.27%
5	11	26.83%	48	28.92%	59	28.50%
TOTAL	41	100.00%	166	100.00%	207	100.00%

Q7f. WITH RESPECT TO THE STANDARD OF TAXI VEHICLESE, HOW WOULD YOU RATE DRIVER PROFESSIONALISM?	BLAIRGOWRIE		Perth		TOTAL	
1	0	0.00%	2	1.20%	2	0.97%
2	1	2.44%	2	1.20%	3	1.45%
3	13	31.71%	46	27.71%	59	28.50%
4	16	39.02%	68	40.96%	84	40.58%
5	11	26.83%	48	28.92%	59	28.50%
TOTAL	41	100.00%	166	100.00%	207	100.00%

Q7g. WITH RESPECT TO THE STANDARD OF TAXI VEHICLES, HOW WOULD YOU RATE DRIVER COMMUNICATION?	BLAIRGOWRIE		Perth		TOTAL	
1	0	0.00%	2	1.20%	2	0.97%
2	3	7.32%	6	3.61%	9	4.35%
3	13	31.71%	48	28.92%	61	29.47%
4	14	34.15%	64	38.55%	78	37.68%
5	11	26.83%	46	27.71%	57	27.54%
TOTAL	41	100.00%	166	100.00%	207	100.00%

Q7h. WITH RESPECT TO THE STANDARD OF TAXI VEHICLES, HOW WOULD YOU RATE DRIVER AREA KNOWLEDGE?	BLAIRGOWRIE		Perth		TOTAL	
1	0	0.00%	2	1.20%	2	0.97%
2	1	2.44%	4	2.41%	5	2.42%
3	14	34.15%	44	26.51%	58	28.02%
4	14	34.15%	60	36.14%	74	35.75%
5	12	29.27%	56	33.73%	68	32.85%
TOTAL	41	100.00%	166	100.00%	207	100.00%

Similarly, respondents were asked to rate Private Hire Cars in a number of categories including, vehicle cleanliness, vehicle condition, driver helpfulness, driver standard of dress, driver standard of hygiene, driver professionalism, driver communication, and river area knowledge. 1 being very poor and 5 being very good, results were as follows:

Q8a. WITH RESPECT TO THE STANDARD OF PRIVATE HIRE VEHICLES, HOW WOULD YOU RATE VEHICLE CLEANLINESS ?	BLAIRGOWRIE		Perth		TOTAL	
1	0	0.00%	0	0.00%	0	0.00%
2	0	0.00%	2	1.18%	2	0.96%
3	13	33.33%	50	29.41%	63	30.14%
4	20	51.28%	66	38.82%	86	41.15%
5	6	15.38%	52	30.59%	58	27.75%
TOTAL	39	100.00%	170	100.00%	209	100.00%

Q8b. WITH RESPECT TO THE STANDARD OF PRIVATE HIRE VEHICLES, HOW WOULD YOU RATE VEHICLE CONDITION ?	BLAIRGOWRIE		Perth		TOTAL	
1	0	0.00%	0	0.00%	0	0.00%
2	0	0.00%	0	0.00%	0	0.00%
3	12	30.77%	46	27.06%	58	27.75%
4	19	48.72%	72	42.35%	91	43.54%
5	8	20.51%	52	30.59%	60	28.71%
TOTAL	39	100.00%	170	100.00%	209	100.00%

Q8c. WITH RESPECT TO THE STANDARD OF PRIVATE HIRE VEHICLES, HOW WOULD YOU RATE DRIVER HELPFULNESS ?	BLAIRGOWRIE		Perth		TOTAL	
1	0	0.00%	0	0.00%	0	0.00%
2	0	0.00%	0	0.00%	0	0.00%
3	11	28.21%	46	27.06%	57	27.27%
4	17	43.59%	68	40.00%	85	40.67%
5	11	28.21%	56	32.94%	67	32.06%
TOTAL	39	100.00%	170	100.00%	209	100.00%

Q8d. WITH RESPECT TO THE STANDARD OF PRIVATE HIRE VEHICLES, HOW WOULD YOU RATE DRIVER STANDARD OF DRESS?	BLAIRGOWRIE		Perth		TOTAL	
1	0	0.00%	0	0.00%	0	0.00%
2	0	0.00%	0	0.00%	0	0.00%
3	10	25.64%	50	29.41%	60	28.71%
4	21	53.85%	74	43.53%	95	45.45%
5	8	20.51%	46	27.06%	54	25.84%
TOTAL	39	100.00%	170	100.00%	209	100.00%

Q8e. WITH RESPECT TO THE STANDARD OF PRIVATE HIRE VEHICLES, HOW WOULD YOU RATE DRIVER STANDARD OF HYGIENE?	BLAIRGOWRIE		Perth		TOTAL	
1	0	0.00%	0	0.00%	0	0.00%
2	0	0.00%	2	1.18%	2	0.96%
3	10	25.64%	48	28.24%	58	27.75%
4	21	53.85%	72	42.35%	93	44.50%
5	8	20.51%	48	28.24%	56	26.79%
TOTAL	39	100.00%	170	100.00%	209	100.00%

Q8f. WITH RESPECT TO THE STANDARD OF PRIVATE HIRE VEHICLES, HOW WOULD YOU RATE DRIVER PROFESSIONALISM?	BLAIRGOWRIE		Perth		TOTAL	
1	0	0.00%	0	0.00%	0	0.00%
2	0	0.00%	2	1.18%	2	0.96%
3	10	25.64%	40	23.53%	50	23.92%
4	20	51.28%	76	44.71%	96	45.93%
5	9	23.08%	52	30.59%	61	29.19%
TOTAL	39	100.00%	170	100.00%	209	100.00%

Q8g. WITH RESPECT TO THE STANDARD OF PRIVATE HIRE VEHICLES, HOW WOULD YOU RATE DRIVER COMMUNICATION?	BLAIRGOWRIE		Perth		TOTAL	
1	0	0.00%	0	0.00%	0	0.00%
2	0	0.00%	0	0.00%	0	0.00%
3	9	23.08%	40	23.53%	49	23.44%
4	21	53.85%	78	45.88%	99	47.37%
5	9	23.08%	52	30.59%	61	29.19%
TOTAL	39	100.00%	170	100.00%	209	100.00%

Q8h. WITH RESPECT TO THE STANDARD OF PRIVATE HIRE VEHICLES, HOW WOULD YOU RATE DRIVER AREA KNOWLEDGE?	BLAIRGOWRIE		Perth		TOTAL	
1	0	0.00%	0	0.00%	0	0.00%
2	0	0.00%	0	0.00%	0	0.00%
3	8	20.51%	38	22.35%	46	22.01%
4	20	51.28%	72	42.35%	92	44.02%
5	11	28.21%	60	35.29%	71	33.97%
TOTAL	39	100.00%	170	100.00%	209	100.00%

Interviewees were asked if they have had any difficulties getting in or out of any type of vehicle in Perth & Kinross. The majority (94.8%) said no, they had not and just 5.2% said they had. Those who had faced difficulty struggled mostly in Private Hire Cars (38.9%) and 22.2% struggled in Taxis. 38.9% didn't know the vehicle type they had difficulties with.

Interviewees were asked what the primary factor is which limits their use of Taxis, responses were:

Quua. WHAT IS THE PRINCIPAL FACTOR WHICH LIMITS YOUR USE OF TAXIS?	PERTH AND KINROSS	
COST	49	26.20%
I GENERALLY USE A CAR	34	18.18%
USE THE BUS INSTEAD	34	18.18%
I USE PRIVATE HIRE VEHICLES	34	18.18%
NONEED FOR A HACKNEY CARRIAGE	16	8.56%
USUALLY CYCLE OR WALK	8	4.28%
OTHER	3	1.60%
WAITING TIME	7	3.74%
THE NEAREST TAXI RANK IS TOO FAR AWAY	2	1.07%
DRIVERS DON'T KNOW THE ROUTE	0	0.00%
TOTAL	187	100.00%

Of those responding 'other', suggestions of other limiting factors were:

- Living outside the area
- Mobility
- Multiple bad experiences

The public were asked if they had experienced problems obtaining a taxi in the last three months in Perth & Kinross, 99.4% said no, while just 0.6% said yes. The 'yes' respondent said this problem occurred as there was no disabled access when trying to obtain a taxi in the afternoon in Perth. The issue occurred on a Wednesday and Friday.

