

# **TfL LONDON RAIL**

## **RESPONSE TO NETWORK RAIL'S SOUTH WEST MAIN LINE ROUTE UTILISATION STRATEGY**

### **1. INTRODUCTION**

- 1.1 Transport for London welcomes the opportunity to provide an input into the South West Main Line Route Utilisation Strategy (RUS). The South West franchise is London's largest commuter operation and hence plays a vital role in the economy of the capital and the UK itself. It is therefore important that London's requirements are fully reflected in the South West Main Line RUS and in the Department for Transport's South Western Franchise Specification.
- 1.2 London's requirements are based on the South Western Rail Corridor Plan (RCP) that has been prepared by TfL London Rail. The RCP has examined the transport network in the area as a whole, identifying gaps in transport provision that are important to the Mayor's economic, social inclusion, accessibility and environmental objectives for London. Proposals to meet the gaps have been developed, with the RCP focussing on solutions that relate to the National Rail network. The RCP has been prepared in close consultation with Network Rail and the Department for Transport and TfL acknowledges the assistance and advice that has been provided.
- 1.3 TfL is developing a 20-year vision, called Rail 2025, for all of London's railways as part of its refresh of strategic thinking. This recognises the significant travel demand increases over the last decade, and anticipates continuing growth in the period to 2025, driven by the London Plan's forecasts of growth in employment and population growth. However, capacity growth has not kept pace, and London's transport network is now under considerable stress, a situation that can only become worse without effective intervention. The future burden on rail will be particularly substantial because the new jobs are concentrated in the central business district while housing growth is more generally distributed across London. While rail is well placed to meet demand for these types of journey, they will further pressurise radial and orbital transport corridors unless there are significant capacity enhancements to meet this. Given this context, Rail 2025 includes proposals for the South West Main Line which have informed our RCP and response to the Route Utilisation Strategy.

1.4 **Section 2** of this response sets out the findings of the RCP for input into the RUS and Franchise Specification. The RCP findings are organised under the following main headings:

- Improving capacity
- Improving interchanges
- Improving access to Heathrow (from the South West Corridor)
- Quick wins
- Improving accessibility and social inclusion

1.5 Specific points arising from the RCP relating to the gaps and options in the South West Main Line RUS are given in **Section 3**. The next steps which need to be taken by Network Rail, the DfT and TfL in progressing and implementing the RUS within the context of the RCP findings and the re-franchising process are set out in **Section 4**.

## 2. RAIL CORRIDOR PLAN FINDINGS

### 2.1 IMPROVING CAPACITY

- 2.1.1 There is significant peak hour overcrowding on many trains coming into Waterloo, on the fast lines, the slow lines, and on the Windsor lines. Our analysis shows that there are, in the AM peak hour, 4.6 and 6.1 people standing per square metre on the main line slow and Windsor line services respectively, on arrival at Clapham Junction. This is a very high level of loading and one which TfL believes needs to be addressed through network, station and train enhancements.

#### 2005 Overcrowding Analysis

Route Group	Passengers standing per square metre	Highest loaded section
Windsor Lines	6.1	Arrival at Clapham Junction
Main line slows	4.6	Arrival at Clapham Junction
Main line fasts	2.0	Arrival at Waterloo

Source: 2005 Modelled Demand, Railplan

More detailed charts for loadings may be found in **Appendix A**.

- 2.1.2 In terms of crowding standards, the national rail industry has worked to a standard of no passengers standing on longer-distance London commuter services (with the last stop 20 minutes or more from the London terminal) and a broad equivalent of approximately 2 people standing per square metre on shorter distance London commuter services, where the last stop is less than 20 minutes from the terminal. TfL is to develop crowding standards for the planning of London services, taking account of passengers' valuations of travel standards on shorter-distance rail journeys. Until this is available, the standards quoted above have been adopted.
- 2.1.3 The Mayor's London Plan is accepted by Government as the basis for the future planning of London. The London Plan sets out the expected pattern of growth in terms of population, employment and spatial development. It is planned that by 2016, population will have grown by 9% from 2001 levels and by 14% in employment terms. Much of the increase in employment will be located in Central London, the city fringes and in East London.
- 2.1.4 TfL has worked closely with NR and the DfT on the demand patterns and on growth on the route, and the results of this

suggest that a figure of approximately 20% growth until 2016 on inner services is one on which there appears to be collective agreement. For longer distance main line fast services, TfL forecasts that growth will be greater than on inner services, and be 26% for the period 2005-2013.

- 2.1.5 The table below indicates the comparative growth rates calculated on different service groups. The growth projected to 2016 by TfL is given in chart form in **Appendix A**.

<b>Route Group</b>	<b>TfL (2001 – 2016)</b>	<b>DfT (2004 - 2016)</b>
<b>Windsor Lines</b>	19%	25%
<b>Main line slows</b>	24%	25%
<b>Main line fasts</b>	26%*	23%

**Source: DfT, TfL**  
\* 2005-2013

Growth in the period until 2025 is predicted to be approximately 30% in overall terms (from 2001), with longer-distance patronage growing at a slightly higher rate.

### **Proposals for capacity enhancements on services**

- 2.1.6 It is clear that strong demand growth in the South West corridor will add to existing overcrowding levels. TfL's proposals for increasing capacity within the Rail Corridor Plan include:

- 2.1.7 Reconfiguration of a sub-fleet of class 450 units for inner suburban services, to an inner suburban interior, akin to that featuring in the refurbished class 455s.**

A short term solution to providing additional passenger capacity on inner suburban services is the reconfiguration of rolling stock to optimise the number of passengers that can be carried more comfortably in existing vehicles.

Analysis indicates that reconfiguration of a sub-fleet of 32 Class 450 units to an inner-suburban configuration is a viable option to provide an increase in train capacity in the shorter term. This would involve the removal of the First Class section, the guard's compartment, toilets, and some tip-up seats.

This proposal has an excellent business case BCR of 9.6:1.

