



Passenger Focus, R B Kensington & Chelsea and London TravelWatch

Watford-Gatwick Passenger Surveys FINAL REPORT



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Executive Summary

- E.1 There has been considerable traffic growth on the West London Line between Clapham Jc and Willesden Jc/Watford Jc over the last 10 years. Despite increases in train services, many trains (both local services to/from Willesden (operated by LOROL) and regional services to/from Watford (operated by Southern)) are congested. Most peak services carry standing passengers, whilst passengers may be left behind; the record count was of 559 passengers on the 1729 ex Watford, which (like all Southern services on the route) is formed of 4 cars.
- E.2 However, understanding passengers' travel patterns by the usual means (such as ticket sales) is difficult, as many use multi-modal tickets such as Travelcard. This report therefore summarises the results of special surveys carried out in November 2007 to address this issue, the third in a series undertaken by the Railway Consultancy. Counts of boarders, alighters and on-train loads were undertaken across all services operated by Southern, both on weekdays and at weekends. In addition, reply-paid postcards were handed out for self-completion, asking passengers basic questions about journey origin, destination and purpose. Remarkably, over 2300 of the 3000 cards issued were returned.
- E.3 Trip matrices have been developed from the returned survey cards using the FURNESS technique to reduce biases caused by issues such as response rates differing by station.
- E.4 Daily demand (summed across both directions of travel) on the Southern services on this corridor is now about 8500 (weekdays), 5000 (Saturdays) and 3800 (Sundays). These figures show continued and substantial growth, averaging +28% in the last 18 months since our previous wave of surveys. This is already well in excess of the 10-year growth assumed in Network Rail's Cross-London Route Utilisation Strategy.
- E.5 The growth in weekday patronage has been concentrated on the central part of the route, and the number of passengers travelling on these services *through* Clapham Jc has continued to rise, now standing at over 2300 per day. This is an average of around 70 people per train operated, which is around three times more than the numbers making journeys across Watford. These figures suggest that there would be considerable disbenefit associated with splitting this service at Clapham, especially as around 225 passengers per day are travelling to/from Gatwick Airport, and double this number to other stations further South.
- E.6 As might be expected, commuting is the dominant journey purpose during the weekday peaks, and some passengers are clearly dependent upon the line, as their comments indicated. However, the line also carries significant numbers of leisure passengers; 2-4% of passengers are travelling to/from Gatwick Airport for holiday purposes; both Watford and Harrow function as railheads for the airport.

Watford-Gatwick Surveys

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1 Introduction

- 1.1 The West London Line (WLL) through Olympia has seen tremendous patronage growth since Connex first introduced through services between Gatwick and Rugby via Clapham Jc and Watford Jc, in 1997. This increased demand has not been confined to these regional services, either: extra local trains have had to be added between Clapham Jc and Willesden Jc. On the other hand, InterCity services are now reduced to a couple a day in each direction, and these are to be withdrawn in December 2008.
- 1.2 There are, however, a number of difficulties in deciding which services to expand, in order to serve the demand. First, the widespread use of Travelcard products means that passengers' exact origins and destinations can only be found through surveys. Secondly, there are a wide range of possible train service patterns which could be operated, because of the network complexity in the Clapham and Willesden areas. Thirdly, operational considerations do need to be taken into account, in order to ensure that any timetabled service can operate reliably and, preferably, to a regular-interval pattern. Perhaps a more fundamental question, however, is what types of service are appropriate – local, regional, InterCity or some combination of all three?
- 1.3 This report is the third piece of analysis undertaken by the Railway Consultancy on the West London Line, the earlier ones having been carried out in October 2004 and February/March 2006. The report is structured as follows: Section 2 contains a summary of the fieldwork carried out, and the techniques used to ensure that the data collected was as accurate as possible. Section 3 contains a summary of the passenger responses, to give an understanding of the types of trips currently made. Section 4 provides the count data obtained here, with some commentary as to the trends recorded over the years, and the likely impacts of changes to service patterns. Section 5 contains our conclusions and recommendations.

