



Southend-on-Sea
Hackney Carriage Unmet Demand Survey
May 2019

Executive Summary

This Hackney Carriage unmet demand survey has been undertaken on behalf of Southend-on-Sea Borough Council following the guidance of the April 2010 DfT Best Practice Guidance document, and all relevant case history in regard to unmet demand. This Executive Summary draws together key points from the main report that are needed to allow a committee to determine from the facts presented their current position in regard to the policy of limiting hackney carriage vehicle licences according to Section 16 of the 1985 Transport Act. It is a summary of the main report which follows and should not be relied upon solely to justify any decisions of a committee, but must be read in conjunction with the full report below.

Hackney carriage policy sees a limit which has been retained since 1976 but with regular testing and issue of plates where necessary. The result has been equal growth in both the limited (hackney carriage) and non-limited (private hire) parts of the licensed vehicle trade – adequate evidence that the limit policy is in tune with market forces.

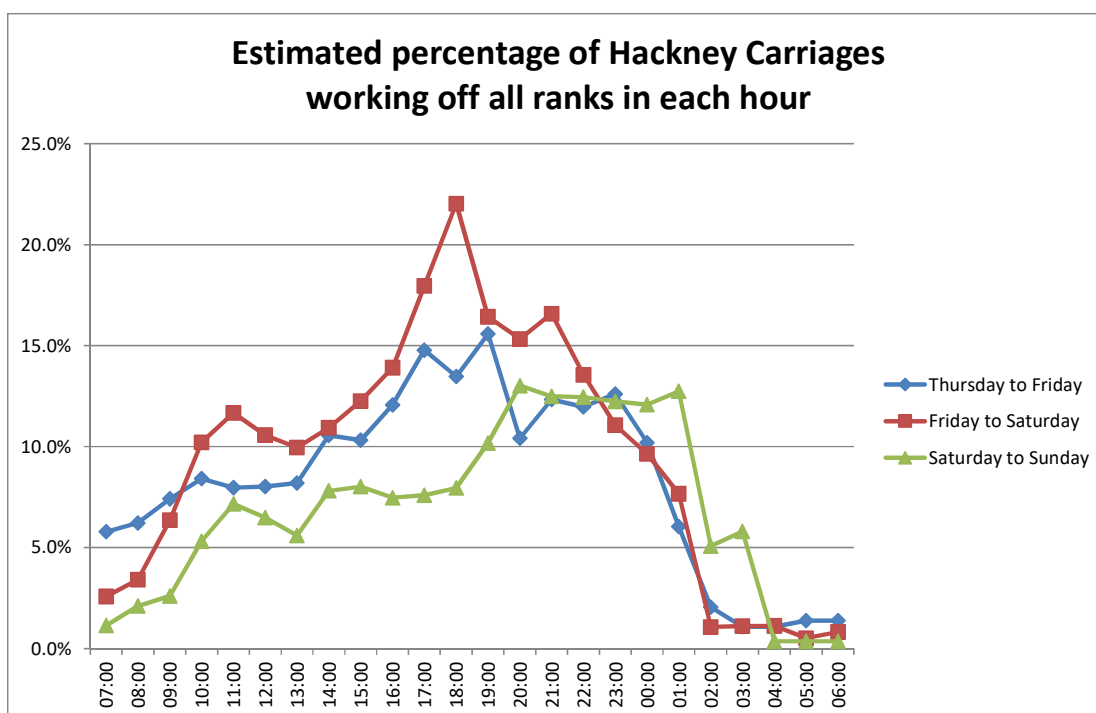
The licensed vehicle fleet currently sees provision of wheelchair accessible vehicles focussed on the hackney carriage fleet, but accessible by a wide range of methods since most are allied to two principal radio operators. Some hackney carriages remain independent but in general people in the area tend not to distinguish between the two parts of the trade as significantly as can occur in other areas. This is a benefit to the public.

372 hours of rank operation were observed at the 11 main active ranks in the area, over three days from Thursday morning through to Sunday morning. The volume of hires over the three days of observation are presented below.

All 3 days					
Rank location	Total Hackney Carriages departing the ranks empty	Total Hackney Carriages departing the ranks with passengers	Total Hackney Carriages departing the ranks	Total passengers departing the ranks	Average passengers per Hackney Carriage
Total for all locations	1484	3665	4831	5106	1.4
Heygate Avenue	223	445	668	636	1.4
Chalkwell Station	68	88	156	105	1.2
Chichester Road	1	2	3	3	1.5
Ditton Court Road	313	272	585	351	1.3
Leigh on Sea Station	191	1025	1216	1261	1.2
London Road Leigh	19	45	64	93	2.1
London Road	143	1131	1274	1652	1.5
Southchurch Avenue	94	16	109	26	1.6
Cliffdown Road (Southend Cen	36	66	102	110	1.7
Victoria Station	47	111	158	137	1.2
University Hospital	30	464	496	732	1.6

Around 90% of Hackney Carriages subscribe to a booking circuit, with one of the main operators. Most Hackney Carriage hires are pre-booked, by telephone or mobile app. This feature of the Hackney Carriage trade is reflected in the fact that 31% of Hackney Carriages observed at the taxi ranks, left the ranks empty. The majority of these empty departures were likely to be to pick up a hire which had been pre-booked.

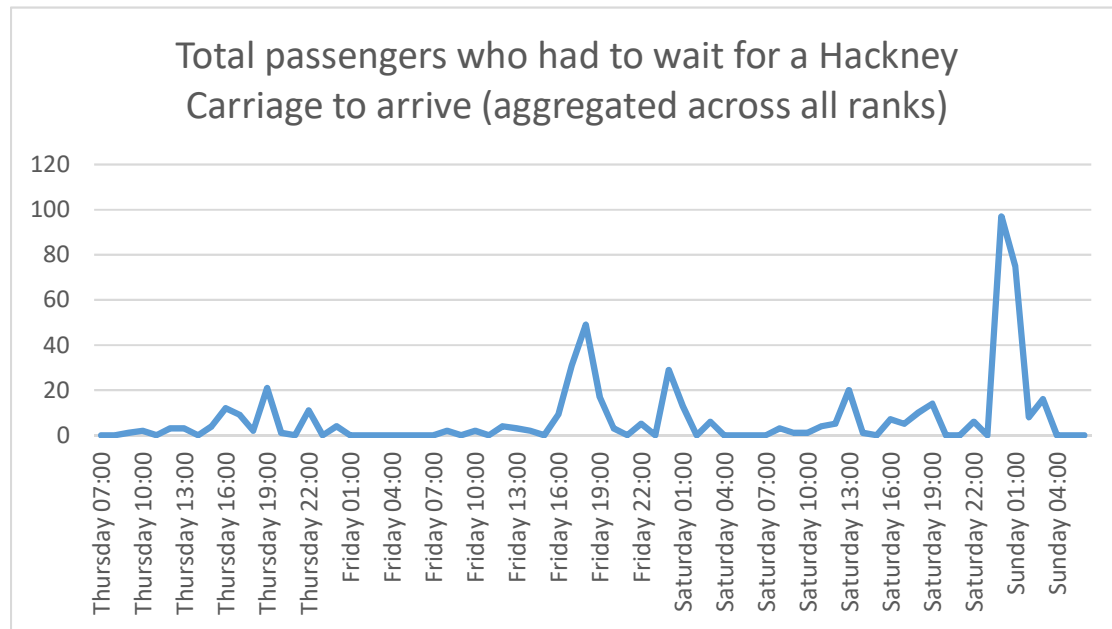
The proportion of the Hackney Carriage fleet which was observed working from the ranks each hour is presented in the following figure.



The proportion of Hackney Carriages working off the ranks is relatively low and reflects the fact that most Hackney Carriages earn most of their income from pre-booked hires, rather than from rank hires.

Passenger waiting occurred from time to time throughout the day on each day surveyed and at night.

A profile of the number of waiting passengers is presented below.



The total number of waiting passengers was 521 passengers (10.2% of all passengers). during the two highest peak periods of passenger waiting from 17:00 to 19:00 hours on Friday and from midnight on Saturday night to 02:00 on Sunday morning, 252 passengers had to wait for a Hackney Carriage to arrive at a rank. This equates to 48% of all waiting passengers had to wait during these four hours. The passenger waiting on Friday from 17:00 to 19:00 hours was largely concentrated on railway station ranks, when the number of passengers from arriving trains exceeded available capacity at the ranks for brief periods. On Saturday night, waiting was concentrated at the London Road rank. Average wait time per waiting passenger was below 5 minutes.

The number of waiting passengers and the duration of waiting is taken into account when assessing whether the level of unmet demand is significant. A calculation was undertaken, using rank activity data and evidence from public consultation, to determine the Index of Significance of Unmet Demand (ISUD). Where the index value is below 80, this is taken as a good indicator that the level of unmet demand is below the level which is deemed to be significant. The result of the ISUD calculation for Southend on Sea was 64.9. Taking this value and other background factors into account, the

findings of this study are the there is **no unmet demand which is significant**.

The number of hackney carriages licensed by Southend on Sea is higher than that needed to service the rank based demand. Consequently, many of the Hackney Carriages rely on a combination of both rank based and pre-booked hires, to generate sufficient income. The level of demand at the ranks is also presumably influenced by the availability of Hackney Carriages to be pre-booked to pick up at a more convenient location for the passengers. i.e. if it took longer to wait for a pick up from a location not at a rank, then more passengers may go to the ranks to hire a Hackney Carriage.

The balance between those Hackney Carriages which work independently of booking circuits and those which subscribe to booking circuits can be sensitive to changes. If the number of Hackney Carriages were to increase, then it is likely that the majority of additional vehicles would follow the prevailing current practice and join a booking circuit and work part of the time from the ranks. If competition from vehicles licensed by other authorities were to increase, this would tend to reduce the number of pre-booked hires undertaken by Hackney Carriages, by diluting demand amongst more vehicles. This, in turn, could result in increased attendance at ranks and increased competition at ranks. Such increased competition, either from Southend Hackney Carriages, or from out of area licensed vehicles, could, in turn, lead to more independent drivers joining a booking circuit to boost earnings. If more of the fleet were reliant on booking circuits, chasing fewer hires, then at peak rank demand times, there could be fewer Hackney Carriages available at the ranks, as many of them may be primarily engaged on pre-booked hires.

Future changes could affect availability of hackney carriages at the ranks and increase incidences and duration of passenger waiting at the ranks. If passenger waiting were to increase, then increasing the number of Hackney Carriages, to an already over provided fleet, would tend to exacerbate the issue of provision at peak times, for the reasons discussed earlier. The counter intuitive result of an increase in Hackney Carriages under such circumstances, would be to decrease the available capacity at ranks at key times.

If, the situation should arise that more Hackney Carriages are required to address increased passenger waiting. Rather than increase the number of Hackney Carriages in the fleet, alternative measures would be more likely to succeed. The most effective means to address excessive passenger waiting at ranks would be to implement measures which effectively incentivise some Hackney Carriages to service ranks, rather than service

pre-booked hires. There are a range of measures which could be explored, should the circumstances arise. Currently there is no need to explore any such measures.

It is recommended that the number of Hackney Carriages in the fleet is not increased at this point in time.

It is further recommended that conditions at the ranks during periods of peak late night demand are monitored from time to time, to check that incidences and durations of wait times do not significantly increase.

If it is felt, at some future point, that incidences and duration of passenger waiting at the ranks have become excessive, then measures to encourage higher levels of attendance at the ranks by Hackney Carriages from within the existing licensed fleet, should be explored and developed, in the first instance.

There is some evidence reported from some quarters, that wheelchair users face additional difficulties obtaining service from wheelchair accessible licensed vehicles. This issue would bear further investigation to verify that such an issue is commonplace. If, following further investigation, there is further supporting evidence to suggest that wheelchair users are being provided with a poorer level of service than other users, then measures should be developed to ensure that wheelchair users may access the same level of service as able bodied users. With a third of the Hackney Carriage fleet comprising wheelchair accessible vehicles, there seems little to justify any lower level of service provision.

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1 General introduction and background

Southend-on-Sea is responsible for the licensing of hackney carriage and private hire vehicles operating within the Council area and is the licensing authority for this complete area. Further details of the local application of Section 16 of the 1985 Transport Act with regard to limiting hackney carriage vehicle numbers is provided in further Chapters of this report. Hackney carriage vehicle licences are the only part of licensing where such a stipulation occurs and there is no legal means by which either private hire vehicle numbers, private hire or hackney carriage driver numbers, or the number of private hire operators can be limited.

This review of current policy is based on the Best Practice Guidance produced by the Department for Transport in April 2010 (BPG). It seeks to provide information to the licensing authority to meet section 16 of the Transport Act 1985 “that the grant of a hackney carriage vehicle licence may be refused if, but only if, the licensing authority is satisfied that there is no significant demand for the services of hackney carriages within its local area, which is unmet.” This terminology is typically shortened to “no SUD”.

Current hackney carriage, private hire and operator licensing is undertaken within the legal frameworks first set by the Town Police Clauses Act 1847 (TPCA), amended and supplemented by various following legislation including the Transport Act 1985, Section 16 in regard to hackney carriage vehicle limits, and by the Local Government Miscellaneous Provisions Act 1976 with reference to private hire vehicles and operations. This latter Act saw application of regulation to the then growing private hire sector which had not been previously part of the TPCA. Many of the aspects of these laws have been tested and refined by other more recent legislation and more importantly through case law.

Beyond legislation, the experience of the person in the street tends to see both hackney carriage and private hire vehicles both as ‘taxis’ – a term we will try for the sake of clarity to use only in its generic sense within the report. We will use the term ‘licensed vehicle’ to refer to both hackney carriage and private hire.

The legislation around licensed vehicles and their drivers has been the subject of many attempts at review. The limiting of hackney carriage vehicle numbers has been a particular concern as it is often considered to be a restrictive practice and against natural economic trends. The current BPG in fact says “most local licensing authorities do not impose quantity restrictions, the Department regards that as best practice”. The three most recent reviews were by the Office of Fair Trading in 2003, through the production of the BPG in 2010, and the Law Commission review which published its results in 2014. None of these resulted in any material change to the legislation involved in licensing.

At the time of writing this report an All Party Parliamentary Group is considering taxi policy matters and has produced interim results (July 2017), but the main results are still some way in the future. Other groups have provided comment but the upshot remains no change in legislation from that already stated above.

With respect to the principal subject of this survey, local authorities retain the right to restrict the number of hackney carriage vehicle licenses. The Law Commission conclusion included retention of the power to limit hackney carriage vehicle numbers but utilizing a public interest test determined by the Secretary of State. It also suggested the three- year horizon also be used for rank reviews and accessibility reviews. However, there is currently no expected date either for publication of the Government response to the Law Commission, nor indeed any plans for revisions to legislation.

A more recent restriction, often applied to areas where there is no 'quantity' control felt to exist per-se, is that of 'quality control'. This is often a pseudonym for a restriction that any new hackney carriage vehicle licence must be for a wheel chair accessible vehicle, of various kinds as determined locally. In many places this implies a restricted number of saloon style hackney carriage licences are available, which often are given 'grandfather' rights to remain as saloon style.

Within this quality restriction, there are various levels of strength of the types of vehicles allowed. The tightest restriction, now only retained by a few authorities only allows 'London' style wheel chair accessible vehicles, restricted to those with a 25-foot turning circle, and at the present time principally the LTI Tx, the Mercedes Vito special edition with steerable rear axle, and the Metrocab (no longer produced). Others allow a wider range of van style conversions in their wheel chair accessible fleet, whilst some go as far as also allowing rear-loading conversions. Given the additional price of these vehicles, this often implies a restriction on entry to the hackney carriage trade.

Some authorities do not allow vehicles which appear to be hackney carriage, i.e. mainly the London style vehicles, to be within the private hire fleet, whilst others do allow wheel chair vehicles. The most usual method of distinguishing between hackney carriages and private hire is a 'Taxi' roof sign on the vehicle, although again some areas do allow roof signs on private hire as long as they do not say 'Taxi', some turn those signs at right angles, whilst others apply liveries, mainly to hackney carriage fleets, but sometimes also to private hire fleets.

After introduction of the 1985 Transport Act, Leeds University Institute for Transport Studies developed a tool by which unmet demand could be evaluated and a determination made if this was significant or not. The tool was taken forward and developed as more studies were

undertaken. Over time this 'index of significance of unmet demand' (ISUD) became accepted as an industry standard tool to be used for this purpose. Some revisions have been made following the few but specific court cases where various parties have challenged the policy of retaining a limit.

Some of the application has differed between Scottish and English authority's. This is mainly due to some court cases in Scotland taking interpretation of the duty of the licensing authority further than is usual in England and Wales, requiring current knowledge of the status of unmet demand at all times, rather than just at the snap-shot taken every three years. However, the three year survey horizon has become generally accepted given the advice of the BPG and most locations that review regularly do within that timescale.

The DfT asked in writing in 2004 for all licensing authorities with quantity restrictions to review them, publish their justification by March 2005, and then review at least every three years since then. In due course, this led to a summary of the government guidance which was last updated in England and Wales in 2010 (but more recently in Scotland).

The BPG in 2010 also provided additional suggestions of how these surveys should be undertaken, albeit in general but fairly extensive terms. A key encouragement within the BPG is that "an interval of three years is commonly regarded as the maximum reasonable period between surveys". BPG suggests key points in consideration are passenger waiting times at ranks, for street hailings and telephone bookings, latent and peaked demand, wide consultation and publication of "all the evidence gathered".

The most recent changes in legislation regarding licensed vehicles have been enactment of the parts of the Equality Act related to guidance dogs (sections 168 to 171, enacted in October 2010), the two clauses of the Deregulation Act which were successful in proceeding, relating to length of period each license covers and to allowing operators to transfer work across borders (enacted in October 2015), and most recently enactment of Sections 165 and 167 of the Equality Act, albeit on a permissive basis (see below).

In November 2016, the DfT undertook a consultation regarding enacting Sections 167 and 165 of the Equality Act. These allow for all vehicles capable of carrying a wheel chair to be placed on a list by the local council (section 167). Any driver using a vehicle on this list then has a duty under section 165 to:

- Carry the passenger while in the wheel chair
- Not make any additional charge for doing so
- If the passenger chooses to sit in a passenger seat to carry the wheel chair

- To take such steps as are necessary to ensure that the passenger is carried in safety and reasonable comfort
- To give the passenger such mobility assistance as is reasonably required

This was enacted from April 2017. There remains no confirmation of any timetable for instigating either the remainder of the Equality Act or the Law Commission recommendations, or for the update of the BPG.

In respect to case law impinging on unmet demand, the two most recent cases were in 1987 and 2002. The first case (*R v Great Yarmouth*) concluded authorities must consider the view of significant unmet demand as a whole, not condescending to detailed consideration of the position in every limited area, i.e. to consider significance of unmet demand over the area as a whole.

R v Castle Point considered the issue of latent, or preferably termed, suppressed demand consideration. This clarified that this element relates only to the element which is measurable. Measurable suppressed demand includes inappropriately met demand (taken by private hire vehicles in situations legally hackney carriage opportunities) or those forced to use less satisfactory methods to get home (principally walking, i.e. those observed to walk away from rank locations).

In general, industry standards suggest (but specifically do not mandate in any way) that the determination of conclusions about significance of unmet demand should take into account the practicability of improving the standard of service through the increase of supply of vehicles. It is also felt important to have consistent treatment of authorities as well as for the same authority over time, although apart from the general guidance of the BPG there is no clear stipulations as to what this means in reality, and certainly no mandatory nor significant court guidance in this regard.

At the present time, there is an active All Party Parliamentary Group considering issues regarding hackney carriage and private hire licensing that are considered to be current and critical. Their discussions are ongoing. As is usual in a diverse industry, other formal and informal groups continue to suggest potential changes to licensing that might be applied – but none of these, however strongly presented, have any legal weight and must be taken fully in context. This includes various changes arising from need to consider pollution and air quality issues although some elements of this will legally apply, but at a much higher level than specific licensing legislation, which may imply clashes with established legislation and more so present practice.

In conclusion, the present legislation in England and Wales sees public fare-paying passenger carrying vehicles firstly split by passenger capacity. All vehicles able to carry nine or more passengers are dealt

with under national public service vehicle licensing. Local licensing authorities only have jurisdiction over vehicles carrying eight or less passengers. Further, the jurisdiction focusses on the vehicles, drivers and operators but rarely extends to the physical infrastructure these use (principally ranks).

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

Drivers can either be split between ability to drive either hackney carriage or private hire, or be 'dual', allowed to drive either kind of vehicle. Whilst a private hire driver can only take bookings via an operator, with the 'triple-lock' applying that the vehicle, driver and operator must all be with the same authority, a hackney carriage driver can accept bookings on-street or by phone without the same stipulation required for private hire.

Recent legislation needing clarification has some operators believing they can use vehicles from any authority as long as they are legally licensed as private hire. At first, under the 'Stockton' case, this was hackney carriages operating as private hire in other areas (cross-border hiring). More recently, under the Deregulation Act, private hire companies are able to subcontract bookings to other companies in other areas if they are unable to fulfil their booking, but the interpretation of this has become quite wide.

The 'triple lock' licensing rule has also become accepted. A vehicle, driver and operator must all be under the same licensing authority to provide full protection to the passenger. However, it is also accepted that a customer can call any private hire company anywhere to provide their transport although many would not realise that if there was an issue it would be hard for a local authority to follow this up unless the triple lock was in place by the vehicle used and was for the area the customer contacted licensing.

Further, introduction of recent methods of obtaining vehicles, principally using 'apps' on mobile phones have also led to confusion as to how 'apps' usage sits with present legislation.

All these matters can impact on hackney carriage services, their usage, and therefore on unmet demand and its significance.

2 Local background and context

Licensing statistics

The authority has a current population of 181,808 using the 2017 estimates currently available from the 2011 census.

All licensing authorities have full powers over licensing the vehicles, drivers and operators serving people within their area. Southend-on-Sea has chosen to utilize its power to limit hackney carriage vehicle numbers, and as far as we are aware has done so since 1976.

By drawing together published statistics from both the Department for Transport and the National Private Hire Association, supplemented by private information from the licensing authority records, recent trends in vehicle, driver and operator numbers can be observed.

Table 1 - Licensing Statistics from 1994 to date

	WAV Hackney Carriage	Other Hackney Carriage	Total Hackney Carriages	WAV Private Hire Vehicles	Other Private Hire Vehicles	Total Private Hire Vehicles	Total Licensed Vehicles	HC Drivers	PH Drivers	Dual Drivers	Total Drivers	Operators
1994	0	183	183	Unknown	Unknown	Unknown	n/k	600			600	
1997	9	186	195	0	108	108	303	346	114	0	460	
1999	8	8	196	0	120	120	316	445	200		645	17
2001	27	185	212	0	212	212	424	429			429	20
2004	19	208	227	0	200	200	427	445	200		645	
2005	24	203	227	0	200	200	427	445	229	0	674	26
2007	30	210	240	0	216	216	356	445	229	0	674	26
2009	30	210	240	0	216	216	356	445	229	0	674	26
2010	35	241	276	0	181	181	457			Not collected		
2011	29	247	276	2	166	168	444	517	261	0	778	39
2012	29	247	276	0	179	179	455			Not collected		
2013	29	247	276	3	173	176	452	492	203	0	695	37
2014	32	244	276	1	199	200	476			Not collected		
2015	32	244	276	0	153	153	429	492	213	0	705	37
2017	91	185	276	3	154	157	433	0	0	610	610	33
2018	91	185	276	3	154	157	433	0	0	609	609	33
2019	92	184	276	Unknown	Unknown	151	427	0	0	609	609	33

Information is also available from these sources to show how the level of wheel chair accessible vehicles (WAV) has varied. It must be noted that in most cases the values for the private hire side tend to be much more approximate than those on the hackney carriage side, as there is no option to mandate for private hire being wheel chair accessible. In some areas, to strengthen the ability of the public to differentiate between the two parts of the licensed vehicle trade, licensing authorities might not allow any WAV in the private hire fleet at all.

Growth review

Since 1994 when DfT statistics were first published, Southend-on-Sea hackney carriage vehicle numbers have increased from 183 to the current level of 276, some 51% growth. This occurred with releases of licences in around 1999, 2001, 2005 and most recently 2009. Growth from 1997 is 42%.

From 1997 to 2019, private hire numbers have increased by 40% although numbers have fallen from the peak of 216 reported in 2009.

Overall licensed vehicle numbers are 41% up since 1997. An unusual feature of the licensed vehicle fleets in Southend is that both hackney carriages and private hire fleets have grown by similar proportions.

Since the last survey in 2015, the number of licensed vehicles which are licensed by Southend has remained relatively stable. The ratio of Hackney Carriages to private hire vehicles is unusual, insofar that the number of Hackney Carriages exceeds the number of private hire vehicles. This is unusual, but reflects a particular feature of the licensed vehicle trade in Southend which is dominated by a single operator which operates a booking circuit with only Hackney Carriages on the booking circuit.

Driver numbers have been remarkably stable since the last survey. This is a very positive sign as this is not the case in many other recently studied licensing authorities.

In terms of operators, the number has dropped since the last survey.

In general, the licensed vehicle trade in Southend appears to be relatively stable.

Vehicle Accessibility

The current proportion of WAV in the hackney carriage fleet is 33%. This is below the current English average (excluding London) of 42% (though this does include all other 100% WAV authorities). When we consider authorities which have some WAV provision below 100%, the average provision is 22%. In terms of authorities which have some WAV, but less than 100% WAV, Southend on Sea ranks 57 out of 215 authorities.

Driver ratios

A change since the last unmet demand survey is that all drivers are now licensed to drive both Hackney Carriages and private hire vehicles. The ratio of drivers to licensed vehicles (both HC and PHV) is 1.43 drivers per vehicle. This figure suggests that some double shifting may occur.

Policy reviews

Southend-on-Sea undertakes regular review of its policy to limit hackney carriage vehicle numbers in line with the BPG. The previous surveys were in 2015 and 2012.

Comparison with other authorities in the region

The proportion of Hackney Carriages and Private Hire Vehicles, per 1,000 population (mid 2017 values), for all authorities in the East of England, is presented in Table 2 and Figure 1. Authorities are grouped by those which limit the number of Hackney Carriages and those which do not. These groups are each ordered in terms of increasing proportions of total licenced vehicles per 1,000 population. Southend on Sea has a relatively high proportion of Hackney Carriages per 1,000

population, compared with other authority areas which apply a limit. However, it does not have the highest proportion amongst these areas. The proportion of Hackney Carriages is higher in Southend on Sea, than the ratios generally observed in areas which do not limit.

Of all licensing areas, including those which do not limit, Southend on Sea is ranked 34 out of 46, in terms of increasing provision of Hackney Carriages per 1,000 population. This indicates that the level of Hackney Carriage provision is higher than the average for the region.

In terms of all licensed vehicles (both Hackney Carriages and private hire vehicles) the proportion of licensed vehicles per 1,000 population is ranked 19 out of 46.

Of the authority areas which limit the number of Hackney Carriages, the proportion of private hire vehicles is the lowest of the 9 authorities.

