

London TravelWatch Response to the London & South East Route Utilisation Strategy - Draft for Consultation

March 2011



London TravelWatch is the official body set up by Parliament to provide a voice for London's travelling public.

Our role is to:

- Speak up for transport users in discussions with policy-makers and the media
- Consult with the transport industry, its regulators and funders on matters affecting users
- Investigate complaints users have been unable to resolve with service providers, and
- Monitor trends in service quality.

Our aim is to press in all that we do for a better travel experience for all those living, working or visiting London and its surrounding region.

Published by:

London TravelWatch
6 Middle Street
London EC1A 7JA

Phone: 020 7505 9000

Fax: 020 7505 9003

Contents

Executive Summary	1
1 Introduction	3
2 London Passengers	5
2.1 Train Service Requirements from London Passengers	5
2.2 Priorities of Improvements on train services for London Passengers	5
3 Expansion of London area rail capacity	18
3.1 New rail routes – serving new areas	18
3.2 New lines and stations in London	19
3.3 New Interchanges in London	20
3.4 Improved Signalling and Operating Methods	21
3.5 Metroisation	22
3.6 A New Route to East Anglia.....	23
4 The Draft RUS Options	26
4.1 Gap A – Reading/Outer Thames Valley	26
4.2 Gap B – East Coast Main Line – London Approaches.....	29
4.3 Gap C – Lea Valley Corridor and Gap D – Great Eastern Main Line (GEML).....	30
4.4 Gap E – Brighton Main Line (BML) and Gap H – Elephant & Castle Corridor	32
4.5 Gap F – South West Main Line (SWML).....	33
4.6 Gap G – Windsor Lines.....	33
4.7 Gap I – Orbital routes	33
4.8 Gap J – Heathrow Airport	36
4.9 Gap K – Maximising the Benefits of Crossrail.....	36
4.10 Gap L – Future Crossrail 2	37
4.11 Gap M – High Speed 1	37
4.12 Gap N – High Speed 2 to High Speed 1 link	37
4.13 Freight Affecting Passengers	38
4.14 Stations	39
5 Conclusion	40
London TravelWatch’s Detailed Recommendations	40
6 Appendix	44
6.1 Appendix 1 – A note about train capacity and interior design	44
6.2 Appendix 2 – The Wider Picture	46
Example of weekly season rates for short, medium and longer distance London commuting – January 2011 fares	47
7 Glossary	49

Executive Summary

We welcome

This 'second generation' draft Route Utilisation Strategy (RUS), which takes a 20 – 30 year view of projected peak commuting capacity shortfalls on London's rail network. This is very important for passengers, although we recognise that it is a complex and costly one to deal with.

We recommend

The passenger's interest must be the highest priority of all decision making on investment in this draft RUS. This draft RUS should be called "A 30 year Rail Capacity Review", rather than be regarded as a strategy in itself.

To do this a wider review of all modes of transport and land use over a 30 year period must consider:

- what passengers want
- what they are prepared to pay for (both as passengers and taxpayers)
- the government's environmental and sustainability objectives and how these can be reconciled with the passenger interest
- land use planning – i.e. where people live and work
- how these factors come together to shape the level of demand for transport and where capacity needs to be provided

Although decision on these matters will be political, the rail industry should take a lead in developing this strategy.

Inputs into a transport and land use strategy should include –

- A strategic review of fares policy across the London and South East area.
- A revenue collection strategy for gating of stations in the London Area.
- Frequent all day every day service patterns as the standard for turn up and go services in the Transport for London (TfL) fare zones.

- Better design, layout and spacing of train seats, particularly on inter-city trains. This has implications for train capacity.
- Recognition of the need to provide additional interchanges at the many places where lines cross each other but at present make no connection to maximise the journey opportunities for passengers and available capacity.
- Maximising the effective walking and cycling catchment area of stations by ensuring that entrances to stations are strategically placed so as to reduce overall journey times for users, not just 'in train' time.
- Acceptance of the '15 minute rule' (and therefore catchment area) for the maximum walking time between homes and any proposed new stations in London.