### **2.1.8 Train lengthening to 12 cars on the Main Slow lines, and to 12 cars on the Windsor Lines**

Analysis has suggested that 12-car operation is the only scheme sufficient to keep crowding at or below current levels by 2021. Conclusions from testing of the preferred platform lengthening options are:

- The optimum solution on the Windsor lines is a 12-car high-capacity configuration railway. This would require platform extensions at a number of locations. The Windsor line platforms at Waterloo are not expected to be costly or problematic.
- The optimum solution on the Main Slow lines is to lengthen this route to 12-car operation. This level of lengthening is the only one sufficient to accommodate future demand properly. 10-car operation could be considered acceptable up until 2021, but the difference in cost and the level of disruption between this option and 12-car is not sufficiently large to justify a phased approach;
- Other 9- and 10-car solutions will not deliver sufficient capacity within the required timescales to make them cost-effective.
- Given the more severe overcrowding experienced on the Windsor lines, it is recommended that priority be given to the programme of works associated with longer trains on the Windsor Lines. The scope of works at Waterloo for Windsor line train lengthening is cheaper and easier in engineering terms than that for the main slow lines.
- The introduction of longer trains on the two routes is discrete: Waterloo platform lengthening can be addressed in two phases (17-19 for Windsor line trains and 1-6 for main slow line trains). Use of the Eurostar platforms may prove possible and valuable during the engineering programme, to maintain a satisfactory level of service.
- These proposals should not affect performance resilience significantly, as no additional trains are proposed, merely lengthened ones.
- The package of train lengthening proposals – 12 cars on the Windsor Lines and main slows – has a business case BCR of 2:1, including optimism bias of 40% (it is more for platform lengthening at certain stations).

### 2.1.9 Train lengthening to 15 cars on a number of Main Fast services:

- Crowding will be a major problem on these main fast line services in the future, rising from 4.1% PIXC today, to 9% by 2016 and 14% by 2021;
- A scheme in which selected long-distance services are lengthened to 15 x 23m carriages by selective lengthening of platforms at locations such as Winchester, Guildford and Woking has a good business case.
- TfL has considered the construction of a single-track flyover north of Clapham Junction, so that lengthened long-distance trains can access Waterloo International. One benefit of this is to ease the programme of construction work for platform lengthening and throat remodelling at Waterloo. The cost of a flyover - £300m – has been included in the business case analysis.
- The train lengthening proposal for selected main line fast services has a business case BCR of 3.1:1, including optimism bias of 40% (for platform lengthening it is 60%).

### Travel demand management

2.1.10 Travel demand management covers a range of possible initiatives and strategies that offer the potential to displace some demand from the high peak (generally 0800 – 0900 for national rail) to shoulder peak periods, when some spare capacity exists. It also covers measures aimed at reducing demand for travel as a whole and to shifting demand to more sustainable modes such as walking and cycling.

2.1.11 TfL recommends that further work be undertaken by itself and DfT jointly to investigate the scale and impact that a range of initiatives could achieve. These could include:

- **cheaper fares in the shoulder peaks** – This measure also requires the technology to charge passengers for travel according to the exact time of the journey (this is likely to be possible with the introduction of Oyster smartcards on the National Rail network);
- **more frequent trains in the shoulder peaks** – making shoulder peak travel easier, quicker, and more flexible, although this would require additional rolling stock and may be limited by network capacity in some areas;
- **supporting employment-related measures to enable travel time shift** – this would include flexible working hours for all

types of employees and travel plans developed to accommodate flexible working;

- **measures to reduce peak travel overall** – including home-working, part-time working.

2.1.12 There will need to be a thorough assessment of the costs and benefits associated with travel demand management initiatives. In particular the impact on the less well paid and London's economy will need to be carefully considered.

### **Double – decker trains**

2.1.13 TfL has undertaken some analysis on the benefits which could be delivered through the introduction of double-decker trains on the South Western network. Its conclusions are that there could be a capacity increase of 10%-15% per 23 metre carriage (taking into account the amount of space needed for the staircases and the probable inability to stand on the upper deck). However, the infrastructure costs would clearly be substantial, given the additional height of the vehicles and the effect on track geometry, and there could be a detrimental effect on dwell times at certain stations. Therefore TfL does not support the introduction of double-decker trains on the South West corridor.

### **Freight**

2.1.14 TfL has examined the potential for some diversion of freight trains from the West London Line on to the Kew East route, in order to release capacity on the West London Line. It appears that the West London Line has the capacity available for the freight, empty coaching stock and enhanced passenger services proposed by TfL and Network Rail, and so TfL does not recommend that freight be rerouted.

## **2.2 IMPROVING INTERCHANGES**

2.2.1 Interchanges are an important feature of travel in London and improvements to key interchanges are a vital part of a more integrated public transport network. TfL sees the need for improvements to:

- Clapham Junction – to increase the number of main line fast services which call there;
- Other key interchanges in the South Western area;
- Waterloo station – to handle increased demand and integration of Waterloo International terminal

### **Clapham Junction**

2.2.2 Clapham Junction is an important strategic interchange and the RCP has examined the benefits and costs involved in stopping more South Western main line fast services. This has the potential benefit of reducing some overall journey times and increasing capacity on the approach to Waterloo. It is also consistent with providing better orbital access around London – using the West London Line and phase 2 of the East London Line Extension – and providing better access to Gatwick and South London through the availability of interchange options. TfL's proposal corresponds to Network Rail's option 5.1 in the RUS.

2.2.3 The Rail Corridor Plan has concluded that Main Fast services can call at Clapham Junction station in the morning by using platforms 7 and 8 alternately, with the aid of new crossovers, and in the evening using platforms 8 and 9 alternately (with Up Fast services routed via platform 7 loop), with performance being on a par with that of the current timetable.

2.2.4 The Rail Corridor Plan's engineering assessment and operational modelling of the scheme has concluded that the required platform extension work (to enable 12-car main line fast trains to stop at platforms 7 and 8) is achievable, but that additional works will be required to increase the line speed through the turnout at the country end. The total cost of these works is £21m.

2.2.5 The impacts of the scheme both on circulating areas within Clapham Junction station and on other services, particularly those to Victoria, have been considered. The passenger subway at Clapham Junction will already be very crowded and congested in 2016, and stopping additional trains will worsen the situation, but only slightly. However, the footbridge will still have spare capacity, although the stairways are likely to be congested. A solution to this is to make the subway and staircases uni-directional at peak times.