Table 2 - Proportions of licenced vehicles per 1,000 population

Licensing Area	Mid 2017 population estimate	Hackney Carriages	Private Hire Vehicles	Total licenced vehicles	Hackney Carriages per 1,000 population	Private Hire Vehicles per 1,000 population	Total licenced vehicles per 1,000 population
Braintree [Limited]	151,677	84	170	254	0.6	1.1	1.7
Southend-on-Sea [Limited]	181,808	276	157	433	1.5	0.9	2.4
Stevenage [Limited]	87,739	100	182	282	1.1	2.1	3.2
Bedford [Limited]	169,912	70	554	624	0.4	3.3	3.7
Harlow [Limited]	86,191	63	258	321	0.7	3.0	3.7
Colchester [Limited]	190,098	131	580	711	0.7	3.1	3.7
Cambridge [Limited]	124,919	323	146	469	2.6	1.2	3.8
Watford [Limited]	96,675	292	186	478	3.0	1.9	4.9
Luton [Limited]	214,658	170	945	1,115	0.8	4.4	5.2
Mid Suffolk [No Limit]	101,543	60	26	86	0.6	0.3	0.8
Maldon [No Limit]	63,975	75	6	81	1.2	0.1	1.3
Breckland [No Limit]	138,602	133	46	179	1.0	0.3	1.3
Fenland [No Limit]	100,776	113	39	152	1.1	0.4	1.5
Suffolk Coastal [No Limit]	129,016	36	162	198	0.3	1.3	1.5
Thurrock [No Limit]	170,394	89	186	275	0.5	1.1	1.6
King's Lynn and West Norfolk [No Limit]	151,945	87	162	249	0.6	1.1	1.6
East Cambridgeshire [No Limit]	88,858	113	35	148	1.3	0.4	1.7
Chelmsford [No Limit]	176,194	199	128	327	1.1	0.7	1.9
Babergh [No Limit]	90,794	52	127	179	0.6	1.4	2.0
North Hertfordshire [No Limit]	133,321	174	93	267	1.3	0.7	2.0
South Norfolk [No Limit]	135,471	199	74	273	1.5	0.5	2.0
Central Bedfordshire [No Limit]	280,030	223	355	578	0.8	1.3	2.1
East Hertfordshire [No Limit]	147,080	258	58	316	1.8	0.4	2.1
North Norfolk [No Limit]	104,067	168	65	233	1.6	0.6	2.2
Waveney [No Limit]	117,897	120	156	276	1.0	1.3	2.3
Tendring [No Limit]	144,705	306	33	339	2.1	0.2	2.3
Castle Point [No Limit]	89,814	131	93	224	1.5	1.0	2.5
Dacorum [No Limit]	153,316	224	170	394	1.5	1.1	2.6
Welwyn Hatfield [No Limit]	122,274	174	142	316	1.4	1.2	2.6
Broxbourne [No Limit]	96,762	216	38	254	2.2	0.4	2.6
Forest Heath [No Limit]	65,523	129	44	173	2.0	0.7	2.6
Basildon [No Limit]	184,479	180	317	497	1.0	1.7	2.7
Epping Forest [No Limit]	130,576	323	72	395	2.5	0.6	3.0
St Edmundsbury [No Limit]	113,725	71	333	404	0.6	2.9	3.6
Great Yarmouth [No Limit]	99,417	197	160	357	2.0	1.6	3.6
Brentwood [No Limit]	76,575	245	43	288	3.2	0.6	3.8
Norwich [No Limit]	140,353	153	383	536	1.1	2.7	3.8
Rochford [No Limit]	86,209	226	105	331	2.6	1.2	3.8
St Albans [No Limit]	147,095	334	236	570	2.3	1.6	3.9
Ipswich [No Limit]	138,480	169	372	541	1.2	2.7	3.9
Hertsmere [No Limit]	104,031	5	410	415	0.0	3.9	4.0
Huntingdonshire [No Limit]	176,979	158	596	754	0.9	3.4	4.3
Peterborough [No Limit]	198,914	134	738	872	0.7	3.7	4.4
Three Rivers [No Limit]	92,641	12	471	483	0.1	5.1	5.2
South Cambridgeshire [No Limit]	156,705	33	1,147	1,180	0.2	7.3	7.5
Uttlesford [No Limit]	87,684	75	1,843	1,918	0.9	21.0	21.9

Note: The abnormally high proportion of private hire vehicles in Uttlesford is attributed to two primary factors: A large proportion of private hire vehicles servicing demand at Stansted Airport which lies within the licensing authority boundary and a national operator for school contracts. Hence the level of provision is not directly related to the population within the area.

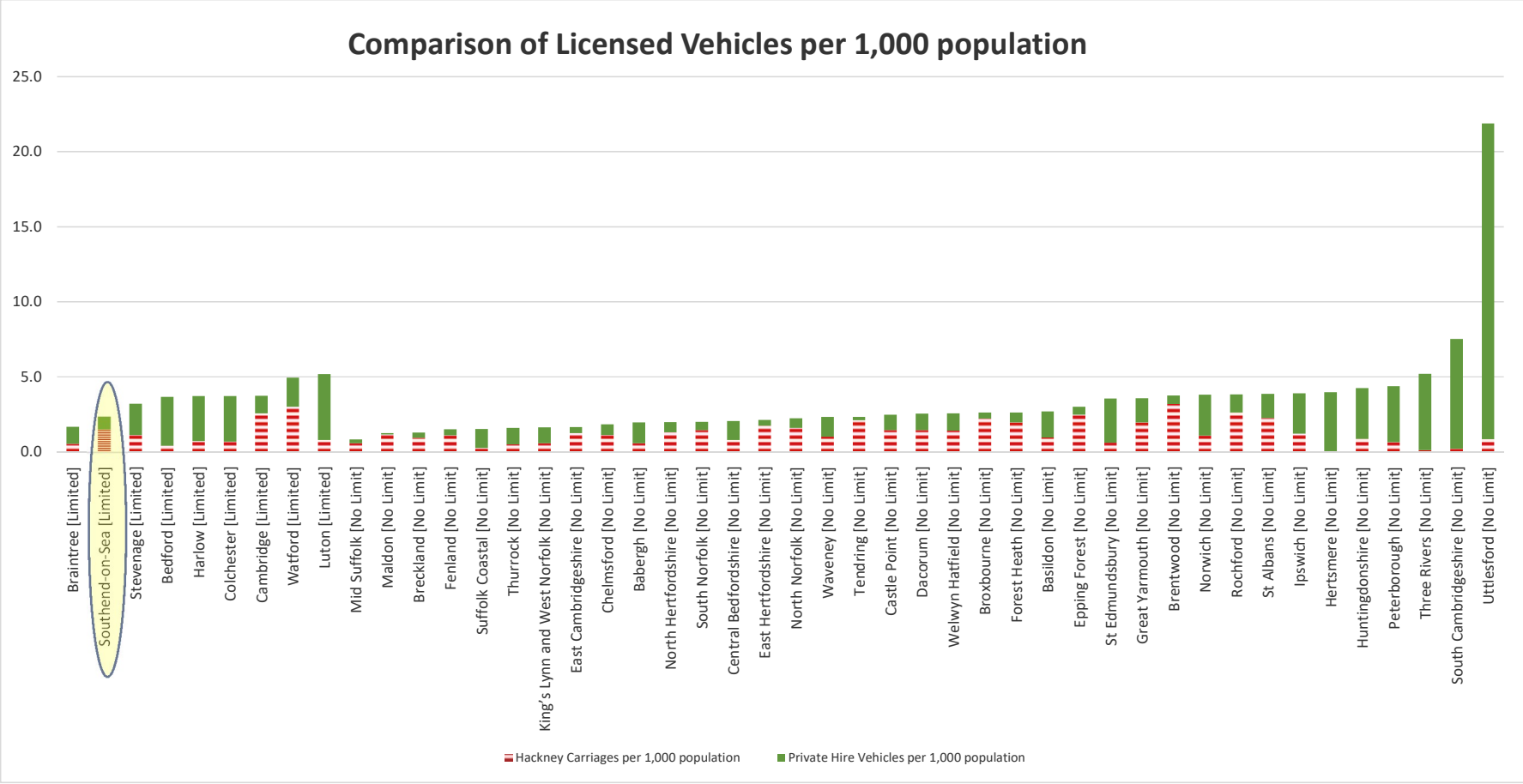


Figure 1 - Comparison of Licensed Vehicles per 1,000 population

Fares Comparison

Private Hire and Taxi Monthly magazine publish monthly league tables of the fares in Licensing Authorities in the UK. The Tariff 1 fares for a two mile journey (distance costs only) are compared and ranked. The lower the ranking number, the more expensive the journey, compared with other authorities. The May 2019 table (the latest available at the time of preparation of this report) indicated that the fares in Southend on Sea were ranked 119 out of 358 authorities listed, with a fare of £6.20. The mid ranked fare (rank 179) was £5.90. So fares in Southend on Sea appear to be higher than average.

In terms of national fares, the highest comparable fare (ranked 1) was £10.60 and the lowest (ranked 358) was £3.50.

Rail patronage

Several ranks in the Borough serve demand from railway stations. The level of passenger throughput at railway stations can vary in response to factors such as service changes, line openings and closures and local developments. The changes in passenger throughput at stations in the Borough are presented in the following figure.

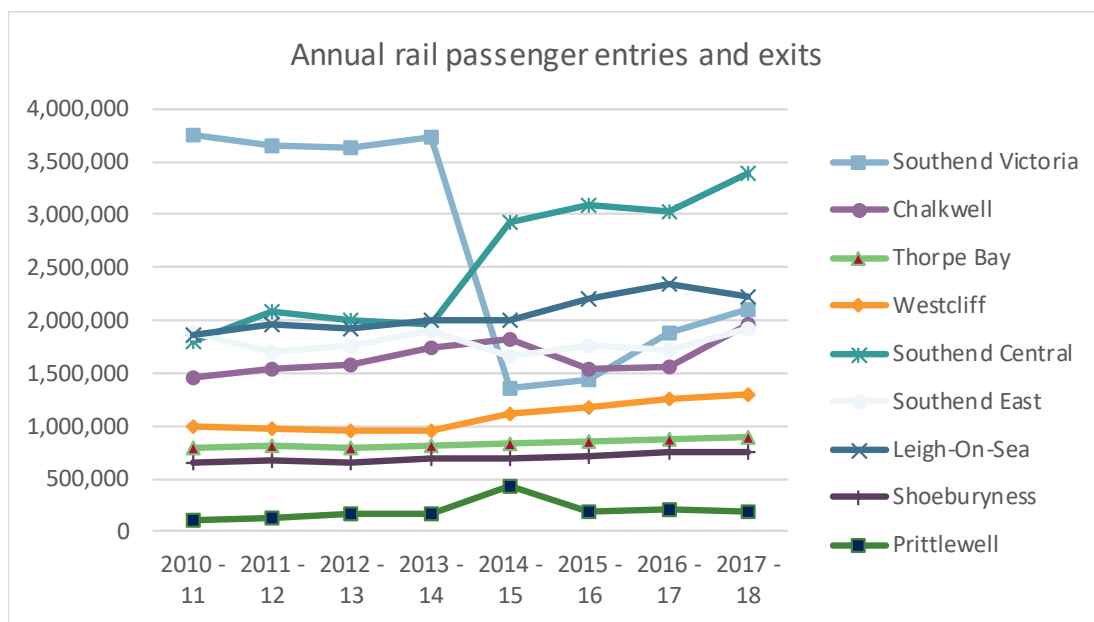


Figure 2 - Rail passenger volumes at Southend on Sea Railway Stations

Most of the stations have experienced growth in passenger numbers in recent years. A noticeable feature is the sharp drop in passenger numbers at Southend Victoria Station between 2013-14 and 2014-15. A sharp increase in passenger numbers was also experienced over the same period at Southend Central Station.

Southend Airport

Whilst Southend Airport is not within Southend on Sea Borough, the presence of the airport immediately beyond the authority boundary is likely to have some influence on the licensed vehicle trade within Southend on Sea. The passenger throughput at the airport has fluctuated in recent years and passenger forecasts vary, by source. Future passenger numbers are likely to be influenced by several factors, including overspill of demand linked to capacity constraints at other airports in the region.

Passenger numbers at the railway station at Southend Airport are a good analogue illustration of proportionate changes in passenger numbers using Southend Airport.

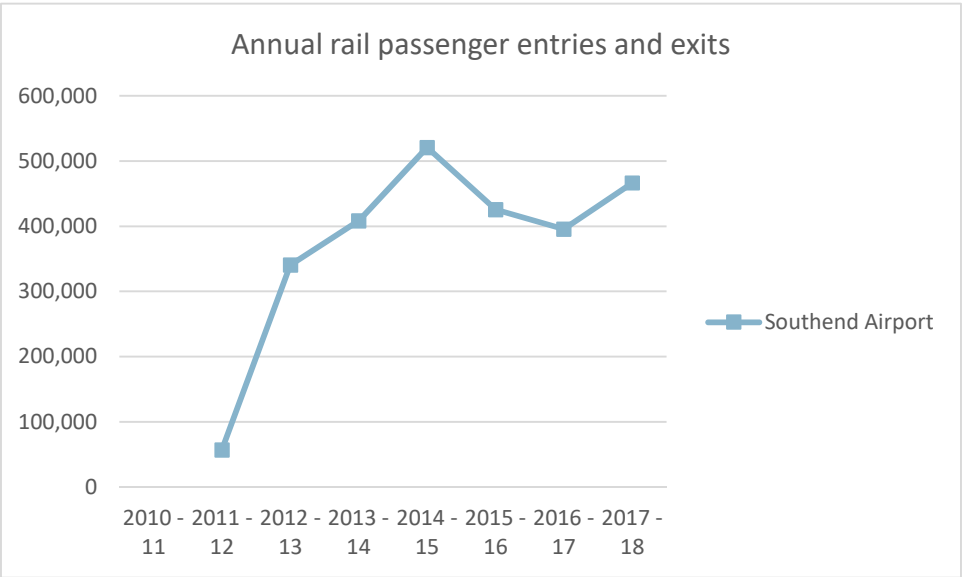


Figure 3 - Rail passenger volumes at Southend Airport Railway Station

Rail passenger numbers have grown in recent years but had fallen from the peak observed during 2014-15.

Air passenger volumes using Southend Airport are presented in the following figures, using Civil Aviation Authority Data.

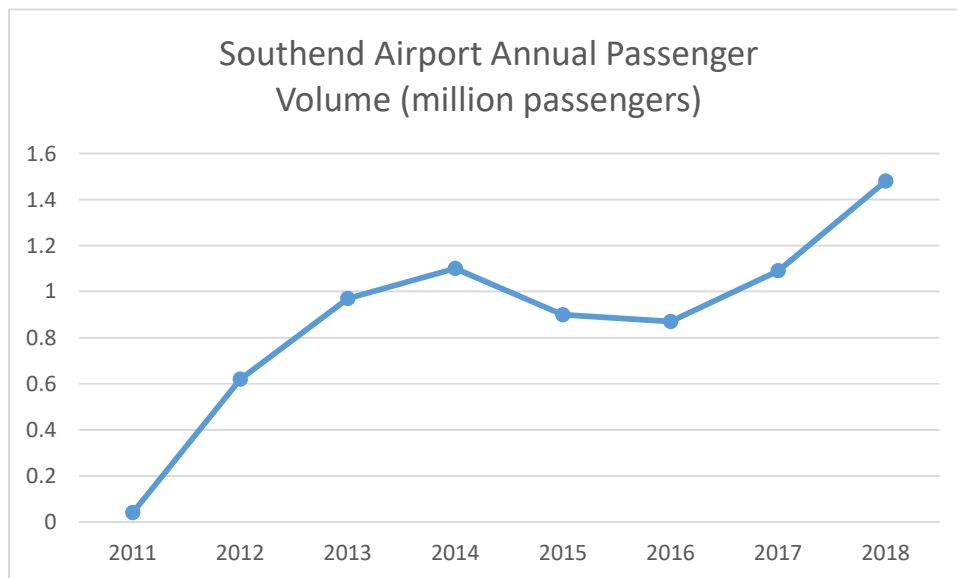


Figure 4 - Southend Airport Passenger Volumes

Air passenger proportionate growth follows a similar pattern to the rail passenger growth patterns.

3 Patent demand measurement (rank surveys)

Rank survey approach

The ranks thought to be currently active were selected for inclusion in the list of ranks to be surveyed for activity. A two stage approach was adopted. Cameras were installed at each of the ranks and activity was recorded over three days, from Thursday morning to Sunday morning. This ensured that a sample of activity from weekday day time, weekday night time and weekend day time and night time periods could be captured.

An initial analysis of the rank activity was undertaken to assess which periods were active. Each hour was classified as:

- No activity – No hires observed within the hour.
- Low activity – Up to two hires per hour observed within the hour
- Active – Three or more hires observed within the hour.

The classifications were then be used to choose hours to be fully processed. Using this approach increases the level of confidence in the activity profile assumed when processing the survey data.

The classification of activity at each rank is presented in the following tables.

Table 3 - Rank Activity Summary, Thursday - Friday

Rank Location	Chalkwell Street	Chichester Road	Diton Court Road	Heygate Avenue	Leigh on Sea Station	London Road	London Road Leigh	Southchurch Avenue	Tyler's Avenue	Cliffdown Road	University Hospital	Victoria Station
Hour Commencing												
07:00	Active	Low	Active	Low	Active	Active	No	Active	No	Low	Active	Active
08:00	Low	No	Active	Low	Active	Active	Low	Active	No	Low	Active	Active
09:00	Low	No	Active	Active	Active	Active	No	Active	No	Low	Active	Active
10:00	Active	No	Active	Active	Active	Active	No	Active	No	No	Active	Low
11:00	Active	No	Active	Active	Active	Active	Low	Active	No	No	Active	Active
12:00	Active	Low	Active	Active	Active	Active	Low	Low	No	No	Active	Low
13:00	Low	No	Low	Active	Active	Active	No	Low	No	No	Active	Low
14:00	No	No	Active	Active	Active	Active	No	Active	No	No	Active	Low
15:00	Low	No	Active	Active	Active	Active	No	Active	No	No	Active	Active
16:00	Active	No	Active	Active	Active	Active	No	Low	No	Low	Active	Low
17:00	Active	No	Active	Active	Active	Active	No	No	No	No	Active	Low
18:00	Active	No	Active	Active	Active	Active	No	Low	No	Low	Active	Active
19:00	Active	No	Active	Active	Active	Active	No	Active	Low	Low	Active	Active
20:00	Active	No	Active	Active	Active	Active	No	Low	No	Low	Active	Active
21:00	Active	No	Active	Active	Active	Active	Low	Active	No	Active	Active	Active
22:00	Active	No	Active	Active	Active	Active	No	Low	No	Active	Low	Active
23:00	Active	No	Active	Active	Active	Active	No	Active	No	Active	Low	Active
00:00	Active	No	Active	Active	Active	Active	No	Low	No	Active	Low	Active
01:00	Active	No	Active	Low	Active	Active	No	No	No	Low	No	Active
02:00	No	No	Low	Low	No	Active	No	No	No	No	No	Active
03:00	No	No	No	Low	No	Active	No	No	No	No	No	No
04:00	No	No	No	Low	Low	Low	No	Low	No	No	No	Low
05:00	No	No	No	No	Low	No	No	Low	No	No	No	No
06:00	No	No	Active	No	Active	No	No	Active	No	No	No	No

Table 4 - Rank Activity Summary, Friday - Saturday

Rank Location	Chalkwell Street	Chichester Road	Ditton Court Road	Heygate Avenue	Leigh on Sea Station	London Road	London Road Leigh	Southchurch Avenue	Tyler's Avenue 1	Tyler's Avenue 2 (Station)	University Hospital	Victoria Station
Hour Commencing												
07:00	Active	No	Active	Low	Active	Active	No	Active	No	No	Active	Low
08:00	Active	No	Active	Active	Active	Active	No	Active	No	No	Active	Low
09:00	No	Low	Active	Active	Active	Active	No	Active	No	No	Active	Low
10:00	Low	No	Active	Active	Active	Active	No	Active	No	No	Active	Low
11:00	No	No	Active	Active	Active	Active	No	Active	No	No	Active	Active
12:00	Low	No	Active	Active	Active	Active	No	Active	No	No	Active	Active
13:00	Low	No	Active	Active	Active	Active	Low	Active	No	No	Active	Active
14:00	Low	Low	Low	Active	Active	Active	No	Low	No	No	Active	Low
15:00	Low	No	Active	Active	Active	Active	No	No	No	No	Active	Low
16:00	Low	No	Active	Active	Active	Active	No	Low	No	No	Active	Active
17:00	Low	No	Active	Active	Active	Active	No	Low	No	No	Active	Low
18:00	Active	No	Active	Active	Active	Active	No	Low	No	No	Active	Active
19:00	Active	No	Active	Active	Active	Active	No	Active	No	Active	Active	Active
20:00	Active	No	Active	Active	Active	Active	Low	Active	No	Active	Active	Active
21:00	Active	No	Active	Active	Active	Active	Active	Active	Low	Active	Active	Active
22:00	Active	No	Active	Active	Active	Active	Active	Active	No	Active	Low	Active
23:00	Active	No	Active	Active	Active	Active	Active	No	No	Active	No	Active
00:00	Low	Low	Active	Active	Active	Active	Active	Low	No	Low	Low	Active
01:00	Low	No	No	Active	Active	Active	Active	Low	No	Low	Active	Active
02:00	No	No	No	Active	No	Active	No	No	No	No	No	Active
03:00	No	No	No	Active	No	Active	No	No	No	No	No	No
04:00	No	No	No	No	No	Active	No	No	No	No	No	No
05:00	No	No	Low	Low	No	Active	No	Low	No	No	No	No
06:00	No	No	Low	Low	No	Low	No	No	No	Low	No	No

Table 5 - Rank Activity Summary, Saturday - Sunday

Rank Location	Chalkwell Street	Chichester Road	Ditton Court Road	Heygate Avenue	Leigh on Sea Station	London Road	London Road Leigh	Southchurch Avenue	Tyler's Avenue 1	Tyler's Avenue 2 (Station)	University Hospital	Victoria Station
Hour Commencing												
07:00	Low	No	Active	Low	Active	Active	No	Active	No	No	Active	Active
08:00	No	No	Low	Active	Active	Active	No	Active	No	No	Low	Active
09:00	Active	Low	Active	Active	Active	Active	No	No	No	No	Active	Low
10:00	No	No	Active	Active	Active	Active	No	No	No	No	Active	No
11:00	Low	No	Active	Active	Active	Active	No	Low	No	No	Active	Low
12:00	Active	No	Active	Active	Active	Active	No	Active	No	No	Active	Active
13:00	Low	No	Active	Active	Active	Active	No	Low	No	No	Active	No
14:00	No	Low	Active	Active	Active	Active	No	Low	No	No	Low	Active
15:00	Low	No	Active	Active	Active	Active	No	Low	No	No	Active	Active
16:00	Active	No	Active	Active	Active	Active	No	Low	No	No	Active	Low
17:00	Low	No	Active	Active	Active	Active	Low	No	No	No	Low	No
18:00	Active	No	Active	Active	Active	Active	Low	Active	No	No	Active	Active
19:00	Active	No	Active	Active	Active	Active	Active	Active	No	No	Low	Active
20:00	Active	No	Active	Active	Active	Active	Active	Active	No	Active	Active	Active
21:00	Active	No	Active	Active	Active	Active	Active	Active	No	Active	Low	Active
22:00	Active	No	Active	Active	Active	Active	Active	Active	Low	Active	Low	Low
23:00	Low	No	Active	Active	Active	Active	Active	Low	Low	Active	No	Low
00:00	Low	Low	Low	Active	Active	Active	Active	No	No	Active	Low	Low
01:00	Low	No	No	Active	Active	Active	Active	Low	No	Active	No	Low
02:00	No	No	No	Active	Low	Active	No	No	No	Low	No	Low
03:00	No	No	No	Active	No	Active	No	No	No	No	No	No
04:00	No	No	Low	No	No	Active	No	No	No	Low	No	No
05:00	No	No	Active	No	No	Active	No	No	No	Low	No	No
06:00	No	No	Low	No	No	Active	No	Low	No	No	No	No

A total of 372 hours of survey footage was processed, encompassing active periods, to assess:

- The number of Hackney Carriages using each rank,
- How many hires per hour at each rank,
- How many passengers used each rank during each hour,
- Average vehicle waiting times at the ranks,
- the number of passengers who had to wait at ranks for a Hackney Carriage to arrive and
- Waiting times for passengers.

Activity at the majority of ranks was recorded from Thursday 7th February 2019, to Sunday 10th February 2019. The rank at University Hospital was surveyed from Thursday 28th February to Sunday 3rd March.

Rank survey results

Heygate Avenue

The rank is located close to the bus station and a shopping centre. The rank was active throughout the day and late into the evening. Peak activity generally occurred during late afternoon. 33% of Hackney Carriages observed at the rank, left the rank without picking up any passengers. Passenger waiting occurred from time to time, at various times of day, including afternoon and late at night. Over the three days observed, 73 of the 636 passengers observed using the rank, had to wait for a Hackney Carriage to arrive at the rank. The rank was frequently passed by Hackney Carriages at various times of day, including late at night, when the adjacent shops were closed and few buses were running. Consequently, passengers occasionally waited at the rank for a taxi to pass by. Some of the passengers appeared to have telephoned for a taxi, when none were waiting at the rank. This appeared to be most common late at night. Hackney Carriages were observed waiting at the rank for much of the time, from mid morning until late at night.

Chalkwell Station

The rank lies on The Ridgeway, adjacent to the pedestrian entry to Chalkwell Station. The rank was active from late afternoon until late at night. Activity levels were generally low, with peak activity observed on Friday evening. 44% of Hackney Carriages observed at the rank, left the rank without picking up any passengers. Passenger waiting occurred from time to time, during the evening. Over the three days observed, 16 of the 105 passengers observed using the rank, had to wait for a Hackney Carriage to arrive at the rank. The rank was frequently passed by Hackney Carriages. Consequently, passengers occasionally waited at the rank for a

taxi to pass by. Some of the passengers appeared to have telephoned for a taxi and this occurred both when no Hackney Carriages were waiting at the rank and when Hackney Carriages were waiting on the rank. Passengers were occasionally observed waiting, whilst a hackney carriage was present, for another Hackney Carriage to arrive and collect them. This appeared to occur from time to time during the evening. Hackney Carriages were observed waiting at the rank from time to time. However, for much of the time, no Hackney Carriages were present. In common with many railway station ranks, vehicles commonly visited the rank in conjunction with train arrival times.

Chichester Road

The rank is located near the Travelodge hotel. There are also several pubs and restaurants fairly nearby. However, most of these are equally close to the rank on London Road, which is better serviced by Hackney Carriages. Only two Hackney Carriages were observed leaving the rank with passengers.

Ditton Court Road

The rank is located to the north side of Westcliff station. Whilst the rank has several spaces along the road in front of the station and further rank spaces around the corner, leading to Hamlet Court Road, only the two to three rank spaces closest to the station entrance were generally used by waiting Hackney Carriages. The rank was active throughout the day and late into the evening. Peak activity generally occurred during late afternoon. 54% of Hackney Carriages observed at the rank, left the rank without picking up any passengers. Passenger waiting occurred during the late afternoon and late night. Over the three days observed, 30 of the 351 passengers observed using the rank, had to wait for a Hackney Carriage to arrive at the rank. Some of the passengers appeared to have telephoned for a taxi, to meet an arriving train. Hackney Carriages were observed waiting at the rank for much of the time, from mid morning until late evening.

Leigh on Sea Station

The rank lies outside the pedestrian entrance to Leigh on Sea station. The rank was active throughout the day, from early morning to late night. Peak activity generally occurred during late afternoon/ early evening. 16% of Hackney Carriages observed at the rank, left the rank without picking up any passengers. Passenger waiting occurred from time to time, at various times of day, including afternoon and late at night. Over the three days observed, 280 of the 1,261 passengers observed using the rank, had to

wait for a Hackney Carriage to arrive at the rank. The rank was generally well attended with waiting Hackney Carriages. However, from time to time, when a train arrived, the volume of arriving passengers exceeded the available waiting Hackney Carriages. On these occasions, passengers waited for Hackney Carriages to return to the rank. The average wait time, for passengers who had to wait for Hackney Carriages to return, was around 4 minutes. Wait times typically didn't exceed 7 minutes. The time taken for Hackney Carriages to return to this rank was generally low. This suggests that some journeys were relatively short journeys.

London Road, Leigh

The rank is located close to Oakleigh pub. The rank was active for brief periods late on Friday and Saturday nights. 9 of the 93 passengers observed using the rank, had to wait for a Hackney Carriage to arrive at the rank. 30% of Hackney Carriages observed at the rank, left the rank empty.

London Road

The rank in London Road, Southend on Sea, is a wide cul-de-sac road. The rank is located close to shops, pubs and restaurants, together with a cinema. 115 of the 1,652 passengers observed had to wait for a Hackney Carriage to arrive at the rank. Waiting generally occurred during the early evening on Friday, Saturday early afternoon and the early hours of Sunday morning. 11% of Hackney Carriages observed at the rank, left the rank empty. The rank was active each day from early morning through to late night. Peak demand occurred on during the early hours of Sunday morning.

Southchurch Avenue

The rank is located close to a casino and is close to Eastern Esplanade. The rank was lightly used. During the summer, there may be additional demand for Hackney Carriages generated by visitors to the Esplanade. The rank appeared to be used primarily as a place for Hackney Carriages to wait between pre-booked hires. The majority of Hackney Carriages observed at the rank, (86%) left the rank empty. No passengers waited at the rank for Hackney Carriages to arrive.

Clifftown Road

The rank is located near some pubs and restaurants and close to Southend Central Station. The rank is frequently passed by Hackney Carriages. The rank was lightly used, with the greatest activity late on Saturday night. No passenger waiting was observed at this rank. 35% of Hackney Carriages observed at this rank left the rank empty.

Victoria Station

The rank is located close to the passenger entrance to Victoria Station. The rank was active on Thursday and Friday evening until late at night. On Saturday, there was a lower level of activity during the evening. Peak activity occurred during late early evening on Friday. 30% of Hackney Carriages observed at the rank, left the rank without picking up any passengers. 12 of the 137 passengers observed using the rank, had to wait for a Hackney Carriage to arrive at the rank.

