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Glasgow City Council

Review and Assessment of the Demand for Taxi and Private Hire Cars in Glasgow

April 2023

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April 2023

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LTP PROJECT TEAM

As part of our commitment to quality the following team of transport professionals was assembled specifically for the delivery of this project. Relevant qualifications are shown and CVs are available upon request to demonstrate our experience and credentials.

Team Member	LTP Designation	Qualifications
Nigel Wilson	*Technical Director*	*CEng FICE FIHE CMIHT*
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REVIEW AND ASSESSMENT OF THE DEMAND FOR TAXI AND PRIVATE HIRE CARS IN GLASGOW

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1. INTRODUCTION

1.1 Background

1.1.1 Local Transport Projects Ltd (LTP) has been commissioned by Glasgow City Council (GCC) to undertake a Taxi & Private Hire Car (PHC) Unmet Demand Study. The overall objectives of the study are to:

- Assess demand for Taxi & PHC services in the city; and
- Recommend whether the figures detailed in the current Limitation of Taxi Licence Policy and Private Hire Car Overprovision Policy remain appropriate or whether these should be amended.

1.1.2 GCC, as the Licensing Authority under the Civic Government (Scotland) Act 1982, has responsibility for the licensing and regulation of Taxi and PHCs, drivers and booking offices within its boundary.

1.1.3 The number of taxis licensed by GCC is currently limited based on an assessment of demand. GCC as Licensing Authority is required to assess demand for taxis throughout its area, to determine whether to disapply, alter or extend the existing limit.

1.1.4 GCC, under Section 10(3) of the Civic Government (Scotland) Act 1982 (the 1982 Act), only has the power to refuse the granting of licences in order to limit the number of taxis when it is clear that there is no significant unmet demand for taxi services in its area.

1.1.5 On 15 May 2017, amendments made to the 1982 Act by Air Weapons and Licensing (Scotland) Act 2015 came into effect with the introduction of new sections 10(3A), (3B) and (3C). These new sections allow the Licensing Authority to refuse to grant an application for a PHC licence on the grounds that there exists or will exist through the granting of the licence, an overprovision of PHC services in the locality or localities in which the PHC is to operate.

1.1.6 When determining whether there is, or would be, an overprovision of PHC licences Section 10(3B & 3C) requires the Licensing Authority to consider the following:

- The number private hire cars operating in the locality; and
- The demand for private hire car services in the locality.

1.2 Scope of Study

1.2.1 The scope of the study as defined in the GCC scoping document is as follows:

- *The work of the Council is aligned to a number of strategic objectives including the objective of delivering a world class city. As part of this objective, the Council is committed to ensuring that the taxi and private hire car sectors offer the best possible service to the people of Glasgow and to the City's visitors.*
- *The Council recognises that the taxi sector plays an integral role in the City's wider public transport network. In particular, the design and wheelchair accessibility of taxi fleet provides essential transport services to those with mobility issues. The taxi sector also plays an important role in supporting the night-time economy and tourism sectors.*

- *Private Hire Car operators offer pre-booked transport services. Whilst these services are not considered part of the wider public transport network, they also offer important and often vital services to users. Often providing services at times where traditional public transport operators offer limited or no service.*
- *The Council needs to ensure that, moving forward, these sectors continue to offer viable services to the public.*
- *The principal objective of the study being commissioned is to provide the Council with the relevant expert advice to best inform policy and, if necessary, amend the current limits (unmet demand of taxis and overprovision of private hire cars) to ensure the sectors continue to provide viable, value for money, safe services to the public.*
- *It is important to emphasise that the purpose of the study is to assess and review consumer demand against the current limits and recommend any changes to these limits (if necessary) in a way that will support the continued offering of safe and reliable services.*
- *The purpose of the report is not to protect the commercial interests of existing operators by setting limits solely intended to prevent competition within an evolving marketplace.*

Taxi Licences

- *The report shall set out the methodology used to assess and review demand. Based on the findings of the study, the report should provide recommendations in relation to the current limits set for taxi licences within the current Limitation of Taxi Licence Policy. Specifically, whether the limits remain appropriate and, if not, the recommended amendments to current limits set.*

Private Hire Car Licences

- *The report shall set out the methodology used to assess demand. Based on the findings of the study, the report should provide recommendations in relation to the current overprovision figure for private hire cars detailed in the Private Hire Car Licence Overprovision policy. Specifically, whether the limit remains appropriate and, if not, the recommended amendments.*

1.3 Legal Context

1.3.1 As stated above the legislation that governs the granting of licences for taxis and PHCs is the Civic Government (Scotland) Act 1982, specifically:

- Section 10(3) that grants licensing authorities the power to refuse the granting of licences in order to limit the number of taxis when it is clear that there is no significant unmet demand for taxi services in its area.
- Section 10(3A, 3B and 3C) that state as follows:
    - *(3A): Without prejudice to paragraph 5 of Schedule 1, the grant of a private hire car licence may be refused by a licensing authority if, but only if, they are satisfied that there is (or, as a result of granting the licence, would be) overprovision of private hire car services in the locality (or localities) in their area in which the private hire car is to operate.*

- *(3B) It is for the licensing authority to determine the localities within their area for the purposes of subsection (3A) and in doing so the authority may determine that the whole of their area is a locality.*
- *(3C) In satisfying themselves as to whether there is or would be overprovision for the purposes of subsection (3A) in any locality, the licensing authority must have regard to—*
  - *(a) the number of private hire cars operating in the locality, and*
  - *(b) the demand for private hire car services in the locality.*

1.3.2 Further to this the following relevant case law examples should be noted in respect to the interpretation of these provisions:

- **Renfrewshire Council v Davies 2005 S.L.T 445** – *'I am satisfied for my part, that the purpose of section 10(3) of the Act was in general to enable a licensing authority to restrict the number of licences to what was necessary to meet the "demand" in their area….that is something which can only meaningfully be carried out by reference to the overall demand in the area.'*
- **Coyle v City of Glasgow 1998 S.L.T. 453** – *'…..that the matter should be kept under review by an official which has information to judge whether the demand has increased since the matter was last considered.'*

1.3.3 The effect of the foregoing on this study is to consider the overall level of taxi unmet demand within the whole of GCC and across all time periods.

1.3.4 There is currently non-statutory Scottish Government guidance on how the overprovision of private hire cars should be assessed, therefore the assessment of overprovision of PHCs has been considered in line with this guidance.

1.4 Structure of Report

1.4.1 The report has been prepared in accordance with the GCC scope and, following this introduction, is divided into the following sections:

- **Background:** Information on the local licensing regime, licence numbers, and previous studies;
- **Taxi Rank Surveys:** Results from the observational surveys carried out at 10 taxi ranks in Glasgow over a continuous 76-hour period;
- **Public Attitude Survey:** Results from the public attitudinal surveys undertaken at various locations to obtain public opinion and perceptions regarding taxi and PHC operations within the GCC area;
- **Stakeholder Consultation:** Summary of feedback received from relevant stakeholder groups;
- **Operator Consultation:** Summary of feedback received through consultation with licensed taxi and PHC operators within the GCC area;

- **Evaluation of Unmet Demand for Taxis:** Using results from both the observational and public attitude interview surveys together with an assessment of the Index of Significant Unmet Demand (ISUD) as an accepted industry standard for this type of evaluation;
- **Private Hire Overprovision Assessment:** Consideration of information and analysis provided through the public attitude interview surveys, stakeholder and taxi/PHC operator consultation and PHC operator bookings data to investigate whether a PHC overprovision exists within GCC; and
- **Study Summary and Recommendations:** Discussion of the findings of the study together with conclusions and recommendations.

2. BACKGROUND

2.1 Taxi and PHC Vehicle/Driver Data

2.1.1 As of January 2023, GCC currently licenses 1,408 taxis and has a policy to limit the number of taxi licences in the city to between 1,278 and 1,420 vehicles. In addition, GCC currently licenses 3,176 PHCs and has a policy to limit the number of PHC licences to between 3,195 and 3,759 vehicles.

2.1.2 Details regarding historical licensing statistics for both Taxi and PHC vehicle and driver licences is provided in Table 1.

Table 1: GCC Taxi and PHC Licence Numbers (2008 to 2023)

Year	Taxi Vehicles	PHCs	Total Fleet	Taxi Drivers	PHC Drivers	Total Drivers	Taxi Driver to Vehicle Ratio	PHC Driver to Vehicle Ratio
2008	1430	2805	4235	3097	3426	6523	2.17	1.22
2009	1429	2832	4261	3139	3453	6592	2.20	1.22
2010	1427	2824	4251	3120	3637	6757	2.19	1.29
2011	1426	2735	3088	3088	3476	6564	2.17	1.27
2012	1425	2640	4065	2968	3355	6323	2.08	1.27
2013	1423	2602	4025	2865	3098	5963	2.01	1.19
2014	1423	2597	4020	2822	3138	5960	1.98	1.21
2015	1421	2638	4059	2705	3299	6004	1.90	1.25
2016	1419	3153	4572	2697	4332	7029	1.90	1.37
2017	1420	3414	4834	2600	4492	7092	1.83	1.32
2018	1420	3759	5179	2482	5042	7524	1.75	1.34
2019	1420	3940	5179	2353	5475	7828	1.66	1.39
2020								
23rd November 2021	1419	-	-	2180	-	-	1.54	-
18th January 2022	1419	3449	4868	2052	4513	6565	1.45	1.31
25th April 2022	1419	3428	4847	1827	3667	5494	1.29	1.07
15th July 2022	1418	3289	4707	1838	3722	5560	1.30	1.13
30th August 2022	1418	3284	4702	1834	3254	5088	1.29	0.99
20th September 2022	1417	3244	4661	1841	3578	5419	1.30	1.10
11th November 2022	1416	3217	4633	1752	3287	5039	1.24	1.02
11th January 2023	1408	3176	4584	1756	3312	5068	1.25	1.04

Source: GCC

2.1.3 The information shows that taxi vehicle numbers have resided at or around the current licence limit number of 1,420 between 2017 and 2022, but that the number of licensed vehicles has dropped over the most recent year.

2.1.4 PHC vehicle numbers have also dropped over the most recent year, from a peak of 3,940 vehicles in 2019 just before the current cap was introduced, to a current figure of 3,176 vehicles, which is similar to PHC numbers in 2016 and is below the current lower limit of 3,195 vehicles.

2.1.5 In terms of drivers, the information shows a continuing decline in taxi driver numbers from the peak in 2008, with a reduction of approximately 14% between January 2022 and January 2023 alone. The number of PHC drivers has fluctuated, with a peak of 5,042 PHC drivers in 2018 and current numbers similar to those in 2015. There has also been a marked reduction in the number of PHC drivers over the last year, with a reduction of approximately 27% between January 2022 and January 2023.

2.1.6 The previous increases in PHC vehicle and driver numbers up to 2019 can likely be attributed to the technology changes in the PHC operating environment that offered opportunities for individuals to work flexibly within the PHC market.

2.1.7 Both the taxi driver to vehicle ratio and PHC driver to vehicle ratio has reduced notably between 2008 and the present day, with considerable reductions over the most recent year.

2.1.8 There is uncertainty in the exact reason for the reductions in the number of both taxi and PHC vehicles/drivers in 2022 and 2023, however this is likely to be associated with a combination of external factors such as the post-COVID recovery, economic downturn and higher cost of living, as discussed further within Section 2.3 below.

2.1.9 Based on data from 2021, 100% of Taxis (1,419 vehicles) and 0.8% of PHCs (30 vehicles) in Glasgow were wheelchair accessible.

2.1.10 Data obtained from National Records of Scotland (NRS) indicates that the mid-2021 population estimate for the overall resident population of Glasgow City is 635,130. From this and the information on the most recent taxi and PHC numbers provided in Table 1, the number of GCC licensed taxis and PHCs per head of population are as follows:

- Taxis: 1 per 451 resident population or 2.2 per 1,000 population;
- PHCs: 1 per 200 resident population or 5.0 per 1,000 population;
- Taxis & PHCs: 1 per 139 resident population or 7.2 per 1,000 population.

2.1.11 Table 2 provides a comparison with other Scottish local authorities in terms of the proportion of licensed vehicles per 1,000 of population, based on data from 2021 which represents the most recent available national data.

Table 2: Glasgow Comparison with other Scottish Authorities (2021)

Council	Population	Taxi Vehicles	Private Hire Cars	Total Vehicles	Taxis per 1,000 Population	PHCs per 1,000 Population	Total Vehicles per 1,000 Population
Aberdeen City	227,430	647	189	836	2.8	0.8	3.7
Aberdeenshire	262,690	350	346	696	1.3	1.3	2.6
Angus	116,120	N/A					
Argyll & Bute	86,220	173	55	228	2.0	0.6	2.6
Clackmannanshire	51,540	46	42	86	0.9	0.8	1.7
Dumfries & Galloway	148,790	214	59	273	1.4	0.4	1.8
Dundee City	147,720	509	167	676	3.4	1.1	4.6
East Ayrshire	122,020	125	95	220	1.0	0.8	1.8
East Dunbartonshire	108,900	236	296	532	2.2	2.7	4.9
East Lothian	109,580	112	54	166	1.0	0.5	1.5
East Renfrewshire	96,580	45	369	414	0.5	3.8	4.3
Edinburgh, City of*	526,470	1,316	2,408	3,724	2.5	4.6	7.1
Eilean Siar	26,640	86	24	110	3.2	0.9	4.1
Falkirk	160,700	372	105	477	2.3	0.7	3.0
Fife	374,730	481	369	850	1.3	1.0	2.3
Glasgow, City of	**635,130**	**1,419**	**3,449**	**4,868**	**2.2**	**5.4**	**7.7**
Highland	238,060	236	296	532	1.0	1.2	2.2
Inverclyde	76,700	243	50	293	3.2	0.7	3.8
Midlothian	94,680	44	117	161	0.5	1.2	1.7
Moray	96,410	164	18	182	1.7	0.2	1.9
North Ayrshire	134,220	220	47	267	1.6	0.4	2.0
North Lanarkshire	341,400	477	1,201	1,678	1.4	3.5	4.9
Orkney Islands	22,540	33	15	48	1.5	0.7	2.1
Perth & Kinross	153,810	101	233	334	0.7	1.5	2.2
Renfrewshire	179,940	226	782	1,008	1.3	4.3	5.6
Scottish Borders	116,020	164	55	219	1.4	0.5	1.9
Shetland Islands	22,940	70	58	128	3.1	2.5	5.6
South Ayrshire	112,450	108	171	279	1.0	1.5	2.5
South Lanarkshire	322,630	348	1,299	1,647	1.1	4.0	5.1
Stirling	93,470	79	113	192	0.8	1.2	2.1
West Dunbartonshire	87,790	334	91	425	3.8	1.0	4.8
West Lothian	185,580	83	401	484	0.4	2.2	2.6
Scotland	**5,479,900**	**9,061**	**12,974**	**22,033**	**1.7**	**2.4**	**4.0**

Sources: Scottish Transport Statistics 2021, *Edinburgh PHC Overprovision Study

2.1.13 The results indicate that when compared with other Taxi and PHC licensing authorities in Scotland, GCC has a slightly higher number of licensed taxis per 1,000 population (2.2) compared to the national average of 1.7 taxis per 1,000 population. GCC also has a higher number of PHCs per 1,000 population (5.4) than any other local authority area and compared to the national average (2.4). The total number of licensed vehicles per 1,000 population is also higher in GCC (7.7) than any other Scottish local authority area.