Individuals were asked the most common way they obtain a taxi. Results were:

Q13a. WHAT METHOD DO YOU USE MOST OFTEN TO OBTAIN A TAXI?	PERTH AND KINROSS	
PHONE BOOKING	97	49.49%
HAILED	8	4.08%
AT A RANK	64	32.65%
NEVER USE HACKNEY CARRIAGES	26	13.27%
other	1	0.51%
TOTAL	196	100.00%

'Other' methods were, booking online.

Respondents were asked to assess the availability of taxis in Perth & Kinross:

Q14. HOW WOULD YOU ASSESS THE AVAILABILITY OF TAXIS IN PERTH AND KINROSS	PERTH AND KINROSS	
VERY POOR	8	4.12%
POOR	8	4.12%
AVERAGE	28	14.43%
GOOD	46	23.71%
VERY GOOD	40	20.62%
DON'T KNOW	64	32.99%
TOTAL	194	100.00%

The public were asked if they would use taxis less if the fares increased by 10%. 63% said no, they wouldn't, while 37% said yes they would use them less. On the other hand, interviewees were asked if taxi fares decreased by 10% would they use them more. 60.2% said no, they would not use them more, and 39.8% said yes, they would use them more.

When the public were asked if there were any locations where new taxi ranks should be located, 66.7% said yes and 33.3% said no. Of those responding 'yes', suggestions of locations were:

Q17b. IF YOU SELECTED 'YES' TO Q15a, PLEASE TELL US WHERE YOU WOULD LIKE TO SEE A NEW RANK?	PERTH AND KINROSS	
HOSPITAL	2	20.00%
BALLINLUIG	1	10.00%
CRAGIE	1	10.00%
CROFT ROAD	1	10.00%
HIGH STREET	1	10.00%
LETHAM	1	10.00%
OATBANK	1	10.00%
RETAIL PARK, PERTH	1	10.00%
TOWN CENTRE, BLAIRGOWIE	0	0.00%
TESCO / ASDA CREIFF ROAD	1	10.00%
TOTAL	10	100.00%

Interviewees were asked if existing ranks had taxis more reliably found there, would they use them more. 95.2% said no, while 4.8% said yes. Those individuals who would use ranks more if taxis were more reliably found there, suggested they would like to see this at:

Q18b. IF YOU SELECTED 'YES' TO Q15a, PLEASE TELL US WHERE YOU WOULD LIKE TO SEE A NEW RANK?	PERTH AND KINROSS	
LEONARD STREET, PERTH	1	11.11%
MILL STREET. PERTH	1	11.11%
NEAR PUBS, PERTH	1	11.11%
PERTH CONCERT HALL	1	11.11%
PERTH PLAYHOUSE	2	22.22%
SOUTH STREET, PERTH	3	33.33%
TOTAL	9	100.00%

Respondents were asked if they had ever given up or made alternative arrangements, as none were available, when trying to hail a taxi. 96.8% said no they had not and 3.2% said yes, in Perth. This statistic is used as an indication of the level of latent unmet demand.

Interviewees were asked if they had ever given up or made alternative arrangements, as the wait time was too long, when trying to book a taxi by phoning. 91.8% said no they had not, and 8.2% said yes they had given up or made alternative arrangements. Respondents were asked how long the wait time quoted was, time in minutes were:

Q20b. HOW LONG APPROXIMATELY WAS THE WAIT TIME QUOTED?	PERTH AND KINROSS	
3	2	18.18%
10	4	36.36%
15	2	18.18%
20	0	0.00%
30	2	18.18%
60	1	9.09%
NONE AVAILABLE	0	0.00%
TOTAL	11	100.00%

The public said the following features of Perth & Kinross taxis were particularly good:

Q21. WHAT FEATURES OF TAXI SERVICES IN PERTH AND KINROSS ARE PARTICULARLY GOOD?	PERTH AND KINROSS	
AVAILABILITY	15	19.74%
CLEANLINESS	10	13.16%
HELPFUL DRIVERS	10	13.16%
ACCESSABILITY	8	10.53%
RELIABILITY	6	7.89%
FRIENDLY SERVICE	8	10.53%
RANK LOCATIONS	6	7.89%
ROOM	6	7.89%
PROMPT SERVICE	4	5.26%
SPEED OF TRIP	1	1.32%
COMFORTABLE	1	1.32%
DRIVER UNDERSTANDING OF ILLNESS / DISABILITY NEEDS	1	1.32%
TOTAL	76	100.00%

Cheaper fares were top of the list when the public was asked what would encourage them to use taxis more often. The following answers were also given:

Q22. WHAT WOULD ENCOURAGE YOU TO USE TAXIS MORE OFTEN?	PERTH AND KINROSS	
CHEAPER FARES	52	73.24%
MORE VEHICLES AVAILABLE	8	11.27%
FEMALE DRIVERS	2	2.82%
AN APP	3	4.23%
MORE LOCAL DRIVERS	2	2.82%
BETTER DISABLED ACCESS	2	2.82%
MORE UNDERSTANDING DRIVERS	1	1.41%
RANK LOCATIONS	1	1.41%
TOTAL	71	100.00%

95% of respondents had never travelled themselves with or travelled with someone else who has a mobility or visual impairment or uses a wheelchair in a taxi. The remaining 5% had experienced this situation. The disabilities or impairments which were travelled with were:

- Wheelchair user
- Knee problems
- Parkinson's / muscular degeneration
- Stroke

Of those 5%, all encountered difficulties in travelling. This was difficulties with access to and from the vehicle. Suggestions for reducing difficulties were, better understanding of mobility issues.

Most respondents (97.4%) did not face difficulties hiring a suitable vehicle. 2.6% found difficulties in an absence of ramps for wheelchairs and cars being unavailable.

The public said the following features of Perth & Kinross taxis were unsatisfactory:

Q25. WHAT FEATURES OF TAXI SERVICES IN PERTH AND KINROSS UNSATISFACTORY?	PERTH AND KINROSS	
COST	4	100.00%
NONE LOCAL OWNERSHIP	3	75.00%
ACCESS	2	50.00%
DRIVER ATTITUDES	1	25.00%
AVAILABILITY	1	25.00%
AVAILABILITY DURING SCHOOL HOURS	1	25.00%
LIMITED BUGGY SPACE	1	25.00%
TOTAL	4	100.00%

The public have listed some features of taxi services in Perth & Kinross they would like to see improvements in:

Q26. WHAT IMPROVEMENTS TO TAXI SERVICES IN PERTH AND KINROSS WOULD YOU LIKE TO SEE?	PERTH AND KINROSS	
CHEAPER FARES	5	41.67%
DRIVER ATTITUDES	1	8.33%
ACCESS	1	8.33%
MORE VEHICLES AVAILABLE	1	8.33%
MORE VEHICLES AVAILABLE AT WEEKENDS	1	8.33%
MORE VEHICLES AVAILABLE IN MORNING / SCHOOL HOURS	1	8.33%
MORE FLEXIBLE PAYMENT METHODS	1	8.33%
RANK AT TESCOS	1	8.33%
TOTAL	12	100.00%

Of all respondents, 76.2% were permanent residents in the Perth & Kinross area, 15.8% were visitors on business or personal business, 7% were tourists and 1% were visitors of another purpose. Just over half of interviewees were female (58.4%) and 41.6% were male. The majority of respondents (38.6%) were aged 30-55, 33.7% were ages 55+ and 27.7% were under 30 years old.

Online Public Consultation

In addition to the face to face consultation, an online consultation survey was undertaken. This survey was distributed through Facebook and augmented through further distribution by stakeholders. The online survey is a useful validation of the face to face survey results and offers the public additional opportunities for participation. As the survey is less controlled than the face to face survey, the results are assessed separately and where indications or information is additional to or in conflict with the face to face survey the additional information is drawn into the report.

16 responses were completed in the online survey. The respondents were asked where they were most likely to hire a taxi. 75% indicated Perth, 12.5% indicated Blairgowrie and the remaining 12.5% indicated other areas.

When asked what are the ways in which a private hire car can be hired, 25% of online respondents chose an invalid means of hire, such as from a rank or hailing.

The results of the online survey were broadly similar to the results of the face to face survey. A greater proportion of respondents offered additional comments at the end of the survey. Key comments related to driver standards and indicated that a small proportion of drivers are presented shabbily, with poor standards of dress and hygiene. Multiple respondents suggested that clearer differentiation between taxis and private hire cars, such as different vehicle colours, would help the public identify the correct vehicle types.