University Hospital

The main rank is located within the hospital grounds and close to the main pedestrian entrance. There are two further feeder ranks on Prittlewell Chase which feed the main rank. The rank was active each day from early morning until late at night. Thursday and Friday were busier than Saturday. Most demand was during weekday working hours. 6% of Hackney Carriages observed at the rank, left the rank without picking up any passengers. No passenger waiting was observed.

Rank activity data

Full details of tabulated hourly passenger and Hackney Carriage volumes and waiting times, are presented in Appendix 1. Summary results are presented below. The results for all ranks are presented in 3D graphs, in order that the relative magnitude of passenger volumes, vehicle volumes and vehicle waiting times at ranks, can be presented and compared across all ranks. In addition, data aggregated across all ranks is presented in simple line graphs, to present the profile of demand, and passenger waiting.

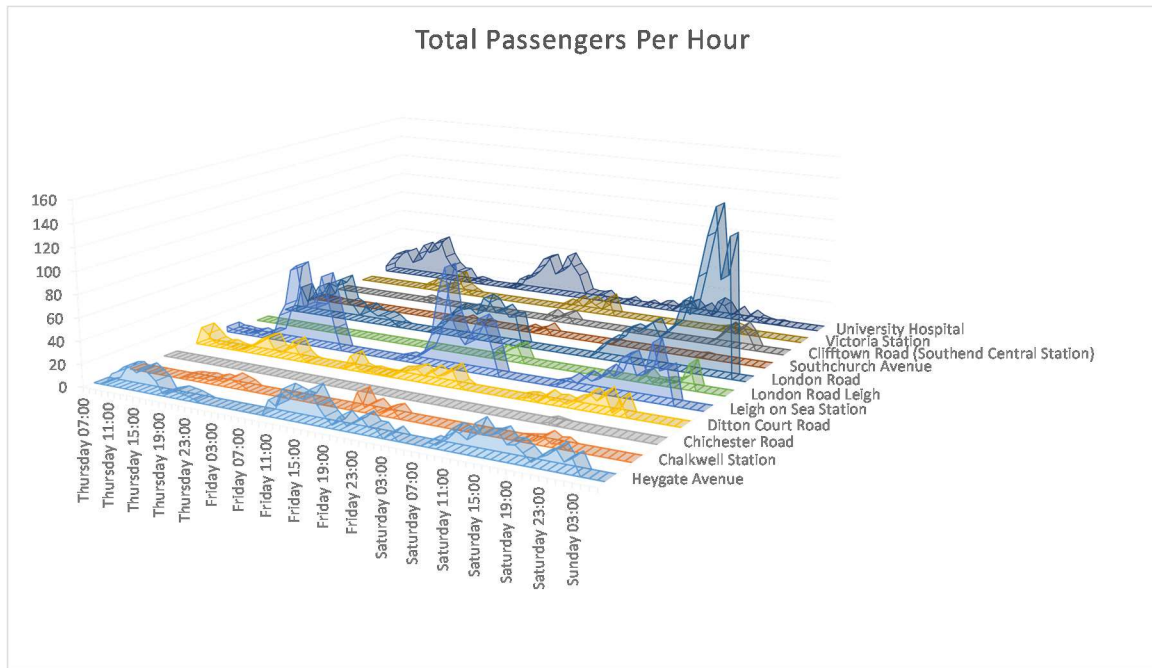


Figure 5 - Total passengers per hour through each rank

The graph provides a comparison between each rank, on a common scale of demand. A typical profile of demand would peak on a Saturday night from 23:00 until 02:00 or 03:00 on Sunday morning. When comparing the ranks in Southend on Sea, only the rank on London Road exhibited such a demand profile.

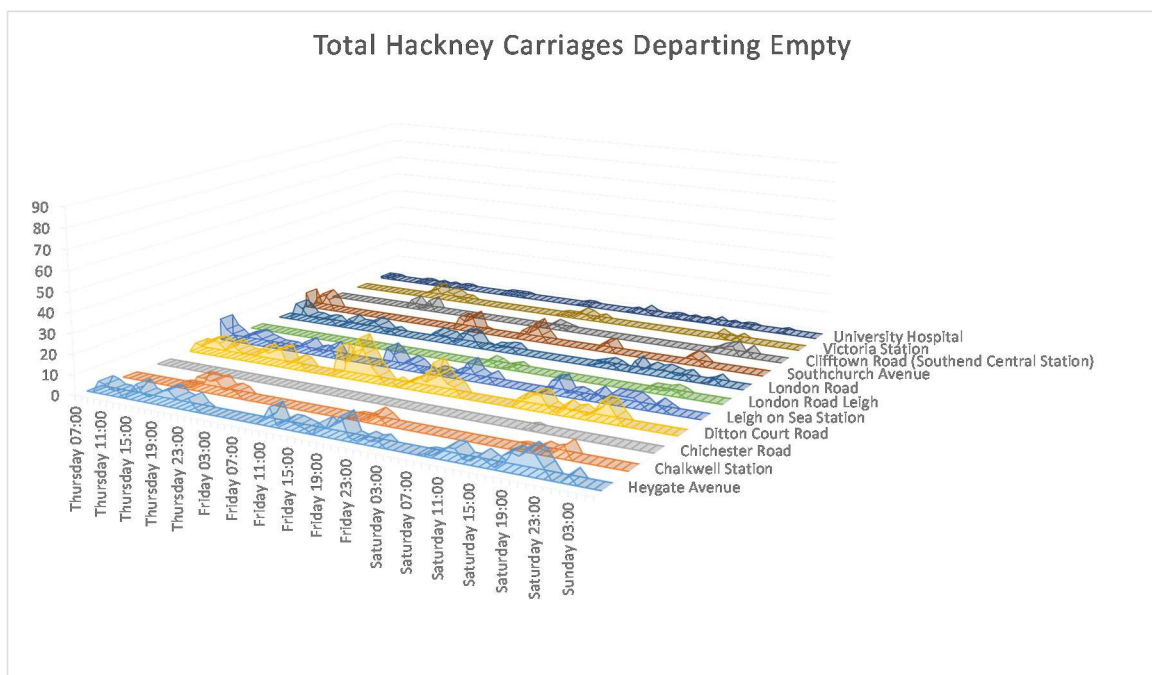


Figure 6 - Total Hackney Carriages Departing Ranks Empty

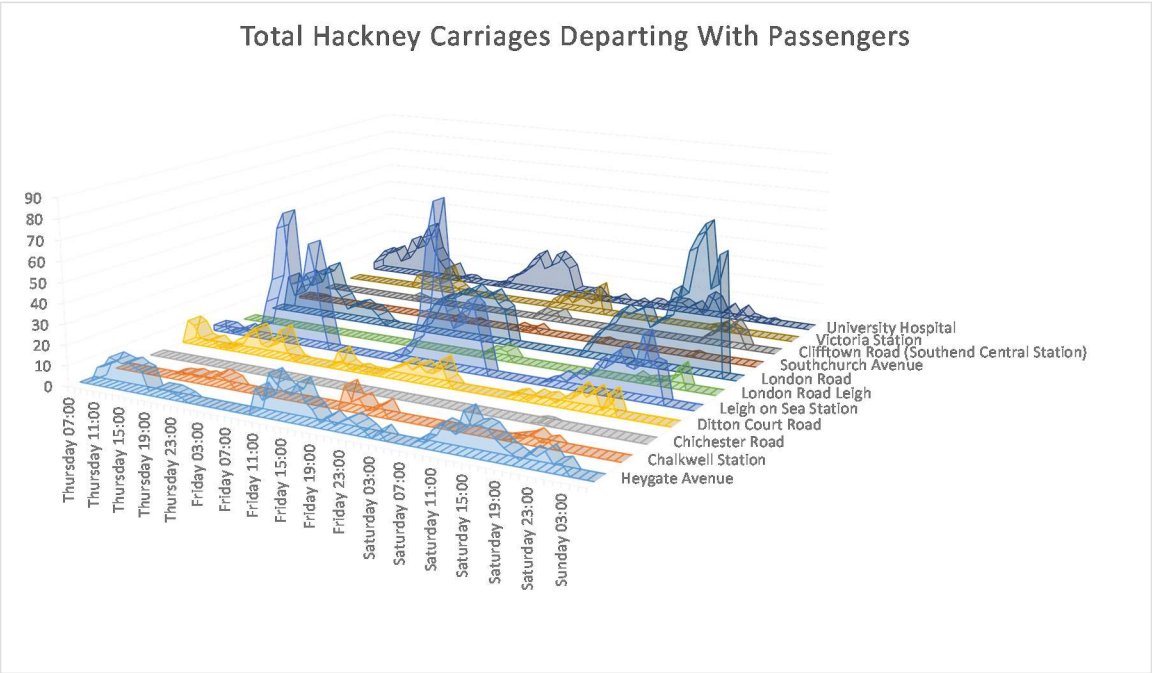


Figure 7 - Total Hackney Carriages Departing With Passengers

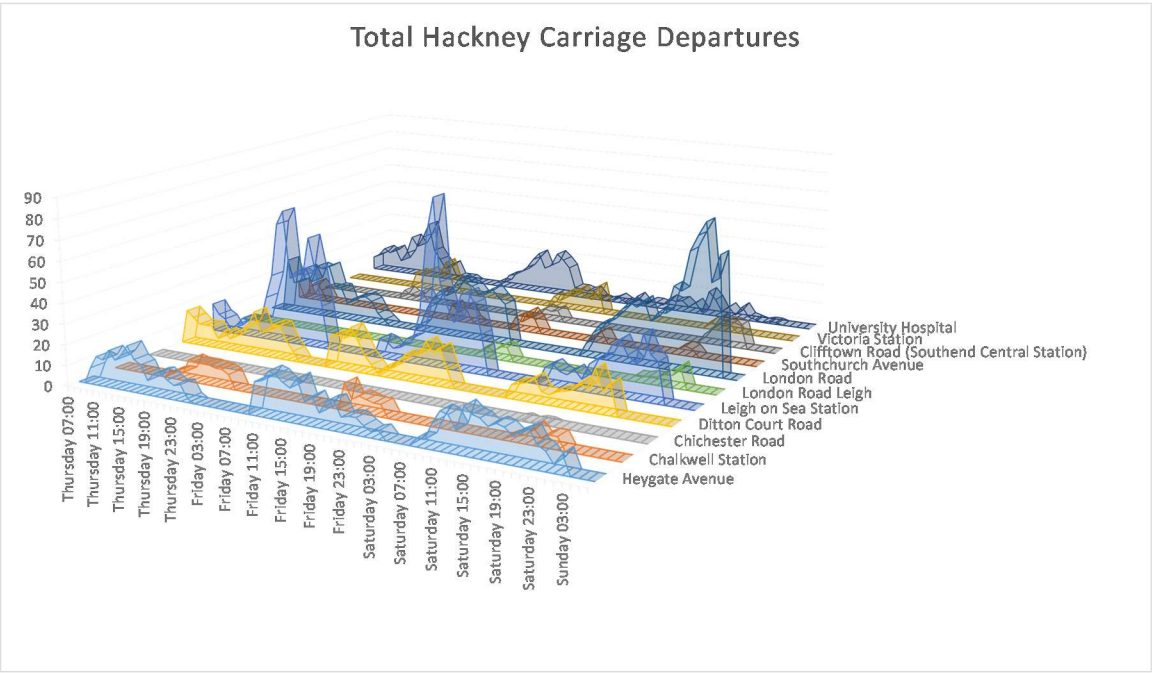


Figure 8 - Total Hackney Carriage Departures (Empty or With Passengers)

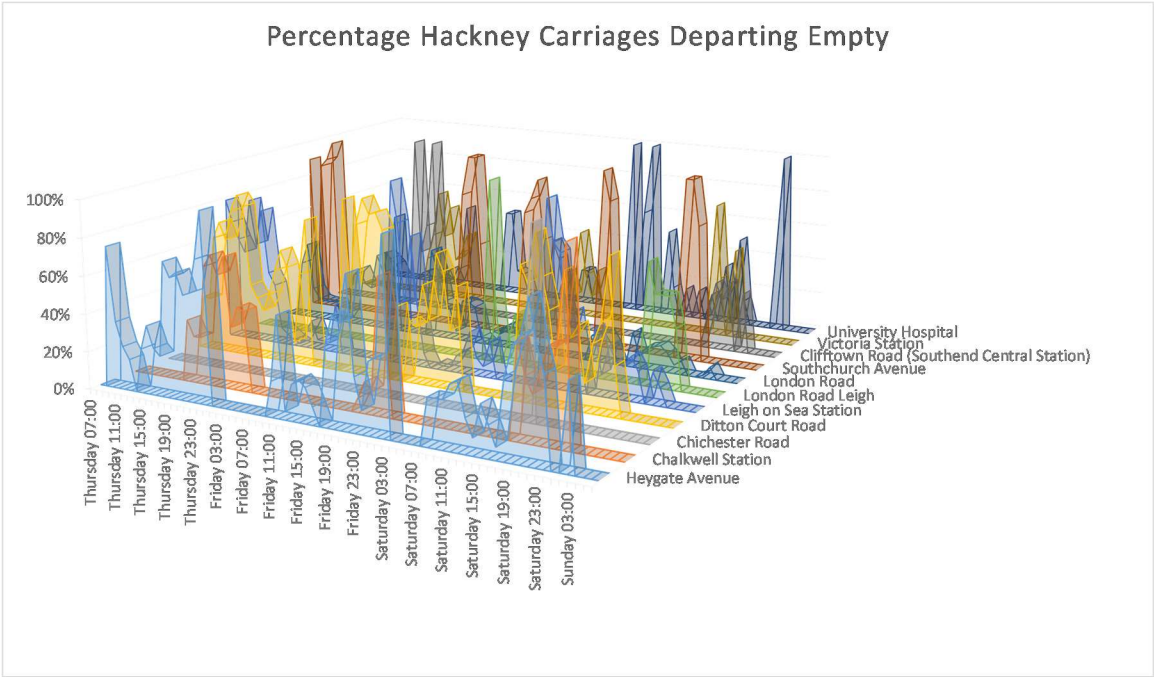


Figure 9 - Percentage of Hackney Carriages Which Departed Ranks Without Passengers

The proportion of Hackney Carriages departing the ranks empty tended to be lower on the ranks at London Road, Leigh on Sea Station and University hospital.

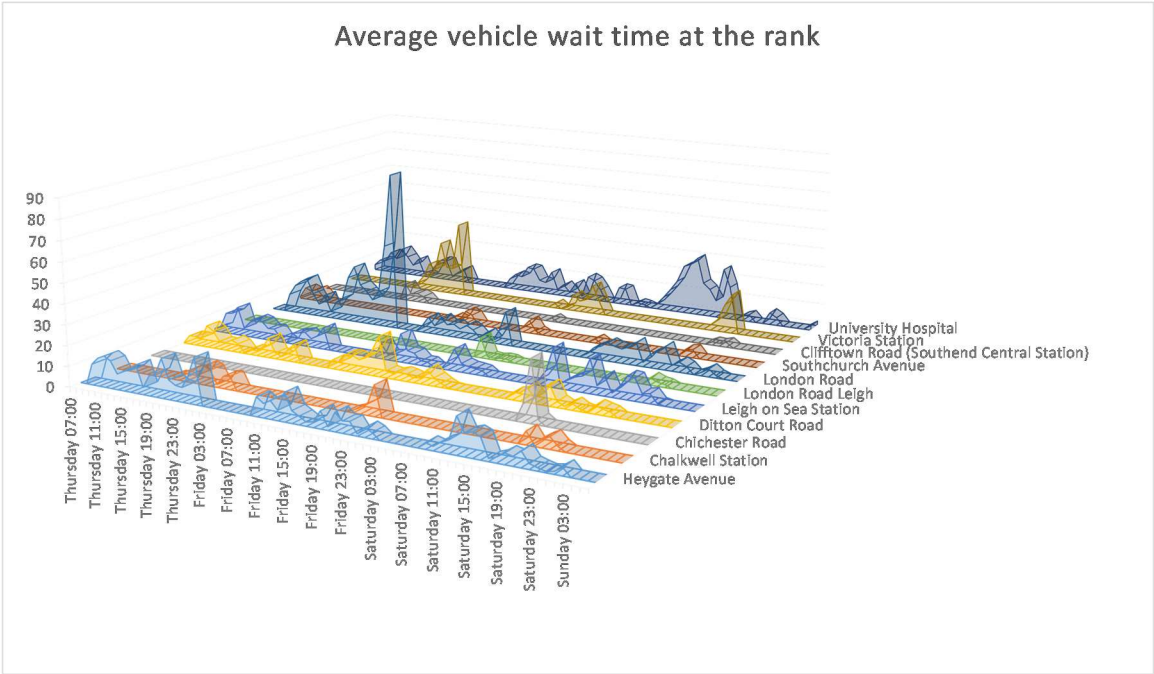


Figure 10 - Average Vehicle Wait Time At Rank (minutes)

The highest vehicle waiting times at the ranks were observed at London Road and at University Hospital, at various times. The wait times include times spent on the ranks by Hackney Carriages which left the ranks empty.

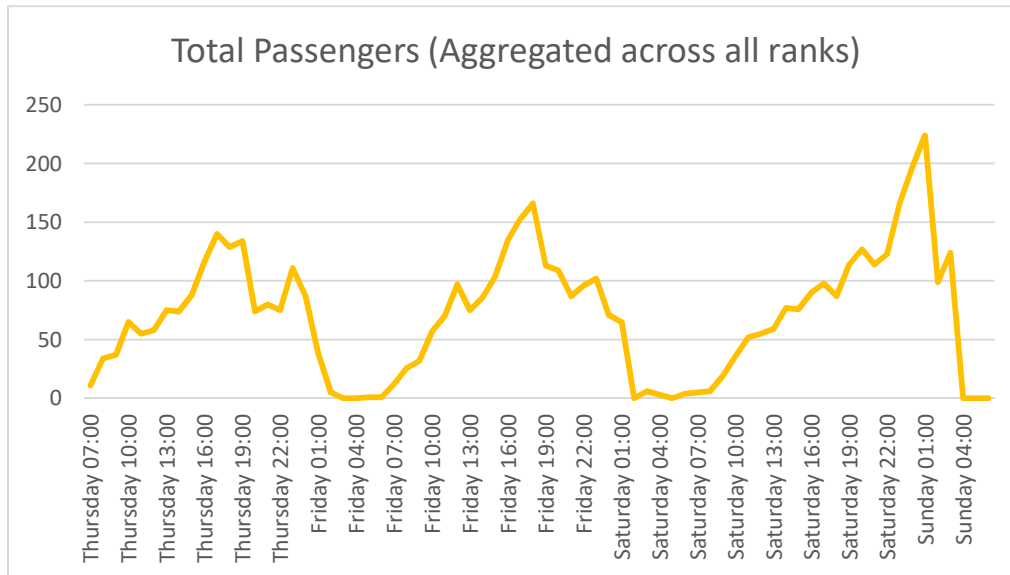


Figure 11 - Total Passengers Per Hour

On the Thursday and Friday, the peak passenger demand was around 17:00 to 19:00. This peak was dominated by demand at the railway station ranks. On Friday, when one may normally expect demand to increase after 18:00, the level of demand reduced across all ranks. The demand profile on Saturday night was closest to a traditional Saturday night profile associated with an active night time economy. However, the peak demand at 01:00 on Sunday was dominated by the rank on London Road, which accounted for 66% of all demand in that hour.

Passenger waiting

Passenger waiting tended to occur primarily during periods of peak demand. These included Thursday and Friday evenings, together with peak demand time in the early hours of Saturday and Sunday morning.

The number of people waiting at each rank is summarised in the following figures.

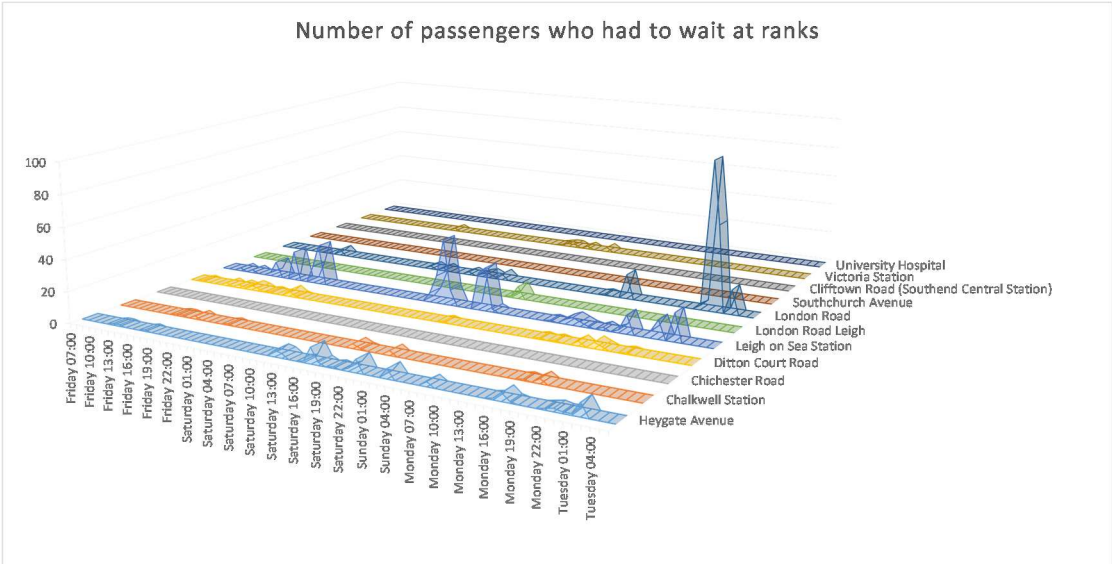


Figure 12 - Waiting passengers

The passenger waiting profile has been aggregated across all ranks.

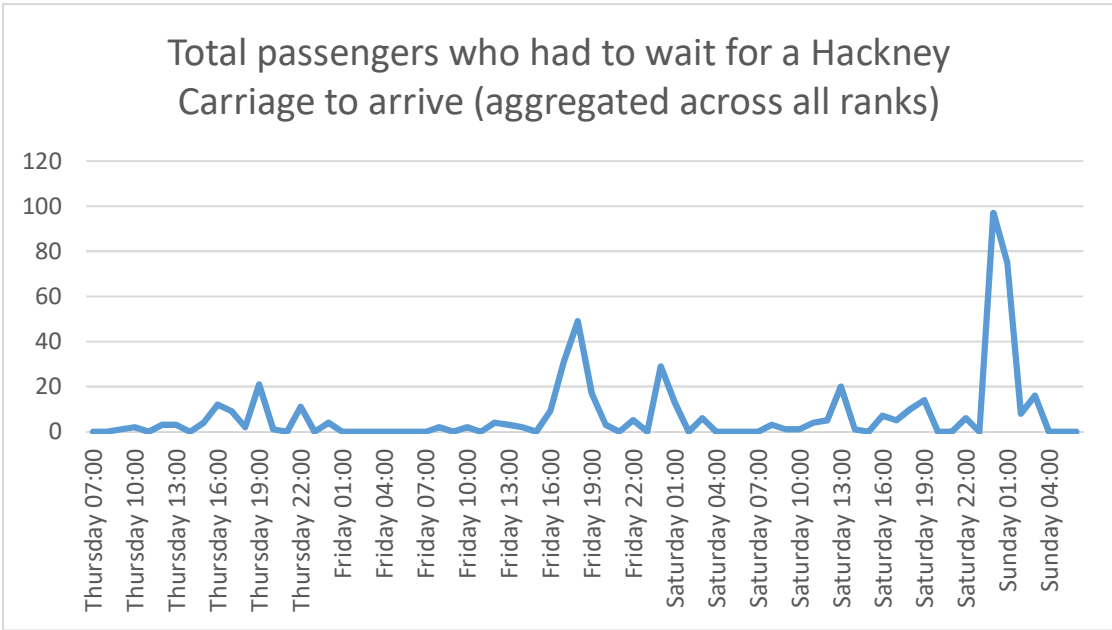


Figure 13 - Profile of waiting passengers

For assessing the level of unmet demand, passenger waiting is assessed in the context of all passenger movements, i.e. as a proportion of all passengers.

The following figures present the waiting passengers as a proportion of all passengers.

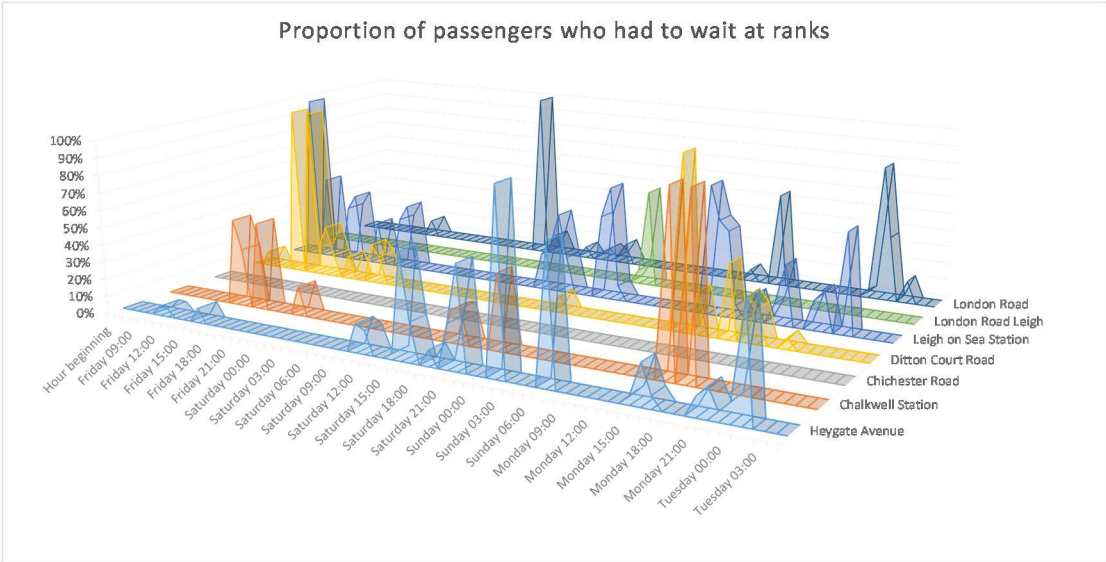


Figure 14 - Proportion of passengers who had to wait

On occasions, the proportion of passengers at particular ranks, who had to wait for a Hackney Carriage to arrive, was close to or at 100%. However, these were often during periods of low demand at those particular ranks, at those times. For example, typically there may be fewer than five passengers during the hour and all of these passengers had to wait for a taxi to arrive.

When we consider the proportion of passengers who had to wait, across all ranks, the proportions appear less dramatic.



Figure 15 - Percentage of all passengers who had to wait

Whilst passenger waiting was primarily related to low volumes of demand at particular ranks, for much of the time observed, there were periods when a significant proportion of passengers had to wait, during busier periods. During the early hours of Saturday and Sunday mornings, there were periods when around 50% of passengers had to wait at ranks for Hackney Carriages to arrive.

When passengers had to wait for a Hackney Carriage to arrive, the wait times were generally less than 5 minutes. For passengers who had to wait, the average wait times across all ranks are presented in the following figure.

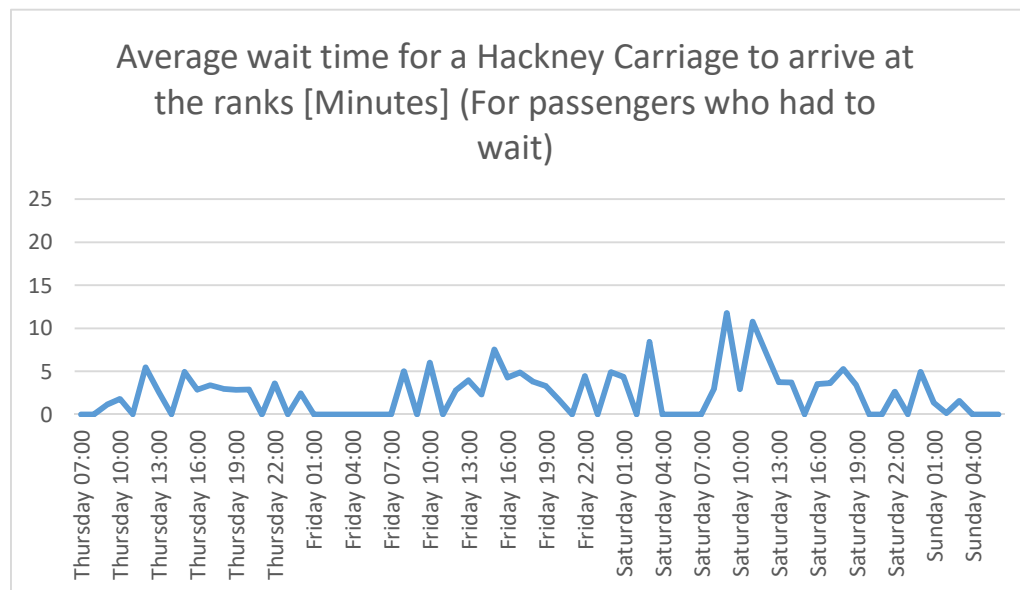


Figure 16 - Average Wait Times For Waiting Passengers

A notable feature of the rank surveys was that some of the hires appeared to be in response to a telephone booking. This included many of the hires, when passengers had to wait for a Hackney Carriage to arrive, during periods of low demand.