2 Fieldwork

- 2.1 Data collection was carried out during November 2007. The first main task was a count of all passengers boarding, alighting and being on-train between East Croydon and Watford, for all services using the West London Line operated by Southern. In previous years, it had been possible to undertake this task by having one surveyor on board each train, supplemented by a second member of staff on a few busy trains. However, demand levels have increased. Not only did a greater number of trains have to be surveyed by more than one member of staff but, in the morning and evening peak, additional staff were required at Olympia, West Brompton and Clapham Junction, to record boarding and alighting movements, as the sheer volume of these precluded this being done from the train. Should these surveys be undertaken again, we would recommend even more of this being done, especially as increased train service frequencies shift the balance of cost-effectiveness towards station-based surveying methods.
- 2.2 The second task was the distribution of reply-paid postcards requesting summary information on passengers' journeys, most notably their origin, destination and journey purpose (see Appendix A). The distribution of postcards was carried out simultaneously with walking through the train to conduct on-board counts. In general, surveyors made considerable efforts also to collect the cards back in, which saves both time and money compared to postage; more significantly, it led to an unprecedented response rate. Of 2997 cards distributed, the dataset derived contains 2333 responses containing details of trips by 2355 passengers.
- 2.3 Weekdays were surveyed between 6th and 20th, and were limited to Tuesdays, Wednesdays and Thursdays, as being representative of 'normal' weekday conditions. Saturdays were surveyed between 3rd and 17th, and Sundays between 4th and 25th, which enabled engineering works to be avoided. Surveying on a number of Saturdays also meant that the impact of particular events was somewhat smoothed, although significant numbers of passengers were recorded going to the Dog and Erotica shows at Olympia, and to a range of football matches at Chelsea, Watford, QPR and Fulham.
- 2.4 Oyster pre-pay validity North of Clapham was introduced on the 11th November, during the period of the surveys, but is not thought to have had a significant impact on the results.

3 Survey Responses

- 3.1 The data from returned survey cards was entered and cleaned. Although there were a few 'spoilt' cards, there were rather more from which good data could be obtained after editing. Despite our attempts to be careful in wording the questions, many passengers combined their responses to outward and return trips, but we were able to distinguish good data on at least the trip in one direction. Considerable numbers of passengers also claimed that they had boarded train services at stations at which the train did not stop, but most of these enabled us to infer the correct answer e.g. passengers stating that they had boarded Southern services at Surbiton were assumed to have done so at Clapham Junction.
- 3.2 We only had partial success in requesting passengers to differentiate between business and commuting trips, with 'work' being a commonly-cited journey purpose. Should there be a re-run of these surveys, we recommend including 'commuting' as an example journey purpose, to encourage the greater accuracy of response.

Trip Distribution

- 3.3 A wide range of trip origins and destinations were recorded, reflecting the interchange opportunities available at Watford Junction and (particularly) Clapham Junction. Trips included those to/from Edinburgh, the Folkestone area, South Wales and West Midlands, as well as much greater numbers from a wide range of stations in Sussex, Surrey, South London and Hertfordshire. Not to be repeated was the trip recorded to Paris via Waterloo, shortly before Eurostar moved to St Pancras.
- 3.4 Consideration of the range of trips involved, however, is important in understanding why passengers choose to use these services. For some, the West London Line is unequivocally the shortest, quickest and cheapest route, but for others it appears not to be the case. Conversations held with passengers helped us understand the reasons for this. There is certainly an anti-London preference, either reflecting the cheaper fares available ('route Olympia'), or a dislike of London Underground (or just being underground more generally), or a reflection that interchange at East Croydon, Watford Jc and even Clapham Jc is somehow conceptually simpler than at the mainline termini of Central London. However, it is also clear that the provision of electronic information (from www.nationalrail.co.uk or other sources) does enable passengers to make informed decisions based on their own preferences, which are valued. It is also clear that some of the simplistic assumptions made in LENNON for the allocation of revenue are not borne out, with passengers taking a wide range of alternative routes in practice; whilst these routes may seem sub-optimal in general, there can be a number of legitimate reasons why, for individuals with particular values of parameters such as interchange penalties, they are sensible generalised-cost minimising routes.

Journey Purpose

- 3.5 Passengers recorded a wide range of journey purposes, which we have grouped and which are set out in Table 3.1, arranged roughly in order of willingness-to-pay.

	<i>Weekday</i>	<i>Saturday</i>	<i>Sunday</i>
Business	18	5	4
Work	8	5	1
Commuting	47	7	6
Education	3	1	4
Personal Business	1	5	6
Shopping	1	2	1
VF&R ¹	7	26	24
Holiday	4	3	4
Leisure	8	39	38
Other, inc. not stated	2	7	13
<i>Total</i>	<i>100</i>	<i>100</i>	<i>100</i>

Table 3.1 Journey Purpose by Day (all figures in %)

N.B. 'Work' trips are those undifferentiated between business and commuting

- 3.6 The dominance of commuting trips on weekdays is to be expected, but some of the other figures require comment. The high proportion of business trips is driven by the presence of exhibition centres at Olympia and Earl's Court, although it is possible that some of these really reflect further commuting journeys. However, the proportion of holiday trips (2-4%), nearly all of which are to/from Gatwick, is notable even on weekdays. Gatwick remains an airport of considerable importance, and it is clear that both Watford and Harrow are now functioning as railheads for the airport, as well as Watford providing interchange for the airport whilst avoiding Central London. In total, we have identified about 75,000 Gatwick-based *holiday* trips per annum, with the total figure of Gatwick-based trips (including those for business, and VF&R purposes) being of the order of 100,000ppa. As well as the additional interchange penalties suffered, the quantity of luggage carried by these passengers would make them severely disadvantaged if the service were to be truncated or withdrawn.
- 3.7 The survey postcards also had room for comments, and a number of passengers specifically noted their dependence on this line for regular trips, including commuting.