5 Key stakeholder consultation

The following key stakeholders were contacted in line with the recommendations of the BPG:

- Supermarkets
- Hotels
- Pubwatch / individual pubs / night clubs
- Other entertainment venues
- Restaurants
- Hospitals
- Police
- Disability representatives
- Rail operators
- Other council contacts within all relevant local councils

Comments received have been aggregated below to provide an overall appreciation of the situation at the time of this survey. In some cases there are very specific comments from stakeholders. The comments provided in the remainder of this Chapter are the views of those consulted, and not that of the authors of this report.

Our information was obtained by telephone, email, letter or face to face meeting as appropriate. The list contacted includes those suggested by the Best Practice Guidance. Our target stakeholders are as far as possible drawn from across the two licensing areas.

For the sake of clarity, we cover key stakeholders from the public side separately to those from the licensed vehicle trade element, whose views are summarized separately in the following Chapter.

Supermarkets

Feedback from supermarkets indicated that Freephones in the supermarkets, or mobile phones were generally used to book travel by licensed vehicles. None of the representatives contacted were aware of any notable issues with the availability of licensed vehicles for customers. Some of the customer service desks did occasionally phone a private hire company for customers.

Hotels

None of the hotels contacted indicated that they had a Freephone facility for any particular private hire company. Most guests, if they needed a taxi would call and book one themselves. There is generally information provided by the hotels, with some local numbers. This was the case in both Perth and in Blairgowrie. If a taxi is required in the morning before 10:00 then there can sometimes be a delay or some difficulty obtaining a vehicle quickly. This is generally the reason that guests sometimes ask at reception if there are any other taxi companies that they can call, if they have initially been unsuccessful in booking a taxi, because none were available.

Public houses

A selection of public houses were contacted to seek their views on the availability of licensed vehicles. All indicated that customers generally managed to obtain a vehicle when they needed one. At closing time, there can sometimes be a longer wait time for a vehicle. None of the respondents indicated that they were aware of any complaints by customers that there were any persistent problems with availability of or level of service provided by licensed vehicles. However, there was some expectation that obtaining one would take longer late on a Friday or Saturday night.

Those premises close to ranks indicated that they thought many of the customers walked along to the rank to obtain a taxi. Although, even those at locations close to ranks, would commonly phone for a taxi.

In Blairgowrie, late at night it was more common for people to phone for a taxi, than to walk to the rank.

Night clubs

No issues were identified by any of the clubs contacted. It was felt that there was generally a mix of Taxis and Private Hire Vehicles used. Many pre-booked hires are fulfilled by Taxis.

Restaurants

No issues identified

Hospitals

People normally made their own arrangements for taxis. Licensed vehicles frequently set down and pick up from the hospital. No particular problems for most people. Sometimes, if someone needs a wheelchair accessible vehicle in Blairgowrie, it can take a while for it to arrive. However, most trips appear to be booked in advance if a wheelchair accessible vehicle is needed.

Police

Police Scotland provided a comprehensive review of the level of service to daytime demand and to the night time economy, from the Police perspective. It was felt that there were adequate taxis available in both Perth and Blairgowrie, to satisfy demand during the day times and at night on the run up to closing time for licensed premises. There are no persistent issues with build up of crowds at ranks. There are generally sufficient taxis waiting at ranks for passengers.

It was felt that the relationship between taxis and Police Scotland is positive.

Disability

A sample of care homes were contacted to ask if they use licensed vehicles and if so, what level of service they received. Generally there were no

issues identified by care homes. The majority of care homes use Private Hire companies if necessary and if they need a wheelchair accessible vehicle then their regular suppliers normally had one available. Normally, if needed, transport was booked in advance. Normally care homes had regular suppliers that they used.

Consultation was undertaken with representatives of elderly and disabled user groups and Council representatives who deal with taxi contracts for school and other special need transport.

The representatives consulted also undertook some consultation with their members and fed back the following key issues that some residents face:

- It is impossible to get a taxi at school pick up times
- Sundays are difficult to book WAV's
- It is not always possible to book a WAV in advance
- None of our members would go to a taxi rank to get a WAV they would always phone in advance
- There have been occasions when going out at night the driver of the WAV has gone off shift and nobody would be driving the WAV to take the person home
- There used to be an issue with wheelchair users not getting clamped in properly but due to WAV training this has improved
- Occasionally taxis don't turn up and due to this people are missing NHS appointments
- A lot of members stick to the same company as they have had positive experience with them
- Many wheelchair users do not use taxi as they are confident that they will get a positive experience.
- There are many different sizes of wav taxis and wheelchairs which means that not all taxis are accessible to all taxis
- WAV's are being used for journeys that they are not always necessary for like airport runs
- You can only get one wheelchair in a taxi at a time
- Phone operators at taxi offices could benefit from disability training
- Equipment in the taxis is not checked and can look worn

With respect to transport contracts which require the use of wheelchair accessible vehicles, there are some secondary issues which became apparent during discussion. With respect to licensed vehicle contracts, there are no wheelchair accessible Taxis or Private Hire Cars based in Blairgowrie or Pitlochry. However, there are vehicles which are based in Perth. So contracts which require the use of a wheelchair accessible vehicle have to use Perth based vehicles. This results in a lot of dead mileage (and hence additional cost) and less availability of wheelchair accessible vehicles which are taken out of general availability for longer periods than would be necessary if the vehicles were based closer to the locations required.

Some feedback from mobility impaired users relates to booked licensed vehicles not turning up to fulfil bookings. There appears to be no means of providing feedback to the Council regarding bookings which are not fulfilled and which operators are the worst offenders.

The participants in the consultation discussions made it clear that the problems that people with mobility difficulties face with licensed vehicle services are by no means the norm for all trips. However, the problems occur frequently enough that they are significant issues for many and do affect the choices that people can make.

Rail and other transport operators

In Perth, at the railway station, there are generally plenty of waiting Taxis which arriving passengers can use. It is rare that there are no vehicles present when needed.

Stagecoach buses were contacted and indicated that there were no issues with taxis. The central bus stops in Perth and the bus stances in Blairgowrie were close to taxi ranks, if customers needed to get a taxi.

6 Trade consultation

The BPG encourages all studies to include 'all those involved in the trade'. There are a number of different ways felt to be valid in meeting this requirement, partly dependent on what the licensing authority feel is reasonable and possible given the specifics of those involved in the trade in their area.

A link to an online questionnaire was sent to all taxi operators.

A total of 22 valid response to the online questionnaire was received.

Of those responding, 63.6% said they normally drove a taxi. A further 22.7% indicated that they didn't normally drive, but did own a taxi. 9% of respondents indicated that they drove private hire cars. 4.5 % of respondents indicated that they didn't normally drive.

Approximately 80% of respondents indicated that they normally worked in Perth. The 5% indicated that they normally worked in Blairgowrie and the remaining 15% indicated that they normally worked in other locations within Perth and Kinross.

In terms of typical hours worked, the majority of taxi drivers who responded worked day time rather than night time hours. Working hours per week ranged from 40 to 63 hours per week. Six day working was the most common number of days worked by taxi drivers.

The average number of hires picked up at ranks was approximately 12. Hires from hailing were less common with few drivers regularly picking up hires from hailing. Approximately a third of drivers had one or two contract hires per day. Around two thirds of drivers undertook telephone hires regularly. The estimated number of telephone hires per day, for those who undertook them, was approximately 5 hires per day.

Based on the responses from taxi drivers, approximately two thirds of hires are obtained from rank hires, the next most common source of hires are telephone bookings followed by contract hires.

Approximately two thirds of drivers rarely pick up wheelchair using passengers. Of the remaining third, most pick up around one or two wheelchair using passengers per week. These were normally pre-booked. One driver regularly carried over ten passengers per week. These were contract hires.

Other than through contract hires, drivers generally didn't have regular clients with mobility impairments.

Around two thirds of drivers indicated that the vehicle they normally drove, was driven by more than one driver. As such, these multi-shifted vehicles cover different times of day, such as daytime demand and evening/ night time demand, by different drivers.

Respondents were asked what issues could adversely affect the taxi trade. A range of responses were received. Some felt that ownership of multiple taxi plates by individuals who rented plates to drivers, was wrong and some felt aggrieved that they could not obtain a plate in their own right.

One driver commented that as a taxi driver from another area, he could drop passengers off in Perth, but couldn't pick up passengers at the ranks in Perth, despite driving past passengers waiting at the ranks.