- 2.2.6 There have also been concerns expressed that this scheme will contribute to overcrowding at Victoria station (both National Rail and Underground), which already suffers from problems at peak times. London Underground is planning an upgrade of its ticket hall, escalators and subways, and access to the National Rail station. These upgrades should be sufficient to accommodate the relatively small increase in passengers as a result of the strategic interchange scheme. There is also likely to be a reduction in moves between Victoria and Waterloo (and vice versa), through interchange at Clapham Junction.
- 2.2.7 The business case for creating a strategic interchange at Clapham Junction is very strong in economic terms and is financially positive, based on a 30-year appraisal period.

### **Quality of service: Key interchange stations**

- 2.2.8 The Rail Corridor Plan proposes relatively modest station improvement packages at Vauxhall, Clapham Junction, Wimbledon, Putney, Richmond, and Feltham. These are designed to address identified problems with disabled access/step-free provision, provision of information, signage, cycle provision, toilet provision, cleanliness, access to buses, passenger information systems and other facilities.
- 2.2.9 Outline business cases for improvement packages to facilities at the seven stations have been undertaken. The packages at Waterloo, Clapham Junction, Richmond, Wimbledon and Putney are forecast to be financially positive with significant user benefits from the improved station facilities. The packages at Vauxhall and Feltham have business case BCRs of 7:1 and 1.3:1 respectively.

### **Waterloo**

- 2.2.10 Waterloo station is owned and managed by Network Rail and the South West Main Line RUS recognises that passenger congestion on the main concourse and the links to and from the Underground lines are becoming a significant problem at peak times.
- 2.2.11 The layout and specifically the changes to Waterloo station are fundamental to virtually all schemes recommended above. Comments on the track and platform layout at Waterloo have been included in the relevant sections above. Recommendations on the passenger circulation issues are as follows:
- Gating of the station (for which TfL and Stagecoach jointly provided the technical design, and is assumed in the base case for the RCP study) to be implemented;

- Network Rail's proposed short term measures to address current and forecast crowding - the removal of retail outlets from the concourse, changing station access and egress arrangements, and moving the location of the display screens on the concourse, to be implemented;
- Additional station capacity measures through extending the existing single escalator from the Underground concourse to the Eurostar concourse up to main concourse level, adding another escalator adjacent to this extended escalator, and rafting over the existing Eurostar concourse (over the area between the Eurostar ticket office and check-in) to be considered for implementation;
- The conversion of the International Terminal for domestic use, including platform regauging, provision of platform repeater signals and minor signalling alterations, provision of direct access from the platforms to the main station concourse (via the proposed rafting over the existing Eurostar concourse), and closure of the existing stairways, travelators, and stairs between the platforms and lower levels, to form part of the project for conversion of Waterloo International to domestic use;
- The Rail Corridor Plan has concluded that the capacity improvement, identified above, to Waterloo, should be adequate to handle demand levels up until around 2021.
- The minor station improvements in the RCP – provision of additional departure boards and real-time information outside the station (for example at bus stops), upgrading of bicycle parking facilities, and improvement to river service connections, to form part of the base franchise specification.
- The package of improvements to the passenger circulation areas of Waterloo is financially positive.

2.2.12 TfL requests that Network Rail and the DfT fully involve it in future discussions on the proposed changes needed to Waterloo station to handle increased passenger numbers and on the future use of Waterloo International terminal, following the transfer of Eurostar services in 2007.

### **The Waterloo Development Framework**

2.2.13 The regeneration of the wider Waterloo area is an important priority. The Waterloo Development Framework (WDF) will be launched for public consultation in January 2006. It has been produced by consultants on behalf of a steering group of the GLA, TfL, LDA, Lambeth Council and Network Rail. The WDF sets out a vision for Waterloo:

*"To give Waterloo a new 'Town Square' that also serves as a public transport interchange space; to improve permeability to and within the area and provide new development principally in the area around and above Waterloo Station."*

2.2.14 Waterloo station will act as a focus for regeneration and its redevelopment can resolve many of the issues of the wider Waterloo area. The following objectives have been set for its redevelopment:

1. proposal to change Waterloo Road to a public transport, cycle, and pedestrian only street;
2. create a high quality integrated transport gateway to London
3. access for pedestrians that is primarily at surface level and respects the main desire lines.
4. seamless interchange between public transport modes. Access to rail, Underground, bus, the proposed Cross River Tram and taxis should ideally be physically linked and include real time information about public transport services so that transfer from one mode to another is as direct, clear and comfortable as possible.
5. integration of Elizabeth House development proposals into future station options.
6. pursue the development of high quality tall buildings on the areas around and above the station.

## **2.3 ACCESS TO HEATHROW**

2.3.1 Heathrow plays a vital role in London's economy and is a major traffic generator in the South West corridor. It currently handles approximately 69 million passengers per annum and with the opening of Terminal 5, it is forecast to grow to approximately 87 million passengers per annum by 2015/16. Airport employees also generate significant demand for surface transport.

2.3.2 TfL strongly supports better public transport access to Heathrow from the South West corridor given the current high use of cars by air passengers and employees.

2.3.3 TfL's view on Airtrack is as follows:

- The scheme is supported in principle, provided that there is no adverse impact on other rail services in the corridor. It is therefore recommended that further timetable performance and capacity modelling is undertaken to ensure that the proposals are robust in timetable terms;
- TfL understands that the Airtrack platforms at Heathrow Terminal 5 are 210 metres in length, sufficient for a 10-car (20 metre) train but not for a 12-car train. However, to meet projected demand on the Windsor Lines it is necessary to run 12 car trains on all services, and it would be preferable if this included Airtrack services, given that they would extensively be used by non-Heathrow passengers. It would therefore be necessary to operate maximum-length Airtrack trains on services to/from Waterloo from the start of operations.
- Airtrack needs to be developed in a way that is consistent with the possible extension of some Crossrail trains to Staines via Heathrow.
- There appears to be no case for TfL's financial involvement in the scheme.

2.3.4 In the context of improving public transport access, TfL has examined an improved Feltham to Heathrow bus link, but has found this to have a weak business case. The case for taxi-based links will be reviewed and BAA involvement in this will be sought.