¹ VF&R: Visiting Friends & Relatives

4 Count Data

- 4.1 Analysis of recent counts, and comparison with earlier results, shows that demand on the Watford West London – Gatwick corridor has continued to rise. *Note that all data only relates to train services operated by Southern, and to passengers using these services between East Croydon and Watford.* Since the last surveys in Spring 2006, weekday demand has risen by around 27% to about 8500 passengers per day, the increase largely being concentrated between East Croydon and Olympia. Saturday demand has risen by about 10% to about 5000 passengers per day, with the increase chiefly in the Southbound direction. Sunday demand has increased by no less than 64% to about 3800 passengers per day. Overall, demand has risen by about 28% to around 2.5mppa.
- 4.2 Figures 4.2 to 4.4 show the count data graphically, whilst the supporting data is available in spreadsheets if required. It should be noted that the levels of growth observed are *already* greater than the 17% 10-year forecast in the Cross-London RUS (Network Rail, 2007, p. 4).
- 4.3 However, one must be very careful in interpreting the results. Although these appear to show strongest growth in the local market, it must be remembered that there have been service changes over the last few years. Importantly, Southern now operate extra trips between Croydon and Olympia, as well as more shuttle journeys between Clapham and Olympia (only); although these are in addition to the metro services operated by Silverlink (now LOROL), some patronage abstraction from these may have occurred. Even if Southern's extra local traffic is indeed new traffic, it may merely reflect demand previously suppressed by the endemic levels of overcrowding, and released by the new capacity provided. Given the crowding levels found on the regional services, enhanced provision of those too might well generate extra traffic, especially as current service frequencies (broadly, hourly) are relatively low in the context of the London area.
- 4.4 Weekend growth has also been strong. Whilst these surveys (as in previous years) were designed to ensure that results were not directly affected by engineering works, these do have medium-term effects as well as immediate effects. Autumn 2007 saw Network Rail carry out relatively little work on this corridor, but previous waves of surveys have been nearer to periods of engineering disruption, and may have reflected this.



Figure 4.1 Traffic Growth has been Particularly Strong at West Brompton across all Time-Periods

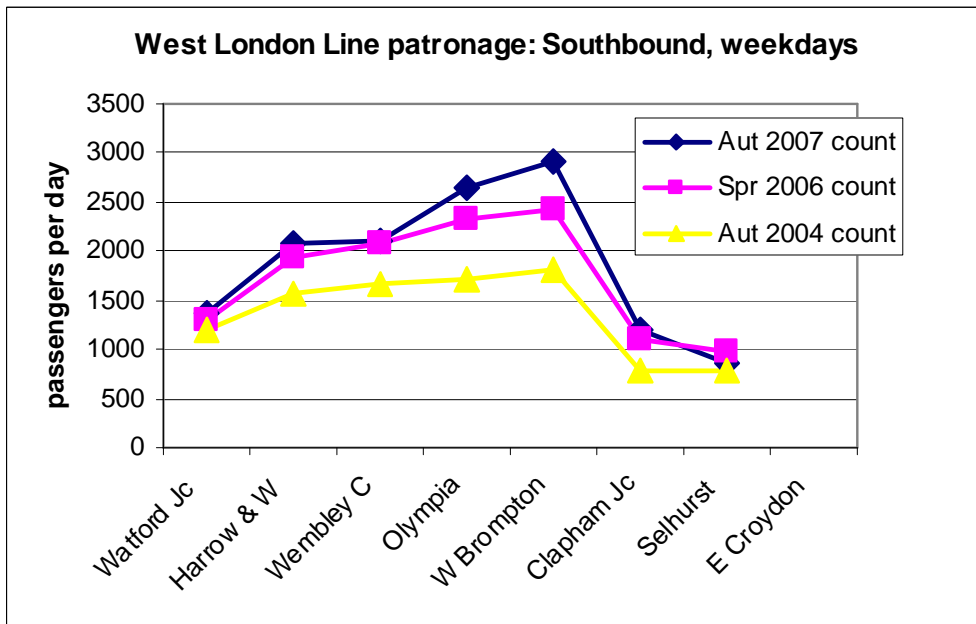
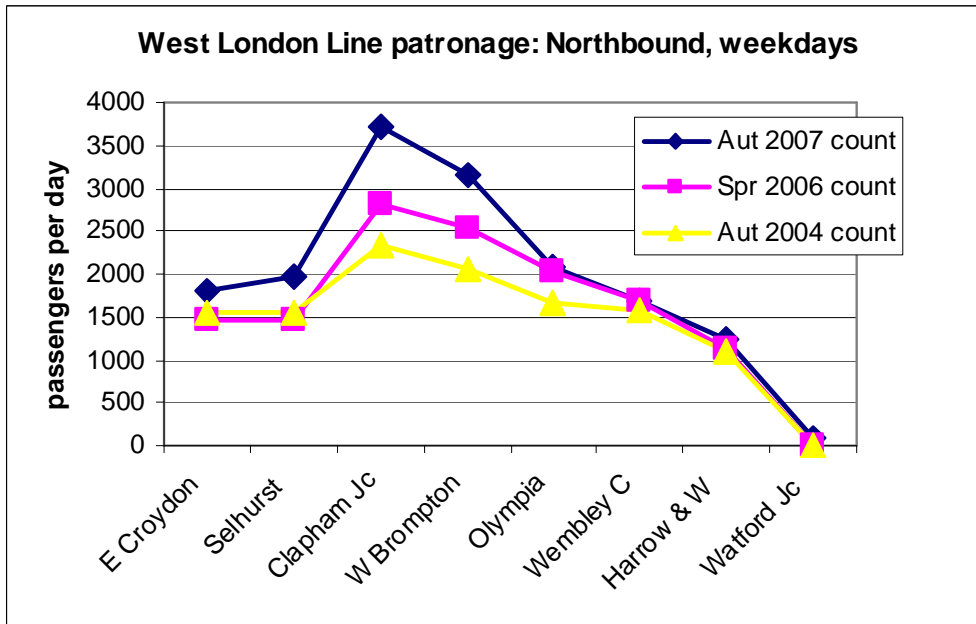