Several respondents mentioned lack of rank space, lack of wheelchair accessible vehicles, poor customer service by some drivers and vehicles parking on taxi ranks.

Respondents were asked what the effect would be if the number of taxi vehicle licensed were increased or decreased. The consensus was that there was not enough business to support more taxis and there was not sufficient rank space to cope with increased numbers. Some respondents acknowledged that if numbers were reduced then earnings would increase. It was also suggested that if numbers were increased, by adding wheelchair accessible vehicles then this could benefit wheelchair users.

Responses to questions regarding a need for new or improved ranks, generated several common suggestions from multiple respondents. The most common responses related to the rank on South Street near Tesco. Several respondents suggested that the rank could be moved back along South Street and extended in length. The next most common response was that the active ranks in general don't have sufficient space to accommodate waiting taxis. Parked vehicles on the ranks was cited as a common problem.

Suggestions for new ranks included a suggestion for a larger rank in Blairgowrie, Kinnoul Street to serve shopping demand, the Concert Hall, Broxden Interchange and improved marking to make it clear that a rank exists at night outside Loft nightclub.

School contract times (7:30 to 9:30 and 14:00 to 16:00 weekdays) were highlighted as times when the public may face difficulties finding a taxi.

Some suggestions were received to improve lighting at the taxi ranks and clearer road markings at ranks.

It was felt that the level of customer care from taxi drivers was generally good. But some driver offered poor levels of customer care and were not fully aware of customer needs.

Respondents were asked to identify any benefits of limiting the number of taxi plates.

Benefits included more comprehensive provision of service as with some vehicles having multiple drivers and operating shifts, drivers were less likely

to cherry pick their working hours. With limited plates, there is more investment in vehicles to ensure vehicles are newer and well maintained.

Respondents were invited to provide any further comments they wished to make. The most common comments related to the ownership of existing plates, with some respondents suggesting that there should be a limit to how many plates are owned by one individual. Several respondents with extensive experience in the trade felt that the level of business from rank hires has dropped over the years. Some respondents felt that there could be more wheelchair accessible vehicles in the fleet. The standard of dress and hygiene of some drivers was criticised.

Additional direct trade consultation

In addition to the responses online, informal discussions were held with several drivers at ranks in Perth and Blairgowrie. In Perth, the drivers on the ranks offered similar views to those offered in the online survey. One additional suggestion was made, that taxis may be allowed into the pedestrianised shopping streets to drop off or pick up elderly or disabled passengers, who sometimes struggle to get to the taxi ranks.

In Blairgowrie, comments related to the position of the taxi rank. Whilst much of the trade in Blairgowrie relies on telephone bookings for immediate hire, there is some walk up demand at the rank. However, the rank location is not immediately obvious to visitors in the town and is relatively far from the principal night time economy venues in the town centre. A rank closer to or on Wellmeadow, next to the green, would be a sensible location to wait for passengers.

7 Evaluation of unmet demand and its significance

It is first important to define our specific view about what constitutes unmet demand. Our definition is when a person turns up at a Taxi rank and finds there is no vehicle there available for immediate hire. This can lead to a queue of people building up, some of who may walk off, whilst others will wait till a vehicle collects them. Later passengers may well arrive when there are vehicles there, but because of the queue will not obtain a vehicle immediately.

There are other instances where a queue of passengers can be observed at a Taxi rank, whilst a queue of Taxis is present, waiting to pick up passengers. This can occur when the level of demand is such that it takes longer for vehicles to move up to waiting passengers than passengers can board and move away. This often occurs at railway stations, but can also occur at other ranks where high levels of passenger arrivals occur. We do not consider this is unmet demand, but geometric delay and although we note this, it is not counted towards unmet demand being significant.

The industry standard index of the significance of unmet demand (ISUD) was initiated at the time of the introduction of section 16 of the 1985 Transport Act as a numeric and consistent way of evaluating unmet demand and its significance. The ISUD methodology was initially developed by a university and subsequently adopted by consultants undertaking the surveys made necessary to enable authorities to retain their limit on Taxi vehicle numbers. The index has been developed over time to take into account various court challenges. It has now become accepted as the industry standard test of if identified unmet demand is significant.

The index is a statistical guide derived to evaluate if observed unmet demand is in fact significant. However, its basis is that early tests using first principles identified based on a moderate sample suggested that the level of index of 80 was the cut-off above which the index was in fact significant, and that unmet demand therefore was such that action was needed in terms of additional issue of plates to reduce the demand below this level, or a complete change of policy if it was felt appropriate. This level has been accepted as part of the industry standard. However, the index is not a strict determinant and care is needed in providing the input samples as well as interpreting the result provided. However, the index has various components which can also be used to understand what is happening in the rank-based and overall licensed vehicle market.

ISUD draws from several different parts of the study data. Each separate component of the index is designed to capture a part of the operation of the demand for Taxis and reflect this numerically. Whilst the principal inputs are from the rank surveys, the measure of latent demand comes from the public on-street surveys, and any final decision about if identified unmet demand is significant, or in fact about the value of continuing the current

policy of restricting vehicle numbers, must be taken fully in the context of a careful balance of all the evidence gathered during the survey process.

The present ISUD calculation has two components which both could be zero. In the case that either are zero, the overall index result is zero, which means they clearly demonstrate there is no unmet demand which is significant, even if other values are high.

The first component which can be zero is the proportion of daytime hours where people are observed to have to wait for a Taxi to arrive. The level of wait used is ANY average wait at all within any hour. The industry definition of these hours varies, the main index user counts from 10:00 to 18:00 (i.e. eight hours ending at 17:59). The present index is clear that unmet demand cannot be significant if there are no such hours. The only rider on this component is that the sample of hours collected must include a fair element of such hours, and that if the value is non-zero, review of the potential effect of a wider sample needs to be considered.

The other component which could be zero is the test identifying the proportion of passengers which are travelling in any hour when the average passenger wait in that hour is greater than one minute.

If both of these components are non-zero, then the remaining components of the index come into play. These are the peakiness factor, the seasonality factor, average passenger delay, and the latent demand factor.

Average passenger delay is the total amount of time waited by all passengers in the sample, divided by the total number of passengers observed who entered Taxis.

The seasonality factor allows for the undertaking of rank survey work in periods which are not typical, although guidance is that such periods should normally be avoided if possible particularly as the impact of seasons may not just be on the level of passenger demand, but may also impact on the level of supply. This is particularly true in regard to if surveys are undertaken when schools are active or not.

Periods when schools are not active can lead to more Taxi vehicles being available whilst they are not required for school contract work. Such periods can also reduce Taxi demand with people away on holiday from the area. Generally, use of Taxis is higher in December in the run-up to Christmas, but much lower in January, February and the parts of July and August when more people are likely to be on holiday. The factor tends to range from 0.8 for December to 1.2 for January / February.

There can be special cases where summer demand needs to be covered, although high peaks for tourist traffic use of Taxis tend not to be so dominant at the current time, apart from in a few key tourist authorities.

The peakiness factor is generally either 1 (level demand generally) or 0.5 (demand has a high peak at one point during the week). This is used to allow for the difficulty of any transport system being able to meet high levels of peaking. It is rarely possible or practicable for example for any public transport system, or any road capacity, to be provided to cover a few hours a week.

The latent demand factor was added following a court case. It comes from asking people in the on-street questionnaires if they have ever given up waiting for a Taxi at a rank in any part of the area. This factor generally only affects the level of the index as it only ranges from 1.0 (no-one has given up) to 2.0 (everyone says they have). It is also important to check that people are quoting legitimate Taxi rank waits as some, despite careful questioning, quote giving up waiting at home, which must be for a Private Hire Vehicle (even if in Taxi guise as there are few private homes with taxi ranks outside).

The ISUD index is the result of multiplying each of the components together and benchmarking this against the cut-off value of 80. Changes in the individual components of the index can also be illustrative. For example, the growth of daytime hour queueing can be an earlier sign of unmet demand developing than might be apparent from the proportion of people experiencing a queue particularly as the former element is based on any wait and not just that averaging over a minute. The change to a peaky demand profile can tend towards reducing the potential for unmet demand to be significant.

Finally, any ISUD value must be interpreted in the light of the sample used to feed it, as well as completely in the context of all other information gathered. Generally, the guide of the index will tend not to be overturned in regard to significant unmet demand being identified, but this cannot be assumed to be the case – the index is a guide and a part of the evidence.