2.1.14 Table 3 provides a comparison of with a number of English cites in terms of the proportion of licensed vehicles per 1,000 of population.

Table 3: Glasgow City Comparison with Other Authorities (2021)

District	Population	Taxi Vehicles	Private Hire Cars	Total Licensed Vehicles	Taxis per 1,000 population	PHCs per 1,000 population	Total licensed Veh. per 1,000 people
London	9,002,488	13,423	77,529	90,952	1.5	8.6	10.1
Glasgow	**635,130**	**1,419**	**3,449**	**4,868**	**2.2**	**5.4**	**7.7**
Bradford	542,128	215	3,139	3,354	0.4	5.8	6.2
Liverpool	500,474	1,426	1,438	2,864	2.8	2.9	5.7
Leeds	798,796	537	3,961	4,498	0.7	5.0	5.6
Birmingham	1,140,525	767	3,873	4,640	0.7	3.4	4.1
Sheffield	589,214	648	1,763	2,411	1.1	3.0	4.1
Bristol	465,866	457	807	1,264	1.0	1.7	2.7
Sunderland	277,846	280	288	568	1.0	1.0	2.0

Sources: DfT Taxi and PHC Data (2021)

2.1.15 The overall vehicle provision per 1,000 population is generally higher in Glasgow than other major cities in the UK, albeit with some significant variation in both Taxi and PHC provision in other cities.

2.1.16 Although the comparison with cities with similar populations is not an exhaustive list, it does indicate that GCC has a comparably high number of licensed vehicles per 1,000 population. From the comparison only London has an overall higher number of licensed vehicles at 10.1 per 1,000 population. Similarly, for those locations where PHC numbers are similar such as Leeds (5.0) and Bradford (5.8) these areas have comparable lower numbers of licensed taxis.

2.1.17 It is difficult to draw direct conclusions regarding licensed vehicle numbers from these types of comparisons due to the different markets, local polices and operational regimes in which the taxi and PHC organisations operate. Notwithstanding the comparison does indicate that access to both taxis and PHCs in GCC for the local population is the highest in Scotland and one of the highest in the wider UK.

2.2 Previous Studies/Reports

2018 Study

2.2.1 A review and assessment of the demand for Taxis and PHCs was undertaken in 2018. The study also covered 10 taxi ranks in Glasgow, shown in Table 4, which were monitored for a continuous period of 76 hours from midnight on Thursday 4th October 2018 to 04:00 on Sunday 7th October 2018.

Table 4: GCC Taxi Rank Survey 2018

Taxi Ranks	
Byres Road	Renfield Street
Buchanan Bus Station	Stockwell Street
Gordon Street	SEC
Union Street	Holland Street
Merkland Street	George Square

2.2.2 The results indicated that:

- Supply and demand at taxi ranks was either at equilibrium or in a state of excess supply for 92.4% of the time, with any periods of excess demand occurring during the weekend evening and night-time periods.
- The Index of Significant Unmet Demand (ISUD) was 39.41, with values below 80 generally considered to indicate no significant unmet demand.
- The average passenger delay across the survey was 1 minute and 42 seconds, a slight reduction in the average waiting times recorded in the 2017 study.

2.2.3 The conclusion of the study was that there was no significant unmet demand for Taxis in Glasgow. The study therefore recommended that Taxi licence numbers should be managed between an upper limit of 1,420 and a lower limit of 1,278, which was implemented by GCC.

2.2.4 The results from the PHC study found that there is reasonable evidence to suggest an overprovision of PHCs exists and that a further increase in PHC licences would further increase the overprovision within Glasgow. The study therefore recommended that a cap on PHC licences should be introduced, which would allow GCC to understand the implications of holding PHC numbers at current levels, and the opportunities and issues that may be presented through technological and operational changes within the PHC market. A recommendation that PHC licence numbers be managed between an upper limit of 3,759 and a lower limit of 3,195 was therefore made, which was implemented by GCC in April 2019.

2.2.5 The review recommended that both the Taxi and PHC policies be monitored and reviewed at a minimum three-year interval, with this study representing an update to the 2018 study using largely the same methodology.

2.3 Changes Since Previous Study

2.3.1 There has been a significant shift in the picture since the previous study was undertaken, with factors such as the post-COVID recovery, economic downturn and higher cost of living all likely having impacted the trade.

2.3.2 The driver shortages in the industry have been well documented in the media, with a notable reduction in Taxi and PHC drivers since the start of the COVID pandemic. The Licensed Private Hire Car Association (LPHCA) noted that an estimated 160,000 drivers left the private hire trade since the start of the pandemic, representing more than half of the pre-pandemic workforce. As shown in Table 1, a similar trend seems to be reflected in Glasgow, with a 33% reduction in overall taxi/PHC driver numbers between 2018 and 2023.

2.3.3 Whilst reflecting data for England, Department for Transport estimates suggest that the number of taxi and PHC drivers operating in 2022 was down by approximately 26% compared to pre-pandemic levels in 2020.

2.3.4 Whilst data for 2022 is not yet available, the numbers of licensed Taxi and PHC vehicles and drivers in Scotland have fallen between 2018 and 2021, as shown in Table 5:

Table 5: Taxi/PHC Vehicles and Licences in Scotland (2018-2021)

Year/Date	Taxi Vehicles	Taxi Driver Licences	Taxi Driver to Vehicle Ratio	PHC Vehicles	PHC Driver Licences	PHC Driver to Vehicle Ratio
2018	8,929	19,292	2.16	10,794	11,939	1.11
2019	8,591	18,797	2.19	11,047	12,163	1.10
2020	8,494	17,411	2.05	10,844	11,665	1.08
2021	7,745	15,945	2.06	9,769	9,810	1.00

Source: Scottish Transport Statistics 2018-2021.

*Taxi data excludes Angus and Edinburgh, as data not available for all fields

^PHC data excludes Angus, Edinburgh, East Lothian, Fife, Inverclyde, Perth and Kinross and West Dunbartonshire, as data not available for all fields

2.3.5 Table 5 shows a notable reduction in the number of licensed Taxis vehicles and drivers in Scotland between 2020 and 2021 of approximately 8.5%, most likely as a result of the COVID pandemic. The number of licensed PHCs reduced by approximately 10% during the same period, with a reduction in PHC drivers of approximately 15%.

2.3.6 Whilst country level data is not yet available for 2022, the data for Glasgow shown in Table 1 indicates that numbers continued to decline during 2022 and into 2023, and a similar trend is expected to be reflected across Scotland.

2.3.7 It is noted that whilst the trend for both taxi and PHC driver to vehicle ratios has declined both in Glasgow and across Scotland, the current taxi driver to vehicle ratio in Glasgow (1.25) is considerably below the national average (2.06).

2.3.8 There is anecdotal evidence that former Taxi and PHC drivers sought alternative employment for parcel delivery and food delivery operators during the COVID pandemic and then did not return to the trade, although there is limited raw data to support this.

3. OBSERVATIONAL SURVEYS

3.1 Introduction

3.1.1 This section highlights the results of the taxi rank observation surveys which were undertaken to identify levels of demand.

3.1.2 There is a total of 74 taxi ranks in the GCC area of various sizes and with various operating times, and it would be economical and unnecessary to survey all ranks. The surveying of 10 locations is considered to provide a reasonable sample, with some redundancy in case of issues with recording some activity during the surveys. The 10 taxi rank locations surveyed across the district are as follows:

1) Buchanan St Bus Station
2) Byres Road
3) Gordon Street
4) Holland Street
5) Renfield Street
6) Scottish Event Campus (SEC)
7) Union Street
8) George Square
9) Merkland Street
10) Stockwell Street

3.1.3 These ranks were chosen as they are geographically spread across the GCC area, including city centre and out of town locations. The survey locations are also consistent with the 2018 study, allowing direct comparisons between the two datasets to be made.

3.1.4 Observational taxi rank surveys were undertaken for a continuous period of 76 hours from midnight on Thursday 10th November 2022 to 03:00 on Sunday 13th November 2022. This period was selected to be as closely comparable to the 2018 study as possible, avoiding any disruption associated with rail strikes and avoiding the period in the build-up to Christmas when additional demand is likely to occur. The surveys were therefore undertaken during a 'typical' period.

3.1.5 It is noted that data from the Glasgow 'City Centre Recovery Dashboard' indicates that footfall in Glasgow City Centre was at approximately 81% of levels experienced before the COVID pandemic on the survey dates, although it is unclear whether there were any significant differences between daytime and night-time footfall. This context has been noted in the interpretation of any results.

3.1.6 The surveys were carried out using digital video cameras to record both vehicular and passenger activity at each of the 10 taxi rank sites. The results and observations of activity at each of the sites are discussed in the following sections.

3.1.7 Due to technical issues with the video equipment, the surveys on Stockwell Street and Renfield Street were terminated early and the ranks were re-filmed the following weekend. The survey data for Stockwell Street therefore covers the period from 00:00 on Thursday 10th November to 21:55 on Friday 11th November, and from 21:55 on Friday 18th November to 03:00 on Sunday 20th November. The survey data for Renfield Street covers from 00:00 on Thursday 10th November to 21:30 on Saturday 12th November, and from 21:30 on Saturday 19th November to 03:00 on Sunday 20th November.

3.2 Rank Survey Results

3.2.1 Summary tables are provided for each survey site for Weekdays (combined totals for Thursday to Friday), Saturday and Sunday. The 'daytime' period is defined as 7am to 7pm and the 'night-time' period as 7pm to 7am. The summary tables also refer to the following:

- ***Total Passengers Departing:*** The total number of individual passengers observed leaving by taxi or PHC. Where there was more than one individual or a group taking a taxi/PHC, the number of people in the group was recorded.
- ***Total Taxis Departing:*** This is the total number of taxis recorded leaving each rank. This includes taxis leaving either with or without a passenger, e.g. taxis that stopped at a site but gave up waiting for a fare after a length of time and left.
- ***Total PHCs Departing:*** This is the total number of PHCs recorded leaving each site. This includes PHCs leaving either with or without a passenger, e.g. PHCs that stopped at a site but gave up waiting for a fare after a length of time and left. To note, PHCs are not legally permitted to pick-up from ranks, but any instances PHCs stopping at the survey taxi rank locations have been recorded.
- ***Average Passenger Delays:*** This is the total number of minutes delay experienced by passengers (e.g. 0.6 minutes equals 36 seconds), divided by the total number of passengers.
- ***Average Taxi Waiting Time:*** This is the total number of minutes delay experienced by taxis, divided by the total number of taxis.

Site 1 – Buchanan Street Bus Station

3.2.2 Technical issues with the video equipment meant that accurate counts of passengers and vehicles could not be determined at Site 1 (Buchanan St Bus Station), therefore this site has been excluded from further analysis for the purposes of this assessment.

3.2.3 The availability of data for all other sites means that the exclusion of the Buchanan Street survey would not have a significant impact on the overall ISUD calculation, and it was therefore not considered necessary to re-survey this rank.

Site 2 – Byres Road

3.2.4 Demand for taxis was found to peak at the rank in the evening and night periods, with the highest demand for taxis during the Friday and Saturday evening/night periods, which resulted in some high levels of passenger delay, most notably between 23:00 Saturday and 01:00 on Sunday when demand significantly exceeded supply.

3.2.5 By comparison, demand for taxis during the morning to early afternoon period was found to be low, although it should be noted that the rank is only operational between 6pm and 2am, with other vehicles able to park in the rank at other times.

Table 6: Byres Road Summary

Byres Road		Total Passengers Departing	Total Taxis Departing	Total PHCs Departing	Ave. Passenger Delays (mins)	Ave. Taxi Waiting Time (mins)
Weekdays	Day (07:00-19:00)	148	113	0	1.1	9.8
	Night (00:00-07:00, 19:00-00:00)	368	229	0	0.3	4.9
Saturday	Day (07:00-19:00)	106	76	0	0.9	9.0
	Night (00:00-07:00, 19:00-00:00)	353	201	0	1.2	2.6
Sunday	Morning (00:00-03:00)	132	51	4	7.2	0.7

Site 3 – Gordon Street

3.2.6 Gordon Street was the busiest rank surveyed in terms of both passenger and taxi activity and appeared to have a turnover of passengers and taxis during most periods of the day. Demand for taxis was found to peak at the rank late afternoon/early evening on Thursday and Friday, during the afternoon on a Saturday, and during the late night/early morning on Saturday and Sunday. Whilst high demand was experienced during these periods, there was also a high level of taxi provision, with a constant stream of taxis observed arriving at most times.

Table 7: Gordon Street Summary

Gordon Street		Total Passengers Departing	Total Taxis Departing	Total PHCs Departing	Ave. Passenger Delays (mins)	Ave. Taxi Waiting Time (mins)
Weekdays	Day (07:00-19:00)	1,728	1,451	3	0.5	7.5
	Night (00:00-07:00, 19:00-00:00)	1,534	1,315	6	0.7	13.2
Saturday	Day (07:00-19:00)	1,328	816	5	0.5	10.8
	Night (00:00-07:00, 19:00-00:00)	1,294	1,167	12	0.4	4.1
Sunday	Morning (00:00-03:00)	297	399	6	0.3	1.6

Site 4 – Holland Street

3.2.7 Holland Street was observed to experience a very low level of demand for across the entire survey period, with some sporadic demand observed primarily during the evening period.

3.2.8 It should be noted that roadworks on Bath Street meant that access to the rank on Holland Street was restricted from mid-morning on Friday 11th November, with taxis observed to access the rank via Sauchiehall Street to the north for the remainder of the survey. This had a significant impact on the number of taxis serving the rank, and the number of passengers using the rank, although a low level of use was still observed to occur.