By embracing these issues, the railway industry should:

- Increase its attraction to car users as a more sustainable and congestion-free mode for as wide a range of journeys as possible
- Maximise the role it plays in meeting public policy objectives for enhancing access to jobs, modal switch and air quality
- Above all, meet the requirements of passengers.

- I. What passengers expect of the railway
- II. What passengers and tax-payers expect to pay for with regards to their transport service
- III. Who is expected to pay for this and in what proportion to overall costs and benefits

Being the voice of London's transport users, this submission sets out a strategy to address the totality of passenger's expectations of the railway network.

Following on from this, the issue of commuting in relation to land use is vital in forecasting for future demand for example for journeys between where a person lives and where a person works. London TravelWatch hopes to encourage the government at all levels to stimulate a debate to ensure that future investment in London's railways (both those within London and those which lead to it) actually achieves what people, as fare-payers and tax-payers want to achieve.

2 London Passengers

2.1 Train Service Requirements from London Passengers

We consider that all passengers (as fare-payers and tax-payers) are entitled to a train service which runs frequently and is reliable at all reasonable times of the day and the week. As London is a multi-modal transport city, passengers are also entitled to a rail network which provides good access to all areas, has adequate capacity and offers easy interchange between different types of transport in a safe and efficient manner.

There is a wide demographic profile of passengers who use train services on London and South East rail routes. The report 'Passengers Priorities for Improvements in Rail Services' published in 2007, gives a very descriptive indication of the different types of passengers who travel on the rail network, passengers' purpose for travel and passengers' type of journey¹.

2.1.1 The keys facts about a London Passenger

Passengers travelling within London make up the largest proportion of users of London and South East rail routes, as illustrated by figure 4.5 in the RUS. Therefore we believe that our recommendations in this response are significant because we represent these passengers. The key facts to note about the London passenger are as follows:

1. London passengers account for over 70% of users on the National Rail network;
2. London passengers are representative of the London population as a whole. This means that passengers within London's population use public transport as their main means of travel to a far greater extent than other populations elsewhere in the UK;
3. Over 50% of all passengers in London walk to and from their station and fewer than 15% access their station by car.

2.2 Priorities of Improvements on train services for London Passengers

London passengers are the dominant users of National Rail it is therefore important for train operating companies to liaise with their customers to meet their needs.

¹ *Passenger's Priorities for Improvements in Rail Services – MVA, Passenger Focus, 2007*

Table 1: Improvements that London passengers want to see on their train services.

Key Improvement	Level of Priority
Getting to their destinations at a price which represents value for money.	Long term
Providing sufficient trains at the time they want to travel.	Short term
A reliable and punctual train service.	Medium term
Providing sufficient seating capacity on the train at the times they want to travel.	Medium term
Keeping passengers informed of delays and alterations to services.	Short term
Providing simple, clear and easy to use ticketing systems.	Short term
Providing personal security to passengers when they travel.	Short term
Providing comfortable seating on the train and at interchanges.	Medium term
Providing with good connections to other forms of public transport.	Long term
Providing with good pedestrian and cycle access / storage at their stations.	Medium term
A commitment to reducing their overall journey times.	Long term
Providing clear and concise information relating to their train service.	Short term

Short term- Management action but no more than modest investment

Medium term- Investment on a scale which should be achievable (or on which substantial progress should be made) within two to five years.

Long term- Complex and large scale investments which will take more than five years to complete.

In some instances we ask for major policy reviews or for investment projects to be appraised. In these cases, although implementation may be a medium or long term matter, we recommend that the review or appraisal should be accorded high priority.

We understand the constraints on government and industry finances at the present time, but we are concerned that the implications of these priorities for London passengers in the table above have not been addressed sufficiently in this draft RUS.

2.2.1 Getting London Passengers to their destinations at a price which represents value for money

There have been several attempts at demand management through the price mechanism that have operated with varying degrees of success. Differentiation between peak and off-peak travel is well established but only applies to daily tickets. The more sophisticated use of variable advance purchase fares to induce passengers to use more lightly loaded trains has, to date, been largely constrained to long distance journeys made on an infrequent basis.