ISUD value, Perth

For the 2017 survey, average passenger delay was 0.12 minutes (7 seconds). Periods when passengers had to wait for a taxi to arrive at the rank amounted to 4.80% of the observed off peaks hours. 11.63 % of passengers travelled in hours when there was an average wait of over a minute. The demand profile did not exhibit highly peaked demand, resulting in a factor of 1.0 being used. The seasonal factor is 1.0. The latent demand factor was 1.032 The resultant **ISUD** value of **6.7** is less than the value of 80 that would suggest the observed unmet demand might be significant. Consequently, this suggests that there is **no significant unmet demand**. This permits the authority to retain its current policy of limiting vehicle numbers, and also allows the number of vehicles to remain unchanged.

ISUD value, Blairgowrie

For the 2017 survey, average passenger delay was 0.10 minutes (6 seconds). Periods when passengers had to wait for a taxi to arrive at the rank amounted to 22.50% of the observed off peaks hours. 7.53 % of passengers travelled in hours when there was an average wait of over a minute. The demand profile did not exhibit highly peaked demand, resulting in a factor of 1.0 being used. The seasonal factor is 1.0. The latent demand factor was 1.021 The resultant **ISUD** value of **17.3** is less than the value of 80 that would suggest the observed unmet demand might be significant. Consequently, this suggests that there is **no significant unmet demand**. This permits the authority to retain its current policy of limiting vehicle numbers, and also allows the number of vehicles to remain unchanged.

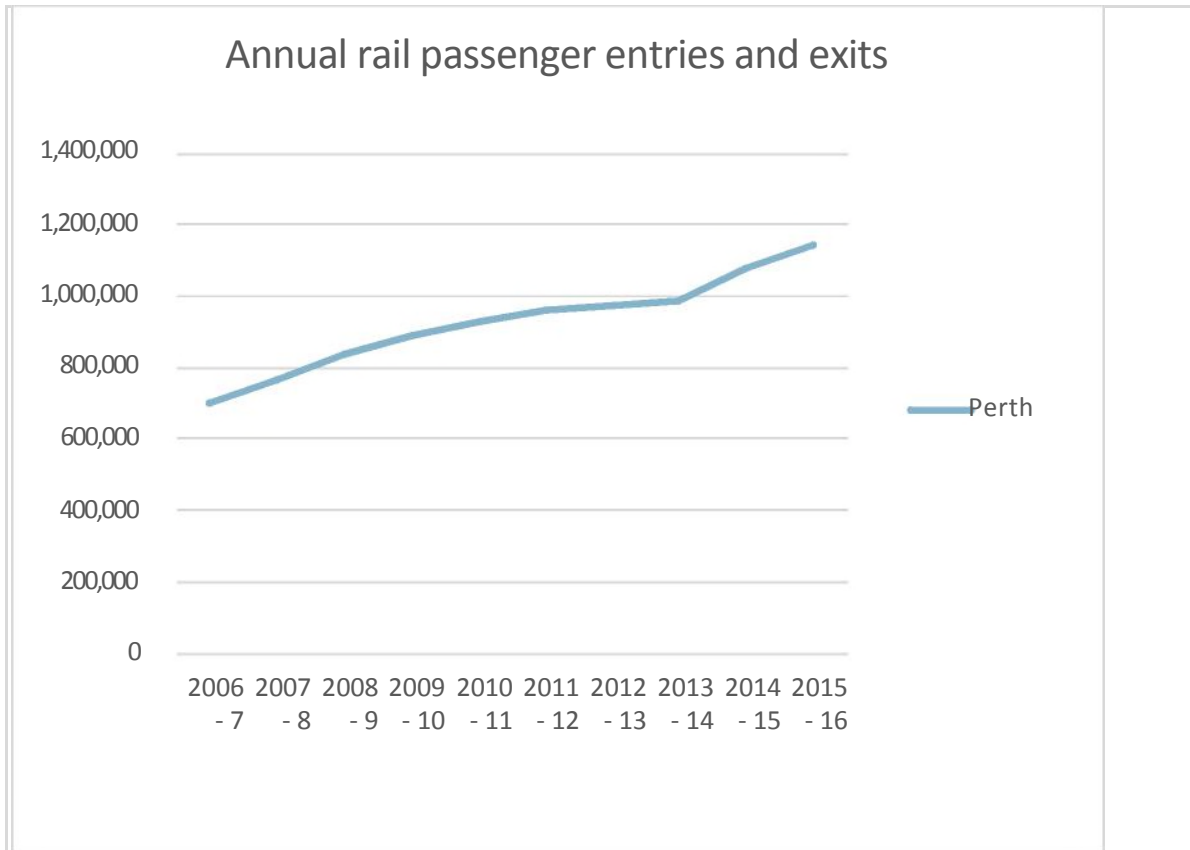
Table 6 ISUD Components

ISUD component	Perth	Blairgowrie
Average passenger delay	0.12	0.1
Off peak hours with observed waiting	4.80	22.50
% of passengers travelling in hours with average queue over a minute	11.63	7.53
Seasonal factor	1.0	1.0
Peak factor	1.0	1.0
Latent demand factor	1.032	1.021
Overall ISUD index estimate	6.7	17.3

8 Comments on railway statistics and mobility impairment

Railway Statistics

Some demand for licensed vehicles is related to rail passenger volumes. Where rail passenger volume increases, we would expect to observe some



increase in associated use of licensed vehicles by rail passengers.

Figure 8 - Annual passenger movements at principal Railway Stations

Data is available for annual passenger numbers each year, from 2009 to 2016.

Passenger usage of Perth Railway Station has grown, on average, by around 8% per annum over the last three years.

Mobility impairment statistics

The Perth and Kinross Community Planning Partnership provide the following data: Data from the 2011 Census indicates that there are around 26,000 people in Perth and Kinross living with a long-term activity-limiting health problem or disability.

The 2011 Census also shows there are 10,500 people in Perth and Kinross with deafness or partial hearing loss and 3,500 with blindness or partial sight loss.

80% of people with a learning disability have some form of sight loss which

equates to 424 people in Perth and Kinross. It is well established that ageing is the single greatest determinant of vision and hearing loss. Older people are also far more likely to have a physical disability than the rest of the population. It is clear that the levels of support needed for people with a physical disability and/or sensory impairment will increase substantially in line with the projected increases in the older population.

Around 20% of the population of Perth and Kinross are aged 65 years or over and the area has the highest projected growth rate in Scotland. The number of people over 65 years is predicted to increase by 40% between 2011 and 2027. By comparison, the traditional working age population is projected to increase by 14%.

Perth and Kinross faces particular challenges in the future due to its demographics.

8 Summary and study conclusions

Feedback from the public and stakeholders suggests that for general use there are high levels of satisfaction with the level of service provided by Taxis. Relatively few general use issues were identified and levels of availability were felt to be high. There was some feedback that a few drivers offered lower levels of service, such as poor local knowledge, poor customer service, low levels of awareness of customer needs and poor standards of dress and hygiene. These issues were not the norm, but common enough that they were mentioned by the trade and members of the public. Some issues with availability of wheelchair accessible vehicles were identified.

From the observation of activity at taxi ranks, there were periods during day time and night time, when passengers had to wait for a Taxi to arrive at the ranks. The periods tended to vary and waiting occurred from time to time at periods of low demand as well as during periods of higher demand. There were no periods when large and persistent queues of passengers formed for extensive periods. The proportion of passengers who had to wait for a Taxi to arrive was generally low. This proportion, coupled with the variety of periods when waiting occurred and the lack of any persistent and extended passenger queueing suggests that the Taxi fleet is generally able to cater for the levels of demand at various times of day. .

The number of waiting passengers and the duration of waiting time needs to be considered in the context of all passengers at all times. Within this context, it was established that the level of passenger waiting was not considered to be significant. The service level in Perth and that in Blairgowrie were considered separately, as separate limits apply in each area. It was concluded that there was **no significant unmet demand in either Perth or in Blairgowrie.**

It appears that there is heavy reliance on pre-booked hires as a vital component of the income stream for many vehicles in the Taxi fleet. This is not uncommon and helps to meet changing demand profiles from the public, especially with regard to the use of mobile phones and smart phone apps, to obtain licensed vehicle services. However, it should be borne in mind that in some licensing areas, where the pre-booked hire market dominates the source of hires for Taxis, this can lead to pressure on Taxis to service pre-booked hires in preference to rank based hires at times of peak demand, such as on a Saturday night. As a consequence, this can lead to significant passenger queues during peak demand periods, despite the size of the Taxi fleet nominally exceeding the level required to service such demand. This feature is not an issue in Perth or in Blairgowrie at the present time and there appears to be sufficient vehicles servicing rank based demand at peak times. However, the trade would benefit in the long term by monitoring the situation at peak times and ensuring that rank

based demand continues to be adequately serviced during those times, as it is at present.