Table 8: Holland Street Summary

Holland Street		Total Passengers Departing	Total Taxis Departing	Total PHCs Departing	Ave. Passenger Delays (mins)	Ave. Taxi Waiting Time (mins)
Weekdays	Day (07:00-19:00)	15	74	2	0.1	11.0
	Night (00:00-07:00, 19:00-00:00)	17	22	4	1.6	6.2
Saturday	Day (07:00-19:00)	9	17	0	0.1	9.7
	Night (00:00-07:00, 19:00-00:00)	29	4	0	0.5	0.8
Sunday	Morning (00:00-03:00)	0	0	0	0.0	0.0

Site 5 – Renfield Street

3.2.9 Renfield Street was observed to experience a relatively low level of demand for taxis, particularly during Thursday and the morning/early afternoon periods of Friday and Saturday. The peak demand was observed to occur during the late evening/night periods on Friday into Saturday, and Saturday into Sunday, with an increase in the average passenger delay during these periods.

Table 9: Renfield Street Summary

Renfield Street		Total Passengers Departing	Total Taxis Departing	Total PHCs Departing	Ave. Passenger Delays (mins)	Ave. Taxi Waiting Time (mins)
Weekdays	Day (07:00-19:00)	44	43	14	0.8	7.8
	Night (00:00-07:00, 19:00-00:00)	71	32	7	2.0	3.6
Saturday	Day (07:00-19:00)	27	20	8	2.3	1.6
	Night (00:00-07:00, 19:00-00:00)	61	23	6	4.5	1.9
Sunday	Morning (00:00-03:00)	42	8	1	11.5	1.3

Site 6 – SEC

3.2.10 The SEC rank was found to have a relatively low demand for taxis for most of the survey period, but did see significant peaks in demand during relatively short timeframes around events that took place at the SEC. There were concert events at Hydro on each of Thursday, Friday and Saturday evenings and events at the wider SEC campus during Friday and Saturday, although this is not considered to be particularly uncommon and the events were not of an abnormal scale.

3.2.11 Peak demand was therefore observed to occur during the Friday and Saturday late afternoon and late evening periods, coinciding with the end of these events. There was an increase in the average passenger delay during these periods, although there was also a significant increase in the number of taxis servicing the rank during these periods, with a generally steady stream of taxis arriving and departing.

3.2.12 A significant number of PHCs was also observed at this rank during the peak periods of demand, primarily picking up passengers who were waiting separately to the rank queue.

Table 10: SECC Summary

SECC		Total Passengers Departing	Total Taxis Departing	Total PHCs Departing	Ave. Passenger Delays (mins)	Ave. Taxi Waiting Time (mins)
Weekdays	Day (07:00-19:00)	201	161	151	4.3	13.0
	Night (00:00-07:00, 19:00-00:00)	347	366	454	4.9	4.2
Saturday	Day (07:00-19:00)	426	195	114	0.7	2.6
	Night (00:00-07:00, 19:00-00:00)	204	133	104	1.0	0.9
Sunday	Morning (00:00-03:00)	4	2	5	4.6	0.3

Site 7 – Union Street

3.2.13 A relatively low number of people were observed to use the Union Street Rank, with demand for taxis appearing to be spread out across each day, with a peak in demand on a Saturday. Private motorists were observed to be parked within the rank during several periods across the survey, though taxis were still able to park at the rank at most times.

Table 11: Union Street Summary

Union Street		Total Passengers Departing	Total Taxis Departing	Total PHCs Departing	Ave. Passenger Delays (mins)	Ave. Taxi Waiting Time (mins)
Weekdays	Day (07:00-19:00)	49	11	31	0.5	0.9
	Night (00:00-07:00, 19:00-00:00)	40	12	12	0.5	0.5
Saturday	Day (07:00-19:00)	38	6	5	1.1	1.2
	Night (00:00-07:00, 19:00-00:00)	44	13	6	0.3	4.5
Sunday	Morning (00:00-03:00)	13	4	2	0.6	6.5

Site 8 – George Square

3.2.14 George Square was one of the busiest ranks surveyed, and demand for taxis was observed to be relatively spread out across the daytime and night-time periods. A peak in demand was observed to occur on a Saturday, between 11:00 and 15:00, 17:00 and 21:00, and in particular between 23:00 and 02:00 on Sunday. Whilst there were some instances of high passenger delay, particularly on Saturday, there was generally a steady stream of taxis servicing the rank during most periods.

Table 12: George Square Summary

George Square		Total Passengers Departing	Total Taxis Departing	Total PHCs Departing	Ave. Passenger Delays (mins)	Ave. Taxi Waiting Time (mins)
Weekdays	Day (07:00-19:00)	761	541	0	0.8	61.4
	Night (00:00-07:00, 19:00-00:00)	664	444	0	1.7	23.1
Saturday	Day (07:00-19:00)	789	394	0	1.0	9.8
	Night (00:00-07:00, 19:00-00:00)	769	441	0	4.1	6.2
Sunday	Morning (00:00-03:00)	360	171	0	8.8	0.9

Site 9 – Merkland Street

3.2.15 Demand for taxis on Merkland Street was relatively low during the morning, though appeared to steadily increase throughout the day, peaking in the late afternoon to early evening period. The rank was observed to be generally well served by taxis, with low levels of passenger delay during all periods.

Table 13: Merkland Street Summary

Merkland Street		Total Passengers Departing	Total Taxis Departing	Total PHCs Departing	Ave. Passenger Delays (mins)	Ave. Taxi Waiting Time (mins)
Weekdays	Day (07:00-19:00)	350	306	2	1.1	13.9
	Night (00:00-07:00, 19:00-00:00)	128	115	3	0.4	18.4
Saturday	Day (07:00-19:00)	169	124	0	1.3	13.3
	Night (00:00-07:00, 19:00-00:00)	120	67	2	0.9	3.9
Sunday	Morning (00:00-03:00)	5	6	0	1.6	1.3

Site 10 – Stockwell Street

3.2.16 Stockwell Street was observed to be a relatively busy rank, and demand for taxis appeared to peak early to late afternoon, with little demand during the evening and night-time periods. The provision of taxis during the periods of higher demand appeared to be largely sufficient, with more taxis observed to service the rank during these periods.

Table 14: Stockwell Street Summary

Stockwell Street		Total Passengers Departing	Total Taxis Departing	Total PHCs Departing	Ave. Passenger Delays (mins)	Ave. Taxi Waiting Time (mins)
Weekdays	Day (07:00-19:00)	622	464	8	0.4	6.2
	Night (00:00-07:00, 19:00-00:00)	49	42	3	1.2	1.9
Saturday	Day (07:00-19:00)	330	247	1	0.3	14.0
	Night (00:00-07:00, 19:00-00:00)	67	35	11	1.0	0.7
Sunday	Morning (00:00-03:00)	9	5	9	4.6	0.6

3.3 Balance of Supply and Demand

3.3.1 The overall results in terms of supply and demand for all taxi rank survey sites are provided in Table 15.

Table 15: Balance of Supply & Demand

Period		Excess Demand (%)	Equilibrium (%)	Excess Supply (%)
Weekdays	**Day (07:00-19:00)**	3.5%	68.4%	28.1%
	Night (00:00-07:00, 19:00-00:00)	3.2%	78.7%	18.2%
Saturday	**Day (07:00-19:00)**	5.3%	70.0%	24.7%
	Night (00:00-07:00, 19:00-00:00)	10.0%	75.6%	14.5%
Sunday	**Morning (00:00-03:00)**	27.5%	70.1%	2.4%
Total		**9.9%**	**72.6%**	**17.6%**

3.3.2 The results indicate that for 90.2% of the time, the balance of supply and demand for taxis in Glasgow is either at equilibrium (72.6%) or in a state of excess supply (17.6%). This represents an overall reduction of 2.2% compared to when the previous study was undertaken in 2018, albeit with a notable increase in the proportion of the time spent at equilibrium (+18.7%) and a reduction in the time spent in excess supply (-20.9%).

3.3.3 The periods of excess demand generally occur during the weekend evening and night-time periods, largely associated with the Glasgow night-time economy.

3.3.4 It is noted from the observational surveys that the number of recorded passengers using all ranks was down on the values observed in 2018. There was some significant rank to rank variation, but overall passenger numbers were observed to be at approximately 60% of previously observed values. The overall number of taxi departures from ranks was also observed to have reduced by a similar proportion. This suggests that there is both a lower demand for taxis and a lower number of operational taxis compared to in 2018, although there is also likely to be some latent demand.

4. PUBLIC ATTITUDE SURVEY

4.1 Introduction

4.1.1 A public attitude survey was undertaken on various dates between the 18th November 2022 to 29th January 2023. The survey was structured and undertaken to obtain additional information on the supply and demand for both taxis and PHCs in Glasgow and also support the understanding of public opinion and perceptions regarding GCC Taxi/PHC operations within the authority.

4.1.2 A total of 405 survey responses were obtained from across the GCC area, including locations both within and outside of the city centre. This number of surveys is considered sufficient to provide a 95% degree of confidence in results with a +/- 5% margin of error, based upon an overall population within Glasgow of 635,130.

4.1.3 It is important that the survey results are representative of all potential GCC taxi users. Therefore, to capture a wide sample of the population, surveys were undertaken at the following locations to ensure a wide cross section of the public and both regular and infrequent taxi/PHC users were captured:

- City Centre (various streets) (366 Surveys);
- Hillhead (Byres Road) (21 Surveys); and
- Partick (Train Station) (18 Surveys).

4.1.4 To note, some of the totals do not add up to 100% where respondents have ticked more than one answer, have not responded to a question, was not applicable or due to rounding of percentages. A summary of the responses received is provided in the following sections.

4.2 General Information

4.2.1 **(Q5) In the last three months have you made a trip by either Taxi or Private Hire Car in Glasgow City?**

Answer	2018 Response	2022 Response
Yes - Taxi	23% (109)	43.3% (175)
Yes – Private Hire Car	37% (178)	24.8% (100)
Yes – Both	20% (94)	25.2% (102)
Yes – But not sure what type	20% (94)	6.7% (27)

Whilst the responses to this question signify a slightly higher use of Taxis, it does not necessarily indicate a preference to use Taxis over PHCs.

4.2.2 (Q7) What was the purpose of your last trip by Taxi or Private Hire Car?

Answer	2018 Response	2022 Response
Work including commuting	11% (53)	18.8% (76)
Education	3% (12)	8.6% (35)
Shopping	17% (80)	3.7% (15)
Evening or night-time leisure	44% (212)	37.5% (152)
Daytime leisure	5% (26)	8.9% (36)
Travel to airport	5% (23)	5.7% (23)
Hospital/Medical	9% (41)	4.9% (20)
Link to other transport mode	4% (20)	4.2% (17)
Other	2% (7)	6.2% (25)
Do not recall	1% (1)	1.5% (6)

The responses indicate that evening/night-time leisure activities (37.5%) remains the principal reason for using Taxis and PHCs in Glasgow, with work/commuting (18.8%), daytime leisure (8.9%) and education (8.6%) being other key purposes. These four uses represent 74% of all activities undertaken by respondents, with a split across other purposes.

There are no significant differences in most trip purposes between the 2018 and 2022 surveys, albeit with a notable reduction in the use of Taxis or PHCs for shopping.

4.2.3 (Q8) Do you recall what day of the week you made your journey?

Answer	Response
Monday	6.2% (18)
Tuesday	14.0% (41)
Wednesday	16.4% (48)
Thursday	20.9% (61)
Friday	18.5% (54)
Saturday	15.8% (46)
Sunday	8.2% (24)

The analysis demonstrates that respondent's most recent journeys were undertaken on various days of the week, with a trend for slightly more journeys to be made towards the end of the week (Thursday/Friday) than earlier in the week.

4.2.4 (Q9) Do you recall what time of day you made your journey?

Answer	Response
Morning (6am-12pm)	27.7% (98)
Afternoon (12pm-6pm)	19.2% (68)
Evening (6pm-12am)	29.9% (106)
Night (12am-6am)	23.2% (82)

The responses indicate that fewest journeys occur in the afternoon period, with most journeys taking place in either an evening or morning.

4.2.5 **(Q10) On your last trip, how did you obtain your vehicle?**

Answer	2018 Response		2022 Response	
	Taxi	PHC	Taxi	PHC
At a rank	65% (131)	3% (9)	25.1% (44)	9% (9)
Hailed on the street	11% (22)	1% (2)	12.6% (22)	(0)
By telephone	22% (44)	64% (176)	46.3% (81)	19% (19)
By mobile app/online	2% (4)	29% (80)	8.6% (15)	71% (71)
From a booking office	(0)	1% (2)	(0)	(0)
Do not recall	1% (1)	2% (4)	7.4% (13)	1% (1)

The responses indicate that the majority of Taxi users obtain a vehicle either by telephone or at a rank (71.4%), with an increase in the proportion of Taxi users obtaining a vehicle by telephone or mobile app as opposed to at a rank. No users reported obtaining a vehicle from a booking office. The majority of PHC users obtained a vehicle either by mobile app or telephone.

4.2.6 **(Q12/14) If hired from a rank/street, how long did you have to wait or it take you to hail? (Taxis Only)**

Wait time	2018 Response		2022 Response	
	Taxi rank	Hail on street	Taxi rank	Hail on street
0 mins	66% (30)	56% (20)	54.5% (30)	18.2% (4)
Up to 5 mins	16% (22)	33% (12)	16.4% (9)	54.5% (12)
Between 5 and 10 mins	5% (7)	8% (3)	9.1% (5)	13.6% (3)
Between 11 and 20 mins	9% (12)	3% (1)	16.4% (9)	13.6% (3)
Over 21 mins	4% (5)	-	3.6% (2)	0

The results indicate that only a small proportion of respondents who hired a Taxi from a rank had a wait time of over 10 minutes (20%), with over half of respondents able to obtain a Taxi immediately. These results are largely similar to the 2018 survey, albeit with a slight increase in the proportion of users waiting between 5 and 20 minutes.

The majority of respondents who hailed on street had a wait time of less than 5 minutes, with only a small proportion having a wait time of between 5 and 20 minutes. There was an increase in the proportion of users reporting up to a 5 minute wait for a Taxi when hailing on street, with a corresponding reduction in the proportion of users able to obtain a Taxi immediately.

4.3 Issues Experienced Using Taxi/PHC Services

4.3.1 (Q21) Have you experienced difficulties in obtaining either a Taxi or Private Hire Car in Glasgow City in the last 12 months?