Within London, fares are now set on a zonal basis, so passengers pay the same price regardless of the particular route that they use. This means rail fares are set on the same basis as London Underground, something for which London TravelWatch has long campaigned on grounds of equity. We would not wish to see this changed.

Fares for journeys from outside London vary widely, largely through accident of history, and nowadays they bear no obvious relation either to costs or to quality of service. At one time, British Rail increased fares on routes which had been substantially modernised and therefore offered improved quality in many aspects of the service. London TravelWatch never objected to this in principle, but we always resisted attempts to finance the investment by applying the increase before the improved service was introduced – a technique known as ‘jam tomorrow’.

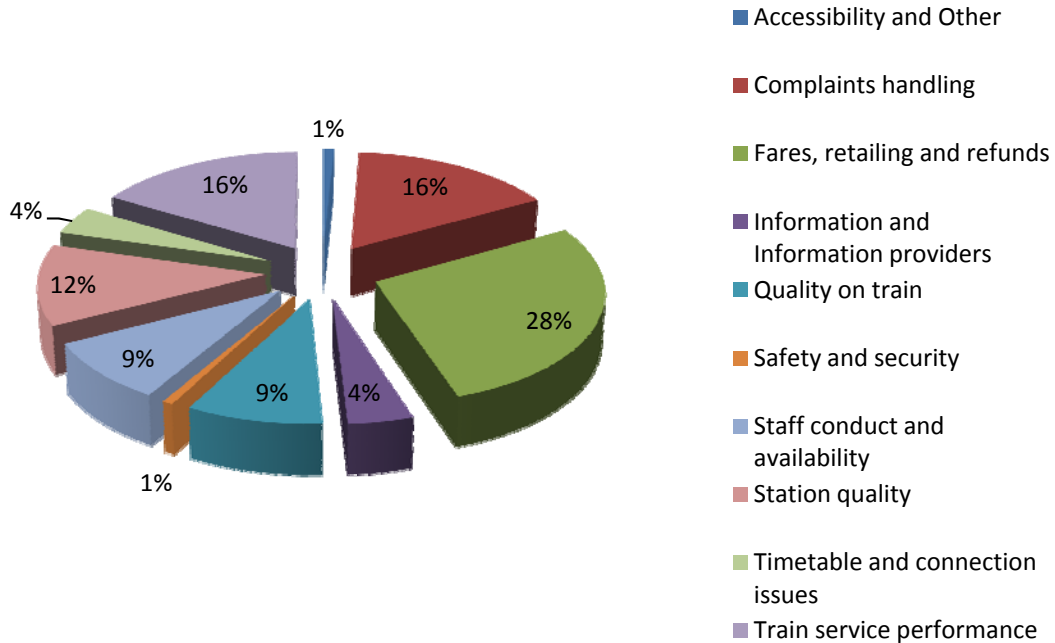
The draft RUS now suggests that on routes where affordable cost effective solutions to future overcrowding cannot be found, fares might be increased in order to restrain the growth in traffic. This is an even worse approach than jam tomorrow, because it penalises existing passengers without giving them any improvement in their service. Therefore London TravelWatch could not support this.

In our response to the Government’s recent consultation on reforming rail franchising, we advocated a strategic review of fares pricing policy in London. We consider that the network benefits of an integrated strategic approach to ticketing are important to passengers as consumers, and suggest that two key areas needs to be addressed:

- A strategic review of fares policy across the London and South East area.
- Improved revenue collection through a gating strategy for stations in the London area.

Fares are the biggest single issue of appeals which London TravelWatch receives from passengers. Appeals fall into the following categories:

Graph 1 - London TravelWatch & Passenger Focus Appeals by Category Quarter 4 2009/10 (ORR National Rail Trends)



Of these complaints many relate to the complexity of the fares structure which passengers find hard to understand. If operators are given too much flexibility on fares, this structure is likely to get more complicated. An example of such an appeal is the confusion of passengers at Gatwick Airport who are faced with one fare for First Capital Connect to London Bridge and a separate fare by Southern.