Figure 4.2. Comparative Weekday Line Loading Data for Southern Services, 2004-7

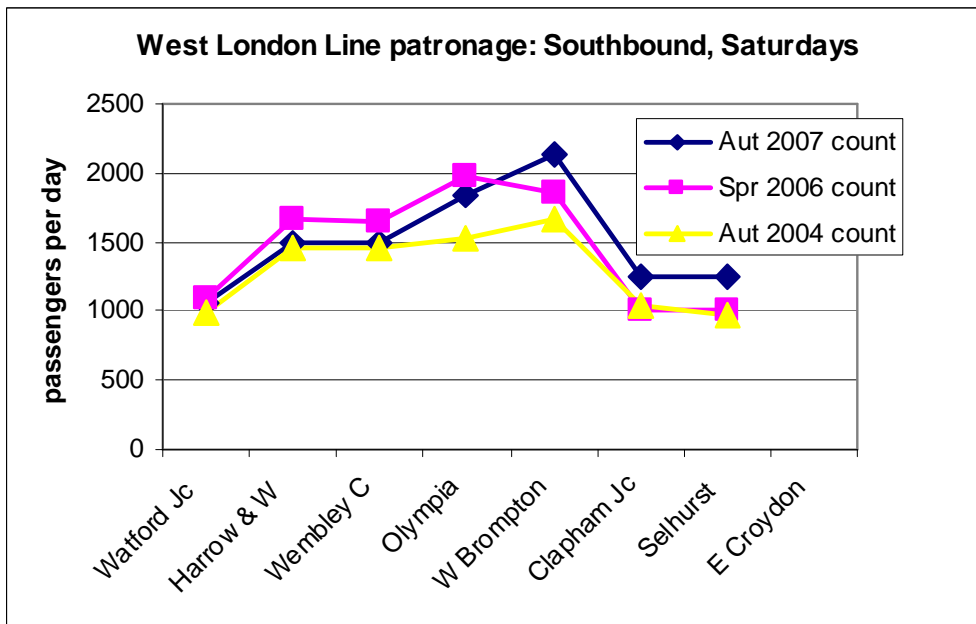
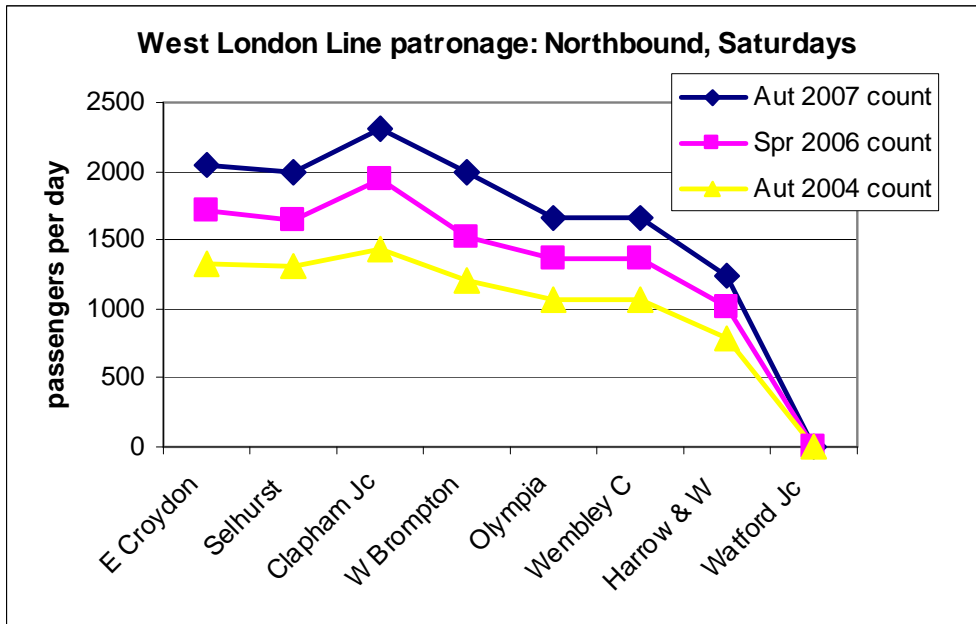