Answer	2018 Response	2022 Response
Yes - Taxi	9% (41)	13.6% (55)
Yes – Private Hire Car	13% (62)	12.1% (49)
Yes – Both	1% (7)	26.7% (108)
Yes – unsure on vehicle	0% (0)	0.5% (2)
No	73% (348)	40% (162)
Do not recall	4% (17)	7.2% (29)

Just under half of respondents (47.2%) did not experience, or did not recall experiencing any difficulties when obtaining either a taxi or PHC. This represents a notable reduction in the proportion of respondents who did not experience or recall experiencing difficulties (77%) than in 2018, suggesting that difficulties in obtaining both Taxis and PHCs have increased.

Of those who did experience difficulties, a relatively balanced number of respondents experienced difficulties with either taxis or PHCs, with a similar number of respondents experiencing difficulties with both taxis and PHCs.

4.3.2 (Q22) If yes, how many times have you experienced difficulties in the last 12 months?

Answer	2018 Response		2022 Response		
	Taxi	PHC	Taxi	PHC	Both
Once	13% (4)	12% (7)	9.1% (5)	8.5% (4)	1.9% (2)
2-5 times	67% (20)	58% (34)	65.5% (36)	59.6% (28)	40.0% (42)
6-10 times	7% (2)	24% (14)	9.1% (5)	17.0% (8)	37.1% (39)
More than 10 times	13% (4)	7% (4)	16.4% (9)	14.9% (7)	21.0% (22)

The results show that it was generally not a one-off occurrence that people experienced difficulties, with the majority of respondents experiencing difficulties with both Taxis and PHCs between 2-5 times in the last 12 months, with similar proportions across both Taxis and PHCs to the 2018 survey. There was an increase in the number of users reporting having had difficulties more than 10 times, with the most notable proportional increase amongst PHC users.

4.3.3 (Q25) If yes, what was the nature of the difficulty?

Answer	2018 Response		2022 Response		
	Taxi	PHC	Taxi	PHC	Both
Vehicle did not turn up	10% (3)	6% (4)	21.2% (11)	44.9% (22)	18.5% (20)
Not available in reasonable time	55% (17)	51% (32)	59.6% (31)	18.4% (9)	46.3% (50)
Late arriving	(0)	11% (7)	13.5% (7)	8.2% (4)	20.4% (22)
Other	35% (11)	32% (20)	5.8% (3)	28.6% (14)	14.8% (16)

The results show that the reported difficulties in obtaining Taxis were primarily associated with them not being available in a reasonable time, which is similar to the 2018 survey. There was a large proportional increase in PHC users reporting a vehicle did not turn up, with a reduction in the proportion reporting that a vehicle was not available in a reasonable time.

In terms of other difficulties stated, these included:

- No availability of vehicles/drivers or fully booked;
- Driver got lost or was at an incorrect location;
- Traffic or road closures;
- Company did not answer phone calls;
- Driver refused to take suitcases;
- Driver refused to use meter;
- Another user took the vehicle.

4.3.5 **(Q26) If yes, approximately what time of day did this occur? (Both Taxis & PHCs)**

Answer	2018 Response	2022 Response
Morning (6am-12pm)	7%	15.5% (31)
Afternoon (12pm – 6pm)	14%	18% (36)
Evening (6pm-12am)	31%	18.5% (37)
Night (12am-6am)	47%	31.5% (63)
Not sure	1%	16.5% (33)

The results show that difficulties with both Taxis and PHCs are most apparent during the night-time period, accounting for 31.5% of difficulties encountered. A relatively even split of difficulties were recorded at other times of day.

4.3.6 **(Q27) If yes, what day of the week did this occur? (Both Taxis & PHCs)**

Answer	2018 Response	2022 Response
Monday	8%	9% (18)
Tuesday	2%	9% (18)
Wednesday	7%	5% (10)
Thursday	8%	6.5% (13)
Friday	17%	16% (32)
Saturday	29%	16% (32)
Sunday	2%	3% (6)
Not sure	26%	35.5% (71)

The most difficulties were experienced on Fridays and Saturdays (32%), with smaller proportions of users experiencing difficulties on other days of the week.

Cross-tabulation analysis demonstrates that of the users to encounter difficulties on Fridays and Saturdays, 64% of respondents stated that these difficulties occurred during the evening or night-time periods (6pm to 6am).

4.3.7 (Q29) Have you made a complaint about your experience with taxis or private hire cars to the operator, booking office, Police, or city council?

Answer	Response
No complaints made	78.8% (319)
Yes, in writing/via email	4.7% (19)
Yes, over the phone at the time of the experience	6.7% (27)
Do not recall	9.9% (40)

Most respondents have not, or do not recall making a complaint about their experience, with 11.4% of respondents having previously complained. Most respondents to complain did so over the phone at the time of the experience, with 4.7% of respondents having made a complaint in writing.

4.3.8 **(Q30) Do you recall a situation where you gave up trying to obtain a Taxi at a rank or hail one on street due to excessive wait times?**

Answer	Response
No	52.3% (212)
Once	17.8% (72)
2-5 times	16.8% (68)
6-10 times	4.2% (17)
More than 10 times	1.0% (4)
Do not recall	7.9% (32)

The results show that 39.8% of respondents recalled at least one situation where they gave up trying to obtain a Taxi due to excessive wait times, although the majority of respondents stated that this occurred 5 times or less. The majority of users (52.3%) stated that they did not give up trying to obtain a Taxi due to excessive wait times.

4.4 Preferences and Opinions on Taxi/PHC Services

4.4.1 (Q32) Do you have any preference for using Taxis or PHCs in Glasgow?

Answer	2018 Response	2022 Response
Prefer to use Taxis	24% (94)	25.3% (95)
Prefer to use Private Hire Car	57% (223)	30.1% (113)
No preference	19% (74)	44.5% (167)

There was no clear preference from respondents towards PHCs or Taxis, with almost 45% stating that they had no preference.

4.4.2 (Q33) What are the reasons for your preference?

Answer	2018 Response		2022 Response	
	Taxi	PHC	Taxi	PHC
Lower cost	5% (8)	57% (178)	7.6% (10)	35.3% (47)
Availability at time of travel	24% (36)	7% (23)	33.6% (44)	23.3% (31)
Ease of hiring a vehicle	22% (32)	15% (47)	18.3% (24)	21.1% (28)
Cleanliness of vehicle	3% (5)	1% (2)	(-)	0.8% (1)
State of repair of vehicle	1% (1)	0% (1)	(-)	0.8% (1)
Age of vehicle	(-)	0% (1)	2.3% (3)	0.8% (1)
Driver knowledge	3% (4)	1% (4)	10.7% (14)	(-)
Driver appearance	(-)	1% (2)	2.3% (3)	(-)
Driver helpfulness	7% (10)	5% (15)	(-)	0.8% (1)
Other	35% (51)	13% (39)	25.2% (33)	17.3% (23)

Other reasons stated by those respondents who prefer to use Taxis included:

- Familiarity;
- More reliable/know the price;
- Safety reasons/reassurance;
- Provide a better service;
- Better regulated;
- Closer to home.

Other reasons stated by those respondents who prefer to use PHCs included:

- Live location tracking;
- Quick and safe;
- Convenience.

4.4.3 **(Q34/35) With the respect to the standard of Taxis and Private Hire Cars in Glasgow City, on a scale of 1 to 10, where 1 is Extremely Poor and 10 is Excellent how would you rate the following: Cleanliness of vehicle, state of repair of vehicle, knowledge of driver and appearance of driver.**

Rating	Cleanliness of Vehicle		State of Repair		Knowledge of Driver		Appearance of Driver	
	Taxi	PHC	Taxi	PHC	Taxi	PHC	Taxi	PHC
1	-	-	-	-	-	0.3%	-	-
2	0.3%	0.6%	0.9%	1.2%	1.7%	1.2%	-	-
3	-	2.4%	2.3%	2.4%	0.9%	7.4%	1.8%	3.3%
4	2.9%	0.6%	-	1.5%	1.7%	12.8%	-	-
5	2.9%	0.6%	6.1%	8.7%	6.4%	5.4%	9.7%	8.4%
6	3.5%	3.0%	1.2%	1.5%	6.4%	14.0%	7.4%	2.7%
7	14.8%	26.7%	9.6%	12.9%	11.1%	11.0%	17.6%	22.0%
8	26.5%	27.0%	32.2%	28.1%	17.2%	20.2%	22.6%	33.1%
9	17.4%	11.3%	19.9%	23.4%	15.7%	11.0%	18.2%	9.0%
10	31.7%	27.9%	27.8%	20.4%	38.8%	16.7%	22.6%	21.4%
Average Rating	**8.4**	**8.1**	**8.3**	**8**	**8.3**	**6.9**	**7.9**	**7.8**

In terms of cleanliness of vehicles and state of repair, both Taxis and PHCs were generally rated highly, albeit with Taxis having a slightly higher average rating in both categories. Respondents rated Taxi drivers' knowledge to be slightly better than PHC drivers, with 72% scoring taxi drivers between 8-10, compared to 48% for PHC drivers. Both Taxi and PHC drivers scored relatively equally with regards driver appearance.

4.4.4 (Q36) Are there any other features not listed that you consider to be important for Taxi and Private Hire Car services in Glasgow City?

Other factors that were stated by respondents as being important for Taxis and PHCs include:

- Vehicle tracking;
- Communication;
- Safety;
- Lower prices or price guarantees;
- Disabled access.

4.4.5 **(Q37) Are you a permanent resident in the Glasgow City Council area?**

77% of survey respondents were permanent residents in the Glasgow City Council area, 19% were visitors on business or personal business and 4% were tourists.

4.5 Summary of Results

4.5.1 Of those surveyed, approximately 26% did not know or understand the different ways to hire taxis compared to PHCs, which suggests that a proportion of the general public do not make any significant differentiation between Taxi and PHC services. This is a similar proportion to the 2018 survey.

4.5.2 The principal methods of obtaining a Taxi were by telephone (46%) or at a Taxi rank (25%), with a smaller proportion of users obtaining a vehicle by hailing on street (13%) or by mobile app/online (9%), and no users obtaining a vehicle at a booking office.

4.5.3 For PHCs, the primary method of obtaining a vehicle were by mobile app/online (71%) or telephone (19%), which is a significant increase in proportional mobile app/online use compared to the 2018 survey.

4.5.4 In terms of passenger issues whilst using Taxi and/or PHC services, 52.8% of respondents reported having experienced issues when obtaining a Taxi and/or PHC in the last 12 months, an increase from 23% of users in 2018. Of these, the majority had experienced issues between 2 and 5 times in the last 12 months, with a majority of Taxi users reporting that one was not available in a reasonable time and a large proportion of PHC users reporting that a vehicle did not turn up.

4.5.5 Approximately 40% of Taxi users reported recalling at least one situation where they gave up trying to obtain a Taxi due to excessive wait times, although the proportion of users making a complaint to either the operator, booking office, Police or city council was low.

4.5.6 The survey showed no clear preference towards either Taxis or PHCs, although the proportion of users stating that they preferred to use Taxis was similar to the 2018 survey. The most commonly stated reasons for a preference towards Taxis were availability at the time of travel, familiarity and ease of hiring a vehicle. The most stated reasons for a preference towards PHCs were lower cost, availability at the time of travel and the availability of live location tracking.

4.5.7 Taxis rated slightly better than PHCs in relation to the cleanliness, state of repair of vehicles and appearance of driver, although both were largely considered to be very good to excellent. In terms of the knowledge of drivers, Taxi drivers were rated notably better compared to the PHC drivers.

4.5.8 In terms of the supply and demand for taxis and PHCs in GCC the public attitude survey results suggest the following:

- The greatest demand from the general public for Taxi and PHC services occurs during the evening, with a relatively high demand during the morning and late night periods;
- There is a trend for slightly more journeys to take place towards the end of the week (Thursday and Friday) than the start of the week;
- For Taxi users, the majority of respondents had experienced little to no waiting time for vehicles either at a taxi rank or hailing on street;
- Of those reporting difficulties in obtaining a Taxi or PHC, the majority of difficulties occurred during the night-time period and on a Friday or Saturday, corresponding with periods of the highest demand.

5. STAKEHOLDER CONSULTATION

5.1 Introduction

5.1.1 Stakeholder consultation was undertaken between 1st November and 2nd December 2022 with organisations/groups identified within the *'Scottish Government Taxi and Private Hire Car Licensing: Best Practice Guidance for Licensing Authorities 2nd Edition'* amongst those contacted. The following organisations/groups were contacted seeking their views and feedback on both taxi and private hire operations in the Glasgow City Council licensing area:

Trade Representatives/Associated Groups

- Unite the Union
- Scottish Taxi Federation
- Glasgow Taxi Association
- Taxi Rank Marshal

Police Scotland

Healthcare/Social Care Providers/Social Groups

- Carerstrust Glasgow
- BEMIS
- NHS Great Glasgow & Clyde
- PEEK Youth Project
- The Senior Centre
- Glasgow Disability Alliance
- Glasgow Women's Aid
- Glasgow Association for Mental Health

Public Transport Providers

- First Greater Glasgow
- ScotRail
- Strathclyde Partnership for Transport
- Glasgow City Bus/West Coast Motors

Business/Educational Organisations

- Glasgow Chamber of Commerce and members
- University of Glasgow
- City of Glasgow College
- University of Strathclyde

Entertainment/Hospitality/Services Sector

- Kelvingrove Art Gallery & Museum
- SEC
- Celtic Football Club
- Glasgow Restaurant Association

5.1.2 Consultation was undertaken via tailored questionnaires which were emailed to the identified stakeholders. This was followed up with a subsequent online version of the questionnaire which was distributed to Glasgow Chamber of Commerce (GCOC) members to encourage participation in the consultation exercise, following an offer by GCOC to facilitate distribution of the survey.

5.1.3 The response rate for the stakeholder consultation was relatively high, with a total of 62 responses received. A total of 60 responses were received from Chamber of Commerce members, with separate responses from the Chamber itself and Unite the Union. The stakeholder responses are summarised in the following sections.

5.2 Chamber of Commerce Member Feedback

Booking Methods

5.2.1 Stakeholders were asked a variety of questions regarding their staff/customers booking methods, including if the stakeholder provides a Taxi/PHC freephone service for their staff/customers of which, only 16.7% do, however, 80% stated that their organisation does telephone for a Taxi/PHC upon request.

5.2.2 When asked whether their staff/customers were more likely to book at a Taxi or PHC, 23 (38.3%) responded that they were more likely to book a Taxi, 24 (40%) responded that they were more likely to book a PHC and the remaining 13 (21.7%) didn't know whether their staff/customers were more likely to book a Taxi or PHC.