2.2.2 Giving London passengers sufficient trains at the time they want to travel

London TravelWatch has developed detailed principles for train service frequencies within its area and for the extent of day for which they should operate.

Table 2: London TravelWatch principles for train service frequencies within London

a) Within the TfL fare zones - 'turn up and go' 6 trains per hour all day metro service, as near as possible at even ten minute intervals, seven days per week.
b) For a first ring around London beyond the zones - general aspiration for 4 trains per hour all day every day, but recognising that there may be some stations where this cannot be justified by demand and value for money.
c) For a second ring around London out to the London TravelWatch boundary - general aspiration for 2 trains per hour all day every day, but again recognising that there may be some stations where this cannot be justified by demand and value for money.
d) First trains to arrive in central London no later than 0600 Mondays – Saturdays, 0730 on Sundays.
e) Last trains to depart central London no earlier than 0030 (2400 for stations beyond the TfL fare zones) daily.

The draft RUS refers to some capacity improvement options as being able to contribute towards TfL's aim of running 4 trains per hour across the London network. In relation to this, London TravelWatch has been pleased to support this TfL target. However this support has been in the context of our view that a true turn-up-and-go service requires a train at least every ten minutes, i.e. 6 trains per hour (the standard which has been applied for many years now on London Underground). Our stance on this was established more than ten years ago, but because at that time much of the London national rail network only offered 2 trains per hour or less, we were content to support 4 trains per hour objective as a good stepping stone towards the ultimate goal.

We are pleased that much progress has now been made towards the 4 trains per hour goal (at least during the daytime, although less so in the evenings and on Sundays), and that some sections of line do achieve 6 trains per hour or better: generally where several branches combine into a single trunk route to the London terminus.

The welcome publication of this draft RUS, looking forward 20 – 30 years, means that London TravelWatch must now press firmly on behalf of passengers for the 6 trains per hour standard – all day, every day - to be adopted as the industry's official target for stations across London. This must be taken into full account in all future planning for the London network.

2.2.3 A reliable and punctual train service

The highest priority for passengers is for their train services to be reliable and punctual. We believe that the infrastructure needs to have sufficient redundancy and flexibility to cope with service disruptions and be able to recover quickly.

However, as incidents and late running of trains will occur from time to time, ten minutes or better 'turn up and go' frequencies (which as on London Underground, would not need to advertise specific times) reduces the frustrations that passengers experience with unreliable infrequent services.

Figure 1 – Evidential examples from London TravelWatch Casework

Case 1: We have received a complaint from a South West Trains passenger about services between Egham and London Waterloo. The passenger explained that he regularly stands for much of his 45 -50 minute journey that and that this is exacerbated by an irregular train service pattern and delays.

2.2.4 Providing London passengers with sufficient seating capacity on the train and at the times they want to travel

Passengers expect a seat to be provided for them during their train journey, except for short journeys of less than 20 minutes duration. At peak times passengers will tolerate some standing, but expect the rail industry to consider how this could be addressed. As explained in the RUS process, London TravelWatch supports the efforts of the industry to try and deal with overcrowding.

Figure 2 – Evidential examples from London TravelWatch Casework

Case 2: National Express East Anglia passengers have complained that they have purchased a first class ticket due to health problems and injuries and then they have been told that these first class tickets cannot be used because the train is overcrowded which results to the lack of seating on the peak services. If passengers pay for a first class ticket, they expect a guaranteed seat.

Some passengers are prepared to pay additionally for the guarantee of a seat, which is why there is a demand for first class on some commuter routes. However others have complained that the provision of first class reduces the total capacity of the trains and thus contributes to overcrowding.