During a Hackney Carriage unmet demand survey, if a waiting passenger were picked up by a private hire vehicle, then the wait time would not be included in the passenger waiting data. Any such passenger wait would not be related to a Hackney Carriage. However, under similar circumstances in Southend on Sea, there is a reasonably high probability that a pre-booked vehicle would be a Hackney Carriage, rather than a private hire vehicle. Where pre-booked hires are fulfilled by a Hackney Carriage at a rank, then the waiting passenger is included in the statistics for passengers waiting at a rank.

Pre-booked hires can be fulfilled by either private hire vehicles or Hackney Carriages. The number of private hire vehicles which can be licensed by an authority is not capped. Consequently, pre-booked hire availability is normally excluded from any Hackney Carriage unmet demand assessment. This would also normally exclude any pre-booked hires which are fulfilled by a Hackney Carriage licensed by the authority. However, in Southend on Sea, it is not feasible to reliably identify and exclude any trips by Hackney Carriage which were pre-booked. Hence, the number of passengers waiting for a Hackney Carriage to arrive at the rank includes both those who have not booked and those who have booked. Consequently, the number of waiting passengers is likely to be an over estimate of latent demand at the ranks.

Summary data for each day

The hourly total volumes through each rank are presented in the following tables.

Table 6 - Daily Rank Totals - Thursday - Friday

Thursday - Friday						
Rank location	Total Hackney Carriages departing the ranks empty	Total Hackney Carriages departing the ranks with passengers	Total Hackney Carriages departing the ranks	Total passengers departing the ranks	Average passengers per Hackney Carriage	Average vehicle wait time at the ranks per Hackney Carriage (minutes)
Total for all locations	532	1170	1598	1489	1.3	8
Heygate Avenue	73	119	192	155	1.3	0
Chalkwell Station	40	37	77	42	1.1	28
Chichester Road	0	0	0	0	0.0	0
Ditton Court Road	102	115	217	138	1.2	0
Leigh on Sea Station	73	411	484	472	1.1	2
London Road Leigh	0	0	0	0	0.0	0
London Road	58	230	288	293	1.3	0
Southchurch Avenue	29	4	32	5	1.3	123
Cliffdown Road (Southend Cen	13	3	16	5	1.7	8
Victoria Station	28	46	74	57	1.2	1
University Hospital	11	205	218	322	1.6	5

Table 7 - Daily Rank Totals - Friday - Saturday

Friday - Saturday						
Rank location	Total Hackney Carriages departing the ranks empty	Total Hackney Carriages departing the ranks with passengers	Total Hackney Carriages departing the ranks	Total passengers departing the ranks	Average passengers per Hackney Carriage	Average vehicle wait time at the ranks per Hackney Carriage (minutes)
Total for all locations	507	1248	1650	1669	1.3	5
Heygate Avenue	65	160	225	229	1.4	0
Chalkwell Station	11	35	46	43	1.2	30
Chichester Road	0	0	0	0	0.0	0
Ditton Court Road	140	86	226	113	1.3	0
Leigh on Sea Station	59	405	464	468	1.2	3
London Road Leigh	8	19	27	42	2.2	54
London Road	46	270	316	348	1.3	0
Southchurch Avenue	45	10	55	19	1.9	36
Cliffdown Road (Southend Cen	6	15	21	24	1.6	9
Victoria Station	13	56	69	68	1.2	0
University Hospital	9	192	201	315	1.6	2

Table 8 - Daily Rank Totals - Saturday - Sunday

Saturday - Sunday						
Rank location	Total Hackney Carriages departing the ranks empty	Total Hackney Carriages departing the ranks with passengers	Total Hackney Carriages departing the ranks	Total passengers departing the ranks	Average passengers per Hackney Carriage	Average vehicle wait time at the ranks per Hackney Carriage (minutes)
Total for all locations	445	1247	1583	1948	1.6	5
Heygate Avenue	85	166	251	252	1.5	0
Chalkwell Station	17	16	33	20	1.3	45
Chichester Road	1	2	3	3	1.5	32
Ditton Court Road	71	71	142	100	1.4	0
Leigh on Sea Station	59	209	268	321	1.5	2
London Road Leigh	11	26	37	51	2.0	50
London Road	39	631	670	1011	1.6	0
Southchurch Avenue	20	2	22	2	1.0	141
Cliffdown Road (Southend Cen	17	48	65	81	1.7	1
Victoria Station	6	9	15	12	1.3	5
University Hospital	10	67	77	95	1.4	2

Table 9 - Summary Rank Totals - Thursday - Sunday

All 3 days					
Rank location	Total Hackney Carriages departing the ranks empty	Total Hackney Carriages departing the ranks with passengers	Total Hackney Carriages departing the ranks	Total passengers departing the ranks	Average passengers per Hackney Carriage
Total for all locations	1484	3665	4831	5106	1.4
Heygate Avenue	223	445	668	636	1.4
Chalkwell Station	68	88	156	105	1.2
Chichester Road	1	2	3	3	1.5
Ditton Court Road	313	272	585	351	1.3
Leigh on Sea Station	191	1025	1216	1261	1.2
London Road Leigh	19	45	64	93	2.1
London Road	143	1131	1274	1652	1.5
Southchurch Avenue	94	16	109	26	1.6
Cliffdown Road (Southend Cen	36	66	102	110	1.7
Victoria Station	47	111	158	137	1.2
University Hospital	30	464	496	732	1.6

General comments on rank survey results

The proportion of Hackney Carriages which leave taxi ranks without having picked up any passengers is high, at 31% of all hires. The proportions of empty departures varies between ranks, with lower levels of empty departures at the ranks at Leigh on Sea Station, London Road and University Hospital.

Most of the Hackney Carriage fleet are affiliated with booking circuits and a high proportion of empty departures is often associated with Hackney Carriages leaving to fulfil a pre-booked hire.

The ranks at Leigh on Sea Station and London Road are favoured by drivers who are not members of a booking circuit. The rank at the University Hospital is a restricted rank and is only serviced by Hackney Carriages affiliated to AC Radio Cabs, who pay for a concession to operate this rank.

Passenger waiting was observed throughout each day at various taxi ranks. Often, the passenger waiting was at locations with low passenger volumes during the periods when waiting was observed. However, on Friday and Saturday nights and during evening periods on Thursday and Friday there the number of passengers who had to wait for a Hackney Carriage to arrive was higher and from time to time a significant proportion of all passengers during these periods had to wait for a Hackney Carriage.

Despite fluctuating demand and fluctuating levels of passenger waiting, the time passengers spent waiting for the arrival of a Hackney Carriage was generally less than 5 minutes. The average time that waiting passengers spent waiting for a Hackney Carriage was 4 minutes 23 seconds.

Rank activity profile

As a sense check, it is prudent to consider the total observed hires against the number of hackney carriages in the fleet. Currently there are 276 Hackney Carriages in the fleet. When we consider the total number of Hackney Carriages departing the ranks with passengers (total rank based hires) against the number of Hackney Carriages, the average number of hires per Hackney Carriage was 13.3. This would imply that if all Hackney Carriages were operating from the ranks and achieved an equal share of hires, each would have undertaken around 13 hires over the three days observed. If we were to assume that working patterns reflect two shifts per day, per vehicle, this would imply an average of around two hires per shift. At one shift per day, the hires are around four hires per day per vehicle. We know that some but not all Hackney Carriage vehicles work multiple shifts. So the average hires per shift would be somewhere in the range of two to four hires per shift from ranks. This level of business could not sustain the fleet from rank based hires only. Feedback from trade sources indicates that the majority of hires are obtained through booking circuits. Consequently, in fact the number of rank based hires are not spread evenly amongst the whole fleet, but are undertaken by vehicles waiting at ranks between pre-booked hires, or by independent drivers who work primarily from the ranks.

The number of Hackney Carriages working from ranks in each hour can be estimated by calculating the average vehicle queue in each hour and the average number of vehicles which have picked up passengers from ranks and are engaged in the hire, hence not present at a rank. The estimate of Hackney Carriages working from the ranks, excludes any Hackney Carriages which left the ranks empty to engage in pre-booked hires. The number of Hackney Carriages engaged in rank based hires at any given time was estimated, by using the average time taken between departing the ranks with a fare and returning to the ranks. The return time was

derived from some sample observations of the time taken for Hackney Carriages to depart with a fare and then return to the same ranks. The estimated number of Hackney Carriages engaged on rank based hires, was added to the average number of Hackney Carriages waiting at the ranks in each hour. The result provided an estimate of the total number of hackney carriages working from the ranks in each hour.

The estimated total number of taxis working from the ranks in each hour is presented in the following figures:

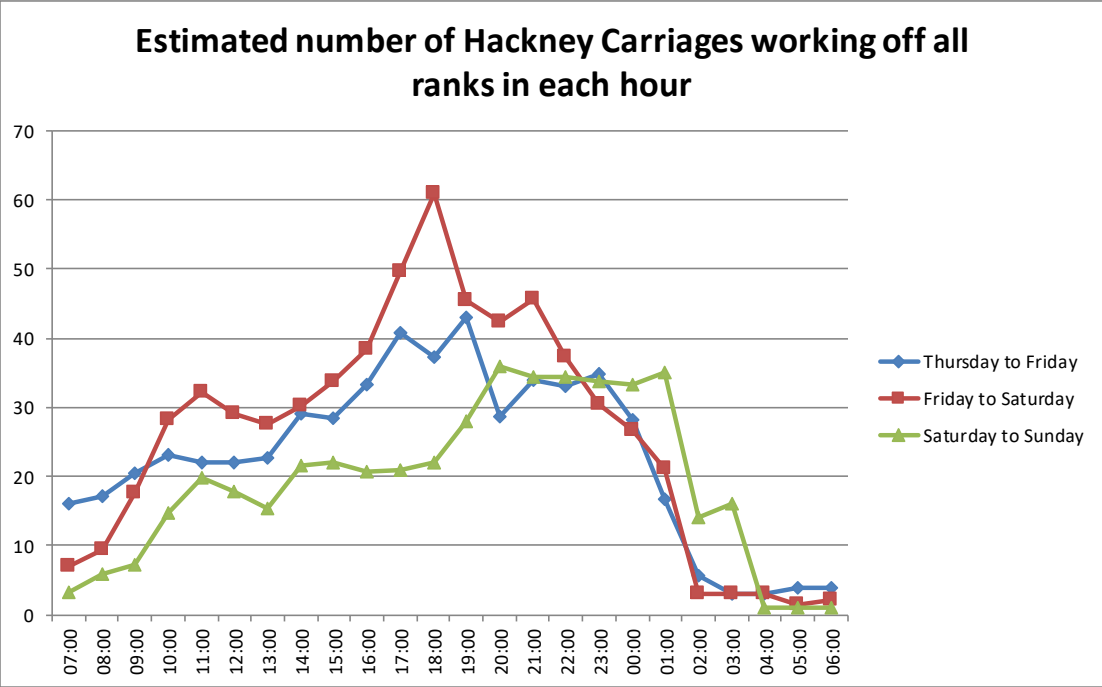


Figure 17 - Estimated number of hackney carriages operating from ranks

The number of Hackney Carriages engaged in rank based work, as a proportion of the whole fleet is presented in the following figure.

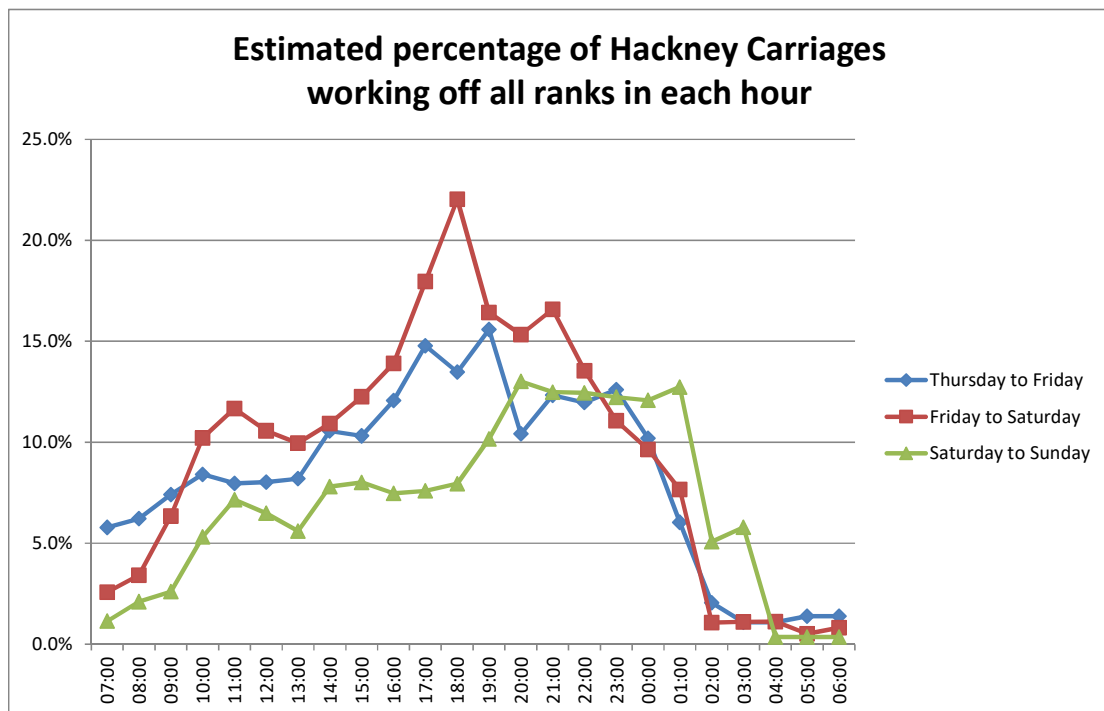


Figure 18 - Estimated percentage of the hackney carriage fleet working from ranks

The relatively low proportion of the fleet which was engaged in rank based work throughout the survey period reflects the dominance of pre-booked hires within the work undertaken by the fleet.

4 General public views

Background to public attitude surveying

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

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

These surveys tend to be undertaken during the daytime period when more people are available, and when survey staff safety can be guaranteed. Further, interviews with groups of people or with those affected by alcohol consumption may not necessarily provide accurate responses, despite the potential value in speaking with people more likely to use hackney carriages at times of higher demand and then more likely unmet demand. Where possible, extension of interviews to the early evening may capture some of this group, as well as some studies where careful choice of night samples can be undertaken.

Our basic methodology requires a sample size of at least 200 to ensure stable responses. Trained and experienced interviewers are also important as this ensures respondents are guided through the questions carefully and consistently. A minimum sample of 50 interviews is generally possible by a trained interviewer in a day meaning that sample sizes are best incremented by 50, usually if there is targeting of a specific area or group (e.g. of students, or a sub-centre), although conclusions from these separate samples can only be indicative taken alone. For some authorities with multiple centres this can imply value in using a higher sample size, such as 250 if there are two large and one moderate sized centre.

More recently, general public views have been enlisted from the use of council citizens' panels although the issue with these is that return numbers cannot be guaranteed. The other issue is that the structure of the sample responding cannot be guaranteed either, and it is also true that those on the panel have chosen to be there such that they may tend to be people

willing to have stronger opinions than the general public randomly approached.

Finally, some recent surveys have placed an electronic copy of the questionnaire on their web site to allow interested persons to respond, although again there needs to be an element of care with such results as people choosing to take part may have a vested interest.

Southend on Sea Public Attitude survey results

Public attitude data was collected through both face to face interviews with members of the public and through an online survey.

A total of 262 face to face surveys were conducted. These interviews were conducted in Shoeburyness (50 interviews), Leigh on Sea (55 interviews) and Southend on Sea (157 interviews). In addition, a sample of 282 surveys were collected via online survey.

When analysing the results obtained from the survey data, we need to consider factors which may influence the results of the survey. For example, any particular variations in responses between Shoeburyness, Leigh on Sea and Southend on Sea will be highlighted when these occur. Similarly, variations between online survey responses and face to face responses will also be highlighted and examined.

The results from the face to face and online surveys are presented in the following table.

Table 10 - Public consultation survey results

Question	Response	Face to face interviews	Online survey
In the last three months, have you made one or more trips by taxi or private hire vehicle in Southend on Sea?	Yes	69%	88%
	No	61%	12%
How often do you use a taxi within this area?	Almost daily	0%	17%
	Once a week	6%	15%
	A few times a month	34%	32%
	Once a month	32%	11%
	Less than once a month	28%	25%

How do you normally obtain a taxi within this area?	At a rank	17%	18%
	Hail in the street	18%	0%
	Telephone company ^a	37%	48%
	Use a freephone	10%	1%
	Use my mobile or smart phone	11%	19%
	Use an app	7%	14%
If you book a taxi by phone, please tell us up to three companies you use most? (% value relates to how many respondents mentioned each operator)	AC Radio Cabs	83%	51%
	333444 Taxis	74%	17%
	Andrews	6%	17%
	ABC	0%	2%
	Associated Taxis	0%	1%
	Cab call	1%	2%
	Bestax	0%	1%
How frequently do you travel by Hackney Carriage (not Private Hire)?	Almost daily	0%	12%
	Once a week	4%	8%
	A few times a month	26%	23%
	Once a month	35%	8%
	Less than once a month	25%	19%
	Can't remember when I last used a Hackney Carriage	6%	19%
	I can't remember seeing a Hackney Carriage in Southend-on-Sea Borough area	3%	11%

Please tell us which ranks they were aware of in Southend-on-Sea Borough area	Leigh-on-Sea Railway Station	50%	25%
	High Street	0%	14%
	Victoria Station	0%	14%
	London Road	51%	26%
	London Road, Leigh		1%
	Heygate Avenue	0%	19%
	Chichester Road	0%	1%
	University Hospital	0%	6%
	Chalkwell Railway Station	0%	8%
	Clifton Road	76%	0%
	Tyler's Avenue	0%	1%
	Hamlet Court Road – Westcliff-on-Sea	0%	10%
	Southchurch Avenue	0%	3%
Is there any location in the Southend-on-Sea Borough area where you would like to see a rank, and if it was there and vehicles were available, would you use it? (Listed in popularity order)	Central Railway Station		
	Seafront		
	Leigh Broadway		
	Leigh Road		
	Hamlet Court Road/London Road		
	Cliffs Pavilion		
	Progress Road		
	Palace Theatre		
Have you had any problems with the local Hackney carriage service?	Greyhound Retail Park		
	Design of vehicle	2%	4%
	Driver issues	2%	17%
	Position of ranks	1%	5%
	Delay in getting taxi	4%	41%
	Cleanliness	3%	7%
	Price	0%	1%
	Don't all take cards	0%	1%
What would encourage you to use Hackney Carriages or use them more often in the Southend-on-Sea Borough area?	No problem	89%	9%
	Better vehicles	16%	10%
	More Hackneys I could phone	27%	26%
	Better drivers	26%	19%
	More Hackneys I could hail or get at a rank	11%	26%
	Better located ranks	21%	8%
	More competitive pricing	0%	11%

If 'better located ranks', please state where:	Central Station		
	Leigh Road		
	Leigh Broadway		
	Cliffs Pavilion		
	Hamlet Court Road / London Road		
	Southchurch Avenue		
	Victoria Railway Station		
Do you consider you, or anyone you know, to have a disability that means you need an adapted vehicle? (Not necessarily a licensed vehicle)	No	0%	80%
	Yes - I need a wheelchair accessible vehicle	0%	2%
	Yes - someone I know needs a wheelchair accessible vehicle	0%	15%
	Yes - I need an adapted vehicle but not a wheelchair accessible vehicle	0%	2%
	Yes - someone I know needs an adapted vehicle but not a wheelchair accessible vehicle	0%	2%
	Need a car with a large boot for a walker	0%	0%
	Cannot use the large black taxis, need a saloon car	0%	0%
Have you ever given up waiting for a Hackney Carriage in the Southend-on-Sea Borough area?	Yes	0%	56%
	No	100%	44%
If you have given up waiting for a Hackney Carriage, could you tell us where?	Respondents who had given up waiting for a Hackney Carriage were asked to provide further details of where they had given up. 13.5% provided locations which were taxi ranks. The remainder were non-specific, no response or referred to telephone bookings.		
Do you have regular access to a car?	Yes	95%	74%
	No	5%	26%

Do you think people in Southend-on-Sea Borough who have disabilities get a good service from Hackney Carriage vehicles and drivers?	Yes, they do	99%	1%
	No, they don't	1%	3%
	Don't know	0%	97%
If no, please specify issue:	Late or don't turn up		
	Not available to book		
	Not designed for disabilities		
	Drivers not willing to help customers		
Do you live in the area?	Yes	100%	98%
	No	0%	2%
What gender are you?	Male	34%	46%
	Female	66%	51%
	Prefer not to say	0%	3%
Which of the following age group do you fall into?	16 – 30 years old	15%	22%
	31 – 55 years old	50%	62%
	Over 55 years old	35%	16%
Are there any other comments that you would like to make?	<ul style="list-style-type: none"> • Prefer rear loading wheelchair accessible vehicles • High prices • Think the public should be educated about the different taxi types • Good service 		

The online public consultation questionnaire was publicised using Facebook, with links to the online survey. The link was shared and referenced in other social media posts, by third parties, as they were encouraged to do. One of the posts sharing the link was associated with a promotion of a campaign to bring Uber into Southend on Sea. The link to the survey was identified by a third party as a survey to bring back Uber. As such, some of the respondents commented within the survey on this basis. However, other aspects of the questionnaire responses which incorporated comments on Uber appeared un-tainted by any bias. All responses have been incorporated in the results analysed.

The on street public consultation was undertaken in Southend, Shoeburyness and Leigh. There were no significant differences in responses between the areas to note.

The level of licensed vehicle use by respondents was relatively high.

Pre-booking of licensed vehicles was the most popular method employed, with the market dominated by AC Radio Cabs, 333444 taxis and Andrews.

The majority of face to face respondents only named one company, although they were invited to name up to three.

Awareness of taxi rank locations was better amongst online respondents than face to face respondents. Most face to face respondents could, however, name one or more rank locations. The online responses named ranks with frequencies which were similar to the profile of relative demand across all the ranks. i.e. the most well used ranks were named more frequently.

Online responses indicated that delays in getting a taxi was the most common problem encountered with taxis. Around a third of those indicating that this was an issue, also commented at the end of the questionnaire that they would support Uber operating in Southend on Sea.

Some of the respondents who indicated that they had a disability which required an adapted vehicle, or who knew someone who did, commented on availability and performance of wheelchair accessible vehicles. A common issue was that vehicles which had been booked to carry a wheelchair commonly turned up late for an appointment, or on occasions, didn't arrive at all. There can be lengthy delays when calling to book a wheelchair accessible vehicle for immediate hire. It is noted that late arrival or failure to arrive was not only an issue for wheelchair users or people with other mobility impairments. Non impaired users also commented that the estimated arrival times could vary significantly from the actual arrival time or indeed some vehicles didn't turn up at all when booked.

Further comments included some which indicated that drivers did not like to undertake 'wheelchair jobs'. This is a comment which is fairly commonplace in such surveys in different areas. The additional time taken to board, secure and alight wheelchairs, with passengers on board can be resented by drivers.

Whilst there were a range of comments, including those regarding the cost of fares and availability at busy times, the majority of respondents generally felt that service was good.

5 Key stakeholder consultation

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

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

Comments received have been aggregated below to provide an overall appreciation of the situation at the time of this survey. In some cases, there are very specific comments from given stakeholders, but we try to maintain their confidentiality as far as is possible. The comments provided in the remainder of this Chapter are the views of those consulted, and not that of the authors of this report.

Our information was obtained by telephone, email, letter or face to face meeting as appropriate. The list contacted includes those suggested by the Council, those drawn from previous similar surveys, and from general internet trawls for information. Our target stakeholders are as far as possible drawn from across the entire licensing area to ensure the review covers the full area and not just specific parts or areas.

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

Where the statistical analyses in Chapter 2 demonstrate low levels of wheelchair accessible vehicle (WAV) provision, an increased emphasis will be given to the issue in terms of the focus of stakeholders but also in specific efforts to contact disabled users and their representatives. However, it must be remembered that none of our consultation is statutory and for cost effective and fixed budget reasons we limit our attempts to contact people generally to a first attempt and reminder.

Supermarkets

None of the supermarkets contacted felt that there were any issues with availability of licensed vehicles for customers. Most customers didn't use

licensed vehicles. Those who did, made their own arrangements for transport.

Hotels

It was generally felt that availability was good. Many hotels will telephone to book a taxi for customers. Hotels generally also offer customer information to enable customers to call for a taxi themselves. It is felt that most customers make their own arrangements to hire a licensed vehicle if they need one. One hotel, close to the Church Road rank, felt that it would be useful if the rank was serviced by Hackney Carriages, as they often need to call to book a taxi for customers.

Public houses

The response from public houses varied to some degree according to their proximity to active ranks. None of the public houses contacted regularly booked licensed vehicles for customers. It was felt that when customers needed a licensed vehicle they normally booked one by mobile phone. Some customers would use an app on the phone to make a booking. Town centre pubs in Southend on Sea felt that some customers would use taxi ranks as they were close to the pub and taxis were normally waiting there. It is thought that the London Road, Southend rank, is the rank that they referred to. In Leigh on Sea and in Shoeburyness, it was felt that all customers would make bookings by mobile phone if they needed a licensed vehicle.

None of the public houses were aware of regular complaints by customers regarding lack of available licensed vehicles. However, many felt that there could be a lengthy wait for a vehicle on Saturday nights. Respondents seemed to feel that this was normal and expected.

Night clubs

Nightclub premises were contacted. The preferred method of contact is to speak directly to door staff, who generally have the greatest awareness of activity outside the premises. Where it was not feasible to speak with door staff, then office staff were contacted by telephone. The responses by all night clubs was that there was generally sufficient licensed vehicles available. Customers made their own arrangements. At some premises, customers were often picked up close to the premises. However, most customers left premises on foot rather than directly into a licensed vehicle.

Restaurants

No known issues were reported by restaurants.

Hospitals

The University Hospital reception staff were contacted. They felt that there were always taxis available at the main entrance. If there were not taxis present, customers could use a Freephone in the lobby area.

Police

Feedback from the Police indicated that there are generally sufficient licensed vehicles to deal with demand on Friday and Saturday nights. Two issues were identified. Drivers can be understandably reluctant to accept intoxicated people. The second issue is that there is some antagonism between licensed taxis and Uber, with reports from Southend licensed drivers, of Uber vehicles parking badly and breaking traffic laws.

Disability

Care homes and representatives of disability groups were contacted for feedback. Care homes indicated that they were not aware of any issues with availability and they were able to book vehicles when required. If wheelchair accessible vehicles were required, these were normally available at the times needed. The service provided to care homes can often vary from that provided to private individuals with mobility impairments. No feedback was received from disability representatives contacted, to indicate that there was any issue with availability of licensed vehicles. Respondents included representatives of the elderly and carer's support groups.

Minority groups

Minority groups can experience limitations on service, on the basis of cultural differences, lifestyle choices and practices or religious beliefs. Representatives of minority groups were contacted. None reported any limitation of service, other than a perception that on Saturday nights, there can be a wait if booking a taxi.

Rail and other transport operators

Bus operators were not aware of any issues. Rail station staff felt that there were taxis available when required.

6 Trade stakeholder views

The BPG encourages all studies to include ‘all those involved in the trade’. An online survey was created and the link to the survey distributed to members of the licensed vehicle trades in Southend on Sea.

In addition to the online survey, some face to face discussion was held with drivers at some of the ranks in Southend on Sea to get feedback on the trade and current issues which affect the trade.

Operators were also contacted for their views on the trade and to obtain information on how rank based hires relate to pre-booked hires of both Hackney Carriages and private hire vehicles.