5.2.3 The reasons for staff/customers choosing either a Taxi or a PHC are as follows:

Table 16: Reasons for Taxi/PHC Preference (Stakeholder)

Answer	Taxi	PHC
Lower cost	8.6% (2)	54.2% (13)
Availability at time of travel	43.5% (10)	41.7% (10)
Ease of hiring a vehicle	56.5% (13)	58.3% (14)
Cleanliness of vehicle	52.2% (12)	4.2% (1)
State of repair of vehicle	43.5% (10)	-
Age of vehicle	8.6% (2)	4.2% (1)
Driver knowledge	69.6% (16)	-
Driver appearance	26.1% (6)	4.2% (1)
Driver helpfulness	30.4% (7)	4.2% (1)
Other	17.4% (4)	16.7% (4)

5.2.14 Table 16 demonstrates that driver knowledge and cleanliness of vehicle are the biggest determining factors in a preference for Taxis over PHCs, with ease of hiring a vehicle also a strong determining factor. The biggest determining factor for a preference for PHCs over Taxis is lower cost, with similar proportions as Taxi users stating availability at the time of travel and ease of hiring a vehicle as determining factors.

5.2.15 When asked how they believe their staff/customers are likely to obtain a Taxi, 71.7% responded with 'Telephone Booking', and 23.3% via 'Street Hailing', 'Taxi Ranks' and 'Other' respectively.

5.2.16 When asked how they believe their staff/customers are likely to obtain a PHC, 76.3% stated via 'mobile app', and the other 23.7% are more likely to book via telephone.

Taxi/PHC Availability

5.2.17 When asked about the level of dependency that the stakeholders' staff/customers have on Taxi services, nearly half (45.0%) believe that their staff/customers are somewhat dependent on taxi services, while a third (33.3%) believe that their staff/customers are not dependent on Taxi services at all, with the remaining 21.7% believing that their staff/customers are very dependent on Taxi services.

5.2.18 When asked about the suitability/availability of both Taxi and PHC services, 35% believed that there are adequate Taxi services and 40% believed that there are adequate PHC services available to their staff/customers. Many respondents stated that there are long wait times for vehicles, particularly during weekday AM and PM peaks, Friday evenings and Saturday evenings and that the issue appears to be particularly acute post-COVID. There was a perception amongst stakeholders that there are not enough vehicles/drivers to service demand, with less vehicles on the road than since before the COVID pandemic.

Taxi/PHC Standards

5.2.19 Stakeholders were asked to score the standards of both Taxis and PHCs on a scale of 1 to 10, where 1 is extremely poor and 10 is excellent. the results are shown below in Table 17.

Table 17: Average Vehicle and Driver Standards

	Cleanliness of Vehicle		State of Repair		Knowledge of Driver		Appearance of Driver		Helpfulness of Driver	
	Taxi	PHC	Taxi	PHC	Taxi	PHC	Taxi	PHC	Taxi	PHC
Average Score	7.5	6.5	7.4	6.5	7.6	5.3	7.0	5.7	7.2	5.9
Highest Score	10	10	10	10	10	10	10	9	10	10
Lowest Score	2	1	2	1	1	2	1	1	1	1

5.2.20 Table 17 demonstrates that the average score for taxis was higher across all categories than for PHCs, with the largest variation in average score within the 'Knowledge of Driver' category. This is in line with the findings of the public attitude surveys.

Stakeholder Suggestions for Improvements & Comments

5.2.21 Some stakeholders believe that there has been a reduction in the number of drivers of both Taxis and PHCs on the roads due to several factors including but not limited to the upcoming Low Emission Zone (LEZ) restrictions which are due to come into force in June 2023, the increasing operational costs involved in running a Taxi or PHC along with diminishing returns.

5.2.22 Most stakeholders believe there to be enough Taxi ranks but not enough Taxis to meet the demand. Stakeholders that do not believe there are not enough ranks mainly agree that there should be more ranks within the general city centre area.

5.2.23 Several stakeholders have reportedly had both Taxis and PHCs cancel pickups and poor driver knowledge, particularly from PHCs. Several Stakeholders have also commented that there is a lack of Taxis to cover certain periods such as Friday and Saturday evenings and during events at key venues such as the SEC/Hydro.

5.2.24 Stakeholders from educational facilities report that that both Taxis and PHCs can be unreliable, however, Taxis appear to be slightly more reliable than PHCs. Stakeholders from educational facilities also reported long delays.

5.3 Chamber of Commerce Member Feedback Summary

5.3.1 The stakeholder responses indicate that the main deciding factors for choosing either a Taxi or PHC are the 'ease of hiring a vehicle' and the 'availability at time of travel' resulting in an even split of people preferring either Taxis or PHCs. The main reasons for people choosing Taxis over PHCs are 'Driver Knowledge', 'Driver Helpfulness' and 'State of Repair of Vehicle. The only reason for people choosing PHCs over Taxis is 'Lower Cost'.

5.3.2 The majority of stakeholders do not believe that there are adequate Taxis (65%) or PHC (60%) services for their staff/customers, with many stating a lack of drivers as being a contributing factor to this. There are several complaints about the lack of both Taxis and PHCs at peak periods which could be an indication of under provision, however, this isn't necessarily due to the cap on vehicle licences, it could be an indication of drivers preferring not to work these peak periods.

5.3.3 On average, stakeholders gave Taxis a higher score for standards in all categories (cleanliness of vehicle, state of repair, knowledge of driver, appearance of driver and helpfulness of driver) with Taxis averaging 7.3 across all categories and PHCs averaging 6.0.

5.4 Unite the Union

5.4.1 Feedback from Unite the Union suggests that there are an adequate number of both Taxis and PHCs servicing the area, they do however comment that there are difficulties obtaining a Taxi of PHC on Friday and Saturday nights. Unite the Union also voiced concerns regarding individuals operating illegally in the area and the effect this may have on public safety.

5.5 Glasgow Chamber of Commerce

5.5.1 Glasgow Chamber of Commerce (GCoC) believe that there are not adequate numbers of both Taxis or PHCs to support the night time economy in Glasgow city centre, GCoC believe this is due to declining driver numbers since the COVID pandemic.

6. OPERATOR CONSULTATION

6.1 Introduction

6.1.1 Operator consultation was undertaken between 1st November 2022 and 31st January 2023 with licensed Taxi and PHC operators in the Glasgow City Council licensing area. All licensed booking offices were contacted to obtain their views and feedback on matters relating to supply/demand and general operations.

6.1.2 Consultation was undertaken via questionnaire and was followed up with email and telephone correspondence where required. Requests were also made to operators to provide information in relation to bookings, fares, wait times and the number of drivers servicing bookings for specified periods over the four-day period between 07:00 on Thursday 10th November 2022 and 03:00 on Sunday 13th November 2022, to coincide with the timings of the observational surveys.

6.1.3 A total of three responses were received to the questionnaire survey, and two responses to the information request. One operator provided feedback via letter/email, which has been referenced in the relevant sections below.

6.1.4 From information provided by the operators, it was determined that the three primary respondents represent approximately 50% of the total taxi fleet and approximately 18% of the total PHC fleet operating in the GCC Licensing Authority area at the time of the survey. Although a higher response figure would have been preferred from PHC operators, it was considered that the level of data provided was sufficient to provide an indication of the general operating trends within GCC in the absence of further responses from operators being forthcoming, despite best efforts to obtain it.

6.1.5 A general summary of feedback relating to general operations, fares and bookings, supply and demand and any specific concerns or issues raised by respondents is provided in the following sections.

6.2 Operator Consultation Feedback

General Operational Details

6.2.1 The size of operations varies greatly for both PHC operators and taxi operators. PHC operators range from fleets with 80 drivers up to 1,000+ drivers. Taxi operators range from fleets of 60 drivers up to 900+ drivers. Only a small number of operators operate both taxis and PHCs.

6.2.2 One operator noted that whilst the number of vehicles in operation has remained largely consistent, the number of drivers undertaking work for the business has reduced from 1,400+ in 2018 to 900+ in 2022, a reduction of over 30%. This is consistent with the data within Section 2.1, which shows a reduction in the number of taxi and PHC drivers both in Glasgow and nationally.

6.2.3 Both taxi and PHC drivers tend to be self-employed and the majority of drivers own their own vehicle. The average number of hours worked by drivers was not recorded or provided by most operators, but one operator noted that most drivers work an average of 40 hours per week.

6.2.4 Limited data was provided on multi-shifting, however one operator noted that approximately 25% of drivers work multiple shifts per day, with approximately 12.5% working multiple shifts to cover peak times only.

6.2.5 The average age of drivers generally tended to be 50+ years, with one taxi operator reporting an average age of 58. In terms of factors which influence drivers work schedules, the predominant factors noted were family commitments and road congestion.

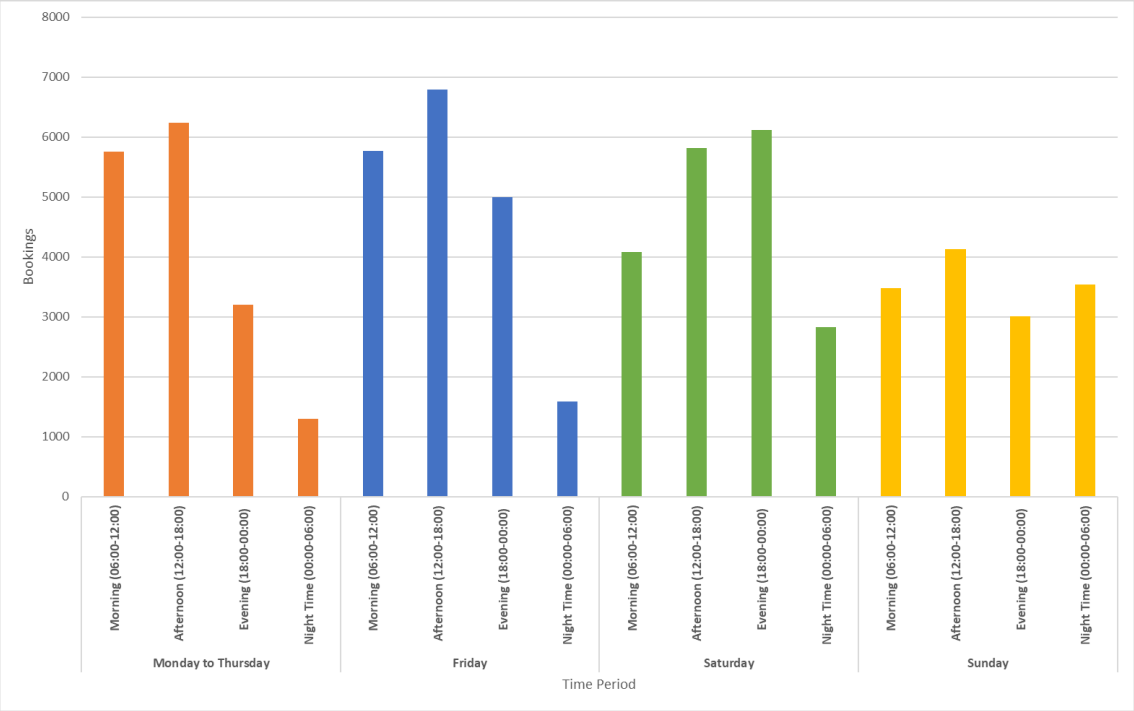
6.2.6 One operator reported that approximately 5% of workers left the workforce over the last year, with another operator reporting 2.5% of workers leaving over the same time period.

Fares & Bookings

6.2.7 The predominant way that both taxis and PHCs receive their bookings is by telephone/booking office or online/app. One operator reported that their mobile app is the fastest growing booking channel.

6.2.8 Three operators (two PHC and one Taxi) provided data on the average number of bookings received on various days of week and times of day. This data has been amalgamated to identify the total number of bookings on each day and during each time period, as shown in Figure 1:

Figure 1: Average Booking Data

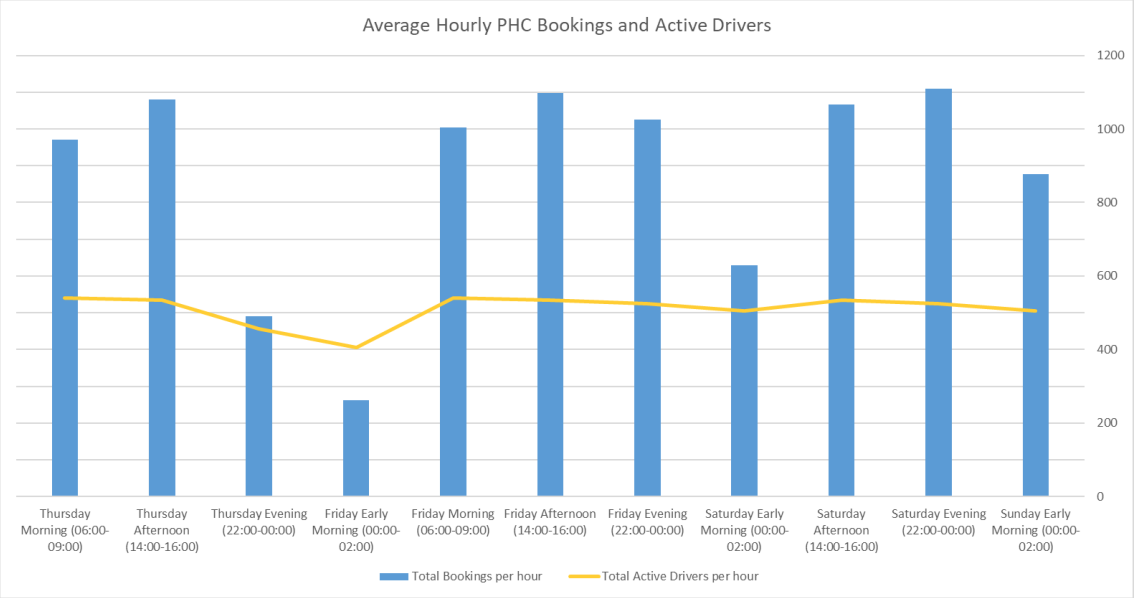


6.2.9 Figure 1 shows that most bookings occur on a weekday afternoon period, most notably on a Friday. There is also a peak in demand on a Saturday evening. The lowest demand tends to occur during the night-time period on a weekday, with generally lower levels of demand on a Sunday. It was noted by operators that this data is an average, and that fluctuations can occur depending on the time of year and events in the city.