## **2.4 QUICK WINS**

### **Car parks**

2.4.1 The RCP has examined a number of areas where improvements could potentially be delivered within a shorter timescale. This has also included consideration of station car parking, which is a concern identified in Network Rail's RUS. TfL's policy on car parking provision - set within the context of the Mayor's Transport Strategy policies 4E.3 & 4H.2 - at stations within the GLA area is as follows:

- no new (or substantial increases to existing) permanent park and ride car parks should be considered within zones 1-3 due to their likely generation effect of additional car vehicle trips and kilometres;
- proposals for new sites or substantial increases to existing park and ride car parks outside zone 3 can be considered provided they result in shortening of car vehicle trips and an overall reduction in car vehicle kilometres.

2.4.2 Unless a sustainable transport case can be demonstrated, TfL recommends managing parking demand through user charges at national rail stations within the GLA area.

2.4.3 The main station car park in the corridor within the GLA area is at Surbiton. There are plans to redevelop the surface level car park in the future. Should this include any increase in parking provision, TfL would recommend that a sustainable transport case be prepared as part of any redevelopment of the car park at this location.

### **Gating of stations**

2.4.4 TfL supports a significant increase in gating at stations, and notes that the gating of Waterloo also appears in the base specification of DfT's franchise consultation document as an expectation from the new franchise holder. The Rail Corridor Plan reviews the case for the gating of New Malden, Raynes Park, Mortlake, Wandsworth Town, Norbiton, Teddington, St Margarets, Whitton, and Worcester Park stations, to protect revenue and enhance passenger security.

2.4.5 The gating package has a strong business case with a financially positive payback period of 4 years. This being the case, the gating package should also be included in the base specification for the franchise. The key benefits are increased ticket revenue from reduced fraudulent travel; costs savings from reduced vandalism at the stations involved; and improved security as a result of the gates and associated increase in staff presence.

## **Additional first and last train services**

- 2.4.6 TfL has identified that the first and last services to a number of stations within the corridor, from Waterloo, are not co-ordinated with the opening times of London Underground at Waterloo. The detailed presentation of results for the relevant stations is included in **Appendix B**; TfL requests that these additional services be included in the future specification of services. The business case for these services is good: the revenue from the overall package of services is estimated to cover 82% of the additional costs of running them. The strongest performing services are those on the Windsor line to/from or via Hounslow and are financially positive; the extra services to/from Chessington also perform well. The TfL BCR for the combined package is 11.1:1, which indicates excellent value for money.
- 2.4.7 Initial operational feasibility suggests there are sufficient paths available to run the extra trains. TfL's view (from early consultation on these proposals) is that engineering access is unlikely to be an issue, as there may be a move towards fewer weekday but more extensive weekend possessions. For operational purposes it would be necessary to run an equal number of additional services in the opposite direction, to reflect rolling stock movements. There is unlikely to be significant demand at these times for people going into London so late or going out of London very early in the morning; however there will be a cost impact which has been taken into account.

## **Handling of delays**

- 2.4.8 It has been recognised that there are relatively high levels of passenger dissatisfaction with how SWT deals with delays. In the latest National Passenger Survey, 27% of passengers were dissatisfied with SWT's handling of delays. TfL has provided, in **Appendix C**, a framework for improving the level of customer service that the franchisee should offer to customers, and suggests this to be included within the franchise specification.
- 2.4.9 Information provision also needs to be coordinated with that of neighbouring TOCs, especially Southern and LUL. For example, passengers travelling from Wimbledon to central London who normally travel via Clapham Junction to Victoria on Southern services, could be informed of severe delays on the Clapham-Victoria section before getting to Clapham (either at Wimbledon or on the SWT train) so they can continue through to Waterloo to continue their journey rather than being delayed.

## **2.5 IMPROVING ACCESSIBILITY AND SOCIAL INCLUSION**

- 2.5.1 Increased accessibility is one of the main ways in which transport can contribute towards facilitating greater social inclusion. Both accessibility and social inclusion are amongst the over-arching objectives of the Mayor's London Plan.
- 2.5.2 Accessibility takes two forms: increasing access of the whole population to employment, education and services, particularly by public transport; and making access to the network, at the point of entry, as physically undemanding as possible to the benefit of those with a temporary encumbrance (luggage or small children) and those with a level of permanent disability (up to 11% of London's population). Ideally, all stations would be accessible to 100% of the population all the time. London's rail network is some way from this but TfL wishes to move towards this objective.
- 2.5.3 TfL is keen to address areas where the national rail network may not be as accessible to passengers as it should be. In the Rail Corridor Plan, a number of areas where this deficiency may be remedied have been identified:

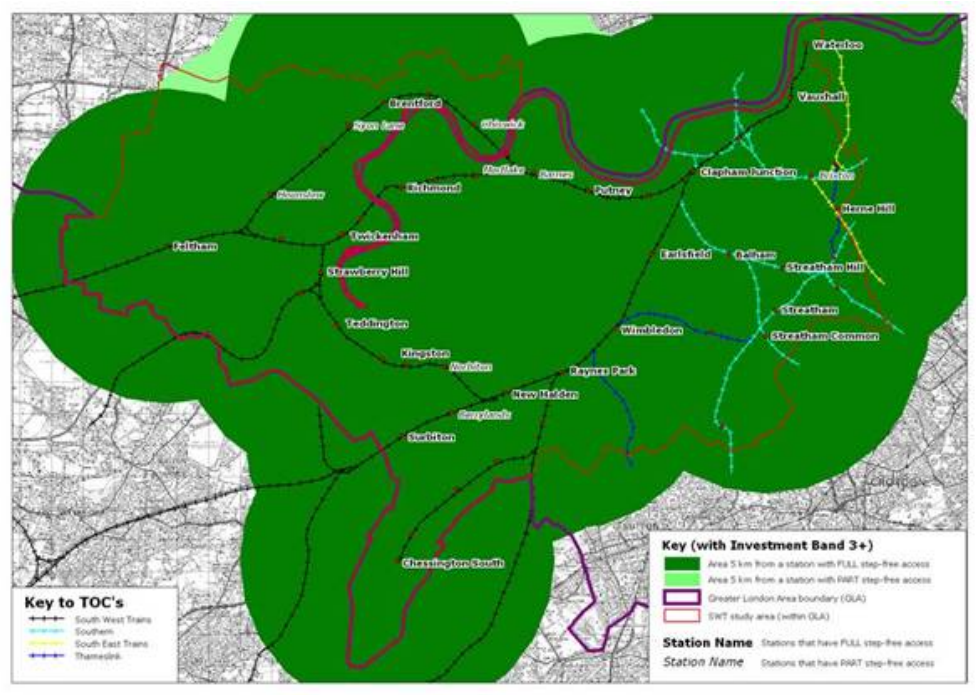
### **Minimum turn-up-and-go service standards: Access to urban centres**