Figure 4.3. Comparative Saturday Line Loading Data for Southern Services, 2004-7

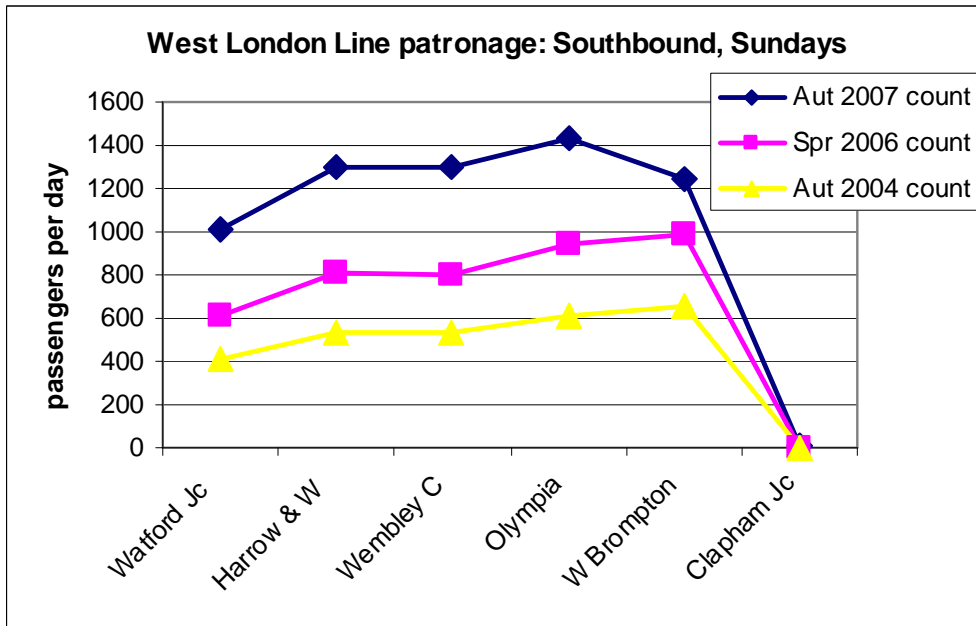
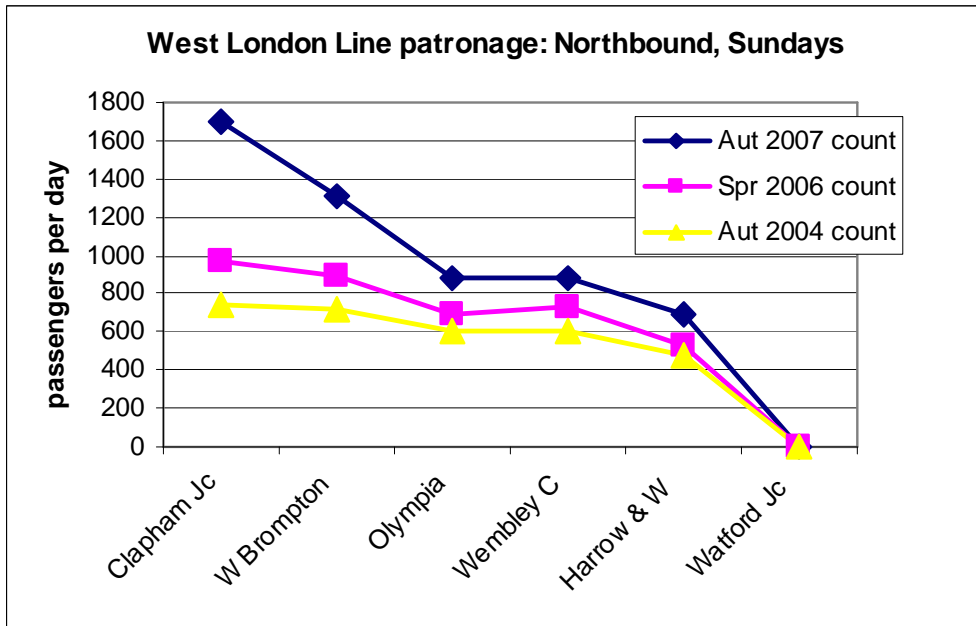