6.2.10 PHC operators were also asked to provide data on the total number of bookings received per hour during key morning, afternoon and evening periods over the period Thursday 10th November to Sunday 13th November 2022 to coincide with the observational surveys discussed in Section 3. Two operators responded to this information request, therefore the results should be treated with an element of caution given the low response rate. Operators were also asked to provide information on the total number of drivers servicing bookings each hour, however the information received was limited to the average number of drivers working during key periods (e.g. mornings), rather than an hour-by-hour breakdown.

6.2.11 A summary of the average bookings per hour and the average active drivers per hour during the key time periods is shown in the chart within Figure 2:

Figure 2: Average Hourly PHC Bookings and Active Drivers



6.2.12 Figure 2 shows that the lowest demand for bookings was on a Thursday evening/Friday early morning and this corresponds with a slight reduction in the number of active drivers. The number of active drivers was largely consistent over other time periods however, albeit with fluctuations in the average numbers of hourly bookings.

6.2.13 Most operators did not retain or provide data on total annual vehicle mileage, although two operators did provide data on the total number of trips undertaken over the most recent four years. The data shows that the number of trips peaked in 2019, before dipping in 2020 and 2021 during the COVID pandemic, with the number of trips in 2022 having largely recovered to pre-COVID levels. Assuming that the average trip length is similar in 2022 to 2019, there appears to have been very little change in the annual total vehicle mileage recorded by operators.

6.2.14 One operator noted that they had received 10 driver-related complaints over the last year, with no vehicle or wait time related complaints. Another operator noted receiving 48 wait time complaints over the last year, with no data provided on vehicle or driver related complaints. Relative to the number of trips undertaken by the respective operators, this represents a low complaint ratio.

Supply & Demand

6.2.15 Peak demand for both Taxi and PHC services was noted as generally being weekdays 07:00-09:30 and 15:00-18:30. Late night on a Saturday night was also noted as being a time of peak demand, particularly between 23:00-03:00. One operator however noted that peak demand can occur at various times for various reasons, for example during inclement weather and during large scale events.

6.2.16 Areas of peak demand were noted to be around the Hydro/SEC during events and conferences, around major sporting events, the main transport hubs of Glasgow Central and Queen Street train stations and Buchanan Street Bus Station, along with areas around colleges and universities. For some PHC operators, demand can be focused primarily on the local area they serve in.

6.2.17 One operator provided data to support an assertion that demand is outstripping supply. The data showed that there had been a 4% increase in the number of trips being requested between 2019 and 2022, but that there was a 15% reduction in the number of completed trips across the same period. The operator believed this to be attributed to a lack of available drivers to meet demand. It was unclear from the data provided whether demand outstripped supply during all periods of the day, or whether there has been a notable increase in the number of trips being requested during certain peak periods.

6.2.18 In terms of taxi drivers having to wait for passengers, one operator noted that taxis may have to wait for passengers at ranks between 10:30am and 12:00, as this was considered to be a period of the lowest passenger demand. This corresponds with the findings of the observational surveys discussed in Section 3.

6.2.19 One PHC operator provided data on the average driver wait time between hires during various periods of the day:

Table 18: Average Wait Time Between Hires

Weekday AM (07:00-09:00)	Weekday PM (14:00-16:00)	Weekday Evening/Night (22:00-02:00)	Friday Evening/Night (22:00-02:00)	Saturday PM (14:00-16:00)	Saturday Evening/Night (22:00-02:00)
≈10 minutes	≈15 minutes	≈15-20 minutes	≈10 minutes	≈20 minutes	≈10 minutes

6.2.20 The data demonstrates that the shortest wait time between hires was during the weekday AM peak and Friday/Saturday evening/night periods, in line with periods of peak demand highlighted above.

6.2.21 Regarding the need for additional taxi ranks, it was noted that the positioning of taxi ranks should be considered as part of the planning process to avoid retrofitting, with another operator noting that no more taxi ranks should be provided without more taxis.

Taxi and PHC Numbers

6.2.22 Two operators generally considered there to be a sufficient number of taxis/PHCs to meet demand in Glasgow as a whole, whilst two operators considered provision not to be sufficient.

- One operator considered there to be a sufficient number of taxis/PHCs, but noted that the main issue for them is sourcing drivers to drive vehicles that are idle rather than there being a need to licence more vehicles. This operator also noted that GCC could assist with this by reducing the processing time for granting licences and that operators would be willing to assist with the associated costs if the process of granting a licence was more reasonable.
- Another operator also considered there to be a sufficient number of taxis/PHCs, and echoed the above concerns and noted that the singular cause in any shortfall in service delivery is a lack of Taxi drivers, but acknowledges that this issue is not unique to Glasgow and is an issue replicated across Europe. The operator noted that Glasgow does not suffer from a lack of Taxi or PHC licences, but that it does suffer from a poor public transport service, particularly during unsocial hours.
- One operator considered provision to not be sufficient and noted that the cap on licensed PHCs is constraining supply when demand is increasing, and that rather than reviewing the PHC cap, the focus should be on increasing supply to meet unmet demand. The operator noted that demand and supply issues were most acute in the city centre area, which in turn has an impact on the city centre economy.
- Another operator also considered taxi/PHC provision to not be sufficient, but did not provide any further details.

6.2.23 Whilst all Taxi vehicles are capable of taking mobility impaired/wheelchair users, the data on the number of wheelchair accessible PHCs is limited, with only one operator sharing that they do not operate any wheelchair accessible vehicles. Two operators believed there to be an adequate number of vehicles capable of transporting wheelchair passengers in Glasgow, whilst one operator did not.

6.2.24 In terms of the proportion of overall fares/bookings by people with mobility impairments, it was noted by one operator that because a limited proportion of PHCs are wheelchair accessible, there is a heavy reliance on Taxis by wheelchair passengers.

Communication with the Licensing Authority

6.2.25 Two operators noted that the level of communication with Council licensing officers is not sufficient, whilst one operator believed it to be sufficient. Reasons stated for communication not being sufficient include difficulty of contact via telephone, and a need to undertake meaningful discussion with the trade over issues that have a bearing on the industry.

Glasgow City Centre Low Emission Zone (LEZ)

6.2.26 GCC has announced that from 1st June 2023 only vehicles compliant with Euro 4 (petrol) or Euro 6 (diesel) vehicle regulations, will be permitted within the city centre LEZ. This will apply to all vehicles including Taxis and PHCs.

6.2.27 When asked whether they supported the LEZ proposals, three operators stated that they supported the introduction of the LEZ and one did not directly respond, but did commit to future use of EVs. When asked whether the June 2023 deadline provided sufficient time to prepare for the change and ensure all fleet vehicles are compliant, responses were mixed. Feedback from operators included the following:

- One operator noted that the LEZ will have a financial bearing on drivers who may be required to upgrade their vehicles;
- One operator noted that the LEZ requirement presents a significant challenge to the Taxi trade, with poorly targeted funding support and a stagnant second-hand Taxi market adding to the challenge;
- One operator provided an ambition for all drivers to use EVs by 2030, with 12% of vehicles operating in Glasgow currently EVs.

7. EVALUATION OF UNMET DEMAND FOR TAXIS

7.1 Calculation of ISUD Variables

7.1.1 This section evaluates the level of unmet demand for taxi services in Glasgow, which essentially relates to passengers having to wait at a taxi rank due to no vehicles being available for hire. The level of unmet demand is measured using the Incidence of Significant Unmet Demand (ISUD), which considers a number of factors as discussed below.

7.1.2 As previously discussed, it is noted that due to technical issues with the video equipment, the data for the Buchanan Street Bus Station rank has been excluded from the ISUD calculation.

7.1.3 The ISUD has been calculated using the following industry recognised formula:

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

7.1.4 Where:

- **ISUD** = Incidence of Significant Unmet Demand
- **APD** = Average passenger delay across the entire week, in minutes
- **PF** = whether the demand is highly peaked. This will equal 1 if there is no peaking and 0.5 if peaking is present
- **SSP** = Steady State Performance – Percentage of weekday daytime hours in which passenger queues are observed
- **GID** = General Incidence of Delay – Proportion of taxi users travelling in hours where average passenger delay exceeds one minute
- **SF** = Seasonality Factor
- **LDF** = Latent Demand Factor. Takes into account trips not made owing to perceived poor quality of service.

7.1.5 An ISUD value of 80 or higher is generally taken as indicating there is significant unmet demand. The values used in calculating the ISUD are as follows:

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

7.1.7 The aggregate delay in passenger minutes was 21,028 minutes. When divided by the total weekly passengers of 14,161, the Average Passenger Delay was **1.5 minutes** (approximately 90 seconds).

7.1.8 **PF**: 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 any public transport system or road capacity, to be provided to cover a few hours a week. Demand across most of the survey locations was observed to be significantly higher on Friday and Saturday nights than at other times, therefore, the **PF value is 0.5.**

7.1.9 **SSP**: Weekday daytime hours were deemed to be between 7.00am and 7.00pm during the weekdays (Thursday and Friday) surveyed. Within these twelve-hour periods, there were a few instances when passengers were delayed by more than a minute, resulting in them having to wait for a taxi to arrive at the rank. The SSP is the proportion of hours during the weekday daytime when there are excess demand conditions. Therefore, the **SSP is 3.7.**

7.1.10 **GID**: The total number of passengers travelling during hours when the average passenger delay exceeded 1 minute was 3,995, and the total number of weekly passengers was 14,161. The GID is the proportion of taxi users travelling in hours where average passenger delay exceeds one minute, therefore the **GID is 28.2** (3,995/14,161*100).

7.1.11 **SF:** Due to the nature of these surveys, it is not practical to collect information throughout an entire year to assess the effects of seasonality. Experience has suggested that Hackney demand does exhibit a degree of seasonality and this is allowed for by the inclusion of a seasonality factor. The factor is set at a level to ensure that a marginal decision either way obtained in an "untypical" month will be reversed. This factor typically takes a value of 1 for surveys conducted in September to November and March to June, i.e. '*typical*' months. It takes a value of 1.2 for surveys conducted in January and February and during school holidays and a value of 0.8 for surveys conducted in December during the pre-Christmas rush of activity. For this study, a factor of **1.0** has been used, as the surveys were undertaken during a typical month.

7.1.12 **LDF:** The level of latent demand was derived from the public attitude survey results as the proportion of the public who have given up trying to obtain a taxi at a rank or hailing on street. It is measured as 1+ the proportion giving up waiting. As discussed in Section 4.3 above, 39.8% of respondents recalled at least one situation where they gave up trying to obtain a Taxi due to excessive wait times, therefore the **LDF factor is 1.4**.

7.1.13 The ISUD value has been calculated as follows, using the variables derived for this study:

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

1.5 x 0.5 x 3.7 x 28.2 x 1.0 x 1.4 = 108.22

7.2 LDF Sensitivity Test

7.2.1 It is noted that the LDF factor is notably different to when the last study was undertaken in 2018 (1.0) and that the overall ISUD is sensitive to the LDF. The public attitude survey for this study included a specific question on whether users had given up trying to obtain a taxi due to excessive wait times, which was not included in the 2018 study. Although the proportion of users reporting giving up obtaining a taxi is high (39.8%), this question is considered to be the most suitable data source from which the LDF factor should be derived.

7.2.2 It is noted that there is also anecdotal evidence from the observational surveys to support the assertion that a proportion of users give up trying to obtain a taxi from a rank. This was particularly the case at quieter ranks that are not as well served by taxis, where some users were observed to wait at a rank for a period of time before moving on, however this is difficult to accurately quantify as users could stand at a rank for a variety of reasons.

7.2.3 For robustness, it is considered prudent to undertake a sensitivity test of the ISUD using an LDF factor of 1.0:

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

LDF Sensitivity Test: 1.5 x 0.5 x 3.7 x 28.2 x 1.0 x 1.0 = 77.41

7.3 Conclusion

7.3.1 The cut off level for a significant unmet demand is 80. The results indicate that from the data available, the ISUD value in Glasgow is 108.22, and therefore that ***there is a significant unmet demand***. This represents a significant increase in the ISUD value since the previous study was undertaken in 2018.

7.3.2 The results reflect the observations from the surveys, where the market generally operates in a steady state during weekday daytimes. However, it also indicates that there is likely to be an insufficient number of taxis to serve demand during the peak periods, e.g. when there are large events taking place in the city and during the weekend evening/night-time periods.

7.3.3 The results also align with the feedback from the public attitude surveys and stakeholder consultation, which found a high proportion of users reporting issues in obtaining taxis, especially during peak periods.

7.3.4 Using an LDF factor of 1.0 would result in an ISUD of 77.41, however it is considered that there is data to support the LDF being higher than when the study was previously undertaken in 2018, therefore it is considered that the use of an LDF of 1.4 is suitable and that an ISUD of 108.22 is the most likely scenario.

7.4 Taxi Unmet Demand Assessment

7.4.1 Based on the ISUD calculation, it is considered that there is evidence of a significant unmet demand for taxis in the GCC licensing area. However, it is considered that there is evidence from the foregoing analysis that the significant unmet demand is being triggered by a lack of taxi drivers as opposed to a lack of taxis.

7.4.2 Whilst the number of licensed taxis has reduced slightly over the most recent annual period, the overall number of licensed taxis in Glasgow has not varied significantly since 2008, with only a 1.5% difference between the minimum (1,408) and maximum (1,430) number of licensed taxis over the last 15 years. The previous study undertaken in 2018 found there to be no significant unmet demand for taxis, which was based on a similar number of licensed taxis, but a significantly higher number of licensed drivers.

7.4.3 The number of licensed taxi drivers and therefore driver to vehicle ratio has reduced significantly since 2008. There are currently 1,756 licensed drivers for 1,408 vehicles in Glasgow, resulting in a ratio of 1.25 drivers per vehicle. This compares to a ratio of 1.75 in 2018, and 2.17 in 2008. The issue of drivers leaving the trade is not unique to Glasgow and is well documented in the media. The current driver to vehicle ratio in Glasgow (1.25) is however particularly low compared to the Scottish average (2.06), suggesting that the issue is particularly acute in Glasgow.

7.4.4 The feedback from the trade and stakeholders also indicates that there appears to be an industry-wide issue of a lack of drivers to service the demand, particularly since the start of the COVID pandemic, with some operators stating that this is the primary issue rather than the number of vehicles.

7.4.5 It is therefore considered that there is evidence to suggest that the unmet demand is not linked to the existing cap. The number of licensed vehicles is currently slightly below the upper limit and has not changed significantly since the cap was last reviewed in 2018. The number of licensed taxi drivers has however reduced by approximately 29% over the same period. The number of taxis in service at any given time is therefore likely to have reduced significantly since 2018, and this is evidenced by the observational surveys which showed a reduction in the number of taxis servicing ranks.