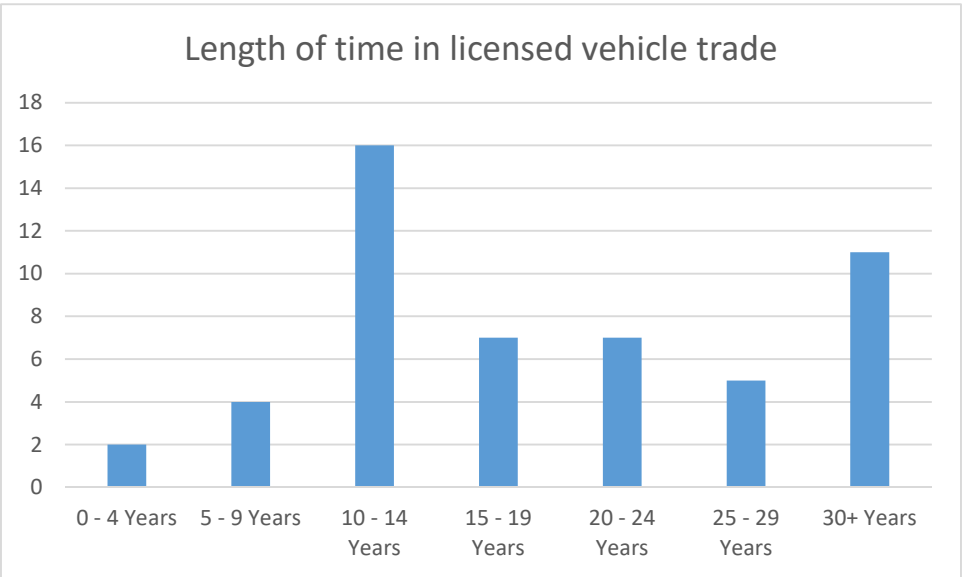
Online survey results

Members of the licensed vehicle trades were asked a series of questions. The responses to these questions are summarised in this section.

A total of 53 responses were received.

79% of respondents indicated that they normally drove a Hackney Carriage. The remaining 21% indicated that they normally drove a private hire vehicle.

Respondents were asked how long they had been involved in the taxi trade in Southend on Sea. The responses are grouped into lengths of service as follows:



The majority of respondents had extensive experience in the trade.

Respondents were asked how many hours they worked each day. From Monday to Thursday, the average number of hours worked was between 7 and 8 hours. On Friday, the average number of hours was between 8 and 9 hours. On Saturday the average number of hours worked was between 7 and 8 hours and on Sunday, between 5 and 6 hours.

The number of days worked by respondents is indicated in the following table:

Number of days worked each week	Proportion of respondents
1 Day	1.9%
2 Days	0.0%
3 Days	1.9%
4 Days	1.9%
5 Days	23.1%
6 Days	46.2%
7 Days	25.0%

The times that people work is influenced by many factors. The respondents were asked what influences the times that they work. The most common responses were as follows, in decreasing order of popularity:

- Family and child care requirements
- Vehicle availability and operator preferences
- Requirement to meet earnings targets
- Preference to avoid night working
- Traffic conditions
- None
- Rail service demand patterns
- Targeting peak demand times
- Weather Conditions
- Preference for night working

Respondents were asked if they owned and drove their own vehicle. 77% indicated that they did and 23% indicated that they did not.

56% of vehicles are driven by another driver at times.

The majority of additional shifts, not worked by the vehicle owner are night shifts, followed by weekend shifts.

The respondents indicated that 94% operated on a radio circuit (57% AC Taxis and 25% 333444 taxis, 8% Andrews, 4% not stated).

Respondents were asked which ranks that they served. Around half of those who provided a response to this question, indicated that they serviced

all of the ranks. The remainder of respondents indicated a short list of favoured ranks which matched the general pattern of use observed in the rank survey results. Some respondents indicated that they concentrated on a single rank or two ranks. The favoured ranks for respondents to focus on were Leigh on Sea Station, University Hospital and London Road. The respondents who did not subscribe to a radio circuit favoured the ranks at Leigh on Sea Station and London Road.

Respondents were asked how they most often obtained their fares. The most common means was by telephone booking (70%) followed by rank hire (30%). When the responses were filtered to include only Hackney Carriage drivers, the responses were 61% of Hackney Carriage hires were obtained through telephone bookings and the remaining 39% of hires were obtained at ranks.

Respondents were asked whether the policy of limiting the number of Hackney Carriages should be continued. 89% of respondents felt the limit should be retained. When we consider responses by Hackney Carriage and private hire drivers separately, the results were 98% of Hackney Carriage drivers felt the limit should be retained and 58% of Private Hire drivers felt the limit should be retained.

Respondents were asked what their reaction would be if the limit on Hackney Carriage numbers were to be increased or removed all together.

24% of respondents indicated that they would leave the trade.

22% indicated that there would be no reaction.

The majority of the remaining respondents indicated that they would fight against such a change and/or have to work longer hours to get by.

Respondents were asked how the limit on Hackney Carriage numbers benefits the public. Responses are summarised as follows, in descending order of popularity:

- A limit enables higher quality of service to be maintained by experienced drivers.
- A limit enables vehicles to be kept to a higher standard of repair.
- Ranks would not be over subscribed and vehicles would not need to keep driving around looking for a rank space, with associated environmental benefits.

Several respondents felt there was no benefit in maintaining a limit. All of these responses were from private hire drivers.

Respondents were asked if there were any particular issues with the operation of the current ranks in Southend on Sea. Responses are summarised as follows, in decreasing order of frequency:

- Other vehicles parking on the ranks
- Markings not clear
- Lack of enforcement
- Lack of capacity on the busiest ranks
- Better signage
- Drivers not pulling down the ranks
- Non-central ranks not used owing to computer allocation of work
- Access to Hospital rank affected by vehicles queueing for hospital car park.

Respondents were asked if they had any other comments to make. The following comments are representative of the range of responses received:

- Cross border hires is an issue which is difficult to police. Southend drivers who are licenced to work in the borough have sat their knowledge for the area. The provision of services by drivers from different districts with different fare rates is not fair on the trade or the people of Southend. Out of area drivers and vehicles cannot be effectively policed by enforcement officers. We have more Taxis /Private Hire cars working our area un licensed [by Southend on Sea] than ever. Unmet demand surveys are a complete waste of money and are now out dated, we have far more important issues that need addressing which in turn would protect the public our fare paying public.
- All taxis should be the same. Either all saloon cars or all purpose built.
- All ranks should be usable by all taxis. The hospital rank should not be limited to one company.
- The taxi trade is a viable trade in Southend and doesn't need changing
- I think you should issue some more plates in accordance with population
- Policy on Wheelchair cabs needs to be reviewed. The council needs to allow rear loader vehicles due to cost. private Hire currently have a financial advantage over a Hackney Carriage
- More checks on vehicles and drivers particularly at night. Badges not on display etc
- I have serviced Southend ranks for many years and over that time it has been extremely rare to find customers waiting for a taxi. Moreover on the few occasions over the years it has happened the

customer has told me they only waited a few minutes when I apologised for the delay.

- I believe the only demand we have is private hire Saturday night between 23:00 & 02:00am
- Taxi earnings fluctuate through the duration of a work shift, earnings during busy periods have to be weighed against earnings during the slack periods in between. It is the total takings at the end of a shift that count, these have to pay for all the vehicle expenses and give the driver a modest profit.
- The system of allowing white plates to be traded is wholly unfair to the people on the waiting list. If a plate is no longer required it should go back to the council for redistribution to the waiting list. The trade should be more geared towards owner drivers rather than companies holding the plates.
- There is a shortage of supply for 6 hours per week (Friday and Saturday 11pm to 2am). This represents less than 4% of the week
- Delimiting the numbers of Hackney carriages or issuing more plates will simply breed a new set of unhelpful drivers, honest PH drivers will admit that driving a PHV makes you work harder and makes you go the extra mile. If SBC were to issue more HC plates they would have to be wheelchair accessible, and we have enough problems already with drivers rejecting and pulling off of ranks just to avoid the wheelchair user. PH drivers do not do this, in fact the PH doesn't have to put a wheelchair accessible vehicle (WAV) on as a PH car, but they do because they care, and cover much more WAV work than the hackneys do. Concentrating more on raising private hire numbers and innovative technologies to enhance the services already offered is the key to offering customers a better service. Issuing more Hackney plates will ruin any level of decent service this town now enjoys

In addition to the trade consultation questionnaire, informal discussion was held with a sample of drivers at ranks around Southend on Sea Borough.

Drivers acknowledged that the majority of Hackney Carriages worked on booking circuits for two principal operators. AC Radio Cabs and treble three treble four (Southend Taxi Cooperative). Those drivers who are not on a booking circuit tend to focus on the ranks at Leigh on Sea Station and London Road in Southend.

At the railway stations it was felt by drivers that there would sometimes be occasions when a train would come in and the arriving passengers would take all of the waiting hackney carriages. On these occasions, a minority of passengers would need to wait for some of the Hackney Carriages to

return to the rank. Drivers tended to wait on station ranks in anticipation of train arrivals. For trains which tend to be busier, more drivers would tend to wait. This would mean that at Leigh on Sea station in particular, more of the Hackney Carriages which work on booking circuits would wait at the rank at busy times. These times were often early evening, when telephone booking volumes may be lower than later in the evening.

Drivers on the London Road rank in Southend indicated that the drivers not affiliated to a booking circuit were joined at busy times, by other Hackney Carriages which were on booking circuits. However, late at night on Friday and Saturday nights, the booking circuit vehicles were generally busy on other bookings and didn't come to the rank as much. This was the time when the independent Hackney Carriages were busiest. Late on Friday and Saturday nights was the time when passengers were most likely to have to wait for a hackney carriage to arrive at the rank.

An issue can arise with some pre-booked hires, which are arranged for pickup at a taxi rank. It is not uncommon for a Hackney Carriage to arrive at a rank and find that the passenger who has booked the Hackney Carriage is not present. On many of these occasions, the passenger had taken an un-booked Hackney Carriage which had arrived to wait at the rank. Such events can reduce availability of Hackney Carriages as they travel to fulfil these phantom bookings.

Feedback from the operators of the booking circuits to which the majority of Hackney Carriages subscribe suggests that the practices employed by drivers varies through at different times. During the day, most drivers derive hires off the ranks. After around 18:00 hours, the split between rank hires and booking circuit hires is around 50% / 50%. Later at night, demand for pre-booked hires increases.

Over the three days of rank surveys, around 28% of hires undertaken by Hackney Carriages subscribed to booking circuits were obtained at ranks. It is estimated that around 75% of rank hires are fulfilled by Hackney Carriages which are also affiliated with booking circuits. The remaining 25% of hires are fulfilled by independent Hackney Carriages.

Around three quarters of private hire vehicles licensed by Southend on Sea Council appear to be affiliated with larger private hire operators. The remainder are affiliated with smaller operators and primarily engaged on contract work, chauffeur services or airport hires. Around a third of vehicles engaged in on demand pre-booked hires through larger operators are private hire vehicles. The remaining two thirds are Southend on Sea Hackney Carriages.

Some of the pre-booked hires fulfilled in Southend on Sea are undertaken by vehicles registered in other licensing areas.

7 Evaluation of unmet demand and its significance

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

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

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

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

ISUD draws from several different parts of the study data. Each separate component of the index is designed to capture a part of the operation of the demand for hackney carriages and reflect this numerically. Whilst the principal inputs are from the rank surveys, the measure of latent demand comes from the public on-street surveys, and any final decision about if identified unmet demand is significant, or in fact about the value of continuing the current policy of restricting vehicle numbers, must be taken fully in the context of a careful balance of all the evidence gathered during the survey process.

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

The first component which can be zero is the proportion of daytime hours where people are observed to have to wait for a hackney carriage to arrive. The level of wait used is when the average wait time per waiting passenger is greater than 1 minute and there are three or more passengers per hour. The industry definition of these hours varies, the main index user counts from 10:00 to 18:00 (i.e. eight hours ending at 17:59). The present index is clear that unmet demand cannot be significant if there are no such hours. The only rider on this component is that the sample of hours collected must include a fair element of such hours, and that if the value is non-zero, review of the potential effect of a wider sample needs to be considered. This coefficient is referred to as the Steady State Performance (**SSP**) coefficient.

The other component which could be zero is the test identifying the proportion of passengers which are travelling in any hour when the average passenger wait in that hour is greater than one minute. This coefficient is referred to as General Incidence of Delay (**GID**).

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

Average passenger delay (**APD**) is the total amount of time waited by all passengers in the sample, divided by the total number of passengers observed who entered hackney carriages.

The seasonality factor (**SF**) allows for the undertaking of rank survey work in periods which are not typical, although guidance is that such periods should normally be avoided if possible particularly as the impact of seasons may not just be on the level of passenger demand, but may also impact on

the level of supply. This is particularly true in regard to if surveys are undertaken when schools are active or not.

Periods when schools are not active can lead to more hackney carriage vehicles being available whilst they are not required for school contract work. Such periods can also reduce hackney carriage demand with people away on holiday from the area. Generally, use of hackney carriages is higher in December in the run-up to Christmas, but much lower in January, February and the parts of July and August when more people are likely to be on holiday. The factor tends to range from 0.8 for December (factoring high demand level impacts down) to 1.2 for January / February (inflating the values from low demand levels upwards).

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

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

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

In addition to latent unmet demand indicated from the public consultation results, any passengers observed waiting at the taxi ranks and who gave up waiting before a Hackney Carriage arrived at the rank, can also be included as latent unmet demand.

The **ISUD** index is the result of multiplying each of the components together and benchmarking this against the cut-off value of 80. Changes in the individual components of the index can also be illustrative. For example, the growth of daytime hour queueing can be an earlier sign of unmet

demand developing than might be apparent from the proportion of people experiencing a queue particularly as the former element is based on any wait and not just that averaging over a minute. The change to a peaky demand profile can tend towards reducing the potential for unmet demand to be significant.

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

We have calculated a factor for the Incidence of Significant Unmet Taxi Demand

(ISUD) using the following standard formula:

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

where:

ISUD = Incidence of Significant Unmet Demand

APD = Average passenger delay across all time periods

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 Hackney Carriage 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.

Calculation of ISUD variables

APD: Passenger delays occurred primarily during peak demand times. The average delay is determined by calculating the total passenger delay as aggregate passenger delay minutes, then dividing by the total number of passengers, including those who did not suffer any delay.

The Average Passenger Delay was = 0.52 minutes (31 seconds).

PF There are no consistent sharp peaks in demand across the taxi ranks surveyed. The rank on London Road exhibited a significant and sharp peak on Saturday night. However, the level of demand at other ranks was reduced at this time. Therefore, taking demand across all ranks, whilst there was a peak, the increase in overall demand, compared with the rest of the day, was not sufficient to deem the peak factor to be reduced. Given the lack of sharp peaks in overall demand, the PF value is 1.0.

SSP Week day, daytime hours are deemed to be between 10.00 am and 6.00 pm. The proportion of active rank hours when waiting passengers had an average wait of more than one minute is taken at the SSP coefficient. The SSP proportion is 11.6%.

GID The percentage of Hackney Carriage users travelling in hours where the average passenger delay exceeds one minute was 8.7%.

SF For this study, a factor of 1.2 is assumed.

LDF Latent Demand Factor. This is derived from the public attitude survey results and the proportion of passengers observed waiting at the ranks, who gave up waiting before a Hackney Carriage arrived. It is measured as 1+ proportion giving up waiting. The inclusion of this factor is a response to the latest DfT guidance requiring an estimate of latent demand.

The public consultation survey results indicate that 0% of respondents have given up trying to hire a taxi by hailing or at a rank. In addition, 3% of passengers observed waiting at the ranks, gave up before a Hackney Carriage arrived. Therefore, the LDF factor is 1.03.

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

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

$$\text{ISUD} = 0.52 \times 1.0 \times 11.6 \times 8.7 \times 1.2 \times 1.03 = 64.9$$

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

Consideration of wider factors

The ISUD value of 64.9 an indication that unmet demand is below a level which would be considered to be significant. However, it is prudent to consider other aspects of the trade in Southend on Sea to determine whether there are any other factors to be taken into account.

One of the key characteristics of the licensed vehicle trades in Southend on Sea is that the majority Southend on Sea licensed vehicles are Hackney Carriages. Most Hackney Carriages obtain the majority of hires through booking circuits. Only a small minority of Hackney Carriages rely primarily on rank based hires. On Friday and Saturday nights, which would normally be considered peak periods, the level of demand late on Friday night dropped, relative to demand earlier in the evening. The level of demand late on Saturday night was not significantly higher than earlier in the evening. This lack of peak demand at 'closing time' could be symptomatic of lack of activity in the night time economy. However, when we consider information received from operators of the booking circuits, together with public attitude survey feedback, it appears that the night time economy is still active, but that members of the public have a strong preference for booking a licensed vehicle, rather than walking to a rank. Evidence from the trade and the public suggests that there is a significant peak in demand on both Friday and Saturday nights. however, these peaks do not manifest as patent demand at taxi ranks, but peak demand is largely satisfied by pre-booked Hackney Carriages and private hire vehicles.

Elsewhere in the UK, in Hackney Carriage fleets where much of the fleet is engaged in hires obtained through booking circuits, a rank demand profile can emerge where, late at night, on Friday and Saturday, demand peaks at a few particular ranks. Often this peak in rank demand follows a peak in telephone booking demand, when the wait times quoted by the booking circuit operators are lengthy and a wait of ten or more minutes at the rank may appear attractive by comparison. On these occasions, passengers are prepared to wait at a rank, in the expectation that they will eventually obtained a Hackney Carriage, following a wait at the rank. The rank wait time is often far less than that quoted by booking circuit operators under these circumstances.

The circumstances described in the previous paragraph can be an indication that there is an oversupply of Hackney Carriages for the level of demand which is present at the ranks. i.e. if all Hackney Carriages were to work

exclusively from the ranks in Southend on Sea and to not accept hires from booking circuits, it is unlikely that there would be sufficient demand to sustain the level of supply of Hackney Carriages.

The availability of Hackney Carriages at times when passengers have been observed waiting at the ranks is primarily limited by the practices followed by the Hackney Carriages in the fleet, rather than the number of Hackney Carriages in the fleet. It is likely that, in the absence of any other changes to licensing requirements, any additional Hackney Carriages introduced to the fleet would continue to follow current practice and operate primarily from booking circuits, rather than work primarily from the ranks.

It was judged that some of the waiting passengers observed were waiting for a Hackney Carriage which had been pre-booked. When feasible, such incidences of waiting passengers would normally be excluded from the assessment, as pre-booked hires are not reserved for fulfilment by Hackney Carriages and can be fulfilled by private hire vehicles, which are not capped. Consequently, it is likely that the number of passengers observed waiting and attributed to rank based non-booked hires, was over estimated, to a small extent.

Whilst passenger waiting has been observed at various times throughout the survey period, the level of waiting, compared with the volume of passengers which did not have to wait, is not significant. Consequently, we conclude that there is no significant unmet demand.

8 Summary, synthesis and study conclusions

This Hackney Carriage unmet demand on behalf of Southend-on-Sea has been undertaken following the guidance of the BPG and other recent case history regarding unmet demand and its significance.

Background and context

Southend has its own Local Transport Plan (LTP) covering transport policy. This encourages licensed vehicles in supporting access particularly at night when other transport is not available.

The power to restrict hackney carriage vehicle numbers has been utilised since 1976. Regular, three-yearly surveys have been undertaken, some of which have resulted in issue of new plates (which had to be wheel chair accessible as well as catering for the full range of disabilities, ambulant, auditory and visual). The 2015 survey found no significant unmet demand and overall no requirement to issue further plates.

Between 2015 and 2019, the number of Hackney Carriages licensed has remained static. The number of private hire vehicles has experienced a modest reduction of two vehicles to 151 vehicles.

Rank observations

Video cameras were placed at twelve rank locations. Feeder ranks at these locations, where applicable, were included in the video coverage. Activity at the ranks was recorded from Thursday morning through to the following Sunday morning. The video footage was reviewed to identify active hours at each rank. Eleven of the twelve ranks were active at some time. 372 hours of footage were fully processed to derive the volume of hackney carriage and passengers using each rank, together with the waiting time for vehicles waiting at the ranks and for any passengers who had to wait for a Hackney Carriage to arrive at the rank.

Several ranks were active throughout the day and late into the evening. The total number of hires observed from the ranks over the three days of the survey, was 3,665. When divided by the 276 Hackney Carriages in the fleet, this equates to around 13 hires per vehicle, over three days. The survey period covers the busiest periods of the week.

Key licensed vehicle trade characteristics

Around 90% of the Hackney Carriage fleet operate on booking circuits for two principal booking circuit operators. The remaining 10% operate independently, primarily from the taxi ranks. Most of the independent Hackney Carriages operate from the rank at Leigh on Sea Station or the rank on London Road, in Southend. These ranks and others are also serviced by Hackney Carriages which operate on booking circuits. For much

of the time, those vehicles operating on booking circuits wait on ranks between bookings, in the hope of picking up a hire from the rank, to supplement hires booked by telephone or mobile app. This practice led to high proportions of the Hackney Carriages waiting at taxi ranks, to leave empty, at times. It is assumed that the majority of empty departures were in order to service a booking made through a booking circuit.

The rank survey recorded hires at taxi ranks. a feature of the trade in Southend on Sea is that the majority of pre-booked hires are made for Hackney Carriages. These appeared to include pre-booked hires for pick up at taxi ranks.

For the majority of time, the arrangement where Hackney Carriages wait on ranks between pre-booked hires, works well, with relatively few passengers having to wait for a Hackney Carriage at the ranks. However, at school run times and from around 18:00 to 20:00 on Thursday and Friday passenger waiting becomes more frequent, particularly at railway stations. On Friday and Saturday nights, for the hour after midnight, around 50% of passengers had to wait for a Hackney Carriage.

The proportion of passengers having to wait and the amount of time passengers have to wait, is taken into account in context of the number of passengers who do not have to wait for a Hackney Carriage to arrive. The ISUD value is below that which would suggest that the level of unmet demand is significant. And this is also considered in context of the wider conditions for passengers. The lack of capacity for passengers at the times when passenger waiting occurs, tends to reflect limitations in capacity for pre-booked hire, rather than for rank capacity in particular. Given that pre-booked hires are largely fulfilled by Hackney Carriages, this feature has a knock on impact on availability at taxi ranks.

Stakeholders responses were often in respect to vehicles which can be booked by telephone, rather than specifically at taxi ranks. However, given the prevalence of Hackney Carriages fulfilling telephone bookings in the area, this is perhaps not surprising. No significant issues with availability or level of service were identified. It was widely acknowledged that there was limited availability of 'taxis' late at night after pub closing times and at school run times. However, these were largely viewed as normal and seemed to be accepted.

A third of the Hackney Carriage fleet are wheelchair accessible vehicles. As most of these vehicles work on booking circuits, one would expect good levels of service for wheelchair users, from the main operators. Feedback from business users (care homes and similar), indicated that they received good service and had no issues with availability of wheelchair accessible

vehicles. Representatives of elderly and disabled representatives did not raise any issues. However, some responses to the public consultation survey, who had mobility impairments, indicated that when a wheelchair accessible vehicle is booked for travel, on occasions the vehicle have been late, or not turned up at all and that some drivers dislike undertaking wheelchair user hires. Feedback from the trade has also suggested that there are some drivers who dislike undertaking wheelchair hires and who will refuse a wheelchair at the rank or pull off the rank to avoid a wheelchair hire. Whilst there is no suggestion that the problems encountered apply to all or even the majority of wheelchair accessible vehicle hires, this feature of feedback is still a cause for some concern.

Feedback was received from the trade through direct discussion with drivers, operators and a trade questionnaire. Members of the trade generally have extensive experience in the trade. There is some double shifting of vehicles with owners renting vehicles to a 'night driver' or 'weekend driver' to cover these shifts. Some owners work the night or weekend shifts and their driver covers other times. Whilst not all vehicles cover multiple shifts, the practice of multi shifting ensures high utilisation of vehicles and helps to ensure that peak demand times at weekends and at night are covered.

The majority of the trade supported retaining the limit. Some respondents who do not own a Hackney Carriage licence, felt some resentment at the lack of opportunity to access Hackney Carriage trade as an owner.

Some respondents felt that there wasn't sufficient rank based demand to sustain the fleet and that pre-booked hires were essential to boost earnings. However, many valued the ability to service ranks between bookings. The proportion of hires derived from rank work versus pre-booked hires tended to be higher earlier in the day, with bookings increasing as the day progressed. In the evening, generally at least 50% of hires were pre-booked.

Trade respondents indicated that retaining the limit benefitted the public by maintaining vehicle quality, good levels of public service and local knowledge, enhanced public safety with experienced drivers and encouraging vehicles to service ranks.

The prevalent method of hiring a Hackney Carriage was by telephone booking. The use of apps to book a Hackney Carriage with one of the local operators is increasing and forms a significant proportion of bookings.

The level of unmet demand is below that which would be deemed significant, therefore it is concluded that there is no significant unmet demand.

Given that the majority of Hackney Carriage hires are through booking circuits, attendance at taxi ranks by the Hackney Carriages on booking circuits is largely opportunistic. Waiting on taxi ranks provide potential additional hires whilst waiting between bookings. This practice offers an advantage over operating a private hire vehicle, as these may not wait on taxi ranks or pick up hires which have not been pre-booked.

The number of hackney carriages is higher than that needed to service the rank based demand. Consequently, many of the Hackney Carriages rely on a combination of both rank based and pre-booked hires. The level of demand at the ranks is also presumably influenced by the availability of Hackney Carriages to be pre-booked to pick up at a more convenient location for the passengers. i.e. if it took longer to wait for a pick up from a location not at a rank, then more passengers may go to the ranks to hire a Hackney Carriage.

The balance between those Hackney Carriages which work independently of booking circuits and those which subscribe to booking circuits can be sensitive to changes. If the number of Hackney Carriages were to increase, then it is likely that the majority of additional vehicles would follow the prevailing current practice and join a booking circuit and work part of the time from the ranks. If competition from vehicles licensed by other authorities were to increase, this would tend to reduce the number of pre-booked hires undertaken by Hackney Carriages and result in increased attendance at ranks and increased competition at ranks. Such increased competition, either from Southend Hackney Carriages, or from out of area licensed vehicles, could, in turn, lead to more independent drivers joining a booking circuit to boost earnings. If more of the fleet were reliant on booking circuits, chasing fewer hires, then at peak rank demand times, there could be fewer Hackney Carriages available at the ranks, as many of them may be primarily engaged on pre-booked hires.

Future changes could affect availability of hackney carriages at the ranks and increase incidences and duration of passenger waiting at the ranks. If passenger waiting were to increase, then increasing the number of Hackney Carriages, to an already over provided fleet, would tend to exacerbate the issue of provision at peak times, for the reasons discussed earlier. The counter intuitive result of an increase in Hackney Carriages under such circumstances, would be to decrease the available capacity at ranks at key times.

If, the situation should arise that more Hackney Carriages are required to address increased passenger waiting. Rather than increase the number of Hackney Carriages in the fleet, alternative measures would be more likely to succeed, if they could incentivise Hackney Carriages to prioritise servicing the ranks. The most effective means to address excessive passenger waiting at ranks would be to implement measures which effectively incentivise some Hackney Carriages to service ranks, rather than service pre-booked hires. There are a range of measures which could be explored, should the circumstances arise. Currently there is no need to explore any such measures.

9 Recommendations

On the basis of the evidence gathered in this report, our key conclusion is that there is **no** evidence of any unmet demand for the services of hackney carriages either patent or latent which is significant at this point in time in the Southend on Sea licensing area.

It is recommended that the number of Hackney Carriages in the fleet is not increased at this point in time.

It is further recommended that conditions at the ranks during periods of peak late night demand are monitored from time to time, to check that incidences and durations of wait times do not significantly increase.

If it is felt, at some future point, that incidences and duration of passenger waiting at the ranks have become excessive, then measures to encourage higher levels of attendance at the ranks by Hackney Carriages from within the existing licensed fleet, should be explored and developed, in the first instance.

There is some evidence reported from some quarters, that wheelchair users face additional difficulties obtaining service from wheelchair accessible licensed vehicles. Firstly, the level of such difficulty should be established more robustly. If, following further investigation, there is further supporting evidence to suggest that wheelchair users are being provided with a poorer level of service than other users, then measures should be developed to ensure that wheelchair users may access the same level of service as able bodied users. With a third of the Hackney Carriage fleet comprising wheelchair accessible vehicles, there seems little to justify any lower level of service provision.