- 2.5.4 The Mayor's requirement of 4 tph for all-stations services in London and 6 tph where routes combine should be seen as a minimum, unless there is overwhelming evidence that the demand does not exist or can only be achieved at significant operational or financial cost.
- 2.5.5 A review of public transport access to rail stations in the major urban centres in the SW rail corridor was undertaken. These were:
- Clapham Junction
  - Wimbledon
  - Kingston
  - Richmond and
  - Hounslow
- 2.5.6 The review examined existing provision, in terms of services, frequencies, and operating hours, for each of the centres, with reference to the local catchment, access to other centres within the South West area, and access to Central London. The review was undertaken at a strategic level, to identify any major gaps in the network, and to examine possible rail-based solutions to these gaps.

- 2.5.7 For Clapham Junction, the main gap identified is that the Sunday service to Hounslow is poor with only 1 tph, and there are no bus service alternatives nor underground connections.
- 2.5.8 For Kingston, the gap identified was that the train service to Richmond limited to 2 tph weekdays and 1 tph on Sunday.
- 2.5.9 For Richmond, the gaps identified are:
- SW train services are limited to 2 tph on Sundays between Richmond and Barnes;
  - SW train services are limited to 2 tph between Kingston and Richmond on Mondays to Saturdays, and 1 tph on Sundays.
- 2.5.10 For Hounslow, the gaps identified are:
- SW train services are limited to 2 tph on weekdays and Saturdays to Feltham (and westwards);
  - SW train services are limited on Sundays to 1 tph from Barnes to Feltham via Hounslow;
  - there is poor access – only 1 tph - to Clapham Junction on a Sunday
- 2.5.11 No significant gaps were identified for Wimbledon.
- 2.5.12 As a result of the above, it is recommended that:
- Sunday's rail frequencies to the major urban centres, particularly Kingston and Hounslow, are reviewed with a view to increasing them to the Mayor's 'turn-up-and-go' four trains per hour standard;
  - specifically, consideration should be given to introducing an additional 2 tph off-peak and weekend service from Waterloo to Kingston via Richmond in order to increase the Richmond-Kingston frequency to 4 tph during these periods, as well as providing collateral frequency benefits for passengers to Waterloo. Furthermore, it is recommended that the Kingston Loop frequency between Kingston and Richmond is increased to 2 tph on Sundays to improve access to the major shopping centre of Kingston.

## Access for All

2.5.13 TfL supports the DfT's *Access for All* station accessibility proposals, subject to the addition of Vauxhall and Chessington South to the list of stations proposed to be made step free in the South West corridor. On this basis, almost all passengers in the GLA part of the RCP study area would be within 5 km of a step-free station. The map below shows the area and the stations to be made step-free to achieve this objective.



Source: TfL London Rail, January 2006

### 3. RESPONSE TO SPECIFIC GAPS IDENTIFIED IN THE SOUTH WEST MAIN LINE RUS

TfL's comments on the specific gaps identified in the RUS relating to London (gaps 1 to 5) are set out in the table below.

Network Rail RUS gaps	Network Rail options	TfL response
<b>Gap 1: Overcrowding</b>	Option 1.1: Additional services	<p>The RUS has identified the potential to operate more peak trains on the Windsor Lines. TfL would be happy to support that proposal if it is deemed to be robust in performance terms.</p> <p>TfL does not feel that the capacity analysis outlined in option 1.1 of the RUS reflects the precise nature of the capacity limitations on the approaches to Waterloo. TfL's analysis into the use of platforms at Waterloo has suggested that the principal limiting factor at Waterloo, preventing running additional trains, is the approach layout rather than the number of platforms. This is substantiated by the fact that a number of the platforms (6, 7, 10 and 11) have quite low numbers of trains – caused by the constrained junction layout on the approaches. The implication of this is that any improvements made to the station, possibly connected with the conversion of Waterloo International to a domestic station, should include measures to the approach layout.</p>
	Option 1.2: Train and platform lengthening	See sections 2.1.6 - 2.1.9 of this response. In addition, TfL would appreciate details of the 41 trains in the peak hours which do not currently run at maximum length and which could do so if additional rolling stock were procured.
	Option 1.3: Travel demand management	See sections 2.1.10 – 2.1.12 of this response
<b>Gap 2: Timetable Performance</b>	Option 2.1: Timetable principles	TfL would be keen to understand more detail of what Network Rail is proposing, recognising that journey times to Waterloo should be robust but as short as possible.

	Option 2.2: Stopping patterns	TfL would be keen to understand more detail of what Network Rail is proposing.
<b>Gap 3: Car parking</b>	Option 2.2: Increasing car parking availability	See sections 2.4.1 – 2.4.3 of this response
<b>Gap 4: Waterloo passenger capacity</b>	Option 3.1 Crowding measures	See sections 2.2.10 – 2.2.14 of this response
	Option 3.2: Longer-term development of Waterloo, including Eurostar platforms	TfL notes that in Network Rail’s analysis in the RUS of the development of Waterloo station (option 4.2), no specific mention is made of lowering the concourse to street level. This has been discussed at meetings of the Waterloo Development Framework.
<b>Clapham Junction calling pattern</b>	Option 5.1: Remodelling of platforms 7/8  Option 5.2: Major remodelling of track, platforms and facilities	TfL provides a detailed response in sections 2.2.2 – 2.2.7.