7.4.6 Amending the existing upper cap on taxis is therefore unlikely to have a significant impact on increasing supply, and that emphasis should be put on encouraging more drivers into the trade in order to increase supply and reduce the levels of unmet demand.

8. PRIVATE HIRE OVERPROVISION ASSESSMENT

8.1 Introduction

8.1.1 In May 2017, amendments made to the Civic Government (Scotland) Act 1982 ("the 1982 Act") by Air Weapons and Licensing (Scotland) Act 2015 came into effect with the introduction of new sections 10(3A), (3B) and (3C) as reproduced below. This change in legislation introduced provisions to allow Licensing Authorities in Scotland to limit or cap the number of PHC licences issued:

(3A) *Without prejudice to paragraph 5 of Schedule 1, the grant of a private hire car licence may be refused by a licensing authority if, but only if, they are satisfied that there is (or, as a result of granting the licence, would be) overprovision of private hire car services in the locality (or localities) in their area in which the private hire car is to operate.*

(3B) It is for the licensing authority to determine the localities within their area for the purposes of subsection (3A) and in doing so the authority may determine that the whole of their area is a locality.

(3C) In satisfying themselves as to whether there is or would be overprovision for the purposes of subsection (3A) in any locality, the licensing authority must have regard to—

(a) the number of private hire cars operating in the locality, and

(b) the demand for private hire car services in the locality.

8.1.2 In terms of the stated requirements within the 1982 Act, Section 10(3B) and 10(3C) are addressed as follows:

- Section 10(3B): the 'locality' over which the overprovision of PHC services is determined as being the whole of the GCC area. This is consistent with the methods used to evaluate taxi unmet demand and reflects the licensing management regime operated by GCC that considers the whole council area as a single zone.
- Section 10(3C): the methodology uses:
    - information obtained from GCC and PHC operators to identify '*the number of private hire cars operating in the locality';* and,
    - a range of data/information sources including results from the public attitude survey (see Section 4); feedback from stakeholder consultation (see Section 5); feedback from taxi and PHC operator consultation (see Section 6); and, analysis of passenger bookings information provided by PHC operators to identify '*the demand for private hire car services in the locality*'.

8.1.3 The current policy in Glasgow which was introduced in April 2019 is for PHC licence numbers to be managed between an upper limit of 3,759 and a lower limit of 3,195.

8.1.4 Guidance on how PHC overprovision may be assessed is provided within the document *'Private Hire Car Overprovision Assessment – Potential Assessment Tools'*, although the document highlights that *"there is no simple numerical formula for pinpointing the threshold between provision and overprovision"* and that *"one of the key considerations when considering applying a cap to private hire car licenses, would be how such a limit would benefit the public"* (SG, 2019).

8.1.5 The guidance outlines nine potential tests for PHC overprovision, which have been adopted for the purposes of this study. The tests take account of a range of data and information sources to determine what the balance of supply and demand is for PHCs within the GCC area, whether an overprovision of supply exists and, if so, what limits to PHC licence numbers may be applied.

8.2 Private Hire Driver and Vehicle Data

8.2.1 GCC's vehicle licensing records identify the following key statistics relating to licensed PHC drivers and vehicles:

Table 19: PHC Drivers and Vehicles

Year/Date	PHC Vehicles	PHC Drivers	Driver to Vehicle Ratio
2008	2805	3426	1.22
2009	2832	3453	1.22
2010	2824	3637	1.29
2011	2735	3476	1.27
2012	2640	3355	1.27
2013	2602	3098	1.19
2014	2597	3138	1.21
2015	2638	3299	1.25
2016	3153	4332	1.37
2017	3414	4492	1.32
2018	3759	5042	1.34
2019	3759	3968	1.06
2020			
18th January 2022	3449	4513	1.31
25th April 2022	3428	3667	1.07
15th July 2022	3289	3722	1.13
30th August 2022	3284	3254	0.99
20th September 2022	3244	3578	1.10
11th November 2022	3217	3287	1.02
11th January 2023	3176	3312	1.04

8.2.2 The current PHC overprovision policy states that PHC licence numbers should be managed between an upper limit of 3,759 and a lower limit of 3,195, and that there will continue to be an overprovision of private hire car services in Glasgow until such a time that the number of licences falls below 3,195. This was based on the previous assessment in 2018, which found there to an overprovision of PHCs, and that PHC numbers could reduce by up to 15% without impacting on the overall balance of supply and demand.

8.2.3 The latest data shows that the number of licences fell below the lower limit of 3,195 in early 2023 for the first time since the current overprovision policy was introduced in April 2019, with a particularly notable decline in licensed vehicle numbers during 2022. The number of licensed PHC drivers has also reduced significantly over the most recent 12-month period, with a reduction of 27% between January 2022 and January 2023.

8.3 Private Hire Overprovision Tests

Passenger Complaints

8.3.1 The guidance states that: *"Absence of passenger complaints may indicate that there is adequate provision of private hire services. This may also indicate that there is existing overprovision of private hire services, or that the licensing of more private hire cars could lead to overprovision. The existence of passenger complaints may indicate that there is insufficient provision of services at times or in some localities, or for some sectors of the community. It is prudent to check the veracity of any complaints before relying on the level of complaints as an indicator of overprovision or otherwise".*

8.3.2 As discussed in Section 4.3, 11.4% of respondents to the public attitude survey reported having made a complaint about Taxi or PHC services. Approximately 4.7% of complaints were made in writing/by email, with 6.7% made over the phone at the time of the experience. Whilst details of the complaints made are not available, it could be considered reasonable to assume that the complaints made in writing were more serious in nature than those made over the phone at the time of the experience.

8.3.3 Given that this question was not asked as part of previous studies in Glasgow, there is no local benchmark against which the level of complaints can be measured to determine whether they have increased or decreased over time. However by comparison, a public attitude survey undertaken as part of a recent PHC study in Edinburgh (Jacobs, 2022) identified that 38% of survey respondents had made a complaint, therefore the proportion of complaints in Glasgow appears to be low.

8.3.4 Whilst not strictly complaints, the public attitude survey results in Section 4.3 identified a small increase in the proportion of respondents reporting having difficulties in obtaining PHCs since the last study was undertaken in 2018, with the primary difficulties stated as being vehicles not turning up or vehicles not being available.

8.3.5 As noted in Section 6.2, the trade survey identified that a low number of complaints were received by operators relative to the number of trips made, with small numbers of driver-related and wait time related complaints.

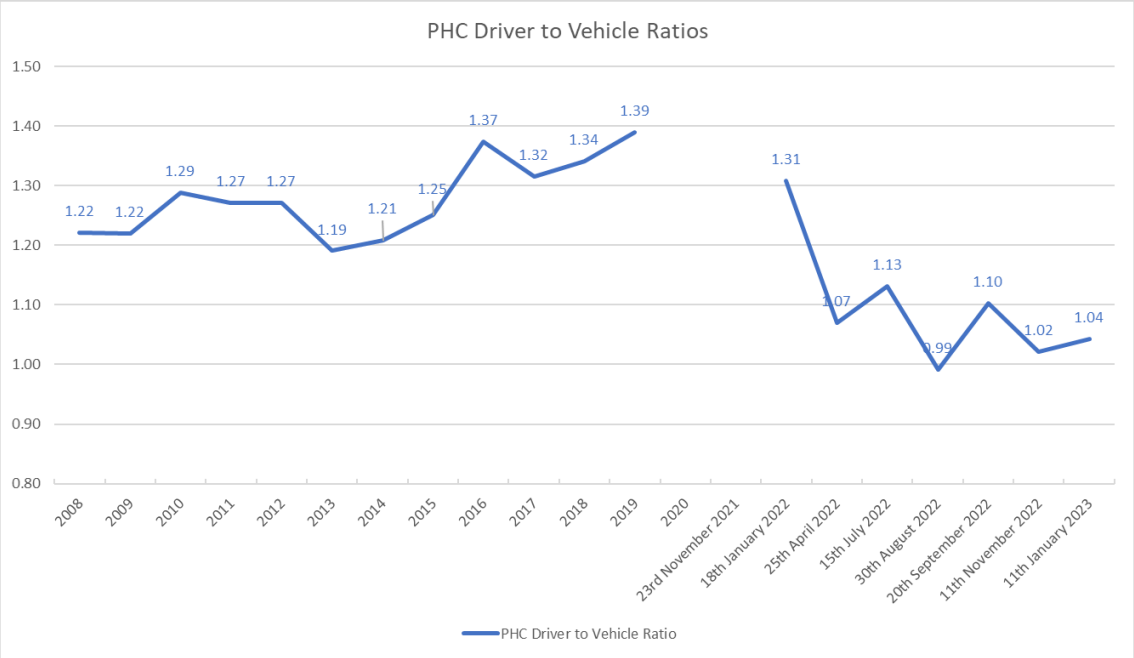
8.3.6 Based on the data available, it is considered that there is some evidence that complaints are being made about PHC services, but that numbers do not appear to be significant. This may therefore be a slight indicator of under provision, but there is limited benchmarking data available to determine whether the current level of complaints is similar to those made previously.

Driver Ratios

8.3.7 The guidance states that: *"Lower driver ratios may be an indicator of overprovision. Whether a ratio is felt to be low may vary by locality"*.

8.3.8 The PHC driver to vehicle ratios are shown in Table 19 above and are shown graphically in Figure 3:

Figure 3: PHC Driver to Vehicle Ratios



8.3.9 The latest data shows that the driver to vehicle ratio has reduced significantly since the last study was undertaken in 2018 and is currently 1.04 drivers per vehicle, which is largely in line with the national average. Historically, driver to vehicle ratios sat between approximately 1.2 and 1.3 between 2008 and 2015, before rising to between 1.3 and 1.4 between 2016 and 2019, around the time Uber and other app-based services were first introduced in the city and the number of licensed vehicles also began to notably increase.

8.3.10 Driver to vehicle ratios during 2022 and into 2023 are therefore considerably lower than historic values. It is unclear why the ratios have reduced so significantly, but this may be linked to more drivers owning and operating their own vehicles than in previous years, with a decline in more traditional fleet operators where multiple drivers would drive a single vehicle. This could mean an overall reduction in the number of vehicles servicing bookings at any given time, as vehicles may only be in active service when drivers choose to work, rather than over multiple extended periods of the day.

8.3.11 As discussed in Section 6.2, there is however evidence to suggest that the number of trips made by operators in 2022 is largely comparable to in 2019, despite a reduction in both vehicle and driver numbers.

8.3.12 Whilst the guidance states that low driver ratios may be an indicator of overprovision, it is considered that other data on the declining number of both licensed vehicles and drivers does not support this assertion, and that in fact the current driver to vehicle ratio could be resulting in a slight under provision.

8.3.13 It is therefore considered that there is no evidence of overprovision with regards this test.

Driver Turnover

8.3.14 The guidance states that: *"A high level of driver turnover may be an indication that drivers find it difficult to make a living as a driver. This in turn can be an indicator of overprovision"*.

8.3.15 As discussed in Section 6.2, operators reported that between 2.5% and 5% of staff left the workforce over the most recent year, which is not considered to represent a significant proportion. This is in contrast to the citywide data presented within Section 8.2 above, which showed that the number of licensed PHC drivers in Glasgow reduced by approximately 27% between January 2022 and January 2023.

8.3.16 As discussed in Section 2.3, there are a number of factors which appear to be impacting the trade, including the post-COVID recovery, economic downturn and higher cost of living, all of which appear to be impacting the number of drivers entering or staying in the trade.

8.3.17 Data from the public attitude survey, stakeholder consultation and trade consultation all determines that there appears to be demand for PHC services, and that the public perception is that wait times have increased and reliability has reduced, particularly during peak periods and since the COVID pandemic. This appears to be primarily as a result of a lack of drivers.

8.3.18 Therefore whilst there appears to be some evidence of driver turnover which is typically indicative of drivers finding it difficult to make a living and therefore overprovision, there are wider factors at play which are influencing drivers leaving the trade, and that an unmet demand for PHC services appears to exist.

8.3.19 It is therefore considered that there is no evidence of overprovision with regards this test.

New Businesses Operating in a Locality

8.3.20 The guidance states that: *"New businesses may drive additional recruitment for drivers and may, in turn, lead to additional licensed vehicles becoming registered. If the increase in drivers and / or vehicles is sustained for several years, this could lead to overprovision. The effect of new businesses operating would be viewed in conjunction with driver ratios and driver turnover"*.

8.3.21 As discussed above relative to driver ratios and driver turnover, there has been a notable reduction in the number of both licensed vehicles and drivers since the previous study was undertaken and since the COVID pandemic.

8.3.22 It is noted that a licence was granted for app-based operator 'Bolt' to begin operations in Glasgow from 31st August 2022, but that operations have not yet commenced for reasons unknown. There has been no significant overall change in the number of licensed private hire operators in Glasgow since the previous study was undertaken in 2018.

8.3.23 It is therefore considered that there is no evidence of overprovision with regards this test.

Reduced Vehicle Mileage

8.3.24 The guidance states that: *"A trend of reduced vehicle mileage may indicate that fewer hires are being undertaken. A change in average annual mileage should be viewed against changes in the number of licensed vehicles and changes in the number of licensed drivers"*.

8.3.25 As discussed in Section 6.2, most operators did not retain or provide data on total annual vehicle mileage, although two operators did provide data on the total number of trips undertaken over the most recent four years. The data shows that the number of trips peaked in 2019, before dipping in 2020 and 2021 during the COVID pandemic, with the number of trips in 2022 having largely recovered to pre-COVID levels. Assuming that the average trip length is similar in 2022 to 2019, there appears to have been very little change in the annual total vehicle mileage recorded by operators (with the exception of reductions associated with the COVID pandemic) despite a reduction in both the number of drivers and vehicles.

8.3.26 There is some anecdotal evidence from one operator that there was a 15% reduction in the number of completed trips between 2019 and 2022, despite a 4% increase in the number of trips being requested. The operator believed this to be attributed to a lack of available drivers to meet demand, which suggests an under provision of PHCs.

8.3.27 It is therefore considered that there is some slight evidence of under provision with regards this test.

Driver Availability to Cover Night-Time Demand

8.3.28 The guidance states that: *"If there is evidence that drivers are generally unwilling to work at night, this may be an indicator that drivers can derive sufficient earnings during daytime working to achieve targets. Such a scenario may indicate that there is not overprovision"*.

8.3.29 As discussed in Section 6.2, operators were asked to provide data on the total number of bookings received per hour during key morning, afternoon and evening periods over the period Thursday 10th November to Sunday 13th November 2022 along with the number of drivers servicing bookings during key periods.