Availability of wheelchair accessible vehicles in particular and the reliability of pre-booked trips for medical appointments have been raised as issues which affect some people around Perth & Kinross as a whole. Availability of wheelchair accessible vehicles was raised as an issue by the trade and by stakeholders during consultation.

The need for accessible vehicles is a key and growing market sector within the trade. In some licensing areas, elsewhere in the UK, the existence of this market is recognised and targeted by some operators as a key business opportunity, especially as a component of daytime demand. There are some operators in Perth & Kinross who do have wheelchair accessible vehicles available and who have trained staff available to service demand. However, it appears that the level of demand exceeds the supply of available vehicles at some times of day. Part of the issue appears to be the length of time that accessible vehicles are tied up on contract work. Lengthy dead mileage legs for some of these contracts means that the vehicles fulfilling the contracts are not available for other work. This affects the availability for wheelchair users.

Older people and people with mobility impairments often have higher reliance on licensed vehicles for travel, than the general population at large. Perth and Kinross has a significant proportion of the population who are elderly or disabled. This proportion of the population is projected to grow at a faster rate than the population as a whole. As such, the market sector for elderly and mobility impaired passengers is likely to present an increasingly significant sector within the licensed vehicle market.

From the results of stakeholder and trade consultation, there appears to be a need for additional provision of wheelchair accessible vehicles and for some increased driver awareness of the needs for elderly and mobility impaired passengers.

The licensed vehicle trade consists of independent operators who are free to decide on working patterns and working locations and what market sectors to target. The Council may wish to explore measures which can improve availability of wheelchair accessible vehicles and the level of service offered to older and mobility impaired users. The most effective measures are likely to be ones which encourage the trade to invest in training, marketing and vehicles which can target and service this market on a commercial basis. Further identification of the potential market size, for wheelchair accessible vehicles and other mobility impaired users would help providers to understand the market potential and make commercial judgements regarding how to target this market.

9 Recommendations

On the basis of the evidence gathered, our key conclusion is that there is no evidence of significant unmet demand for the services of Taxis. There is no compelling need to increase the number of Taxi vehicle licences to meet current levels of demand.

The principal issue identified is lack of availability of wheelchair accessible vehicles at some times of day and in some locations. It is recommended that the Council discuss the potential market size for wheelchair users and mobility impaired passengers, with the trade, with the objective of encouraging investment towards targeting this particular market sector.

Appendix A Rank Survey Data

Perth & Blairgowrie Taxi Unmet Demand Survey

Table 7 - Perth & Blairgowrie ranks, total passengers

Total passengers					
Day & Time	Murray Street	Railway Station	South Street East	South Street West	Blairgowrie
Thursday07:00	6	2			
Thursday08:00	13	8			
Thursday09:00	10	7			
Thursday10:00	10	13			
Thursday11:00	12	10			4
Thursday12:00	9	8			2
Thursday13:00	13	5			4
Thursday14:00	11	9			3
Thursday15:00	12	5			5
Thursday16:00	8	8			
Thursday17:00	5	8			4
Thursday18:00	17	12			
Thursday19:00	16	8			
Thursday20:00	18	13			
Thursday21:00	17	9	2		
Thursday22:00	25	5			
Thursday23:00	24	7	2		
Friday00:00	60			3	
Friday01:00	15				
Friday02:00	12				
Friday03:00	19				
Friday04:00					
Friday05:00					
Friday06:00					
Friday07:00	4				
Friday08:00	7	5			
Friday09:00	6	23			
Friday10:00	12	10			4
Friday11:00	10	10			2
Friday12:00	19	7			1
Friday13:00	9	1			2
Friday14:00	13	7			6
Friday15:00	13	2			1
Friday16:00	12	5			2
Friday17:00	21	11			1
Friday18:00	23	14			5
Friday19:00	29	11			7
Friday20:00	35	11	1		1
Friday21:00	49	9	3		14
Friday22:00	43	12	2		7
Friday23:00	55	18		27	9
Saturday00:00		11		3	1
Saturday01:00		11		2	
Saturday02:00				4	
Saturday03:00				1	
Saturday04:00					
Saturday05:00					
Saturday06:00					
Saturday07:00					
Saturday08:00					
Saturday09:00		11			
Saturday10:00		11			
Saturday11:00		15			
Saturday12:00		8			1
Saturday13:00		12			3
Saturday14:00		3			2
Saturday15:00		8			2
Saturday16:00		8			3
Saturday17:00		11			3
Saturday18:00		13			4
Saturday19:00		20			14
Saturday20:00		14			10
Saturday21:00		13			6
Saturday22:00		11			10
Saturday23:00		11	7		3
Sunday00:00		2	2	7	
Sunday01:00				1	
Sunday02:00				1	
Sunday03:00					
Sunday04:00					
Total	692	486	19	49	146

Table 8 - Perth & Blairgowrie ranks, total Taxis departing with passengers

Total Taxis departing with passengers					
Day & Time	Murray Street	Railway Station	South Street East	South Street West	Blairgowrie
Thursday 07:00	6	2			
Thursday 08:00	10	8			
Thursday 09:00	10	7			
Thursday 10:00	8	13	10		
Thursday 11:00	9	10	8		3
Thursday 12:00	7	8	14		2
Thursday 13:00	10	5	10		3
Thursday 14:00	9	9	13		3
Thursday 15:00	11	5	15		4
Thursday 16:00	7	8	12		
Thursday 17:00	5	8	8		3
Thursday 18:00	12	10	3		
Thursday 19:00	11	7	5		
Thursday 20:00	12	13	3		
Thursday 21:00	11	9	10		
Thursday 22:00	18	5	1		
Thursday 23:00	15	6	3		
Friday 00:00	36			4	
Friday 01:00	12			7	
Friday 02:00	8			9	
Friday 03:00	8				
Friday 04:00					
Friday 05:00					
Friday 06:00					
Friday 07:00	4				
Friday 08:00	6	5			
Friday 09:00	6	18	2		
Friday 10:00	10	6	14		3
Friday 11:00	8	8	10		2
Friday 12:00	15	6	10		1
Friday 13:00	8	1	20		2
Friday 14:00	10	7	19		4
Friday 15:00	10	2	10		1
Friday 16:00	9	5	6		2
Friday 17:00	13	11	10		1
Friday 18:00	17	14	7		4
Friday 19:00	20	11	9		4
Friday 20:00	24	9	12		1
Friday 21:00	31	9	15		6
Friday 22:00	24	10	13		4
Friday 23:00	33	11		2	7
Saturday		10		10	1
Saturday		10		21	
Saturday				25	
Saturday				25	
Saturday					
Saturday					
Saturday	5				
Saturday	4		3		
Saturday	5	8	7		
Saturday	6	7	7		
Saturday	7	13	13		
Saturday	6	6	13		1
Saturday	7	9	10		2
Saturday	3	3	16		2
Saturday	8	6	10		1
Saturday	14	8	8		2
Saturday	21	11	14		2
Saturday	30	11	8		3
Saturday	43	13	12		8
Saturday	55	13	15		7
Saturday	31	13	19		4
Saturday	40	10	12		5
Saturday	47	8	7		2
Sunday 00:00	44	2	3	6	
Sunday 01:00	33			38	
Sunday 02:00	9			35	
Sunday 03:00					
Sunday 04:00					
Total	90	427	449	18	100