Figure 3 – Evidential examples from London TravelWatch Casework

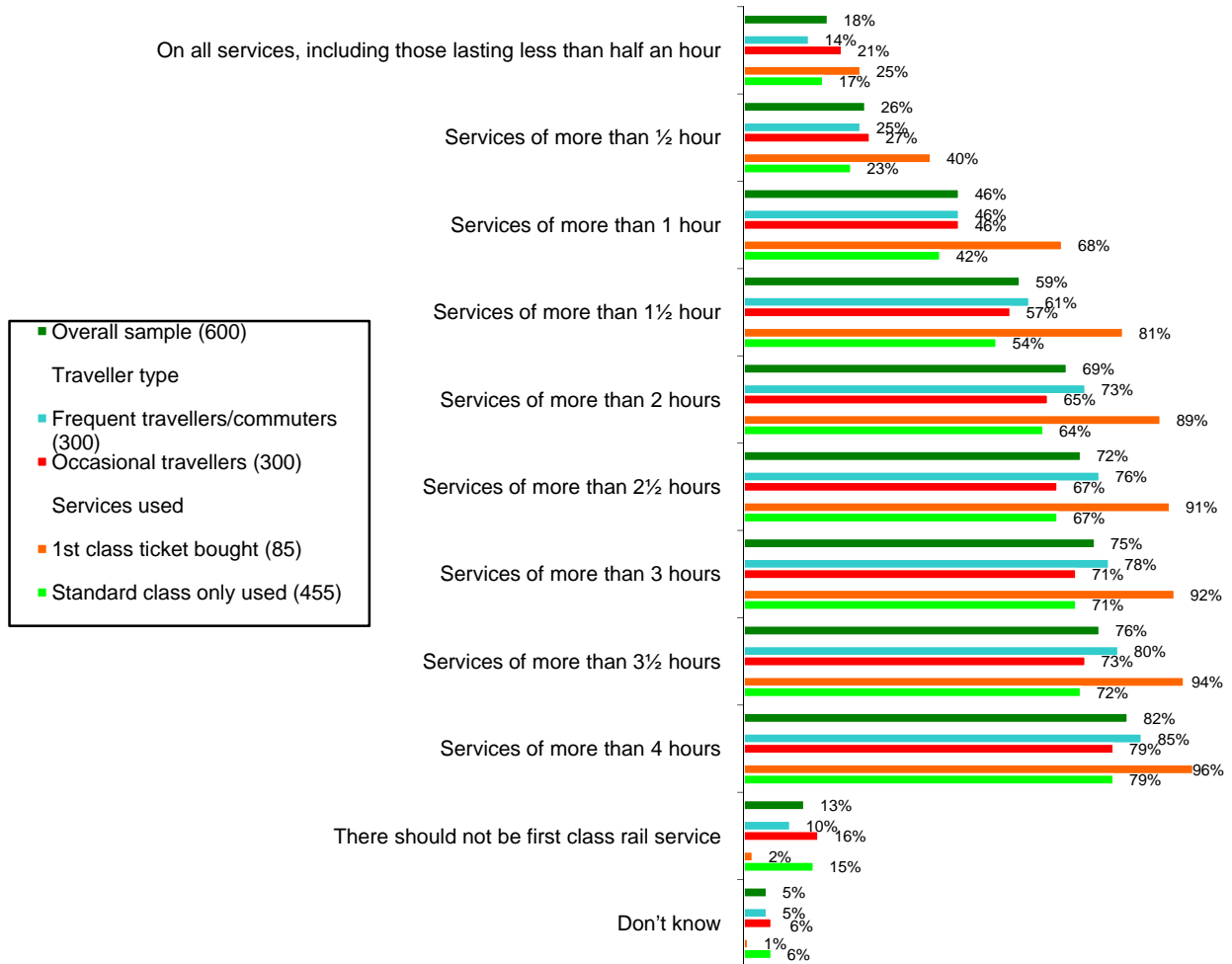
Case 3: We have received complaints from First Capital Connect passengers regarding the provision of first class seating compartments on trains for peak services. The majority of these passengers have explained that the only reason why they book first class tickets is to get a guaranteed seat due to spinal injuries, carrying heaving luggage and other health issues. Passengers getting a guaranteed seat, especially from East Croydon is still a problem because these trains are heavily overcrowded.

To better understand these competing demands, London TravelWatch commissioned an online survey of 600 rail users in London and the South East. This survey showed that the level of passenger expectation for first class travel services varies according to the length of journey time.