8.3.30 The analysis showed that the lowest demand for bookings was on a Thursday evening/night and this corresponds with a slight reduction in the number of active drivers. The number of active drivers was largely consistent over other time periods however, albeit with fluctuations in the average numbers of hourly bookings. There was only a small reduction in drivers during the peak Friday and Saturday night periods.

8.3.31 This suggests that all available drivers generally appear to be working during all periods of the day in order to service demand, with no obvious peak in the number of active drivers during periods of peak demand. Where clear reductions in demand occur, there is a slight corresponding reduction in the number of active drivers, but this is not as significant as the proportional reduction in bookings.

8.3.32 This shows that there is a general willingness amongst drivers to work during all periods of the day, including at night. It is expected that most drivers work flexibly around personal commitments, and that as a general rule there appears to be sufficient earnings can be derived by working during most periods of the day.

8.3.33 Based on the data above, it is considered that there is no evidence of overprovision with regards this test, and that some under provision may be evident in that all available drivers appear to be working during all periods of the day.

Level of Multi-Shifting

8.3.34 The guidance states that: *"High levels of multi shifting tend to occur along with higher driver ratios. If there is also high levels of driver turnover, this can be an indication that income levels are not sufficient to sustain the number of drivers. Higher levels of multi-shift operation which are not coupled with high driver turnover, indicates a sustainable level of income and suggests that there is not overprovision. If there is anecdotal evidence of people working excessive hours, it is prudent to take such information into account when considering the ratio of drivers to vehicles and multi-shifting activities"*.

8.3.35 Some limited data on multi-shifting was provided as part of the trade consultation discussed in Section 6.2, which showed that one operator noted between 12.5%-25% of drivers working multiple shifts per day. Whilst the available data is limited, this does not appear to indicate high levels of multi-shifting.

8.3.36 As discussed above, driver ratios are low, and the rate of driver turnover also appears to be low. There is therefore no indicator that there is overprovision with regards this test.

Pirating Activity

8.3.37 The guidance states that: *"If there is proven evidence of pirating activity (private hire cars touting for hires without being pre booked) this may be evidence that there is insufficient demand to sustain the private hire car fleet. However, pirating activity should also be viewed against the context of taxi provision. If taxi availability is limited, pirating activity by private hire cars may also relate to lack of available taxis"*.

8.3.38 The popularity of mobile app-based systems means that customers can request PHCs from any location, including within the vicinity of taxi ranks. Because some ranks are located outside of major trip attractors such as concert venues and bus/train stations, and because there are often no designated pick-up/drop-offs points for PHCs, this can often result in app booked PHCs stopping at ranks to pick-up passengers as this is where they are likely to wait for vehicles to arrive.

8.3.39 The observational surveys discussed in Section 3 recorded the number of PHCs arriving and departing at each rank. The number of PHCs recorded at each rank varied considerably, with most recorded at the SECC during periods of peak demand. A total of 1,483 activities involving PHCs were recorded over the 76-hour survey period at all 10 ranks.

8.3.40 It is difficult to determine whether the PHCs observed during the survey were touting for hire or were pre-booked. It is likely that some pirating activity occurred during the observational surveys, but this was likely to be low level, with most PHCs expected to have been pre-booked.

8.3.41 It is therefore considered that there is no evidence of overprovision with regards this test.

Extended Wait Times between Hires

8.3.42 The guidance states that: *"If there are periods when driver are waiting for extended periods between hires, at times when they would be expected to be relatively busy, this may be an indication of overprovision. The wait time which may be considered to be extended will vary by locality and time of day"*.

8.3.43 As discussed in Section 6.2, one operator provided details as to driver wait time between hires, which demonstrated that wait times are generally circa. 10 minutes at peak times, and circa. 15-20 minutes at off-peak times. This does not appear to be indicative of extended wait times between hires, and is therefore not an indicator of overprovision.

8.3.44 Data from the public attitude survey discussed in Section 4.3 demonstrates that members of the public who had difficulties in obtaining PHCs primarily had issues due to a vehicle not turning up, extended wait times or vehicles not being available. This suggests that the public perceive the availability of PHCs to be an issue and is potentially an indicator of under provision, particularly given that driver wait times between hires appears to be low, particularly at peak times.

8.3.45 Based on the data available, it is considered that there is some evidence of under provision with regards this test.

Stakeholder Consultation Feedback

8.3.46 Responses received from the stakeholder survey indicated that 40% of respondents believed there to be adequate PHC services available to their staff/customers, whilst 60% did not. Many respondents stated that there are long wait times for vehicles, particularly during weekday AM and PM peaks, Friday evenings and Saturday evenings and that the issue appears to be particularly acute post-COVID. There was a perception amongst stakeholders that there are not enough vehicles/drivers to service demand, with less vehicles on the road than since before the COVID pandemic.

8.3.47 Feedback from the Glasgow Chamber of Commerce suggests that there are not adequate numbers of PHCs to support the night-time economy in Glasgow city centre, with a perception that this is due to declining driver numbers since the COVID pandemic.

8.3.48 Feedback from Unite the Union suggests that there are generally an adequate number of both Taxis and PHCs servicing the area, however they comment that there are difficulties obtaining a Taxi of PHC on Friday and Saturday night.

Taxi and PHC Operator Feedback

8.3.49 As discussed in Section 6.2, feedback from the trade consultation indicated that two operators considered there to be a sufficient number of taxis/PHCs to meet demand in Glasgow as a whole, whilst two operators considered provision not to be sufficient.

8.3.50 There was a consensus amongst operators that there appears to be an industry wide issue of a lack of drivers to service demand, with two operators considering this to be the primary issue rather than the number of vehicles. One operator expressed a view that the current PHC cap is constraining supply, and that supply needs to be increased to service an unmet demand.

8.4 Private Hire Overprovision Assessment

8.4.1 From the foregoing assessment of PHC demand in the GCC locality and the various information sources utilised, it is considered that there is some evidence of a potential under provision of PHCs to service the overall demand in the area, particularly at peak times.

8.4.2 This conclusion is based on the following evidence:

- Both licensed vehicle and driver numbers have reduced significantly over the last year, with a notably low driver to vehicle ratio compared to when the last study was undertaken in 2018. This is indicative of drivers having left the trade, and that whilst current licensed PHC numbers sit slightly below the existing lower limit of 3,195, the low driver to vehicle ratio means that the number of active vehicles at any given time is likely to be lower than when the current PHC limits were set;
- The feedback from the trade is that there appears to be an industry-wide issue of a lack of drivers to service the demand, with some operators stating that this is the primary issue rather than the number of vehicles;
- The stakeholder consultation feedback indicated that 60% of respondents believed there not to be adequate PHC services, with a perception that there are not enough drivers/vehicles to service demand;
- The feedback from the public attitude surveys indicates that a higher proportion of users reported having experienced issues when obtaining a PHC in the last 12 months compared to in 2018, with common issues stated including vehicles not turning up and no vehicles being available, particularly during periods of peak demand;

8.4.3 There is evidence to suggest that the under provision is not linked to the existing PHC cap however, as licensed vehicle numbers are currently below the lower limit and appear to be continuing to decline. Based on the latest data from January 2023, an additional 19 vehicles could be licensed before the existing lower limit is reached.

8.4.4 However, given that driver to vehicle ratios are around 1.04, much lower than was recorded in the previous study in 2018 (1.34), increasing licensed vehicles by 19 is only likely to result in the recruitment of an additional 20 drivers, as the trend within the PHC trade is for vehicles to be owner operated. This is unlikely to have a significant impact on the overall availability of PHCs, therefore it is considered prudent to increase the existing PHC limit to encourage the recruitment of additional drivers in light of these lower ratios, which also appear to be reflected nationally.

8.4.5 The 2018 study determined that applying a limit on PHC vehicles at the current level of licences (3,759) was unlikely to have a detrimental impact on customer service and choice at the present time. Further, overall PHC operations would likely be able to accommodate a reduction in PHC licences of 15% (3,195) without impacting on the overall balance of supply and demand in GCC.

8.4.6 In the current climate and given the reduction in driver ratios, it is considered that the previously applied 15% reduction in licences should be relaxed and amended to 10%. This would increase the limit on PHC vehicle licences to 3,383 and permit the licensing of an additional 188 vehicles compared to the current lower limit. This could result in the recruitment of an additional 196 drivers into the trade based on the current driver to vehicle ratio of 1.04.

8.4.7 It should be noted that increasing the lower limit to 3,383 may not have an impact on vehicle and driver numbers going forwards without other measures to encourage drivers into the trade, especially given that the existing number of licensed vehicles is below the lower limit, however the increase would provide some headroom for the granting of additional driver and vehicle licences to enable an increase supply should market forces dictate this.

8.4.8 It is acknowledged that whilst there was some difference of opinion, feedback from the trade generally suggests that the primary issue is a lack of drivers rather than a lack of vehicles, but increasing the limit may assist in increasing the number of drivers entering the trade.

8.4.9 It is considered that there is no current evidence to support increasing the limit to 3,759 as this was previously found to represent an overprovision. It is recommended that the cap is reviewed in three years, and if considered necessary to undertake an interim review in 12 months. This interim review could be done via a review of driver and vehicle license numbers at that time, and an abridged version of the public attitude survey in order to obtain key data to support the overprovision tests.

9. STUDY SUMMARY AND RECOMMENDATIONS

9.1 Taxi Unmet Demand Assessment

9.1.1 The analysis from the observational surveys of taxi ranks indicate that for 90.2% of the time, the balance of supply and demand for taxis in GCC is either at equilibrium (72.6%) or in a state of excess supply (17.6%). This represents a notable reduction in the proportion of time spent spend in excess supply compared to the previous study undertaken in 2018. They also indicate that the periods of excess demand for taxis (9.9%) largely occur during the weekend evening and night-time periods associated with the Glasgow night-time economy.

9.1.2 To determine unmet demand, the Index of Significant Unmet Demand (ISUD) has been used an indicator of the level of unmet demand, where values over 80 are generally considered to indicate that there is significant unmet demand for Taxis. For GCC it is concluded that the representative value of ISUD is 108.22, indicating that there is a significant unmet demand for taxis within the authority.

9.1.3 It should be noted that the ISUD is sensitive to the Latent Demand Factor (LDF), and an LDF of 1.0 would result in an ISUD of 77.41, however this is considered unlikely, and an LDF of 1.4 as derived from the public attitude surveys is considered the most likely scenario.

9.1.4 This aligns with the observation surveys, which indicate an insufficient number of taxis to service demand during the peak periods, and the findings of the public attitude surveys and stakeholder consultation, which found a high proportion of users reporting issues in obtaining taxis, especially during peak periods.

9.1.5 It is considered that there is a significant unmet demand for taxis in the GCC licensing area, but there is evidence that this is a result of a lack of taxi drivers as opposed to a lack of taxis. The number of licensed taxis is largely consistent with when the cap was last reviewed in 2018 and when there was no significant unmet demand, but the number of licensed drivers has reduced by approximately 29%, which is expected to have contributed to a reduction in the number of taxis in service at any given time.

9.1.6 It is therefore considered that there is no strong evidence for the removal or amendment of the existing upper cap, however it is recommended that the previous lower limit of 1,278 is removed in light of the reduction in driver numbers and to ensure that vehicle numbers are managed at current and historical levels.

9.1.7 Emphasis should however be put on encouraging more drivers into the trade to reduce the levels of significant unmet demand, and driver numbers should be subject to continuous monitoring.

> ***Recommendation:*** *Taxi licence numbers should be managed to a limit of 1,420, but emphasis should be placed on encouraging more drivers into the trade to increase supply and reduce unmet demand.*

9.2 Private Hire Car Overprovision Assessment

9.2.1 From an assessment of PHC demand in the GCC locality utilising a range of information sources it is considered that, in the context of overall demand in the area, there is evidence to suggest that a slight under provision of PHC supply exists.

9.2.2 There is evidence to suggest that the under provision is not linked to the existing PHC cap however, as licensed vehicle numbers are currently below the lower limit and appear to be continuing to decline. Both licensed vehicle and driver numbers have reduced significantly, most notably over the last year, and the driver to vehicle ratios are significantly lower (1.04) than when the previous study was undertaken in 2018 (1.34). This means that the number of active vehicles at any given time is likely to be lower than when the current PHC limits were set.

9.2.3 Given the low driver to vehicle ratios, and the trend within the PHC trade for vehicles to be owner operated, it is considered that increasing licensed vehicles to the current lower limit of 3,195 would not result in the recruitment of a sufficient number of additional drivers to address the under provision. It is therefore considered prudent to increase the existing PHC limit to encourage the recruitment of additional drivers into the trade.

9.2.4 The previous study determined that PHC operations would likely be able to accommodate a reduction in PHC licences of 15% without impacting on the overall balance of supply and demand in GCC. In the current climate and given the reduction in driver ratios, it is considered that the previously applied 15% reduction in licences should be relaxed and amended to 10%. This would increase the limit on PHC vehicle licences to 3,383 and permit the licensing of an additional 188 vehicles compared to the current lower limit. This could result in the recruitment of an additional 196 drivers into the trade based on the current driver to vehicle ratio of 1.04.

9.2.5 It should be noted that increasing the lower limit to 3,383 may not have an impact on vehicle and driver numbers going forwards without other measures to encourage drivers into the trade, especially given that the existing number of licensed vehicles is below the lower limit, however the increase would provide some headroom for the granting of additional driver and vehicle licences to enable an increase supply.

9.2.6 It is considered that there is no current evidence to support increasing the limit to 3,759 as this was previously found to represent an overprovision, although the cap should be reviewed again in three years.

Recommendation: *GCC should amend its policy of limiting PHC licence numbers pursuant to Section 10 (3A, 3B and 3C) of the 1982 Act and the granting of licences should be managed to a limit of 3,383.*

Emphasis should also be placed on encouraging more drivers into the trade to increase supply and address evidence of PHC under provision.

GCC should ensure that regular, routine monitoring of PHC operations and services is carried out at a minimum three-year interval and at the same time as their review of taxi unmet demand.

9.2.7 It is recommended that the cap is reviewed in three years, and if considered necessary to undertake an interim review in 12 months. This interim review could be done via a review of driver and vehicle license numbers at that time, and an abridged version of the public attitude survey in order to obtain key data to support the overprovision tests.

9.2.8 It is also recommended that the number of both Taxi and PHC vehicle and driver licences is reviewed by GCC on a quarterly basis in order to ensure that trends can be monitored in the future and that data is available at frequent intervals. This could include the number of new/renewed licences issued during each quarter in order to track whether new drivers are entering the trade.

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