Appendix 1 – Detailed Rank Observation Statistics

Total passengers												
Hour beginning	Heygate Avenue	Chalkwell Station	Chichester Road	Ditton Court Road	Leigh on Sea Station	London Road Leigh	London Road	Southchurch Avenue	(Southend Central Station)	Victoria Station	University Hospital	
Thursday 07:00	0	0	0	0	5	0	0	1	0	0	5	
Thursday 08:00	0	0	0	16	3	0	0	2	0	0	13	
Thursday 09:00	2	0	0	11	3	0	0	1	0	0	20	
Thursday 10:00	11	0	0	5	2	0	25	1	0	0	21	
Thursday 11:00	14	0	0	3	2	0	12	0	0	0	24	
Thursday 12:00	19	0	0	4	4	0	18	0	0	0	13	
Thursday 13:00	20	0	0	2	2	0	28	0	0	0	23	
Thursday 14:00	16	0	0	1	6	0	18	0	0	0	33	
Thursday 15:00	21	0	0	2	6	0	33	0	0	0	26	
Thursday 16:00	17	2	0	6	24	0	31	0	0	0	36	
Thursday 17:00	12	3	0	10	35	0	39	0	0	0	41	
Thursday 18:00	2	3	0	15	68	0	17	0	0	0	24	
Thursday 19:00	4	4	0	17	73	0	14	0	0	7	15	
Thursday 20:00	6	3	0	7	36	0	6	0	0	6	10	
Thursday 21:00	5	5	0	5	36	0	15	0	0	4	10	
Thursday 22:00	4	4	0	10	36	0	11	0	3	6	1	
Thursday 23:00	2	8	0	17	66	0	8	0	2	5	3	
Friday 00:00	0	6	0	6	45	0	9	0	0	19	2	
Friday 01:00	0	4	0	1	20	0	7	0	0	7	0	
Friday 02:00	0	0	0	0	0	0	2	0	0	3	0	
Friday 03:00	0	0	0	0	0	0	0	0	0	0	0	
Friday 04:00	0	0	0	0	0	0	0	0	0	0	0	
Friday 05:00	0	0	0	0	0	0	0	0	0	0	1	
Friday 06:00	0	0	0	0	0	0	0	0	0	0	1	
Friday 07:00	0	0	0	1	0	0	0	0	0	0	11	
Friday 08:00	0	0	0	13	0	0	2	0	0	0	11	
Friday 09:00	0	0	0	3	0	0	9	3	0	0	17	
Friday 10:00	14	0	0	1	0	0	17	0	0	0	25	
Friday 11:00	10	0	0	2	2	0	21	0	0	0	35	
Friday 12:00	25	0	0	1	4	0	28	2	0	0	37	
Friday 13:00	23	0	0	1	3	0	27	0	0	0	21	
Friday 14:00	21	0	0	1	8	0	29	0	0	0	27	
Friday 15:00	20	0	0	6	13	0	24	0	0	0	41	
Friday 16:00	29	0	0	7	28	0	40	0	0	0	31	
Friday 17:00	17	0	0	9	67	0	37	0	0	0	23	
Friday 18:00	9	16	0	11	90	0	28	0	0	6	6	
Friday 19:00	3	5	0	6	47	0	33	3	7	4	5	
Friday 20:00	11	8	0	12	32	0	26	1	3	11	5	
Friday 21:00	5	2	0	8	24	0	27	3	6	5	7	
Friday 22:00	8	5	0	10	36	9	0	7	8	12	1	
Friday 23:00	14	7	0	17	49	7	0	0	0	8	0	
Saturday 00:00	7	0	0	4	42	12	0	0	0	5	1	
Saturday 01:00	7	0	0	0	23	14	0	0	0	17	4	
Saturday 02:00	0	0	0	0	0	0	0	0	0	0	0	
Saturday 03:00	6	0	0	0	0	0	0	0	0	0	0	
Saturday 04:00	0	0	0	0	0	0	0	0	0	0	3	
Saturday 05:00	0	0	0	0	0	0	0	0	0	0	0	
Saturday 06:00	0	0	0	0	0	0	0	0	0	0	4	

Total passengers												
Hour beginning	Heygate Avenue	Chalkwell Station	Chichester Road	Ditton Court Road	Leigh on Sea Station	London Road Leigh	London Road	Southchurch Avenue	(Southend Central Station)	Victoria Station	University Hospital	
Saturday 07:00	0	0	0	0	0	0	0	0	0	0	5	
Saturday 08:00	4	0	0	0	0	0	0	1	0	0	1	
Saturday 09:00	3	0	0	2	0	0	7	0	0	0	7	
Saturday 10:00	10	0	0	3	2	0	14	0	0	0	7	
Saturday 11:00	18	0	0	1	4	0	19	0	0	0	10	
Saturday 12:00	16	0	0	7	9	0	19	0	0	0	4	
Saturday 13:00	12	0	0	4	6	0	29	0	0	0	8	
Saturday 14:00	26	0	0	5	13	0	32	0	0	0	1	
Saturday 15:00	18	0	0	3	10	0	30	0	0	0	15	
Saturday 16:00	19	1	2	7	13	0	36	0	0	0	12	
Saturday 17:00	22	2	1	8	22	0	40	0	0	0	3	
Saturday 18:00	14	3	0	15	17	0	28	0	0	1	9	
Saturday 19:00	15	7	0	10	34	9	35	0	0	3	1	
Saturday 20:00	10	3	0	18	37	2	41	0	4	5	7	
Saturday 21:00	4	4	0	2	21	2	63	1	11	3	3	
Saturday 22:00	9	0	0	15	23	4	52	0	19	0	1	
Saturday 23:00	12	0	0	0	51	4	86	0	13	0	0	
Sunday 00:00	18	0	0	0	28	7	122	0	21	0	1	
Sunday 01:00	9	0	0	0	31	23	148	0	13	0	0	
Sunday 02:00	13	0	0	0	0	0	86	0	0	0	0	
Sunday 03:00	0	0	0	0	0	0	124	0	0	0	0	
Sunday 04:00	0	0	0	0	0	0	0	0	0	0	0	
Sunday 05:00	0	0	0	0	0	0	0	0	0	0	0	
Sunday 06:00	0	0	0	0	0	0	0	0	0	0	0	

Total Hackney Carriages Departing Empty											
Hour beginning	Heygate Avenue	Chalkwell Station	Chichester Road	Ditton Court Road	Leigh on Sea Station	London Road Leigh	London Road	Southchurch Avenue	Cliffdown Road (Southend Central Station)	Victoria Station	University Hospital
Thursday 07:00	0	0	0	0	11	0	0	8	0	0	1
Thursday 08:00	0	0	0	5	6	0	0	0	0	0	1
Thursday 09:00	6	0	0	4	4	0	0	6	0	0	1
Thursday 10:00	5	0	0	7	1	0	9	9	0	0	0
Thursday 11:00	3	0	0	8	4	0	7	6	0	0	0
Thursday 12:00	3	0	0	7	5	0	3	0	0	0	0
Thursday 13:00	0	0	0	4	6	0	3	0	0	0	0
Thursday 14:00	4	0	0	8	4	0	2	0	0	0	1
Thursday 15:00	8	0	0	5	3	0	3	0	0	0	1
Thursday 16:00	4	1	0	4	2	0	3	0	0	0	0
Thursday 17:00	3	1	0	4	2	0	0	0	0	0	1
Thursday 18:00	5	1	0	4	2	0	1	0	0	0	0
Thursday 19:00	7	7	0	8	1	0	5	0	0	2	1
Thursday 20:00	8	7	0	6	3	0	3	0	0	3	0
Thursday 21:00	5	6	0	8	6	0	3	0	5	7	1
Thursday 22:00	4	7	0	9	2	0	3	0	1	3	1
Thursday 23:00	6	3	0	2	3	0	6	0	1	5	0
Friday 00:00	2	4	0	5	2	0	4	0	6	4	0
Friday 01:00	0	3	0	4	6	0	1	0	0	2	0
Friday 02:00	0	0	0	0	0	0	2	0	0	2	0
Friday 03:00	0	0	0	0	0	0	0	0	0	0	0
Friday 04:00	0	0	0	0	0	0	0	0	0	0	0
Friday 05:00	0	0	0	0	0	0	0	0	0	0	1
Friday 06:00	0	0	0	0	0	0	0	0	0	0	1
Friday 07:00	0	0	0	15	0	0	0	0	0	0	1
Friday 08:00	0	0	0	8	0	0	2	0	0	0	1
Friday 09:00	0	0	0	13	0	0	5	7	0	0	0
Friday 10:00	3	0	0	21	10	0	4	5	0	0	0
Friday 11:00	9	0	0	14	7	0	4	9	0	0	0
Friday 12:00	1	0	0	8	2	0	1	1	0	0	0
Friday 13:00	4	0	0	4	5	0	6	0	0	0	0
Friday 14:00	4	0	0	0	4	0	7	0	0	0	0
Friday 15:00	3	0	0	2	1	0	6	0	0	0	0
Friday 16:00	2	0	0	0	0	0	1	0	0	0	0
Friday 17:00	0	0	0	3	2	0	0	0	0	0	0
Friday 18:00	6	1	0	4	2	0	2	0	0	1	1
Friday 19:00	4	1	0	7	1	0	2	5	0	1	1
Friday 20:00	7	1	0	5	3	0	3	4	3	1	0
Friday 21:00	11	5	0	15	3	3	3	10	2	4	0
Friday 22:00	2	3	0	10	9	2	0	4	1	3	0
Friday 23:00	1	0	0	6	4	0	0	0	0	1	0
Saturday 00:00	3	0	0	5	2	1	0	0	0	2	0
Saturday 01:00	2	0	0	0	4	2	0	0	0	0	0
Saturday 02:00	3	0	0	0	0	0	0	0	0	0	1
Saturday 03:00	0	0	0	0	0	0	0	0	0	0	0
Saturday 04:00	0	0	0	0	0	0	0	0	0	0	3
Saturday 05:00	0	0	0	0	0	0	0	0	0	0	1
Saturday 06:00	0	0	0	0	0	0	0	0	0	0	0

Total Hackney Carriages Departing Empty											
Hour beginning	Heygate Avenue	Chalkwell Station	Chichester Road	Ditton Court Road	Leigh on Sea Station	London Road Leigh	London Road	Southchurch Avenue	Clifftown Road (Southend Central Station)	Victoria Station	University Hospital
Saturday 07:00	0	0	0	0	0	0	0	4	0	0	0
Saturday 08:00	1	0	0	0	0	0	0	5	0	0	1
Saturday 09:00	1	0	0	5	1	0	1	0	0	0	1
Saturday 10:00	3	0	0	5	7	0	2	0	0	0	0
Saturday 11:00	6	0	0	8	8	0	3	0	0	0	1
Saturday 12:00	6	0	0	8	2	0	2	0	0	0	0
Saturday 13:00	2	0	0	3	3	0	0	0	0	0	1
Saturday 14:00	2	0	1	1	2	0	0	0	0	0	0
Saturday 15:00	5	0	0	5	0	0	6	0	0	0	2
Saturday 16:00	3	1	0	3	5	0	2	0	0	0	0
Saturday 17:00	1	1	0	4	2	0	4	0	0	0	1
Saturday 18:00	7	1	0	2	5	0	3	0	0	3	0
Saturday 19:00	9	3	0	4	5	0	4	3	0	1	1
Saturday 20:00	8	2	0	10	5	2	3	5	1	0	1
Saturday 21:00	12	3	0	9	5	2	2	3	3	2	0
Saturday 22:00	10	6	0	4	3	2	3	0	4	0	0
Saturday 23:00	5	0	0	0	0	3	0	0	5	0	0
Sunday 00:00	0	0	0	0	4	2	0	0	0	0	0
Sunday 01:00	0	0	0	0	2	0	1	0	4	0	1
Sunday 02:00	4	0	0	0	0	0	3	0	0	0	0
Sunday 03:00	0	0	0	0	0	0	0	0	0	0	0
Sunday 04:00	0	0	0	0	0	0	0	0	0	0	0
Sunday 05:00	0	0	0	0	0	0	0	0	0	0	0
Sunday 06:00	0	0	0	0	0	0	0	0	0	0	0

Total Hackney Carriages Departing With Passengers											
Hour beginning	Heygate Avenue	Chalkwell Station	Chichester Road	Ditton Court Road	Leigh on Sea Station	London Road Leigh	London Road	Southchurch Avenue	Cliffdown Road (Southend Central Station)	Victoria Station	University Hospital
Thursday 07:00	0	0	0	0	3	0	0	1	0	0	4
Thursday 08:00	0	0	0	12	3	0	0	1	0	0	8
Thursday 09:00	2	0	0	10	3	0	0	1	0	0	12
Thursday 10:00	9	0	0	4	1	0	19	1	0	0	11
Thursday 11:00	10	0	0	3	1	0	9	0	0	0	14
Thursday 12:00	15	0	0	4	4	0	14	0	0	0	7
Thursday 13:00	14	0	0	1	2	0	22	0	0	0	12
Thursday 14:00	13	0	0	1	6	0	16	0	0	0	21
Thursday 15:00	14	0	0	1	6	0	24	0	0	0	16
Thursday 16:00	12	2	0	6	20	0	23	0	0	0	23
Thursday 17:00	11	3	0	8	32	0	28	0	0	0	30
Thursday 18:00	2	3	0	11	59	0	16	0	0	0	16
Thursday 19:00	4	4	0	14	67	0	12	0	0	7	10
Thursday 20:00	4	3	0	6	31	0	6	0	0	5	6
Thursday 21:00	4	4	0	5	32	0	9	0	0	4	8
Thursday 22:00	3	3	0	8	34	0	10	0	2	5	1
Thursday 23:00	2	6	0	15	53	0	8	0	1	4	2
Friday 00:00	0	5	0	5	38	0	8	0	0	13	2
Friday 01:00	0	4	0	1	16	0	5	0	0	5	0
Friday 02:00	0	0	0	0	0	0	1	0	0	3	0
Friday 03:00	0	0	0	0	0	0	0	0	0	0	0
Friday 04:00	0	0	0	0	0	0	0	0	0	0	0
Friday 05:00	0	0	0	0	0	0	0	0	0	0	1
Friday 06:00	0	0	0	0	0	0	0	0	0	0	1
Friday 07:00	0	0	0	1	0	0	0	0	0	0	6
Friday 08:00	0	0	0	9	0	0	2	0	0	0	7
Friday 09:00	0	0	0	3	0	0	8	2	0	0	10
Friday 10:00	13	0	0	1	0	0	15	0	0	0	13
Friday 11:00	8	0	0	2	2	0	19	0	0	0	18
Friday 12:00	21	0	0	1	4	0	20	1	0	0	22
Friday 13:00	17	0	0	1	2	0	20	0	0	0	14
Friday 14:00	14	0	0	1	8	0	24	0	0	0	16
Friday 15:00	13	0	0	3	12	0	23	0	0	0	23
Friday 16:00	19	0	0	5	26	0	27	0	0	0	20
Friday 17:00	11	0	0	6	63	0	24	0	0	0	16
Friday 18:00	8	12	0	9	82	0	23	0	0	5	4
Friday 19:00	3	5	0	6	42	0	26	2	4	3	4
Friday 20:00	6	7	0	9	29	0	21	1	3	8	4
Friday 21:00	3	2	0	6	21	0	18	1	3	4	5
Friday 22:00	5	3	0	6	29	4	0	3	5	9	1
Friday 23:00	7	6	0	13	36	4	0	0	0	7	0
Saturday 00:00	5	0	0	4	33	6	0	0	0	5	1
Saturday 01:00	3	0	0	0	16	5	0	0	0	15	3
Saturday 02:00	0	0	0	0	0	0	0	0	0	0	0
Saturday 03:00	4	0	0	0	0	0	0	0	0	0	0
Saturday 04:00	0	0	0	0	0	0	0	0	0	0	2
Saturday 05:00	0	0	0	0	0	0	0	0	0	0	0
Saturday 06:00	0	0	0	0	0	0	0	0	0	0	3

Total Hackney Carriages Departing With Passengers											
Hour beginning	Heygate Avenue	Chalkwell Station	Chichester Road	Ditton Court Road	Leigh on Sea Station	London Road Leigh	London Road	Southchurch Avenue	Cliffdown Road (Southend Central Station)	Victoria Station	University Hospital
Saturday 07:00	0	0	0	0	0	0	0	0	0	0	3
Saturday 08:00	3	0	0	0	0	0	0	1	0	0	1
Saturday 09:00	3	0	0	2	0	0	6	0	0	0	5
Saturday 10:00	9	0	0	3	2	0	11	0	0	0	5
Saturday 11:00	12	0	0	1	3	0	15	0	0	0	5
Saturday 12:00	11	0	0	4	6	0	17	0	0	0	3
Saturday 13:00	9	0	0	3	4	0	23	0	0	0	5
Saturday 14:00	20	0	0	4	8	0	27	0	0	0	1
Saturday 15:00	14	0	0	2	6	0	25	0	0	0	11
Saturday 16:00	15	1	1	5	9	0	27	0	0	0	9
Saturday 17:00	14	2	1	5	15	0	29	0	0	0	2
Saturday 18:00	10	3	0	11	13	0	20	0	0	1	6
Saturday 19:00	7	5	0	7	20	3	24	0	0	2	1
Saturday 20:00	5	2	0	11	23	1	25	0	4	4	6
Saturday 21:00	3	3	0	2	16	2	40	1	5	2	2
Saturday 22:00	7	0	0	11	15	2	37	0	10	0	1
Saturday 23:00	6	0	0	0	32	3	60	0	8	0	0
Sunday 00:00	9	0	0	0	19	4	68	0	13	0	1
Sunday 01:00	4	0	0	0	18	11	74	0	8	0	0
Sunday 02:00	5	0	0	0	0	0	43	0	0	0	0
Sunday 03:00	0	0	0	0	0	0	60	0	0	0	0
Sunday 04:00	0	0	0	0	0	0	0	0	0	0	0
Sunday 05:00	0	0	0	0	0	0	0	0	0	0	0
Sunday 06:00	0	0	0	0	0	0	0	0	0	0	0

Total Hackney Carriage Departures											
Hour beginning	Heygate Avenue	Chalkwell Station	Chichester Road	Ditton Court Road	Leigh on Sea Station	London Road Leigh	London Road	Southchurch Avenue	Clifftown Road (Southend Central Station)	Victoria Station	University Hospital
Thursday 07:00	0	0	0	0	14	0	0	9	0	0	7
Thursday 08:00	0	0	0	17	9	0	0	0	0	0	9
Thursday 09:00	8	0	0	14	7	0	0	7	0	0	13
Thursday 10:00	14	0	0	11	2	0	28	10	0	0	11
Thursday 11:00	13	0	0	11	5	0	16	6	0	0	14
Thursday 12:00	18	0	0	11	9	0	17	0	0	0	7
Thursday 13:00	14	0	0	5	8	0	25	0	0	0	12
Thursday 14:00	17	0	0	9	10	0	18	0	0	0	22
Thursday 15:00	22	0	0	6	9	0	27	0	0	0	17
Thursday 16:00	16	3	0	10	22	0	26	0	0	0	23
Thursday 17:00	14	4	0	12	34	0	28	0	0	0	31
Thursday 18:00	7	4	0	15	61	0	17	0	0	0	16
Thursday 19:00	11	11	0	22	68	0	17	0	0	9	11
Thursday 20:00	12	10	0	12	34	0	9	0	0	8	6
Thursday 21:00	9	10	0	13	38	0	12	0	5	11	9
Thursday 22:00	7	10	0	17	36	0	13	0	3	8	2
Thursday 23:00	8	9	0	17	56	0	14	0	2	9	2
Friday 00:00	2	9	0	10	40	0	12	0	6	17	2
Friday 01:00	0	7	0	5	22	0	6	0	0	7	0
Friday 02:00	0	0	0	0	0	0	3	0	0	5	0
Friday 03:00	0	0	0	0	0	0	0	0	0	0	0
Friday 04:00	0	0	0	0	0	0	0	0	0	0	0
Friday 05:00	0	0	0	0	0	0	0	0	0	0	2
Friday 06:00	0	0	0	0	0	0	0	0	0	0	2
Friday 07:00	0	0	0	16	0	0	0	0	0	0	7
Friday 08:00	0	0	0	17	0	0	4	0	0	0	8
Friday 09:00	0	0	0	16	0	0	13	9	0	0	10
Friday 10:00	16	0	0	22	10	0	19	5	0	0	13
Friday 11:00	17	0	0	16	9	0	23	9	0	0	18
Friday 12:00	22	0	0	9	6	0	21	2	0	0	22
Friday 13:00	21	0	0	5	7	0	26	0	0	0	14
Friday 14:00	18	0	0	1	12	0	31	0	0	0	16
Friday 15:00	16	0	0	5	13	0	29	0	0	0	23
Friday 16:00	21	0	0	5	26	0	28	0	0	0	20
Friday 17:00	11	0	0	9	65	0	24	0	0	0	16
Friday 18:00	14	13	0	13	84	0	25	0	0	6	5
Friday 19:00	7	6	0	13	43	0	28	7	4	4	5
Friday 20:00	13	8	0	14	32	0	24	5	6	9	4
Friday 21:00	14	7	0	21	24	3	21	11	5	8	5
Friday 22:00	7	6	0	16	38	6	0	7	6	12	1
Friday 23:00	8	6	0	19	40	4	0	0	0	8	0
Saturday 00:00	8	0	0	9	35	7	0	0	0	7	1
Saturday 01:00	5	0	0	0	20	7	0	0	0	15	3
Saturday 02:00	3	0	0	0	0	0	0	0	0	0	1
Saturday 03:00	4	0	0	0	0	0	0	0	0	0	0
Saturday 04:00	0	0	0	0	0	0	0	0	0	0	5
Saturday 05:00	0	0	0	0	0	0	0	0	0	0	1
Saturday 06:00	0	0	0	0	0	0	0	0	0	0	3

Total Hackney Carriage Departures											
Hour beginning	Heygate Avenue	Chalkwell Station	Chichester Road	Ditton Court Road	Leigh on Sea Station	London Road Leigh	London Road	Southchurch Avenue	Cliffdown Road (Southend Central Station)	Victoria Station	University Hospital
Saturday 07:00	0	0	0	0	0	0	0	4	0	0	3
Saturday 08:00	4	0	0	0	0	0	0	6	0	0	2
Saturday 09:00	4	0	0	7	1	0	7	0	0	0	6
Saturday 10:00	12	0	0	8	9	0	13	0	0	0	5
Saturday 11:00	18	0	0	9	11	0	18	0	0	0	6
Saturday 12:00	17	0	0	12	8	0	19	0	0	0	3
Saturday 13:00	11	0	0	6	7	0	23	0	0	0	6
Saturday 14:00	22	0	1	5	10	0	27	0	0	0	1
Saturday 15:00	19	0	0	7	6	0	31	0	0	0	13
Saturday 16:00	18	2	1	8	14	0	29	0	0	0	9
Saturday 17:00	15	3	1	9	17	0	33	0	0	0	3
Saturday 18:00	17	4	0	13	18	0	23	0	0	4	6
Saturday 19:00	16	8	0	11	25	3	28	3	0	3	2
Saturday 20:00	13	4	0	21	28	3	28	5	5	4	7
Saturday 21:00	15	6	0	11	21	4	42	4	8	4	2
Saturday 22:00	17	6	0	15	18	4	40	0	14	0	1
Saturday 23:00	11	0	0	0	32	6	60	0	13	0	0
Sunday 00:00	9	0	0	0	23	6	68	0	13	0	1
Sunday 01:00	4	0	0	0	20	11	75	0	12	0	1
Sunday 02:00	9	0	0	0	0	0	46	0	0	0	0
Sunday 03:00	0	0	0	0	0	0	60	0	0	0	0
Sunday 04:00	0	0	0	0	0	0	0	0	0	0	0
Sunday 05:00	0	0	0	0	0	0	0	0	0	0	0
Sunday 06:00	0	0	0	0	0	0	0	0	0	0	0