1. Journeys less than an hour – first class is unnecessary.

For local services within the TfL fare zones, first class should be reclassified as standard class and where new or refurbished trains are envisaged, only standard class should be provided.

Graph 2 - Length of journey where passengers think first class services should be available, July 2010



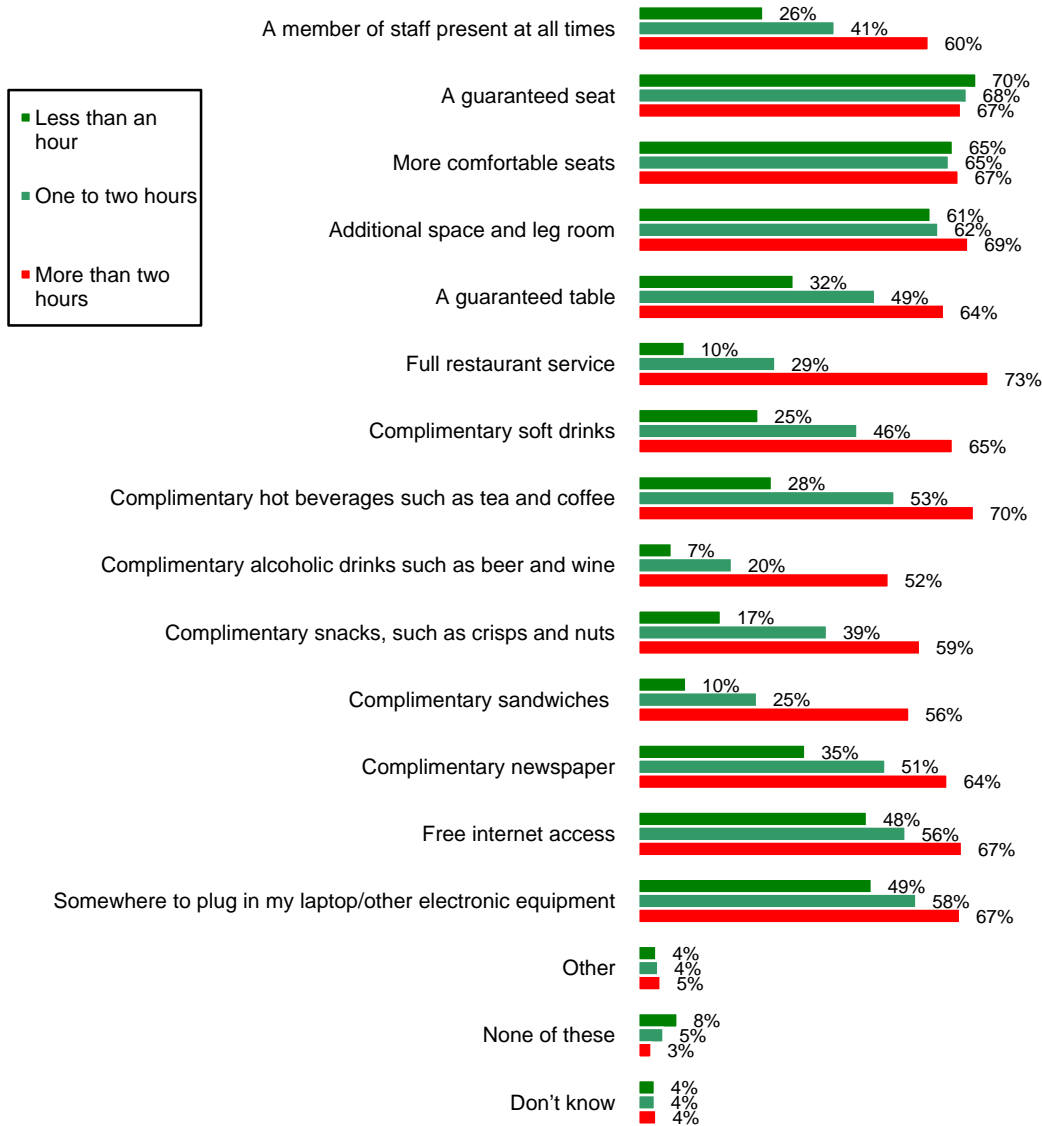
Base: All respondents (600)

Source: London TravelWatch and Ipsos MORI

2. Journeys between one and two hours – higher quality facilities should be provided

The higher quality facilities include a guaranteed seat, more comfortable seat and additional space and leg room. This does not need to be called first class but could be branded as something else, such as business or comfort class. This journey duration covers a majority of the longer distance commuter journeys into London.