Table 9 - Perth & Blairgowrie ranks, total Taxis departing the ranks empty

Total Taxis departing ranks empty					
Day & Time	Murray Street	Railway Station	South Street East	South Street West	Blairgowrie
Thursday 07:00	9	2			1
Thursday 08:00	4				3
Thursday 09:00	9				2
Thursday 10:00	13		4		2
Thursday 11:00	11	1			1
Thursday 12:00	5	3	3		1
Thursday 13:00	6	9	4		2
Thursday 14:00	7	1	1		3
Thursday 15:00	4		1		1
Thursday 16:00	4		1		3
Thursday 17:00	1				2
Thursday 18:00	5		2		
Thursday 19:00	7	1	5		
Thursday 20:00	5		7		
Thursday 21:00	13	4	7		
Thursday 22:00	6	1	2		
Thursday 23:00	14		3		
Friday 00:00	6			6	
Friday 01:00	8			5	
Friday 02:00	4			5	
Friday 03:00	9				
Friday 04:00					
Friday 05:00					
Friday 06:00					
Friday 07:00	10				
Friday 08:00	7	1			2
Friday 09:00	12	2	5		2
Friday 10:00	7	5	4		3
Friday 11:00	15	2	7		
Friday 12:00	4	1	10		
Friday 13:00	9	4			2
Friday 14:00	4	4	1		4
Friday 15:00	3	1			1
Friday 16:00	1		2		5
Friday 17:00	1				2
Friday 18:00	2	1	4		2
Friday 19:00	3	2	5		4
Friday 20:00	13	4	3		5
Friday 21:00	10	4	8		1
Friday 22:00	7	3	2		3
Friday 23:00	16	1		6	1
Saturday		2		1	1
Saturday				4	
Saturday				10	
Saturday				6	
Saturday					
Saturday					
Saturday	8				
Saturday	5		1		
Saturday	2	1	5		
Saturday	1		1		
Saturday		2	1		
Saturday	3		1		1
Saturday	3		1		4
Saturday	3	1	2		1
Saturday	3		8		3
Saturday	4		4		3
Saturday	3		1		2
Saturday	3	1	1		4
Saturday			1		
Saturday	10	2	10		7
Saturday	20	2	8		7
Saturday	11		6		2
Saturday	10	1			4
Sunday 00:00	1	1	1		
Sunday 01:00	5			5	
Sunday 02:00	2				
Sunday 03:00					
Sunday 04:00					
Total	371	70	143	48	97

Table 10 - Perth & Blairgowrie ranks, total Taxis departing the ranks

Total Taxis departing ranks					
Day & Time	Murray Street	Railway Station	South Street East	South Street West	Blairgowrie
Thursday 07:00	15	4			1
Thursday 08:00	14	8			3
Thursday 09:00	19	7			2
Thursday 10:00	21	13	14		2
Thursday 11:00	20	11	8		4
Thursday 12:00	12	11	17		3
Thursday 13:00	16	14	14		5
Thursday 14:00	16	10	14		6
Thursday 15:00	15	5	16		5
Thursday 16:00	11	8	13		3
Thursday 17:00	6	8	8		5
Thursday 18:00	17	10	5		
Thursday 19:00	18	8	10		
Thursday 20:00	17	13	10		
Thursday 21:00	24	13	17		
Thursday 22:00	24	6	3		
Thursday 23:00	29	6	6		
Friday 00:00	42			10	
Friday 01:00	20			12	
Friday 02:00	12			14	
Friday 03:00	17				
Friday 04:00					
Friday 05:00					
Friday 06:00					
Friday 07:00	14				
Friday 08:00	13	6			2
Friday 09:00	18	20	7		2
Friday 10:00	17	11	18		6
Friday 11:00	23	10	17		2
Friday 12:00	19	7	20		1
Friday 13:00	17	5	20		4
Friday 14:00	14	11	20		8
Friday 15:00	13	3	10		2
Friday 16:00	10	5	8		7
Friday 17:00	14	11	10		3
Friday 18:00	19	15	11		6
Friday 19:00	23	13	14		8
Friday 20:00	37	13	15		6
Friday 21:00	41	13	23		7
Friday 22:00	31	13	15		7
Friday 23:00	49	12		8	8
Saturday		12		11	2
Saturday		10		25	
Saturday				35	
Saturday				31	
Saturday					
Saturday					
Saturday	13				
Saturday	9		4		
Saturday	7	9	12		
Saturday	7	7	8		
Saturday	7	15	14		
Saturday	9	6	14		2
Saturday	10	9	11		6
Saturday	6	4	18		3
Saturday	11	6	18		4
Saturday	18	8	12		5
Saturday	24	11	15		4
Saturday	33	12	9		7
Saturday	43	13	13		8
Saturday	65	15	25		14
Saturday	51	15	27		11
Saturday	51	10	18		7
Saturday	57	9	7		6
Sunday 00:00	45	3	4	6	
Sunday 01:00	38			43	
Sunday 02:00	11			35	
Sunday 03:00					
Sunday 04:00					
Total	1272	497	592	230	197

Table 11 - Perth & Blairgowrie ranks, average Taxi vehicle waiting time at the rank (hh:mm)

Taxi average vehicle wait times (HH:MM)					
Day & Time	Murray Street	Railway Station	South Street East	South Street West	Blairgowrie
Thursday 07:00	00:04	00:01			00:22
Thursday 08:00	00:04	00:06			00:28
Thursday 09:00	00:15	00:16			00:33
Thursday 10:00	00:18	00:28	00:11		00:24
Thursday 11:00	00:17	00:27	00:24		00:11
Thursday 12:00	00:27	00:20	00:29		00:14
Thursday 13:00	00:18	00:42	00:15		00:21
Thursday 14:00	00:11	00:37	00:08		00:06
Thursday 15:00	00:05	00:31	00:02		00:06
Thursday 16:00	00:11	00:31	00:01		00:23
Thursday 17:00	00:01	00:26	00:03		00:02
Thursday 18:00	00:01	00:21	00:00		
Thursday 19:00	00:03	00:32	00:05		
Thursday 20:00	00:21	00:33	00:14		
Thursday 21:00	00:11	00:21	00:06		
Thursday 22:00	00:13	00:24	00:05		
Thursday 23:00	00:09	00:33	00:08		
Friday 00:00	00:04			00:02	
Friday 01:00	00:11			00:05	
Friday 02:00	00:11			00:12	
Friday 03:00	00:08				
Friday 04:00					
Friday 05:00					
Friday 06:00					
Friday 07:00	00:07				
Friday 08:00	00:05	00:05			00:21
Friday 09:00	00:19	00:11	00:13		00:00
Friday 10:00	00:24	00:31	00:11		00:07
Friday 11:00	00:20	00:48	00:15		00:02
Friday 12:00	00:07	00:41	00:07		00:53
Friday 13:00	00:13	00:50	00:06		00:17
Friday 14:00	00:13	00:07	00:02		00:16
Friday 15:00	00:06	00:24			00:33
Friday 16:00	00:06	00:43	00:02		00:25
Friday 17:00	00:06	00:22			00:33
Friday 18:00	00:04	00:13	00:01		00:22
Friday 19:00	00:10	00:28	00:01		00:22
Friday 20:00	00:10	00:31	00:06		00:28
Friday 21:00	00:06	00:48	00:04		00:17
Friday 22:00	00:17	00:26	00:13		00:14
Friday 23:00	00:09	00:20		00:01	00:09
Saturday		00:11		00:02	00:02
Saturday		00:07		00:09	
Saturday				00:09	
Saturday				00:01	
Saturday					
Saturday					
Saturday	00:09				
Saturday	00:12		00:09		
Saturday	00:07	00:07	00:13		
Saturday	00:08	00:17	00:01		
Saturday	00:11	00:02	00:07		
Saturday	00:10	00:17	00:01		00:21
Saturday	00:06	00:10	00:02		00:10
Saturday	00:16	00:19	00:08		00:27
Saturday	00:07	00:31	00:03		00:08
Saturday	00:03	00:12	00:03		00:11
Saturday	00:03	00:09	00:00		00:14
Saturday	00:03	00:16	00:02		00:09
Saturday	00:02	00:03			00:06
Saturday	00:03	00:04	00:00		00:11
Saturday	00:07	00:07	00:01		00:22
Saturday	00:04	00:12	00:01		00:19
Saturday	00:04	00:01			00:17
Sunday 00:00	00:02	00:01			
Sunday 01:00	00:04				
Sunday 02:00	00:05				
Sunday 03:00					
Sunday 04:00					

Table 12 - Perth & Blairgowrie ranks, maximum Taxi vehicle waiting time (hh:mm)