Figure 4.4. Comparative Sunday Line Loading Data for Southern Services, 2004-7

Crowding

- 4.5 Services on this corridor are very popular. Many services in the weekday peaks already have all the seats taken, but this also occurs at weekends, where mid-morning Northbound trains are particularly convenient for people attending events at Olympia and elsewhere. Nevertheless, in a resource-constrained railway, some occasional standing is inevitable, and train capacities for planning purposes include an allowance for this.
- 4.6 However, several trains loaded well beyond the planning capacity of 360 passengers for these services, which are all booked to be operated by 4-car trains. The peak loads recorded were as follows:

<i>Weekdays</i>	
07:47 from E Croydon	381 leaving Clapham
08:24 from Clapham	367 on departure
17:29 from Watford	559 leaving West Brompton
<i>Saturdays</i>	
09:52 from East Croydon	370 leaving Clapham

- 4.7 Because of the high loads on the 17:29 from Watford, we made special efforts to count this as accurately as possible, and we do know that more than 360 passengers boarded at Olympia and West Brompton (252 and 135 respectively), adding to the passenger load of over 200 already on the train. The figure is also consistent with average loadings reported by Southern's PLD train weighing system. Nevertheless, a re-count of Southbound evening peak trains is advised once passengers have amended their journey plans to reflect the recent timetable alterations.

Passengers Travelling Through Clapham

- 4.8 The Railway Consultancy is aware that one of the key decisions to be made is whether these services should be truncated at Clapham, so the number of passengers travelling through Clapham is clearly of importance. Patronage doing this has increased by 20-25% over the last 18 months, to reach the figures shown in Table 4.1. Whilst these average numbers depend upon the detailed timetable, it is clear that significant numbers of passengers currently use these services through Clapham Junction, and would be inconvenienced if they had to change additionally. The peak loads through Clapham are on the 07:47 from East Croydon (which had an estimated 265 passengers travelling through Clapham), and the 17:29 from Watford (which had an estimated 312 passengers travelling through Clapham). The latter of these trains has been retimed from the December 2007 timetable, in an attempt to provide more capacity by making an additional shuttle trip between Olympia and Clapham.

	<i>2007</i>	<i>2006</i>	<i>change</i>
<i>Weekdays</i>			
Northbound	89	56	+59%
Southbound	74	70	+5%
<i>Saturdays</i>			
Northbound	88	75	+18%
Southbound	57	44	+30%

Table 4.1 Passengers on Southern Services Travelling Through Clapham Junction
(figures are average per train)

- 4.9 Moreover, Clapham Jc is a busy station, with large numbers of boarders and alighters. Platforms 16 and 17 are no exception, whilst platform 17 not only has a large train:platform gap but also particularly narrow stairs to the platform. It takes well over a minute for the

100+ peak passengers getting off a train arriving on platform 17 to clear the platform, and queues have been observed back on to the train. Passengers attempting to board trains departing from platform 17 are already delayed by those alighting. If everybody was required to alight because the train terminated, these problems could only get worse.

- 4.10 We would remind those considering service changes that, despite the growing numbers of elderly and/or mobility-impaired passengers, and the relative prevalence of these on the South coast, through train services beyond London have already been reduced. Cross Country services are to be withdrawn, whilst through services from Brighton to Reading via Chichester and Basingstoke already have been. This leaves the Brighton - Watford service as one of the few crossing London, and one on which a number of commuters have clearly based their home and work locations, so who would be negatively affected. These practical considerations are supported by theoretical economic arguments, in which the disbenefits of service withdrawal are effectively valued more highly than the benefits of new services, which are subject to the 'rule of a half'.
- 4.11 We understand that another possible service amendment is to replace the Watford – Brighton service with a Clapham Jc – Milton Keynes service, the latter designed to improve connections with West Coast InterCity services. However, it is worth considering the relative significance of these two markets, which we can do from the responses to our survey; this data is set out in Table 4.2.

	<i>Northbound</i>	<i>Southbound</i>
<i>Weekday</i>		
Total trips	1171	1363
<i>Of which %</i>		
Watford Junction	64	64
Watford local ²	3	1
County	24	23
InterCity	9	11
<i>Saturday</i>		
Total trips	1239	1074
<i>Of which %</i>		
Watford Junction	65	55
Watford local	2	2
County	20	30
InterCity	13	12
<i>Sunday</i>		
Total trips	691	1015
<i>Of which %</i>		
Watford Junction	54	76
Watford local	3	1
County	18	18
InterCity	26	5

Table 4.2 Split of Trips on Southern service to/from Watford Jc
Source: returned survey postcards

- 4.12 This analysis shows that, whilst there might be benefits in extending the service North of Watford, the beneficiaries would generally be passengers travelling to/from stations between Watford and Northampton. Moreover, the actual numbers of passengers involved are relatively small – 300 passengers (roughly 30% of the daily 1000 Watford

² Includes trips to/from Watford High St, Bushey, and the St Albans Abbey branch

boarders/alighters) only constitutes a potential market of about 20 passengers per train and, depending upon the exact composition of any timetable (stopping patterns etc.) some of these might continue to change at Watford.