#### 4. NEXT STEPS

- 4.1 This section sets out the next steps that need to be taken by Network Rail, the DfT and TfL in progressing and implementing the South West Main Line RUS in the context of the RCP findings and the refranchising process.
- 4.2 The next steps for progressing the five gap areas identified in the RCP (Improving Capacity, Improving Interchanges, Heathrow Access, Quick Wins, Improving Accessibility and Social Inclusion) are shown below with identification of the agency which has functional lead.
- 4.3 These essential enhancement programmes need to be developed systematically to published and agreed timescales.

#### Improving Capacity

<b>Activity</b>	<b>Agency</b>
Develop programme for the reconfiguration of inner suburban rolling stock	DfT lead (NR, TfL support)
Develop programme/functional specification for the lengthening of inner and outer services and station platforms – with priority being accorded to the Windsor Lines	DfT/NR joint lead (TfL support)
Confirm feasibility of additional peak services (NR RUS option 1.1)	NR lead
Investigate travel demand management measures – initiatives, scale and impact	TfL/DfT lead
Ensure linkage between refranchising process and capacity growth within the franchise period	DfT lead

## Improving Interchanges

Activity	Agency
Develop programme to enable more South West fast trains to call at Clapham Junction	NR lead (TfL, DfT support)
Develop programme for minor improvements at key interchange stations	DfT lead (TfL, NR support)
Develop programme for increasing capacity at Waterloo: <ul style="list-style-type: none"> <li>- concourse capacity</li> <li>- platform lengthening</li> <li>- station approach changes</li> <li>- Waterloo International conversion to domestic use</li> <li>- Access to LUL station</li> <li>- Waterloo Development Framework</li> </ul>	NR lead NR lead NR lead DfT lead (NR, TfL support) NR/LUL lead (TfL support) Joint steering group: GLA, TfL, LDA, NR, Lambeth

## Heathrow Access

Activity	Agency
Feltham – Heathrow: review the case for taxi-based links	TfL lead (BAA support)
Undertake further performance/capacity modelling of Airtrack. Integrate with costed option proposals for the refranchising process	DfT/Airtrack Forum/NR lead (TfL, BAA support)

## Quick Wins

Activity	Agency
Network Rail to note TfL policy towards new station car park capacity in the GLA area	NR lead
Gating of stations: DfT to review the business case for gating the 9 additional stations identified in the RCP (Waterloo being in the base case) and incorporate into the franchise base case.	DfT lead (TfL support)

Additional first and last trains: DfT to review the business case for TfL-requested changes, and incorporate into the franchise base case.	DfT lead (TfL support)
Handling of delays: DfT to review TfL's proposed improvements for handling delays to passengers, and incorporate into franchise base case.	DfT lead (TfL support)
Network Rail to manage engineering access to facilitate additional all-night New Year's Eve services on Kingston Loop.	NR lead

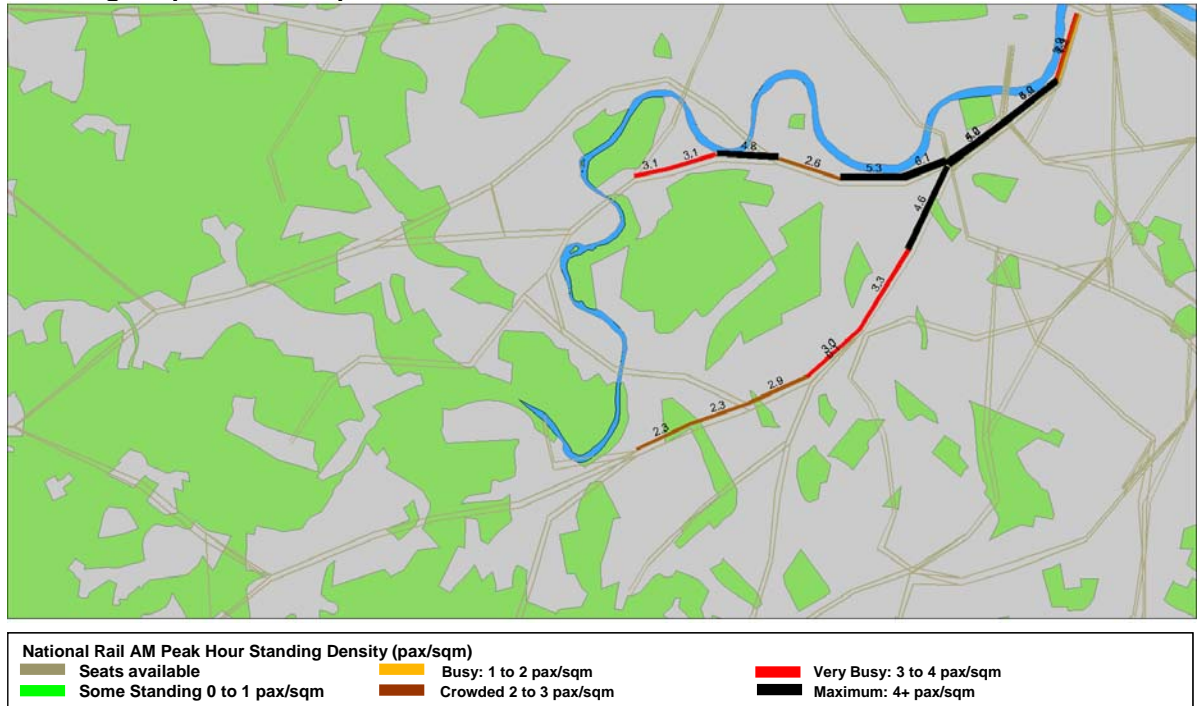
### Accessibility and Social Inclusion

Activity	Agency
Ensure appropriate minimum service standards are reflected in SLC2 for the DfT base case franchise specification (See sections 2.5.4 – 2.5.12 of this response for current gaps against minimum turn-up-and-go standards)	DfT lead (TfL support)
Include Vauxhall and Chessington South in the list of stations to be made step-free under the <i>Access for All</i> initiative	DfT lead
Develop programme for the delivery of the <i>Access for All</i> accessibility proposals in the South Western area.	DfT lead