Maximum Taxi Vehicle wait time					
Day & Time	Murray Street	Railway Station	South Street East	South Street West	Blairgowrie
Thursday 07:00	00:15	00:06			
Thursday 08:00	00:11	00:11			
Thursday 09:00	00:31	00:24			
Thursday 10:00	00:27	00:47			00:13
Thursday 11:00	00:25	01:18			00:22
Thursday 12:00	00:44	00:34			00:16
Thursday 13:00	00:32	01:01			00:30
Thursday 14:00	00:17	00:54			00:07
Thursday 15:00	00:08	00:55			00:09
Thursday 16:00	00:23	01:02			00:42
Thursday 17:00	00:02	00:48			00:01
Thursday 18:00	00:01	00:44			
Thursday 19:00	00:10	01:06			
Thursday 20:00	00:29	00:45			
Thursday 21:00	00:18	00:33	00:02		
Thursday 22:00	00:25	00:31			
Thursday 23:00	00:13	00:55	00:10		
Friday 00:00	00:13			00:04	
Friday 01:00	00:14				
Friday 02:00	00:22				
Friday 03:00	00:16				
Friday 04:00					
Friday 05:00					
Friday 06:00					
Friday 07:00	00:10				
Friday 08:00	00:09	00:15			
Friday 09:00	00:29	00:21			
Friday 10:00	00:34	00:44			00:16
Friday 11:00	00:31	01:17			00:03
Friday 12:00	00:13	00:44			00:53
Friday 13:00	00:22	01:17			00:29
Friday 14:00	00:20	00:05			00:21
Friday 15:00	00:10	00:39			
Friday 16:00	00:13	01:09			00:29
Friday 17:00	00:12	00:37			
Friday 18:00	00:19	00:26			00:28
Friday 19:00	00:15	00:46			00:22
Friday 20:00	00:16	00:45	00:00		00:39
Friday 21:00	00:18	00:39	00:03		00:19
Friday 22:00	00:25	00:42	00:00		00:18
Friday 23:00	00:15	00:34		00:08	00:12
Saturday 00:00		00:49		00:00	00:02
Saturday 01:00		00:12		00:07	
Saturday 02:00				00:08	
Saturday 03:00				00:05	
Saturday 04:00					
Saturday 05:00					
Saturday 06:00					
Saturday 07:00	00:25				
Saturday 08:00	00:22				
Saturday 09:00	00:19	00:18			
Saturday 10:00	00:23	00:35			
Saturday 11:00	00:30	00:11			
Saturday 12:00	00:16	00:35			00:23
Saturday 13:00	00:15	00:19			00:15
Saturday 14:00	00:28	00:46			00:45
Saturday 15:00	00:17	00:40			
Saturday 16:00	00:10	00:30			00:14
Saturday 17:00	00:09	00:21			00:16
Saturday 18:00	00:09	00:25			00:06
Saturday 19:00	00:07	00:09			00:11
Saturday 20:00	00:09	00:09			00:14
Saturday 21:00	00:15	00:20			00:35
Saturday 22:00	00:08	00:25			00:24
Saturday 23:00	00:09	00:03	00:01		00:23
Sunday 00:00	00:06	00:02	00:05	00:02	
Sunday 01:00	00:24			00:02	
Sunday 02:00	00:16			00:02	
Sunday 03:00					
Sunday 04:00					
Maximum	00:44	01:18	00:10	00:08	00:53

Table 13 - Perth & Blairgowrie ranks, average passenger waiting times (hh:mm)

Average passenger wait time					
Day & Time	Murray Street	Railway Station	South Street East	South Street West	Blairgowrie
Thursday 07:00					
Thursday 08:00	00:02				
Thursday 09:00	00:03				
Thursday 10:00					
Thursday 11:00					00:03
Thursday 12:00					
Thursday 13:00					
Thursday 14:00					00:02
Thursday 15:00					
Thursday 16:00					
Thursday 17:00	00:01				
Thursday 18:00	00:02				
Thursday 19:00	00:01				
Thursday 20:00					
Thursday 21:00					
Thursday 22:00					
Thursday 23:00					
Friday 00:00					
Friday 01:00					
Friday 02:00	00:00				
Friday 03:00	00:01				
Friday 04:00					
Friday 05:00					
Friday 06:00					
Friday 07:00					
Friday 08:00		00:00			
Friday 09:00					
Friday 10:00					00:00
Friday 11:00					
Friday 12:00					
Friday 13:00					
Friday 14:00	00:00				
Friday 15:00					
Friday 16:00					
Friday 17:00	00:00				
Friday 18:00	00:00				
Friday 19:00	00:00				
Friday 20:00					
Friday 21:00					
Friday 22:00					
Friday 23:00				00:08	
Saturday				00:00	
Saturday					
Saturday					
Saturday					
Saturday					
Saturday					
Saturday					
Saturday	00:01				
Saturday					
Saturday					
Saturday					
Saturday					
Saturday					
Saturday	00:01				
Saturday	00:00				
Saturday	00:01				00:02
Saturday	00:01				
Saturday	00:00				
Saturday					
Saturday					
Saturday					
Sunday 00:00	00:02			00:01	
Sunday 01:00	00:00				
Sunday 02:00					
Sunday 03:00					
Sunday 04:00					

Table 14 - Perth & Blairgowrie ranks, maximum passenger waiting times (hh:mm)

Maximum passenger wait time					
Day & Time	Murray Street	Railway Station	South Street East	South Street West	Blairgowrie
Thursday 07:00					
Thursday 08:00	00:12				
Thursday 09:00	00:06				
Thursday 10:00					
Thursday 11:00					00:06
Thursday 12:00					
Thursday 13:00					
Thursday 14:00					00:08
Thursday 15:00					
Thursday 16:00					
Thursday 17:00	00:06				
Thursday 18:00	00:07				
Thursday 19:00	00:07				
Thursday 20:00					
Thursday 21:00					
Thursday 22:00					
Thursday 23:00					
Friday 00:00					
Friday 01:00					
Friday 02:00	00:01				
Friday 03:00	00:10				
Friday 04:00					
Friday 05:00					
Friday 06:00					
Friday 07:00					
Friday 08:00		00:02			
Friday 09:00					
Friday 10:00					00:03
Friday 11:00					
Friday 12:00					
Friday 13:00					
Friday 14:00	00:04				
Friday 15:00					
Friday 16:00					
Friday 17:00	00:02				
Friday 18:00	00:04				
Friday 19:00	00:03				
Friday 20:00					
Friday 21:00					
Friday 22:00					
Friday 23:00				00:03	
Saturday				00:03	
Saturday					
Saturday					
Saturday					
Saturday					
Saturday					
Saturday					
Saturday					
Saturday	00:08				
Saturday					
Saturday					
Saturday					
Saturday					
Saturday	00:05				
Saturday	00:02				
Saturday	00:06				00:07
Saturday	00:08				
Saturday	00:02				
Saturday					
Saturday					
Saturday	00:01				
Sunday 00:00	00:12			00:07	
Sunday 01:00	00:02				
Sunday 02:00					
Sunday 03:00					
Sunday 04:00					
Maximum	00:12:26	00:02:47		00:07:46	00:08:27

Table 15 - Perth & Blairgowrie ranks, number of passengers who had to wait

Total waiting passengers					
Day & Time	Murray Street	Railway Station	South Street East	South Street West	Blairgowrie
Thursday07:00					
Thursday08:00	3				
Thursday09:00	8				
Thursday10:00					
Thursday11:00					2
Thursday12:00					
Thursday13:00					
Thursday14:00					1
Thursday15:00					
Thursday16:00					
Thursday17:00	2				
Thursday18:00	9				
Thursday19:00	6				
Thursday20:00					
Thursday21:00					
Thursday22:00					
Thursday23:00					
Friday00:00					
Friday01:00					
Friday02:00	1				
Friday03:00	5				
Friday04:00					
Friday05:00					
Friday06:00					
Friday07:00					
Friday08:00		1			
Friday09:00					
Friday10:00					1
Friday11:00					
Friday12:00					
Friday13:00					
Friday14:00	1				
Friday15:00					
Friday16:00					
Friday17:00	1				
Friday18:00	7				
Friday19:00	2				
Friday20:00					
Friday21:00					
Friday22:00					
Friday23:00				12	
Saturday00:00				2	
Saturday01:00					
Saturday02:00					
Saturday03:00					
Saturday04:00					
Saturday05:00					
Saturday06:00					
Saturday07:00					
Saturday08:00					
Saturday09:00					
Saturday10:00					
Saturday11:00					
Saturday12:00					
Saturday13:00					
Saturday14:00					
Saturday15:00					
Saturday16:00					
Saturday17:00					
Saturday18:00					2
Saturday19:00					
Saturday20:00					
Saturday21:00					
Saturday22:00					
Saturday23:00					
Sunday00:00				2	
Sunday01:00					
Sunday02:00					
Sunday03:00					
Sunday04:00					
Total	45	1		16	6