- 4.13 In comparison, the number of passengers currently travelling through Clapham Jc, and who would be disbenefitted by any service truncation there, is 2377 per weekday and 2523 on Saturdays (note that no through services are currently run on Sundays). With average 'carry-overs' at Clapham ranging between 60 and 90 per train, it can therefore be seen that the value of running through Clapham is around four times as large as that of running through Watford.

Development of a Trip Matrix

- 4.14 By using the journey description responses, and by calibrating to the train counts, it is possible to derive a trip matrix for the line. In fact, this process is less straightforward than it might appear, because the surveys were conducted over several days. Moreover, the sample of responses was not a complete sample; some trains were too crowded to allow easy access for the distribution of cards, some passengers refuse or return spoilt forms etc. etc. In fact, the estimated sample sizes were as follows: weekday 10%, Saturday 17% and Sunday 14%.
- 4.15 Worse, it is not possible to avoid some bias in surveys, in particular that those passengers travelling longer-distances on the train are more likely to be surveyed. This is particularly the case for Southbound passengers boarding at Watford, where trains are often quite empty; in contrast, Northbound passengers boarding at Clapham are relatively difficult to intercept, since many alight after only a few minutes, and they are often boarding a train which is already well-loaded. In addition, there are perhaps more commuters making these short-distance trips, concentrated at peak trips; for these passengers, the response rate is often poorer, partly because they are more likely already to have filled in a card on a previous journey.
- 4.16 However, there are techniques available to minimise the impact of these problems. We have used the FURNESS procedure, which is an iterative process which alternately controls the number of responses from the sample to the number of counted origins, and the number of counted destinations. Whilst this does not necessarily ever converge, and certainly does not do so within the 6 iterations we have undertaken, it does reduce the level of error significantly. That said, the trip matrices provided in Appendix B are only 'best estimates', and remain slightly incorrect. In particular, it has not been possible to eliminate all of the short-distance/long-distance bias noted above.

Demand to/from Gatwick

- 4.17 Our best estimate from the trip matrix is that about 225 airport passengers per day travel on Southern services between Gatwick Airport and stations North of Clapham Junction. To these should be added a further estimated 450 passengers travelling from Brighton, intermediate stations on the main line (e.g. Burgess Hill), and stations off the main line (e.g. Eastbourne) to stations North of Clapham. Note that these figures necessarily exclude most of the morning peak, in which through services are not offered.
- 4.18 However, demand for travel between the WLL and the South is not even across the day. Count data shows that only the evening trains carry many fewer than the average number of cross-Clapham passengers. The data also shows that Northbound services carry more through passengers than Southbound ones, although this may also partly reflect the fact that, in the morning peak, there are a number of additional Clapham – Olympia shuttles which make the few through services particularly attractive.

5 Conclusions and Recommendations

- 5.1 This report summarises work carried out in November 2007, as the third in a series of surveys on Southern's Watford Jc – Gatwick services, which operate via the West London Line. Fieldwork comprised on-train counts (which had to be supplemented by station counts) and the distribution of reply-paid questionnaires on postcards, most of which were in fact collected back by survey staff. Response rates were extremely high, with trip data for over 2300 journeys being collected.
- 5.2 As might be expected, commuting was the most significant journey purpose on weekdays, with trips for leisure and visiting purposes dominant at weekends. However, holiday traffic to/from Gatwick registered 3-4% of trips on all days.
- 5.3 Patronage on the West London Line has continued to grow, particularly during the weekday peaks, and on Sundays. Overall, demand has risen by about 28% to around 2.5mppa. This growth is already greater than forecast in Network Rail's Cross-London Route Utilisation Strategy. Despite additional train services being provided, many trains remain congested (the highest recorded train loading for these 4-car services being 559 passengers) and suppressed demand is likely. Ongoing monitoring of peak conditions is recommended, in the light of the timetable changes made in December 2007.
- 5.4 Passenger growth has also continued in the 'cross-Clapham' market, which is known to be of particular interest in terms of possible changes to service patterns. The average number of passengers travelling through Clapham on these services varies between 45 and 90, depending upon direction and day of the week. On the other hand, analysis shows that the maximum potential figures for passengers travelling across Watford are only around 20 per train, making this much less valuable.
- 5.5 Trip matrices have been developed using the FURNESS procedure, to reduce the impact of some of the biases inherent in survey work of this nature. These confirm the significant numbers of passengers travelling across Clapham, and imply a significant disbenefit if services were split there.

References

- Network Rail (2006), "Cross-London Route Utilisation Strategy", August.
- Railway Consultancy (2004) "Watford – Gatwick Passenger Surveys", report for London Transport Users' Committee and Southern, November.
- Railway Consultancy (2006) "Watford – Gatwick Passenger Surveys", report for London TravelWatch, TfL Rail and Passenger Focus, March.

Appendix A. Survey Card



C 1001

On behalf of London TravelWatch

With the imminent opening of the station at Shepherd's Bush, capacity on the Watford-Gatwick rail service is under pressure. For planning purposes, we need your help in understanding the trips you currently make on this service. All surveys returned named will be entered into a prize draw.