## Appendix A: Capacity loading charts

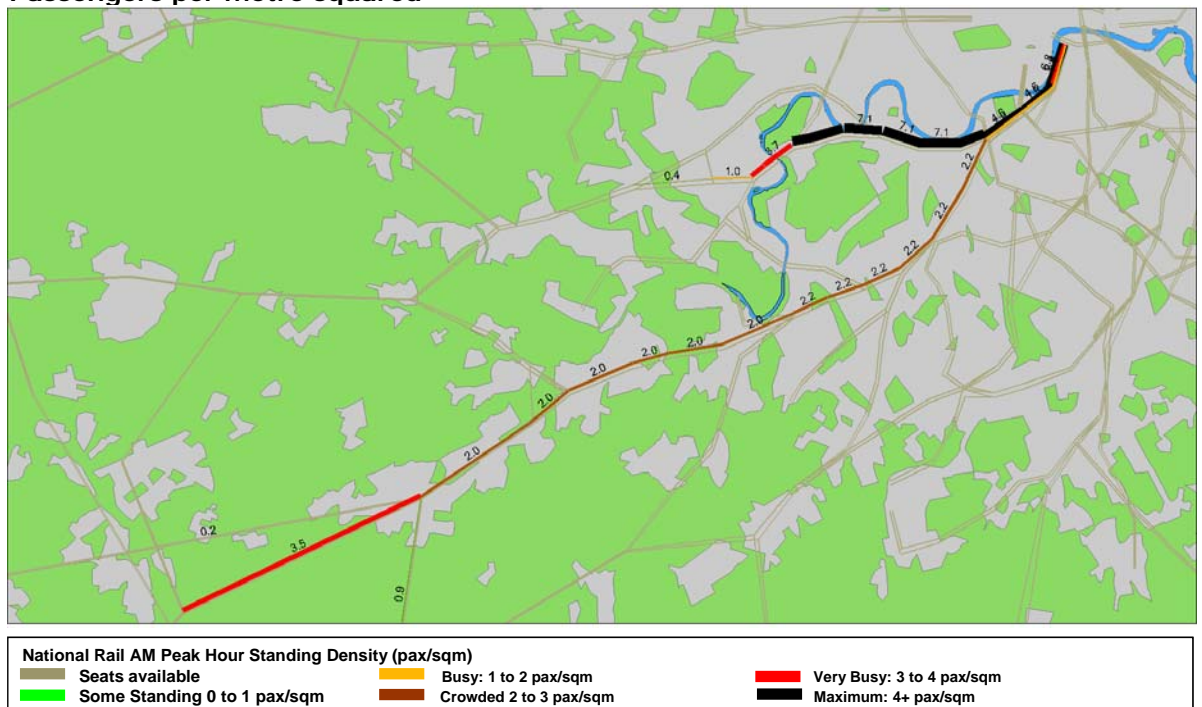
These charts present TfL's analysis of current and future capacity loadings on the South Western corridor, presented in terms of passengers standing per square metre.