Proportion of Hackney Carriages departing empty											
Hour beginning	Heygate Avenue	Chalkwell Station	Chichester Road	Ditton Court Road	Leigh on Sea Station	London Road Leigh	London Road	Southchurch Avenue	Cliffdown Road (Southend Central Station)	Victoria Station	University Hospital
Thursday 07:00	0%	0%	0%	0%	79%	0%	0%	89%	0%	0%	14%
Thursday 08:00	0%	0%	0%	29%	67%	0%	0%	0%	0%	0%	11%
Thursday 09:00	75%	0%	0%	29%	57%	0%	0%	86%	0%	0%	8%
Thursday 10:00	36%	0%	0%	64%	50%	0%	32%	90%	0%	0%	0%
Thursday 11:00	23%	0%	0%	73%	80%	0%	44%	100%	0%	0%	0%
Thursday 12:00	17%	0%	0%	64%	56%	0%	18%	0%	0%	0%	0%
Thursday 13:00	0%	0%	0%	80%	75%	0%	12%	0%	0%	0%	0%
Thursday 14:00	24%	0%	0%	89%	40%	0%	11%	0%	0%	0%	5%
Thursday 15:00	36%	0%	0%	83%	33%	0%	11%	0%	0%	0%	6%
Thursday 16:00	25%	33%	0%	40%	9%	0%	12%	0%	0%	0%	0%
Thursday 17:00	21%	25%	0%	33%	6%	0%	0%	0%	0%	0%	3%
Thursday 18:00	71%	25%	0%	27%	3%	0%	6%	0%	0%	0%	0%
Thursday 19:00	64%	64%	0%	36%	1%	0%	29%	0%	0%	22%	9%
Thursday 20:00	67%	70%	0%	50%	9%	0%	33%	0%	0%	38%	0%
Thursday 21:00	56%	60%	0%	62%	16%	0%	25%	0%	100%	64%	11%
Thursday 22:00	57%	70%	0%	53%	6%	0%	23%	0%	33%	38%	50%
Thursday 23:00	75%	33%	0%	12%	5%	0%	43%	0%	50%	56%	0%
Friday 00:00	100%	44%	0%	50%	5%	0%	33%	0%	100%	24%	0%
Friday 01:00	0%	43%	0%	80%	27%	0%	17%	0%	0%	29%	0%
Friday 02:00	0%	0%	0%	0%	0%	0%	67%	0%	0%	40%	0%
Friday 03:00	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Friday 04:00	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Friday 05:00	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Friday 06:00	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Friday 07:00	0%	0%	0%	94%	0%	0%	0%	0%	0%	0%	14%
Friday 08:00	0%	0%	0%	47%	0%	0%	50%	0%	0%	0%	13%
Friday 09:00	0%	0%	0%	81%	0%	0%	38%	78%	0%	0%	0%
Friday 10:00	19%	0%	0%	95%	100%	0%	21%	100%	0%	0%	0%
Friday 11:00	53%	0%	0%	88%	78%	0%	17%	100%	0%	0%	0%
Friday 12:00	5%	0%	0%	89%	33%	0%	5%	50%	0%	0%	0%
Friday 13:00	19%	0%	0%	80%	71%	0%	23%	0%	0%	0%	0%
Friday 14:00	22%	0%	0%	0%	33%	0%	23%	0%	0%	0%	0%
Friday 15:00	19%	0%	0%	40%	8%	0%	21%	0%	0%	0%	0%
Friday 16:00	10%	0%	0%	0%	0%	0%	4%	0%	0%	0%	0%
Friday 17:00	0%	0%	0%	33%	3%	0%	0%	0%	0%	0%	0%
Friday 18:00	43%	8%	0%	31%	2%	0%	8%	0%	0%	17%	20%
Friday 19:00	57%	17%	0%	54%	2%	0%	7%	71%	0%	25%	20%
Friday 20:00	54%	13%	0%	36%	9%	0%	13%	80%	50%	11%	0%
Friday 21:00	79%	71%	0%	71%	13%	100%	14%	91%	40%	50%	0%
Friday 22:00	29%	50%	0%	63%	24%	33%	0%	57%	17%	25%	0%
Friday 23:00	13%	0%	0%	32%	10%	0%	0%	0%	0%	13%	0%
Saturday 00:00	38%	0%	0%	56%	6%	14%	0%	0%	0%	29%	0%
Saturday 01:00	40%	0%	0%	0%	20%	29%	0%	0%	0%	0%	0%
Saturday 02:00	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Saturday 03:00	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Saturday 04:00	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	60%
Saturday 05:00	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%
Saturday 06:00	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Proportion of Hackney Carriages departing empty											
Hour beginning	Heygate Avenue	Chalkwell Station	Chichester Road	Ditton Court Road	Leigh on Sea Station	London Road Leigh	London Road	Southchurch Avenue	Cliffdown Road (Southend Central Station)	Victoria Station	University Hospital
Saturday 07:00	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%
Saturday 08:00	25%	0%	0%	0%	0%	0%	0%	83%	0%	0%	50%
Saturday 09:00	25%	0%	0%	71%	100%	0%	14%	0%	0%	0%	17%
Saturday 10:00	25%	0%	0%	63%	78%	0%	15%	0%	0%	0%	0%
Saturday 11:00	33%	0%	0%	89%	73%	0%	17%	0%	0%	0%	17%
Saturday 12:00	35%	0%	0%	67%	25%	0%	11%	0%	0%	0%	0%
Saturday 13:00	18%	0%	0%	50%	43%	0%	0%	0%	0%	0%	17%
Saturday 14:00	9%	0%	100%	20%	20%	0%	0%	0%	0%	0%	0%
Saturday 15:00	26%	0%	0%	71%	0%	0%	19%	0%	0%	0%	15%
Saturday 16:00	17%	50%	0%	38%	36%	0%	7%	0%	0%	0%	0%
Saturday 17:00	7%	33%	0%	44%	12%	0%	12%	0%	0%	0%	33%
Saturday 18:00	41%	25%	0%	15%	28%	0%	13%	0%	0%	75%	0%
Saturday 19:00	56%	38%	0%	36%	20%	0%	14%	100%	0%	33%	50%
Saturday 20:00	62%	50%	0%	48%	18%	67%	11%	100%	20%	0%	14%
Saturday 21:00	80%	50%	0%	82%	24%	50%	5%	75%	38%	50%	0%
Saturday 22:00	59%	100%	0%	27%	17%	50%	8%	0%	29%	0%	0%
Saturday 23:00	45%	0%	0%	0%	0%	50%	0%	0%	38%	0%	0%
Sunday 00:00	0%	0%	0%	0%	17%	33%	0%	0%	0%	0%	0%
Sunday 01:00	0%	0%	0%	0%	10%	0%	1%	0%	33%	0%	100%
Sunday 02:00	44%	0%	0%	0%	0%	0%	7%	0%	0%	0%	0%
Sunday 03:00	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Sunday 04:00	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Sunday 05:00	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Sunday 06:00	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Average Hackney Carriage vehicle wait time at rank											
Hour beginning	Heygate Avenue	Chalkwell Station	Chichester Road	Ditton Court Road	Leigh on Sea Station	London Road Leigh	London Road	Southdunch Avenue	Cliffdown Road (Southend Central Station)	Victoria Station	University Hospital
Thursday 07:00	0	0	0	0	1	0	0	1	0	0	3
Thursday 08:00	0	0	0	4	3	0	0	6	0	0	6
Thursday 09:00	10	0	0	4	10	0	0	5	0	0	6
Thursday 10:00	14	0	0	4	11	0	10	6	0	0	12
Thursday 11:00	15	0	0	11	15	0	15	3	0	0	8
Thursday 12:00	13	0	0	9	4	0	18	0	0	0	14
Thursday 13:00	8	0	0	4	8	0	20	0	0	0	10
Thursday 14:00	10	0	0	4	10	0	12	0	0	0	6
Thursday 15:00	11	0	0	6	9	0	7	0	0	0	10
Thursday 16:00	14	2	0	4	6	0	12	0	0	0	2
Thursday 17:00	4	2	0	1	6	0	4	0	0	0	1
Thursday 18:00	10	5	0	3	2	0	9	0	0	0	7
Thursday 19:00	11	6	0	3	0	0	12	0	0	3	11
Thursday 20:00	19	4	0	5	6	0	23	0	0	8	11
Thursday 21:00	10	9	0	10	6	0	30	0	9	15	3
Thursday 22:00	8	8	0	3	7	0	20	0	4	13	5
Thursday 23:00	7	1	0	2	4	0	17	0	5	28	8
Friday 00:00	13	6	0	6	6	0	13	0	3	14	0
Friday 01:00	23	7	0	9	11	0	18	0	0	14	0
Friday 02:00	0	0	0	0	0	0	43	0	0	40	0
Friday 03:00	0	0	0	0	0	0	81	0	0	0	0
Friday 04:00	0	0	0	0	0	0	0	0	0	0	0
Friday 05:00	0	0	0	0	0	0	0	0	0	0	0
Friday 06:00	0	0	0	0	0	0	0	0	0	0	0
Friday 07:00	0	0	0	5	0	0	0	0	0	0	6
Friday 08:00	0	0	0	4	0	0	3	0	0	0	9
Friday 09:00	0	0	0	8	0	0	8	3	0	0	8
Friday 10:00	9	0	0	8	8	0	4	1	0	0	13
Friday 11:00	7	0	0	7	3	0	9	7	0	0	13
Friday 12:00	9	0	0	8	3	0	6	5	0	0	7
Friday 13:00	5	0	0	13	14	0	7	0	0	0	6
Friday 14:00	14	0	0	20	6	0	5	0	0	0	12
Friday 15:00	6	0	0	4	6	0	7	0	0	0	3
Friday 16:00	4	0	0	3	2	0	5	0	0	0	6
Friday 17:00	2	0	0	4	2	0	2	0	0	0	3
Friday 18:00	3	0	0	4	0	0	5	0	0	3	8
Friday 19:00	8	1	0	3	0	0	1	0	0	0	1
Friday 20:00	2	3	0	3	4	0	7	3	0	1	13
Friday 21:00	9	5	0	8	11	10	17	7	2	9	11
Friday 22:00	6	15	0	4	4	1	0	2	0	6	6
Friday 23:00	6	0	0	2	3	1	0	0	0	7	0
Saturday 00:00	1	0	0	0	3	1	0	0	0	15	0
Saturday 01:00	5	0	0	0	2	1	0	0	0	8	9
Saturday 02:00	3	0	0	0	0	0	0	0	0	0	9
Saturday 03:00	0	0	0	0	0	0	0	0	0	0	0
Saturday 04:00	0	0	0	0	0	0	0	0	0	0	2
Saturday 05:00	0	0	0	0	0	0	0	0	0	0	1
Saturday 06:00	0	0	0	0	0	0	0	0	0	0	0

Average Hackney Carriage vehicle wait time at rank												
Hour beginning	Heygate Avenue	Chalkwell Station	Chichester Road	Ditton Court Road	Leigh on Sea Station	London Road Leigh	London Road	Southchurch Avenue	Cliffdown Road (Southend Central Station)	Victoria Station	University Hospital	
Saturday 07:00	0	0	0	0	0	0	0	2	0	0	3	
Saturday 08:00	0	0	0	0	0	0	0	0	0	0	7	
Saturday 09:00	3	0	0	3	3	0	2	0	0	0	12	
Saturday 10:00	2	0	0	4	8	0	6	0	0	0	17	
Saturday 11:00	5	0	0	7	19	0	7	0	0	0	26	
Saturday 12:00	6	0	0	3	3	0	9	0	0	0	27	
Saturday 13:00	17	0	0	8	5	0	8	0	0	0	31	
Saturday 14:00	10	0	9	10	7	0	7	0	0	0	18	
Saturday 15:00	12	0	30	3	8	0	9	0	0	0	15	
Saturday 16:00	10	0	3	1	17	0	12	0	0	0	9	
Saturday 17:00	1	0	0	3	5	0	2	0	0	0	26	
Saturday 18:00	3	6	0	1	10	0	7	0	0	3	17	
Saturday 19:00	5	1	0	0	2	0	9	0	0	6	0	
Saturday 20:00	4	4	0	4	6	0	12	4	0	15	3	
Saturday 21:00	7	6	0	3	11	4	3	4	2	21	4	
Saturday 22:00	3	2	0	2	11	2	5	0	2	0	0	
Saturday 23:00	2	0	0	0	4	2	3	0	3	0	0	
Sunday 00:00	1	0	0	0	5	0	0	0	0	0	6	
Sunday 01:00	1	0	0	0	1	0	2	0	0	0	4	
Sunday 02:00	4	0	0	0	0	0	4	0	0	0	0	
Sunday 03:00	0	0	0	0	0	0	1	0	0	0	0	
Sunday 04:00	0	0	0	0	0	0	0	0	0	0	0	
Sunday 05:00	0	0	0	0	0	0	0	0	0	0	0	
Sunday 06:00	0	0	0	0	0	0	0	0	0	0	3	

Detailed Rank Statistics

Appendix 2 – Passenger waiting events

Rank location	Date	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing (HH:MM:SS)	Number of passengers	Did passengers leave in a taxi Y/N	Wait time	Wait time (decimal minutes)	Aggregate wait times (Passenger minutes)
Chalkwell Station	07/02/2019	16:20:34	16:27:02	1	Y	00:06:28	6.47	6.47
Chalkwell Station	07/02/2019	17:18:58	17:22:46	1	Y	00:03:48	3.80	3.80
Chalkwell Station	07/02/2019	19:46:52	19:50:14	1	Y	00:03:22	3.37	3.37
Chalkwell Station	07/02/2019	19:50:18	19:51:36	1	Y	00:01:18	1.30	1.30
Chalkwell Station	08/02/2019	00:45:24	00:46:22	1	Y	00:00:58	0.97	0.97
Chalkwell Station	08/02/2019	18:01:27	18:10:37	1	Y	00:09:10	9.17	9.17
Chalkwell Station	08/02/2019	18:33:19	18:36:41	1	Y	00:03:22	3.37	3.37
Chalkwell Station	08/02/2019	18:33:39	18:38:09	1	Y	00:04:30	4.50	4.50
Chalkwell Station	08/02/2019	19:34:21	19:47:43	1	Y	00:13:22	13.37	13.37
Chalkwell Station	08/02/2019	23:05:53	23:07:49	1	Y	00:01:56	1.93	1.93
Chalkwell Station	08/02/2019	23:23:39	23:27:51	1	Y	00:04:12	4.20	4.20
Chalkwell Station	08/02/2019	23:23:39	23:33:59	1	Y	00:10:20	10.33	10.33
Chalkwell Station	08/02/2019	23:23:39	23:33:59	1	Y	00:10:20	10.33	10.33
Chalkwell Station	09/02/2019	16:53:12	16:54:18	1	Y	00:01:06	1.10	1.10
Chalkwell Station	09/02/2019	18:28:04	18:40:18	1	Y	00:12:14	12.23	12.23
Chalkwell Station	09/02/2019	18:40:22	18:51:32	1	Y	00:11:10	11.17	11.17
Chalkwell Station	09/02/2019	18:53:12	19:05:14	1	Y	00:12:02	12.03	12.03
Ditton Court Road	07/02/2019	09:24:59	09:26:07	1	Y	00:01:08	1.13	1.13
Ditton Court Road	07/02/2019	13:51:20	13:54:38	2	Y	00:03:18	3.30	6.60
Ditton Court Road	07/02/2019	15:01:22	15:06:28	2	Y	00:05:06	5.10	10.20
Ditton Court Road	07/02/2019	16:16:30	16:18:48	1	Y	00:02:18	2.30	2.30
Ditton Court Road	07/02/2019	17:15:32	17:16:36	1	Y	00:01:04	1.07	1.07
Ditton Court Road	07/02/2019	17:21:10	17:25:26	1	Y	00:04:16	4.27	4.27
Ditton Court Road	07/02/2019	17:52:34	18:02:26	1	Y	00:09:52	9.87	9.87
Ditton Court Road	07/02/2019	18:10:30	18:14:08	1	Y	00:03:38	3.63	3.63
Ditton Court Road	07/02/2019	18:12:42	18:15:00	1	Y	00:02:18	2.30	2.30
Ditton Court Road	07/02/2019	20:28:30	20:31:24	1	Y	00:02:54	2.90	2.90
Ditton Court Road	07/02/2019	23:19:22	23:24:16	1	Y	00:04:54	4.90	4.90
Ditton Court Road	07/02/2019	23:19:30	23:25:40	1	Y	00:06:10	6.17	6.17
Ditton Court Road	07/02/2019	23:20:02	23:26:40	1	Y	00:06:38	6.63	6.63
Ditton Court Road	07/02/2019	23:20:02	23:30:24	1	Y	00:10:22	10.37	10.37
Ditton Court Road	08/02/2019	00:17:32	00:19:50	1	Y	00:02:18	2.30	2.30
Ditton Court Road	08/02/2019	22:46:43	22:53:01	1	Y	00:06:18	6.30	6.30
Ditton Court Road	09/02/2019	11:48:08	11:55:46	1	Y	00:07:38	7.63	7.63
Ditton Court Road	09/02/2019	13:54:58	13:56:06	1	Y	00:01:08	1.13	1.13
Ditton Court Road	09/02/2019	16:03:26	16:07:48	2	Y	00:04:22	4.37	8.73
Ditton Court Road	09/02/2019	16:40:46	16:46:46	1	Y	00:06:00	6.00	6.00
Ditton Court Road	09/02/2019	18:54:42	18:56:58	4	Y	00:02:16	2.27	9.07
Ditton Court Road	09/02/2019	19:11:46	19:14:44	2	Y	00:02:58	2.97	5.93
Ditton Court Road	09/02/2019	22:38:26	22:40:08	1	Y	00:01:42	1.70	1.70
Heygate Avenue	07/02/2019	12:52:13	12:54:03	1	Y	00:01:50	1.83	1.83
Heygate Avenue	07/02/2019	13:41:35	13:42:49	1	Y	00:01:14	1.23	1.23
Heygate Avenue	07/02/2019	17:36:00	17:37:44	1	Y	00:01:44	1.73	1.73
Heygate Avenue	08/02/2019	12:45:46	12:49:26	1	Y	00:03:40	3.67	3.67
Heygate Avenue	08/02/2019	12:57:08	12:59:16	1	Y	00:02:08	2.13	2.13
Heygate Avenue	08/02/2019	12:58:56	13:01:38	2	Y	00:02:42	2.70	5.40
Heygate Avenue	08/02/2019	13:01:26	13:04:00	1	Y	00:02:34	2.57	2.57
Heygate Avenue	08/02/2019	13:02:20	13:07:02	2	Y	00:04:42	4.70	9.40
Heygate Avenue	08/02/2019	16:56:31	16:57:49	1	Y	00:01:18	1.30	1.30
Heygate Avenue	08/02/2019	17:05:45	17:08:07	1	Y	00:02:22	2.37	2.37
Heygate Avenue	08/02/2019	17:19:53	17:23:35	1	Y	00:03:42	3.70	3.70
Heygate Avenue	08/02/2019	17:20:51	17:25:21	2	Y	00:04:30	4.50	9.00
Heygate Avenue	08/02/2019	17:23:41	17:29:39	4	Y	00:05:58	5.97	23.87
Heygate Avenue	08/02/2019	17:26:59	17:37:49	1	N	00:10:50	10.83	10.83
Heygate Avenue	08/02/2019	17:38:51	17:41:33	1	Y	00:02:42	2.70	2.70
Heygate Avenue	08/02/2019	18:02:59	18:07:25	1	Y	00:04:26	4.43	4.43
Heygate Avenue	08/02/2019	18:41:49	18:43:23	1	Y	00:01:34	1.57	1.57
Heygate Avenue	08/02/2019	20:09:11	20:10:29	1	N	00:01:18	1.30	1.30
Heygate Avenue	08/02/2019	22:03:27	22:08:27	2	N	00:05:00	5.00	10.00

Rank location	Date	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing (HH:MM:SS)	Number of passengers	Did passengers leave in a taxi Y/N	Wait time	Wait time (decimal minutes)	Aggregate wait times (Passenger minutes)
Heygate Avenue	08/02/2019	23:27:05	23:35:07	1	N	00:08:02	8.03	8.03
Heygate Avenue	08/02/2019	23:27:59	23:33:15	3	N	00:05:16	5.27	15.80
Heygate Avenue	08/02/2019	23:32:19	23:42:41	2	Y	00:10:22	10.37	20.73
Heygate Avenue	08/02/2019	23:58:23	00:02:15	2	Y	00:03:52	3.87	7.73
Heygate Avenue	09/02/2019	03:08:41	03:11:39	1	Y	00:02:58	2.97	2.97
Heygate Avenue	09/02/2019	03:08:41	03:13:47	2	N	00:05:06	5.10	10.20
Heygate Avenue	09/02/2019	03:14:31	03:23:59	2	Y	00:09:28	9.47	18.93
Heygate Avenue	09/02/2019	03:10:21	03:28:53	1	Y	00:18:32	18.53	18.53
Heygate Avenue	09/02/2019	08:36:11	08:37:35	1	Y	00:01:24	1.40	1.40
Heygate Avenue	09/02/2019	08:37:27	08:41:13	2	Y	00:03:46	3.77	7.53
Heygate Avenue	09/02/2019	16:54:20	16:57:08	1	Y	00:02:48	2.80	2.80
Heygate Avenue	09/02/2019	17:27:18	17:30:42	1	Y	00:03:24	3.40	3.40
Heygate Avenue	09/02/2019	17:38:40	17:40:36	2	Y	00:01:56	1.93	3.87
Heygate Avenue	09/02/2019	17:39:18	17:43:10	1	Y	00:03:52	3.87	3.87
Heygate Avenue	09/02/2019	17:54:02	18:01:12	1	Y	00:07:10	7.17	7.17
Heygate Avenue	09/02/2019	18:19:08	18:20:52	1	Y	00:01:44	1.73	1.73
Heygate Avenue	09/02/2019	22:05:26	22:07:40	1	Y	00:02:14	2.23	2.23
Heygate Avenue	09/02/2019	23:35:26	23:40:20	2	Y	00:04:54	4.90	9.80
Heygate Avenue	10/02/2019	00:52:52	01:01:24	1	N	00:08:32	8.53	8.53
Heygate Avenue	10/02/2019	01:04:24	01:12:44	1	N	00:08:20	8.33	8.33
Heygate Avenue	10/02/2019	02:09:46	02:12:48	4	Y	00:03:02	3.03	12.13
Heygate Avenue	10/02/2019	02:09:46	02:15:10	2	Y	00:05:24	5.40	10.80
Heygate Avenue	10/02/2019	02:18:38	02:22:06	2	Y	00:03:28	3.47	6.93
London Road	07/02/2019	17:23:31	17:25:39	1	Y	00:02:08	2.13	2.13
London Road	07/02/2019	17:24:15	17:27:41	1	Y	00:03:26	3.43	3.43
London Road	07/02/2019	17:05:43	17:07:31	1	Y	00:01:48	1.80	1.80
London Road	07/02/2019	17:05:43	17:08:09	1	Y	00:02:26	2.43	2.43
London Road	08/02/2019	08:35:36	08:42:56	1	N	00:07:20	7.33	7.33
London Road	08/02/2019	08:52:04	08:54:48	1	Y	00:02:44	2.73	2.73
London Road	08/02/2019	10:00:08	10:06:10	2	Y	00:06:02	6.03	12.07
London Road	08/02/2019	14:47:43	14:49:21	2	Y	00:01:38	1.63	3.27
London Road	08/02/2019	16:47:27	16:50:37	1	Y	00:03:10	3.17	3.17
London Road	08/02/2019	16:48:03	16:51:09	1	Y	00:03:06	3.10	3.10
London Road	08/02/2019	17:20:09	17:22:39	3	Y	00:02:30	2.50	7.50
London Road	08/02/2019	18:53:51	18:55:49	1	Y	00:01:58	1.97	1.97
London Road	08/02/2019	19:01:53	19:03:57	1	Y	00:02:04	2.07	2.07
London Road	08/02/2019	19:04:57	19:06:25	1	Y	00:01:28	1.47	1.47
London Road	08/02/2019	19:07:31	19:10:49	1	Y	00:03:18	3.30	3.30
London Road	08/02/2019	19:08:53	19:11:01	1	Y	00:02:08	2.13	2.13
London Road	09/02/2019	10:10:29	10:13:25	1	Y	00:02:56	2.93	2.93
London Road	09/02/2019	13:00:26	13:06:16	1	Y	00:05:50	5.83	5.83
London Road	09/02/2019	13:02:50	13:09:52	1	Y	00:07:02	7.03	7.03
London Road	09/02/2019	13:05:18	13:10:46	1	Y	00:05:28	5.47	5.47
London Road	09/02/2019	13:10:50	13:13:02	1	Y	00:02:12	2.20	2.20
London Road	09/02/2019	13:10:50	13:13:48	1	Y	00:02:58	2.97	2.97
London Road	09/02/2019	13:13:12	13:13:48	1	Y	00:00:36	0.60	0.60
London Road	09/02/2019	13:13:12	13:14:48	1	Y	00:01:36	1.60	1.60
London Road	09/02/2019	13:14:18	13:16:06	1	Y	00:01:48	1.80	1.80
London Road	09/02/2019	13:15:32	13:18:30	3	Y	00:02:58	2.97	8.90
London Road	09/02/2019	13:18:48	13:20:48	1	Y	00:02:00	2.00	2.00
London Road	09/02/2019	13:18:48	13:21:44	2	Y	00:02:56	2.93	5.87
London Road	09/02/2019	13:20:18	13:21:32	2	Y	00:01:14	1.23	2.47
London Road	09/02/2019	23:10:56	23:14:04	1	Y	00:03:08	3.13	3.13
London Road	09/02/2019	23:13:00	23:14:32	2	Y	00:01:32	1.53	3.07
London Road	10/02/2019	00:06:46	00:09:02	1	Y	00:02:16	2.27	2.27
London Road	10/02/2019	00:06:46	00:10:30	2	Y	00:03:44	3.73	7.47
London Road	10/02/2019	00:06:46	00:10:40	3	Y	00:03:54	3.90	11.70
London Road	10/02/2019	00:06:46	00:11:02	1	Y	00:04:16	4.27	4.27
London Road	10/02/2019	00:06:46	00:11:50	2	Y	00:05:04	5.07	10.13

Rank location	Date	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing (HH:MM:SS)	Number of passengers	Did passengers leave in a taxi Y/N	Wait time	Wait time (decimal minutes)	Aggregate wait times (Passenger minutes)
London Road	10/02/2019	00:09:40	00:13:02	2	Y	00:03:22	3.37	6.73
London Road	10/02/2019	00:09:46	00:13:26	1	Y	00:03:40	3.67	3.67
London Road	10/02/2019	00:10:50	00:13:48	2	Y	00:02:58	2.97	5.93
London Road	10/02/2019	00:16:50	00:19:54	2	Y	00:03:04	3.07	6.13
London Road	10/02/2019	00:17:26	00:22:04	1	Y	00:04:38	4.63	4.63
London Road	10/02/2019	00:17:26	00:22:46	2	Y	00:05:20	5.33	10.67
London Road	10/02/2019	00:17:42	00:24:04	2	Y	00:06:22	6.37	12.73
London Road	10/02/2019	00:17:42	00:24:24	1	Y	00:06:42	6.70	6.70
London Road	10/02/2019	00:18:18	00:25:10	1	Y	00:06:52	6.87	6.87
London Road	10/02/2019	00:18:40	00:25:30	2	Y	00:06:50	6.83	13.67
London Road	10/02/2019	00:19:26	00:26:34	2	Y	00:07:08	7.13	14.27
London Road	10/02/2019	00:20:22	00:27:04	2	Y	00:06:42	6.70	13.40
London Road	10/02/2019	00:21:08	00:27:54	1	Y	00:06:46	6.77	6.77
London Road	10/02/2019	00:21:52	00:28:16	2	Y	00:06:24	6.40	12.80
London Road	10/02/2019	00:22:16	00:29:16	2	Y	00:07:00	7.00	14.00
London Road	10/02/2019	00:22:52	00:29:26	2	Y	00:06:34	6.57	13.13
London Road	10/02/2019	00:23:44	00:29:34	2	Y	00:05:50	5.83	11.67
London Road	10/02/2019	00:23:44	00:30:40	1	Y	00:06:56	6.93	6.93
London Road	10/02/2019	00:24:46	00:32:44	2	Y	00:07:58	7.97	15.93
London Road	10/02/2019	00:24:46	00:34:05	2	Y	00:09:19	9.32	18.63
London Road	10/02/2019	00:25:18	00:34:34	2	Y	00:09:16	9.27	18.53
London Road	10/02/2019	00:28:44	00:39:56	2	Y	00:11:12	11.20	22.40
London Road	10/02/2019	00:29:48	00:40:06	2	Y	00:10:18	10.30	20.60
London Road	10/02/2019	00:30:10	00:41:20	1	Y	00:11:10	11.17	11.17
London Road	10/02/2019	00:30:22	00:41:50	1	Y	00:11:28	11.47	11.47
London Road	10/02/2019	00:30:42	00:42:56	2	Y	00:12:14	12.23	24.47
London Road	10/02/2019	00:32:20	00:43:08	2	Y	00:10:48	10.80	21.60
London Road	10/02/2019	00:33:36	00:43:16	2	Y	00:09:40	9.67	19.33
London Road	10/02/2019	00:33:36	00:44:18	3	Y	00:10:42	10.70	32.10
London Road	10/02/2019	00:35:44	00:45:58	2	Y	00:10:14	10.23	20.47
London Road	10/02/2019	00:44:18	00:49:54	1	Y	00:05:36	5.60	5.60
London Road	10/02/2019	00:45:24	00:50:28	2	Y	00:05:04	5.07	10.13
London Road	10/02/2019	00:46:20	00:50:46	1	Y	00:04:26	4.43	4.43
London Road	10/02/2019	00:51:26	00:52:44	3	Y	00:01:18	1.30	3.90
London Road	10/02/2019	00:51:26	00:53:36	2	Y	00:02:10	2.17	4.33
London Road	10/02/2019	00:52:02	00:54:44	3	Y	00:02:42	2.70	8.10
London Road	10/02/2019	00:52:12	00:56:16	2	Y	00:04:04	4.07	8.13
London Road	10/02/2019	00:52:12	00:56:26	1	Y	00:04:14	4.23	4.23
London Road	10/02/2019	00:52:12	00:57:28	3	Y	00:05:16	5.27	15.80
London Road	10/02/2019	00:53:00	00:58:05	2	Y	00:05:05	5.08	10.17
London Road	10/02/2019	00:53:20	00:58:10	2	Y	00:04:50	4.83	9.67
London Road	10/02/2019	00:53:20	00:58:40	1	Y	00:05:20	5.33	5.33
London Road	10/02/2019	00:57:12	00:59:52	2	Y	00:02:40	2.67	5.33
London Road	10/02/2019	00:58:16	00:59:42	1	Y	00:01:26	1.43	1.43
London Road	10/02/2019	00:59:22	01:01:50	3	Y	00:02:28	2.47	7.40
London Road	10/02/2019	00:59:22	01:02:30	2	Y	00:03:08	3.13	6.27
London Road	10/02/2019	00:59:42	01:03:02	3	Y	00:03:20	3.33	10.00
London Road	10/02/2019	01:00:48	01:03:12	1	Y	00:02:24	2.40	2.40
London Road	10/02/2019	01:01:36	01:05:32	2	Y	00:03:56	3.93	7.87
London Road	10/02/2019	01:02:52	01:06:04	4	Y	00:03:12	3.20	12.80
London Road	10/02/2019	01:02:52	01:06:14	1	Y	00:03:22	3.37	3.37
London Road	10/02/2019	01:03:16	01:08:06	2	Y	00:04:50	4.83	9.67
London Road	10/02/2019	01:05:12	01:08:38	3	Y	00:03:26	3.43	10.30
London Road	10/02/2019	01:08:06	01:08:58	2	Y	00:00:52	0.87	1.73
London Road	10/02/2019	01:08:48	01:10:12	5	Y	00:01:24	1.40	7.00
London Road	10/02/2019	01:08:48	01:10:34	1	Y	00:01:46	1.77	1.77
London Road	10/02/2019	01:10:00	01:11:36	3	Y	00:01:36	1.60	4.80
London Road	10/02/2019	01:10:28	01:11:58	2	Y	00:01:30	1.50	3.00
London Road	10/02/2019	01:11:16	01:12:30	2	Y	00:01:14	1.23	2.47