Thinking about the journey you are making now:

Where did you start your rail/tube/tram journey?

Where did you get on this train?

Where will you get off this train?

What is your final destination station/stop?

What is the purpose of your journey?

If you would like to express your views at greater length, and/ or enter our prize draw for £25 of rail travel vouchers, please give us your name and daytime phone number and tick the relevant box(es):

.....

I am willing to give my views at greater length

<input type="checkbox"/>
<input type="checkbox"/>

I wish to enter the prize draw for £25 of rail travel vouchers

Your personal details will not be used for any other purposes

BUSINESS REPLY SERVICE
LICENCE NUMBER NAT22224

**The Railway Consultancy Ltd
1st floor South Tower
Crystal Palace station
London SE19 2BR**

Appendix B. Summary of Estimated Trip Matrices

The following tables provide estimates of the numbers of trips on key flows on Southern's West London Line services. However, it should be noted that, whilst the FURNESS procedure used has reduced some of the imbalances and biases inherent in the surveys, it has not been possible to carry out this process to produce a perfectly-accurate answer. In particular, it is our judgment that the weekday matrix still underestimates the number of short-distance trips e.g. between Clapham Jc and West Brompton/Olympia, over-estimating other trips to compensate. Moreover, the matrix demonstrates a level of asymmetry unlikely in practice. However, the figures shown are a reasonable guide to orders of magnitude.

Weekdays

	S of EC	Gatwick	E Croydon	Sel-WC	via CJ Clapham J	int stas	Watford	N of Wat	Total	
S of EC	n/a	n/a	n/a	n/a	n/a	n/a	566	200	98	864
Gatwick	n/a	n/a	n/a	n/a	n/a	n/a	150	50	29	229
E Croydon	n/a	n/a	n/a	n/a	n/a	n/a	412	30	34	476
Sel-WC	n/a	n/a	n/a	n/a	n/a	n/a	230	10	3	243
via CJ	n/a	n/a	n/a	n/a	n/a	n/a	1003	150	16	1169
Clapham J	n/a	n/a	n/a	n/a	n/a	n/a	573	118	48	739
int stas	480	208	196	447	776	561	406	273	167	3514
Watford	84	36	58	33	267	113	425	n/a	n/a	1016
N of Wat	72	55	23	9	101	30	273	n/a	n/a	563
Total	636	299	277	489	1144	704	4038	831	395	8813

Saturdays

	S of EC	Gatwick	E Croydon	Sel-WC	via CJ Clapham J	int stas	Watford	N of Wat	Total	
S of EC	n/a	n/a	n/a	n/a	n/a	n/a	328	162	74	564
Gatwick	n/a	n/a	n/a	n/a	n/a	n/a	158	16	25	199
E Croydon	n/a	n/a	n/a	n/a	n/a	n/a	410	42	37	489
Sel-WC	n/a	n/a	n/a	n/a	n/a	n/a	59	22	3	84
via CJ	n/a	n/a	n/a	n/a	n/a	n/a	186	90	48	324
Clapham J	n/a	n/a	n/a	n/a	n/a	n/a	282	95	51	428
int stas	126	246	114	141	416	255	286	235	193	2012
Watford	65	30	30	13	93	100	250	n/a	n/a	581
N of Wat	107	43	28	3	78	39	73	n/a	n/a	371
Total	298	319	172	157	587	394	2032	662	431	5052

Sundays

	S of EC	Gatwick	E Croydon	Sel-WC	via CJ Clapham J	int stas	Watford	N of Wat	Total	
S of EC	n/a	n/a	n/a	n/a	n/a	n/a	223	55	57	335
Gatwick	n/a	n/a	n/a	n/a	n/a	n/a	50	12	20	82
E Croydon	n/a	n/a	n/a	n/a	n/a	n/a	129	2	15	146
Sel-WC	n/a	n/a	n/a	n/a	n/a	n/a	49	15	0	64
via CJ	n/a	n/a	n/a	n/a	n/a	n/a	359	59	69	487
Clapham J	n/a	n/a	n/a	n/a	n/a	n/a	244	94	84	422
int stas	102	162	45	137	279	237	168	75	38	1243
Watford	70	25	37	25	249	166	346	n/a	n/a	918
N of Wat	33	4	17	0	114	21	111	n/a	n/a	300
Total	205	191	99	162	642	424	1679	312	283	3997

N.B. Trips shown as to/from Gatwick and East Croydon refer to those stations only; the 'South of E Croydon' category excludes these trips, but includes all other trips from stations beyond or via East Croydon, including Brighton, Coastway East & West, stations on the Brighton main line both North and South of Gatwick, and local stations accessed via East Croydon (including Norwood Junction, the Caterham, Tattenham Corner, Uckfield & East Grinstead branches, and those on the Croydon Tram network).