**Figure 1 - Current Crowding on Inner Suburban Services (2005) – Passengers per metre squared**



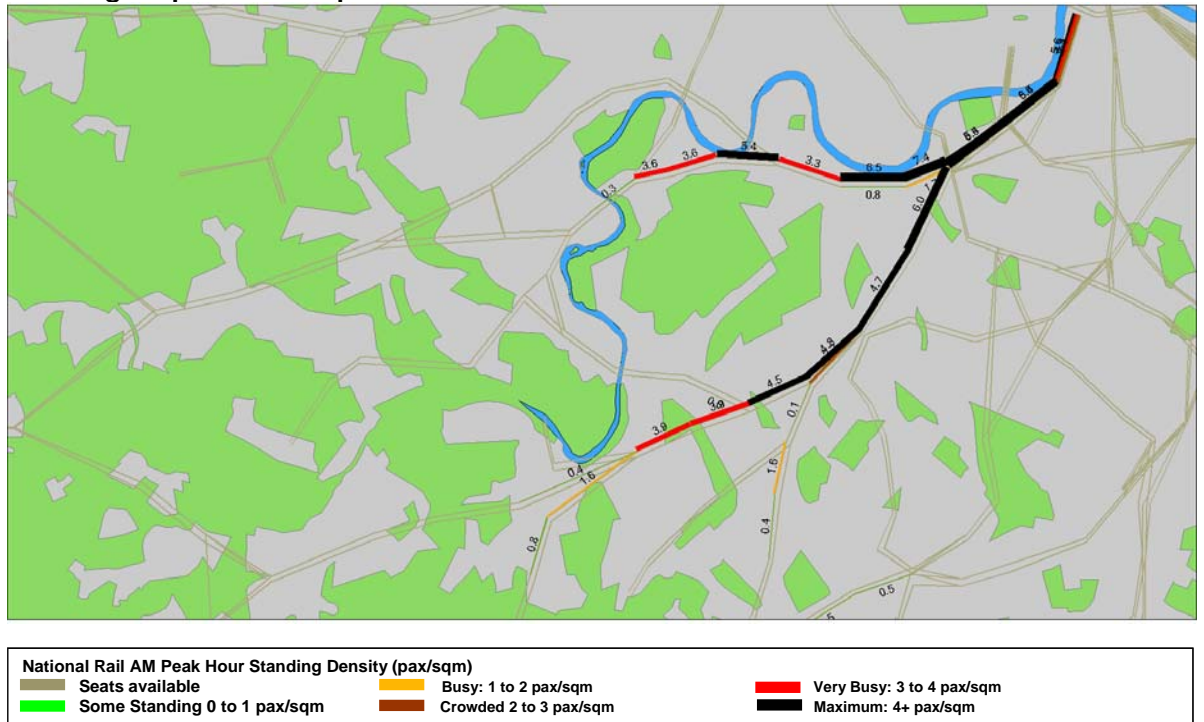
Source: RailPlan

**Figure 2 - Current Crowding on Outer Suburban Services (2005) – Passengers per metre squared**



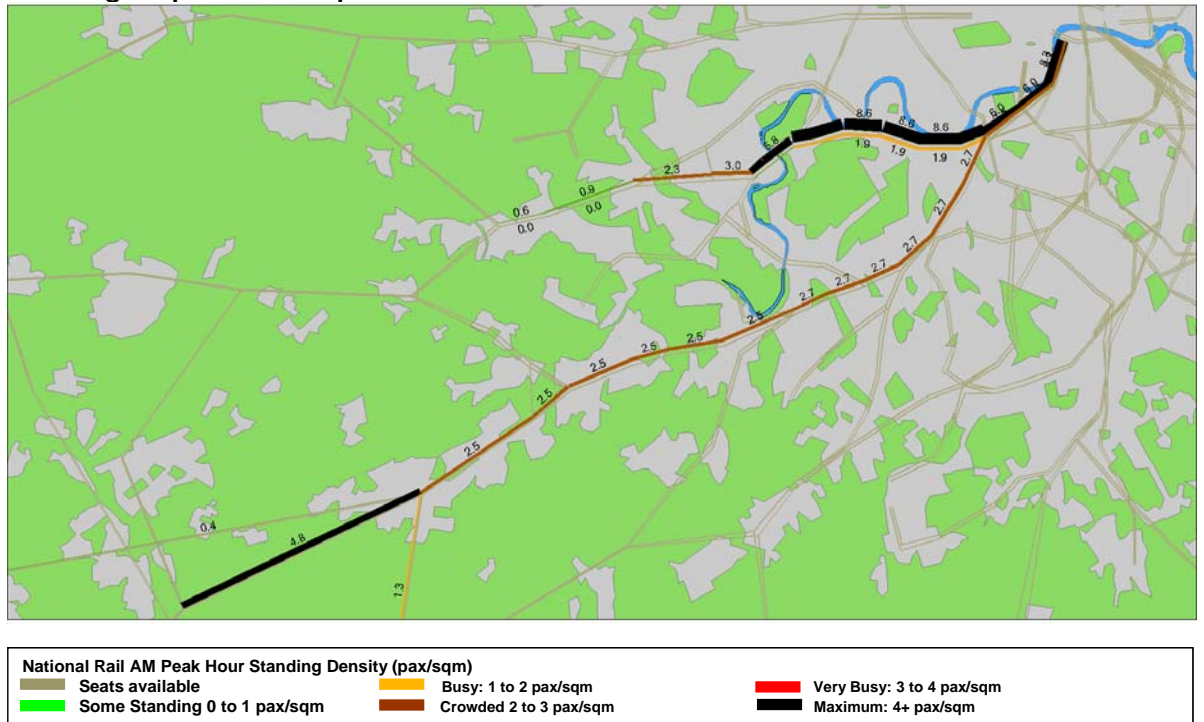
Source: RailPlan

**Figure 3 - Forecast Crowding on Inner Suburban Services (2016) - Passengers per metre squared**



Source: RailPlan

**Figure 4 - Forecast Crowding on Outer Suburban Services (2016) - Passengers per metre squared**



Source: RailPlan

## Appendix B: First and last trains

The analysis in section 2.5 outlines TfL's rationale – in accessibility and economic terms – for an increased provision of early morning and late evening services to certain locations within the GLA area. The following tables give details of the gaps in the service provision:

### Early morning

Origin Station	First Arrival at Waterloo - Weekdays	Direct Train from Tube	Minutes Before First Tube
<i>Tube (northbound average of Northern &amp; Bakerloo line)</i>	05:40		
Richmond	05:46		-00:06
Hounslow Loop	05:46		-00:06
Whitton	05:46		-00:06
Motspur Park	06:11		-00:31
Shepperton Branch	06:16		-00:36
Berrylands	06:31		-00:51
Chessington South	07:17		-01:37

### Late evening

Destination Station	Last Departure from Waterloo - Weekdays	Direct Train to Tube	Minutes After Last Tube
<i>Tube (southbound average of Northern &amp; Bakerloo line)</i>	00:37		
Richmond	00:18		-00:19
Motspur Park	00:15		-00:22
Shepperton Branch	23:57		-00:40
Hounslow Loop	23:52		-00:45
Whitton	23:43		-00:54
Berrylands	23:30		-01:07
Chessington South	23:00		-01:37

To address these deficiencies, TfL has identified the following additional services which it wishes to be included in the trains service specification:

### Early Morning

Option	Service	Arrival Time of Additional Trains to Waterloo	Stopping Pattern As:
Option 4.1A	Chessington South– Waterloo	05:47, 06:17, 06:47	07:17
Option 4.1B	Hounslow – Waterloo	05:38	06:08
Option 4.1C	Shepperton – Waterloo	05:36, 06:06 (replaces 06:16), 06:36	07:06

### Late Evening

Option	Service	Additional Departures from Waterloo	Stopping Pattern As:
Option 4.1D	Waterloo – Chessington South	22:46 (replaces 23:00), 23:46, 00:46	21:46
Option 4.1E	Waterloo – Staines (via Hounslow & Feltham)	00:22	23:52
Option 4.1F	Waterloo – Shepperton	23:42 (replaces 23:57), 00:12, 00:42	22:42

## Appendix C: Detailed assessment on handling of delays

### Small Scale Delays (10-20 minutes)

#### ON TRAINS

Guard informs passengers of scale of delay and cause

Customer information system (display and intercom) accurately reports scale and cause of delay

Guard available to provide passenger reassurance and support

#### AT STATIONS

Public address announcement of scale of delay and cause

Customer information system reports scale and cause of delay

Staff made available to provide passenger reassurance and support

Information on delay made available through help points

#### REMOTELY

Train running information made available through websites (eg TOC and National Rail Enquiries), and WAP

### Large Scale Delays (greater than 20 minutes)

#### ON TRAINS

Guard informs passengers of scale of delay and cause

Customer information system reports scale and cause of delay

Guard available to provide passenger reassurance and support

Guard to advise passengers if alternative routeing (eg alighting at next station) would be of benefit, with relevant connecting train times if not frequent

#### AT STATIONS

Public address announcement of scale of delay and cause

Customer information system reports scale and cause of delay

Staff made available to provide passenger reassurance and support

Staff to advise passengers if alternative routeing (by rail or other modes) is likely to be of benefit

Information on delay made available through help points

#### REMOTELY

Train running information made available through websites (eg TOC and National Rail Enquiries), and WAP

If a network-wide problem, email/SMS messages sent to subscribers to inform of delays, and if alternative routeings/journeys necessary (ie to avoid problem stations)