Rank location	Date	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing (HH:MM:SS)	Number of passengers	Did passengers leave in a taxi Y/N	Wait time	Wait time (decimal minutes)	Aggregate wait times (Passenger minutes)
London Road	10/02/2019	01:11:42	01:12:44	2	Y	00:01:02	1.03	2.07
London Road	10/02/2019	01:12:30	01:13:08	1	Y	00:00:38	0.63	0.63
London Road	10/02/2019	01:12:52	01:13:40	1	Y	00:00:48	0.80	0.80
London Road	10/02/2019	01:13:38	01:14:18	1	Y	00:00:40	0.67	0.67
London Road	10/02/2019	01:16:14	01:17:08	3	Y	00:00:54	0.90	2.70
London Road	10/02/2019	01:17:16	01:19:14	4	Y	00:01:58	1.97	7.87
London Road	10/02/2019	01:17:16	01:19:24	3	Y	00:02:08	2.13	6.40
London Road	10/02/2019	01:18:36	01:19:54	3	Y	00:01:18	1.30	3.90
London Road	10/02/2019	01:18:36	01:20:04	1	Y	00:01:28	1.47	1.47
London Road	10/02/2019	01:19:28	01:20:26	2	Y	00:00:58	0.97	1.93
London Road	10/02/2019	01:19:28	01:20:34	1	Y	00:01:06	1.10	1.10
London Road	10/02/2019	01:19:28	01:21:08	2	Y	00:01:40	1.67	3.33
London Road	10/02/2019	01:20:18	01:21:44	3	Y	00:01:26	1.43	4.30
London Road	10/02/2019	01:21:52	01:23:00	1	Y	00:01:08	1.13	1.13
London Road	10/02/2019	03:49:22	03:50:50	4	Y	00:01:28	1.47	5.87
London Road	10/02/2019	03:50:16	03:50:58	1	Y	00:00:42	0.70	0.70
London Road	10/02/2019	03:50:16	03:54:16	3	Y	00:04:00	4.00	12.00
London Road	10/02/2019	03:50:30	03:55:50	2	Y	00:05:20	5.33	10.67
London Road	10/02/2019	03:50:30	03:56:58	5	Y	00:06:28	6.47	32.33
London Road	10/02/2019	03:56:38	03:57:24	1	Y	00:00:46	0.77	0.77
London Road Leigh	09/02/2019	00:54:21	00:58:57	1	Y	00:04:36	4.60	4.60
London Road Leigh	09/02/2019	01:02:29	01:04:59	4	Y	00:02:30	2.50	10.00
London Road Leigh	09/02/2019	01:22:03	01:26:57	2	Y	00:04:54	4.90	9.80
London Road Leigh	09/02/2019	01:22:03	01:29:49	2	Y	00:07:46	7.77	15.53
Victoria Station	08/02/2019	00:20:47	00:25:39	2	Y	00:04:52	4.87	9.73
Victoria Station	08/02/2019	18:09:02	18:13:24	1	Y	00:04:22	4.37	4.37
Victoria Station	08/02/2019	19:11:02	19:17:40	2	Y	00:06:38	6.63	13.27
Victoria Station	08/02/2019	20:37:42	20:39:40	1	Y	00:01:58	1.97	1.97
Victoria Station	08/02/2019	20:38:00	20:39:54	1	Y	00:01:54	1.90	1.90
Victoria Station	08/02/2019	22:23:34	22:25:58	1	Y	00:02:24	2.40	2.40
Victoria Station	08/02/2019	22:23:34	22:27:06	1	Y	00:03:32	3.53	3.53
Victoria Station	09/02/2019	01:11:17	01:18:17	1	Y	00:07:00	7.00	7.00
Victoria Station	09/02/2019	01:11:17	01:18:29	1	Y	00:07:12	7.20	7.20
Victoria Station	09/02/2019	01:12:07	01:19:03	1	Y	00:06:56	6.93	6.93
Leigh on Sea Station	07/02/2019	10:21:52	10:23:38	2	Y	00:01:46	1.77	3.53
Leigh on Sea Station	07/02/2019	12:21:07	12:28:05	1	Y	00:06:58	6.97	6.97
Leigh on Sea Station	07/02/2019	12:22:05	12:29:43	1	Y	00:07:38	7.63	7.63
Leigh on Sea Station	07/02/2019	15:03:05	15:08:21	1	Y	00:05:16	5.27	5.27
Leigh on Sea Station	07/02/2019	15:03:45	15:08:05	1	N	00:04:20	4.33	4.33
Leigh on Sea Station	07/02/2019	16:11:37	16:18:33	1	Y	00:06:56	6.93	6.93
Leigh on Sea Station	07/02/2019	16:13:11	16:14:37	2	N	00:01:26	1.43	2.87
Leigh on Sea Station	07/02/2019	16:17:31	16:20:31	1	Y	00:03:00	3.00	3.00
Leigh on Sea Station	07/02/2019	16:20:03	16:23:11	1	Y	00:03:08	3.13	3.13
Leigh on Sea Station	07/02/2019	16:22:33	16:23:41	2	Y	00:01:08	1.13	2.27
Leigh on Sea Station	07/02/2019	16:23:15	16:26:03	2	Y	00:02:48	2.80	5.60
Leigh on Sea Station	07/02/2019	16:23:31	16:25:25	1	Y	00:01:54	1.90	1.90
Leigh on Sea Station	07/02/2019	19:02:05	19:03:41	1	Y	00:01:36	1.60	1.60
Leigh on Sea Station	07/02/2019	19:02:05	19:04:03	1	Y	00:01:58	1.97	1.97
Leigh on Sea Station	07/02/2019	19:02:05	19:04:17	1	Y	00:02:12	2.20	2.20
Leigh on Sea Station	07/02/2019	19:02:29	19:04:31	1	Y	00:02:02	2.03	2.03
Leigh on Sea Station	07/02/2019	19:02:37	19:06:27	1	Y	00:03:50	3.83	3.83
Leigh on Sea Station	07/02/2019	19:02:37	19:06:33	1	Y	00:03:56	3.93	3.93
Leigh on Sea Station	07/02/2019	19:02:57	19:06:39	1	Y	00:03:42	3.70	3.70
Leigh on Sea Station	07/02/2019	19:02:57	19:09:11	1	Y	00:06:14	6.23	6.23
Leigh on Sea Station	07/02/2019	19:03:49	19:09:29	1	Y	00:05:40	5.67	5.67
Leigh on Sea Station	07/02/2019	19:04:15	19:09:57	1	Y	00:05:42	5.70	5.70
Leigh on Sea Station	07/02/2019	19:10:47	19:11:37	1	Y	00:00:50	0.83	0.83
Leigh on Sea Station	07/02/2019	19:11:07	19:11:45	1	Y	00:00:38	0.63	0.63
Leigh on Sea Station	07/02/2019	19:17:47	19:19:23	1	Y	00:01:36	1.60	1.60

Rank location	Date	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing (HH:MM:SS)	Number of passengers	Did passengers leave in a taxi Y/N	Wait time	Wait time (decimal minutes)	Aggregate wait times (Passenger minutes)
Leigh on Sea Station	07/02/2019	19:17:47	19:19:31	1	Y	00:01:44	1.73	1.73
Leigh on Sea Station	07/02/2019	19:18:25	19:19:45	1	Y	00:01:20	1.33	1.33
Leigh on Sea Station	07/02/2019	19:31:05	19:33:31	1	Y	00:02:26	2.43	2.43
Leigh on Sea Station	07/02/2019	19:31:05	19:34:13	1	Y	00:03:08	3.13	3.13
Leigh on Sea Station	07/02/2019	19:31:05	19:34:25	1	Y	00:03:20	3.33	3.33
Leigh on Sea Station	07/02/2019	19:32:39	19:35:53	1	Y	00:03:14	3.23	3.23
Leigh on Sea Station	07/02/2019	22:12:09	22:14:41	1	Y	00:02:32	2.53	2.53
Leigh on Sea Station	07/02/2019	22:12:09	22:15:21	1	Y	00:03:12	3.20	3.20
Leigh on Sea Station	07/02/2019	22:12:15	22:15:35	1	Y	00:03:20	3.33	3.33
Leigh on Sea Station	07/02/2019	22:12:23	22:15:57	1	Y	00:03:34	3.57	3.57
Leigh on Sea Station	07/02/2019	22:12:23	22:16:05	1	Y	00:03:42	3.70	3.70
Leigh on Sea Station	07/02/2019	22:12:39	22:16:43	1	Y	00:04:04	4.07	4.07
Leigh on Sea Station	07/02/2019	22:13:19	22:17:01	2	Y	00:03:42	3.70	7.40
Leigh on Sea Station	07/02/2019	22:13:19	22:17:41	1	Y	00:04:22	4.37	4.37
Leigh on Sea Station	07/02/2019	22:14:03	22:18:05	1	Y	00:04:02	4.03	4.03
Leigh on Sea Station	07/02/2019	22:16:59	22:20:21	1	Y	00:03:22	3.37	3.37
Leigh on Sea Station	07/02/2019	23:14:37	23:15:15	1	Y	00:00:38	0.63	0.63
Leigh on Sea Station	07/02/2019	23:14:37	23:15:21	1	Y	00:00:44	0.73	0.73
Leigh on Sea Station	07/02/2019	23:14:37	23:15:35	1	Y	00:00:58	0.97	0.97
Leigh on Sea Station	07/02/2019	23:14:37	23:15:41	1	Y	00:01:04	1.07	1.07
Leigh on Sea Station	07/02/2019	23:14:37	23:15:47	1	Y	00:01:10	1.17	1.17
Leigh on Sea Station	07/02/2019	23:14:37	23:15:55	1	Y	00:01:18	1.30	1.30
Leigh on Sea Station	07/02/2019	23:14:37	23:16:09	1	Y	00:01:32	1.53	1.53
Leigh on Sea Station	07/02/2019	23:14:45	23:16:33	2	Y	00:01:48	1.80	3.60
Leigh on Sea Station	07/02/2019	23:15:05	23:17:03	2	Y	00:01:58	1.97	3.93
Leigh on Sea Station	07/02/2019	23:15:13	23:17:27	1	Y	00:02:14	2.23	2.23
Leigh on Sea Station	07/02/2019	23:15:31	23:19:51	1	Y	00:04:20	4.33	4.33
Leigh on Sea Station	07/02/2019	23:15:31	23:21:27	2	Y	00:05:56	5.93	11.87
Leigh on Sea Station	07/02/2019	23:15:31	23:21:33	1	Y	00:06:02	6.03	6.03
Leigh on Sea Station	07/02/2019	23:15:31	23:22:05	1	Y	00:06:34	6.57	6.57
Leigh on Sea Station	07/02/2019	23:16:59	23:22:11	1	Y	00:05:12	5.20	5.20
Leigh on Sea Station	07/02/2019	23:17:43	23:22:17	1	Y	00:04:34	4.57	4.57
Leigh on Sea Station	07/02/2019	23:18:37	23:22:29	1	Y	00:03:52	3.87	3.87
Leigh on Sea Station	07/02/2019	23:47:03	23:48:57	1	Y	00:01:54	1.90	1.90
Leigh on Sea Station	07/02/2019	23:47:03	23:49:49	1	Y	00:02:46	2.77	2.77
Leigh on Sea Station	07/02/2019	23:47:03	23:50:09	3	Y	00:03:06	3.10	9.30
Leigh on Sea Station	07/02/2019	23:47:03	23:51:21	1	Y	00:04:18	4.30	4.30
Leigh on Sea Station	08/02/2019	16:23:20	16:28:44	1	Y	00:05:24	5.40	5.40
Leigh on Sea Station	08/02/2019	16:23:54	16:29:18	1	Y	00:05:24	5.40	5.40
Leigh on Sea Station	08/02/2019	16:24:30	16:30:18	1	Y	00:05:48	5.80	5.80
Leigh on Sea Station	08/02/2019	16:25:02	16:32:02	1	Y	00:07:00	7.00	7.00
Leigh on Sea Station	08/02/2019	16:28:36	16:33:14	1	Y	00:04:38	4.63	4.63
Leigh on Sea Station	08/02/2019	16:36:28	16:39:02	1	Y	00:02:34	2.57	2.57
Leigh on Sea Station	08/02/2019	17:39:52	17:42:14	1	Y	00:02:22	2.37	2.37
Leigh on Sea Station	08/02/2019	17:39:52	17:42:00	1	Y	00:02:08	2.13	2.13
Leigh on Sea Station	08/02/2019	17:43:28	17:46:14	1	Y	00:02:46	2.77	2.77
Leigh on Sea Station	08/02/2019	17:43:28	17:46:28	1	Y	00:03:00	3.00	3.00
Leigh on Sea Station	08/02/2019	17:43:28	17:46:52	1	Y	00:03:24	3.40	3.40
Leigh on Sea Station	08/02/2019	17:44:14	17:48:10	1	Y	00:03:56	3.93	3.93
Leigh on Sea Station	08/02/2019	17:44:14	17:49:10	1	Y	00:04:56	4.93	4.93
Leigh on Sea Station	08/02/2019	17:44:30	17:50:04	1	Y	00:05:34	5.57	5.57
Leigh on Sea Station	08/02/2019	17:44:30	17:51:06	1	Y	00:06:36	6.60	6.60
Leigh on Sea Station	08/02/2019	17:45:48	17:51:16	1	Y	00:05:28	5.47	5.47
Leigh on Sea Station	08/02/2019	17:46:24	17:53:26	1	Y	00:07:02	7.03	7.03
Leigh on Sea Station	08/02/2019	17:47:28	17:53:54	1	Y	00:06:26	6.43	6.43
Leigh on Sea Station	08/02/2019	17:47:28	17:56:38	1	Y	00:09:10	9.17	9.17
Leigh on Sea Station	08/02/2019	17:52:28	17:57:46	1	Y	00:05:18	5.30	5.30
Leigh on Sea Station	08/02/2019	17:53:18	17:59:14	1	Y	00:05:56	5.93	5.93
Leigh on Sea Station	08/02/2019	17:53:44	18:00:14	1	Y	00:06:30	6.50	6.50

Rank location	Date	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing (HH:MM:SS)	Number of passengers	Did passengers leave in a taxi Y/N	Wait time	Wait time (decimal minutes)	Aggregate wait times (Passenger minutes)
Leigh on Sea Station	08/02/2019	17:55:44	18:00:26	1	Y	00:04:42	4.70	4.70
Leigh on Sea Station	08/02/2019	17:56:36	18:02:10	1	Y	00:05:34	5.57	5.57
Leigh on Sea Station	08/02/2019	18:01:46	18:03:02	1	Y	00:01:16	1.27	1.27
Leigh on Sea Station	08/02/2019	18:01:46	18:03:30	1	Y	00:01:44	1.73	1.73
Leigh on Sea Station	08/02/2019	18:01:46	18:04:26	1	Y	00:02:40	2.67	2.67
Leigh on Sea Station	08/02/2019	18:01:46	18:05:00	1	Y	00:03:14	3.23	3.23
Leigh on Sea Station	08/02/2019	18:03:32	18:05:24	1	Y	00:01:52	1.87	1.87
Leigh on Sea Station	08/02/2019	18:04:18	18:05:52	1	Y	00:01:34	1.57	1.57
Leigh on Sea Station	08/02/2019	18:04:48	18:06:58	1	Y	00:02:10	2.17	2.17
Leigh on Sea Station	08/02/2019	18:10:16	18:12:26	1	Y	00:02:10	2.17	2.17
Leigh on Sea Station	08/02/2019	18:10:50	18:12:36	2	Y	00:01:46	1.77	3.53
Leigh on Sea Station	08/02/2019	18:10:50	18:13:18	1	Y	00:02:28	2.47	2.47
Leigh on Sea Station	08/02/2019	18:11:44	18:13:38	1	Y	00:01:54	1.90	1.90
Leigh on Sea Station	08/02/2019	18:28:50	18:29:22	1	Y	00:00:32	0.53	0.53
Leigh on Sea Station	08/02/2019	18:28:50	18:30:22	1	Y	00:01:32	1.53	1.53
Leigh on Sea Station	08/02/2019	18:28:50	18:30:52	1	Y	00:02:02	2.03	2.03
Leigh on Sea Station	08/02/2019	18:29:14	18:31:08	1	Y	00:01:54	1.90	1.90
Leigh on Sea Station	08/02/2019	18:29:38	18:31:42	1	Y	00:02:04	2.07	2.07
Leigh on Sea Station	08/02/2019	18:29:38	18:32:02	1	Y	00:02:24	2.40	2.40
Leigh on Sea Station	08/02/2019	18:29:38	18:32:26	1	Y	00:02:48	2.80	2.80
Leigh on Sea Station	08/02/2019	18:30:30	18:36:24	1	Y	00:05:54	5.90	5.90
Leigh on Sea Station	08/02/2019	18:32:40	18:36:54	1	Y	00:04:14	4.23	4.23
Leigh on Sea Station	08/02/2019	18:32:52	18:37:12	1	Y	00:04:20	4.33	4.33
Leigh on Sea Station	08/02/2019	18:35:38	18:38:40	1	Y	00:03:02	3.03	3.03
Leigh on Sea Station	08/02/2019	18:35:46	18:38:48	1	Y	00:03:02	3.03	3.03
Leigh on Sea Station	08/02/2019	18:36:14	18:39:48	1	Y	00:03:34	3.57	3.57
Leigh on Sea Station	08/02/2019	18:36:34	18:41:34	2	Y	00:05:00	5.00	10.00
Leigh on Sea Station	08/02/2019	18:36:34	18:42:06	1	Y	00:05:32	5.53	5.53
Leigh on Sea Station	08/02/2019	18:36:58	18:43:00	2	Y	00:06:02	6.03	12.07
Leigh on Sea Station	08/02/2019	18:37:34	18:43:10	1	Y	00:05:36	5.60	5.60
Leigh on Sea Station	08/02/2019	18:37:58	18:43:40	1	Y	00:05:42	5.70	5.70
Leigh on Sea Station	08/02/2019	18:38:26	18:45:32	1	Y	00:07:06	7.10	7.10
Leigh on Sea Station	08/02/2019	18:39:12	18:46:42	1	Y	00:07:30	7.50	7.50
Leigh on Sea Station	08/02/2019	18:40:10	18:47:00	1	Y	00:06:50	6.83	6.83
Leigh on Sea Station	08/02/2019	18:40:38	18:48:10	1	Y	00:07:32	7.53	7.53
Leigh on Sea Station	08/02/2019	18:41:14	18:48:18	1	Y	00:07:04	7.07	7.07
Leigh on Sea Station	08/02/2019	18:44:04	18:48:40	1	Y	00:04:36	4.60	4.60
Leigh on Sea Station	08/02/2019	18:44:16	18:48:50	1	Y	00:04:34	4.57	4.57
Leigh on Sea Station	08/02/2019	18:45:10	18:49:12	1	Y	00:04:02	4.03	4.03
Leigh on Sea Station	08/02/2019	18:45:54	18:49:36	1	Y	00:03:42	3.70	3.70
Leigh on Sea Station	08/02/2019	18:46:20	18:49:48	1	Y	00:03:28	3.47	3.47
Leigh on Sea Station	08/02/2019	19:01:32	19:03:14	1	Y	00:01:42	1.70	1.70
Leigh on Sea Station	08/02/2019	19:01:44	19:03:26	2	Y	00:01:42	1.70	3.40
Leigh on Sea Station	08/02/2019	19:02:10	19:03:46	1	Y	00:01:36	1.60	1.60
Leigh on Sea Station	08/02/2019	19:02:10	19:04:06	1	Y	00:01:56	1.93	1.93
Leigh on Sea Station	08/02/2019	19:19:26	19:20:50	1	Y	00:01:24	1.40	1.40
Leigh on Sea Station	08/02/2019	19:20:08	19:22:00	1	Y	00:01:52	1.87	1.87
Leigh on Sea Station	08/02/2019	19:20:24	19:24:58	2	Y	00:04:34	4.57	9.13
Leigh on Sea Station	08/02/2019	19:21:16	19:22:18	1	Y	00:01:02	1.03	1.03
Leigh on Sea Station	08/02/2019	23:16:09	23:21:55	2	Y	00:05:46	5.77	11.53
Leigh on Sea Station	08/02/2019	23:16:29	23:23:15	1	Y	00:06:46	6.77	6.77
Leigh on Sea Station	08/02/2019	23:17:15	23:23:57	1	Y	00:06:42	6.70	6.70
Leigh on Sea Station	08/02/2019	23:18:21	23:24:43	1	Y	00:06:22	6.37	6.37
Leigh on Sea Station	08/02/2019	23:22:47	23:25:13	1	Y	00:02:26	2.43	2.43
Leigh on Sea Station	08/02/2019	23:36:07	23:38:41	1	Y	00:02:34	2.57	2.57
Leigh on Sea Station	08/02/2019	23:36:17	23:39:27	1	Y	00:03:10	3.17	3.17
Leigh on Sea Station	08/02/2019	23:36:17	23:40:21	1	Y	00:04:04	4.07	4.07
Leigh on Sea Station	08/02/2019	23:36:27	23:41:35	1	Y	00:05:08	5.13	5.13
Leigh on Sea Station	08/02/2019	23:36:27	23:42:33	1	Y	00:06:06	6.10	6.10

Rank location	Date	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing (HH:MM:SS)	Number of passengers	Did passengers leave in a taxi Y/N	Wait time	Wait time (decimal minutes)	Aggregate wait times (Passenger minutes)
Leigh on Sea Station	08/02/2019	23:36:53	23:43:17	1	Y	00:06:24	6.40	6.40
Leigh on Sea Station	08/02/2019	23:36:53	23:43:37	2	Y	00:06:44	6.73	13.47
Leigh on Sea Station	08/02/2019	23:37:51	23:43:47	2	Y	00:05:56	5.93	11.87
Leigh on Sea Station	08/02/2019	23:37:51	23:44:39	2	Y	00:06:48	6.80	13.60
Leigh on Sea Station	08/02/2019	23:41:13	23:46:21	2	Y	00:05:08	5.13	10.27
Leigh on Sea Station	08/02/2019	23:45:15	23:48:05	2	Y	00:02:50	2.83	5.67
Leigh on Sea Station	08/02/2019	23:45:15	23:48:19	2	Y	00:03:04	3.07	6.13
Leigh on Sea Station	09/02/2019	00:17:57	00:19:25	1	Y	00:01:28	1.47	1.47
Leigh on Sea Station	09/02/2019	00:17:57	00:19:59	1	Y	00:02:02	2.03	2.03
Leigh on Sea Station	09/02/2019	00:17:57	00:20:21	1	Y	00:02:24	2.40	2.40
Leigh on Sea Station	09/02/2019	00:17:57	00:21:41	2	Y	00:03:44	3.73	7.47
Leigh on Sea Station	09/02/2019	00:17:57	00:22:35	1	Y	00:04:38	4.63	4.63
Leigh on Sea Station	09/02/2019	00:17:57	00:22:57	1	Y	00:05:00	5.00	5.00
Leigh on Sea Station	09/02/2019	00:18:38	00:23:45	2	Y	00:05:07	5.12	10.23
Leigh on Sea Station	09/02/2019	00:18:38	00:24:45	1	Y	00:06:07	6.12	6.12
Leigh on Sea Station	09/02/2019	00:18:51	00:24:53	2	Y	00:06:02	6.03	12.07
Leigh on Sea Station	09/02/2019	00:19:37	00:25:31	1	Y	00:05:54	5.90	5.90
Leigh on Sea Station	09/02/2019	00:19:37	00:25:57	1	Y	00:06:20	6.33	6.33
Leigh on Sea Station	09/02/2019	00:19:37	00:26:31	3	Y	00:06:54	6.90	20.70
Leigh on Sea Station	09/02/2019	00:19:47	00:27:17	1	Y	00:07:30	7.50	7.50
Leigh on Sea Station	09/02/2019	00:36:45	00:37:53	1	Y	00:01:08	1.13	1.13
Leigh on Sea Station	09/02/2019	00:36:45	00:40:33	2	Y	00:03:48	3.80	7.60
Leigh on Sea Station	09/02/2019	00:36:55	00:43:49	1	Y	00:06:54	6.90	6.90
Leigh on Sea Station	09/02/2019	00:37:03	00:44:11	1	Y	00:07:08	7.13	7.13
Leigh on Sea Station	09/02/2019	00:37:17	00:44:45	1	Y	00:07:28	7.47	7.47
Leigh on Sea Station	09/02/2019	00:38:03	00:45:05	1	Y	00:07:02	7.03	7.03
Leigh on Sea Station	09/02/2019	00:44:31	00:46:55	1	Y	00:02:24	2.40	2.40
Leigh on Sea Station	09/02/2019	00:44:35	00:47:35	2	Y	00:03:00	3.00	6.00
Leigh on Sea Station	09/02/2019	01:22:47	01:24:11	1	Y	00:01:24	1.40	1.40
Leigh on Sea Station	09/02/2019	01:23:17	01:25:23	1	Y	00:02:06	2.10	2.10
Leigh on Sea Station	09/02/2019	09:21:12	09:33:00	1	N	00:11:48	11.80	11.80
Leigh on Sea Station	09/02/2019	11:40:42	11:54:24	2	Y	00:13:42	13.70	27.40
Leigh on Sea Station	09/02/2019	11:50:16	11:58:18	1	Y	00:08:02	8.03	8.03
Leigh on Sea Station	09/02/2019	12:06:06	12:14:50	1	N	00:08:44	8.73	8.73
Leigh on Sea Station	09/02/2019	12:09:54	12:21:10	2	Y	00:11:16	11.27	22.53
Leigh on Sea Station	09/02/2019	12:50:38	12:52:24	1	Y	00:01:46	1.77	1.77
Leigh on Sea Station	09/02/2019	12:51:30	12:54:56	1	Y	00:03:26	3.43	3.43
Leigh on Sea Station	09/02/2019	13:53:04	14:02:14	3	Y	00:09:10	9.17	27.50
Leigh on Sea Station	09/02/2019	14:06:44	14:10:26	1	Y	00:03:42	3.70	3.70
Leigh on Sea Station	09/02/2019	16:35:58	16:39:00	1	Y	00:03:02	3.03	3.03
Leigh on Sea Station	09/02/2019	16:37:18	16:40:28	1	Y	00:03:10	3.17	3.17
Leigh on Sea Station	09/02/2019	18:51:46	18:54:54	1	Y	00:03:08	3.13	3.13
Leigh on Sea Station	09/02/2019	18:51:46	18:55:22	1	Y	00:03:36	3.60	3.60
Leigh on Sea Station	09/02/2019	19:36:02	19:37:50	1	Y	00:01:48	1.80	1.80
Leigh on Sea Station	09/02/2019	19:36:28	19:39:08	2	Y	00:02:40	2.67	5.33
Leigh on Sea Station	09/02/2019	19:36:28	19:40:28	2	Y	00:04:00	4.00	8.00
Leigh on Sea Station	09/02/2019	19:36:28	19:40:38	1	Y	00:04:10	4.17	4.17
Leigh on Sea Station	09/02/2019	19:39:26	19:40:50	1	Y	00:01:24	1.40	1.40
Leigh on Sea Station	09/02/2019	19:50:12	19:51:48	1	Y	00:01:36	1.60	1.60
Leigh on Sea Station	09/02/2019	19:50:48	19:55:08	2	Y	00:04:20	4.33	8.67
Leigh on Sea Station	09/02/2019	19:50:48	19:56:18	2	Y	00:05:30	5.50	11.00
Leigh on Sea Station	09/02/2019	22:40:24	22:42:42	2	Y	00:02:18	2.30	4.60
Leigh on Sea Station	09/02/2019	22:40:40	22:43:30	1	Y	00:02:50	2.83	2.83
Leigh on Sea Station	09/02/2019	22:41:42	22:46:12	1	Y	00:04:30	4.50	4.50
Leigh on Sea Station	09/02/2019	23:06:04	23:08:44	1	Y	00:02:40	2.67	2.67
Leigh on Sea Station	09/02/2019	23:06:20	23:09:54	1	Y	00:03:34	3.57	3.57
Leigh on Sea Station	09/02/2019	23:37:22	23:39:04	2	Y	00:01:42	1.70	3.40
Leigh on Sea Station	09/02/2019	23:37:22	23:41:20	1	Y	00:03:58	3.97	3.97
Leigh on Sea Station	09/02/2019	23:37:22	23:42:56	2	Y	00:05:34	5.57	11.13

Rank location	Date	Time passengers started to queue (HH:MM:SS)	Time passengers stopped queuing (HH:MM:SS)	Number of passengers	Did passengers leave in a taxi Y/N	Wait time	Wait time (decimal minutes)	Aggregate wait times (Passenger minutes)
Leigh on Sea Station	09/02/2019	23:38:34	23:43:06	1	Y	00:04:32	4.53	4.53
Leigh on Sea Station	09/02/2019	23:40:04	23:44:38	2	Y	00:04:34	4.57	9.13
Leigh on Sea Station	09/02/2019	23:40:04	23:45:58	2	Y	00:05:54	5.90	11.80
Leigh on Sea Station	10/02/2019	01:01:30	01:03:46	1	Y	00:02:16	2.27	2.27
Leigh on Sea Station	10/02/2019	01:01:30	01:04:20	2	Y	00:02:50	2.83	5.67
Leigh on Sea Station	10/02/2019	01:03:56	01:05:03	3	Y	00:01:07	1.12	3.35
Leigh on Sea Station	10/02/2019	01:32:38	01:36:48	2	Y	00:04:10	4.17	8.33
Leigh on Sea Station	10/02/2019	01:32:38	01:41:22	1	Y	00:08:44	8.73	8.73
Leigh on Sea Station	10/02/2019	01:32:38	01:44:30	3	Y	00:11:52	11.87	35.60
Leigh on Sea Station	10/02/2019	01:32:38	01:45:24	1	Y	00:12:46	12.77	12.77
Leigh on Sea Station	10/02/2019	01:33:44	01:52:22	4	Y	00:18:38	18.63	74.53
Leigh on Sea Station	10/02/2019	01:49:34	01:56:16	1	Y	00:06:42	6.70	6.70