Graph 3 - Passenger expectations of facilities and services in First Class, July 2010



Base: All respondents (600)

Source: London TravelWatch and Ipsos MORI

2.2.5 Keeping London passengers informed of delays and alterations to services

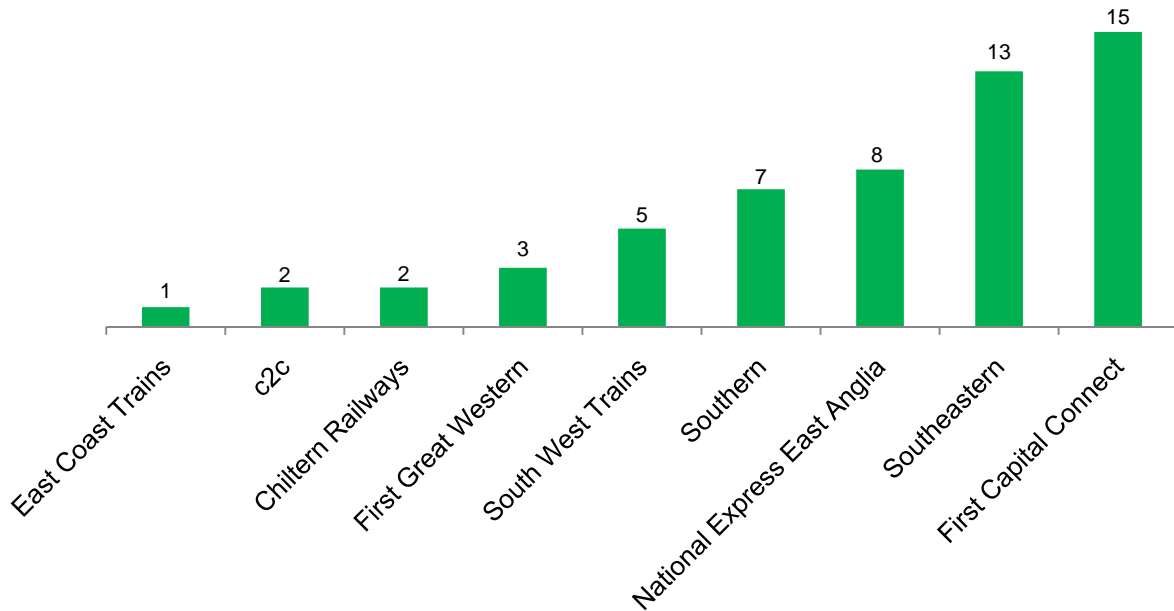
By keeping passengers informed of delays and alterations of services, it gives them the opportunity to:

- a) Reroute their specific journey
- b) Choose an alternative means of reaching their final destination.

Information in an accessible format that is regularly updated is a key tool for passengers to enable them to use the network effectively.

We have received complaints from passengers explaining that train operators keep failing to provide passengers with accurate time travel information, because the current information systems keep failing, there has been an emergency incident etc. Passengers are disappointed with vague explanations and would like up-to-date live travel information so that they can plan their journey in advance.

Graph 2 – London TravelWatch Delay Complaints by Train Operating Company from January 2010 to January 2011



The table above shows the number of complaints we have received per TOC relating to the issue of the operator not giving passengers correct information on delays in advance in order for passengers to plan an alternative route for their journey.

2.2.6 London passengers are provided with simple, clear and easy to use ticketing systems

London has long been a beneficiary of innovations in integrated ticketing systems, since the introduction of Travelcards in the 1980s and zonal ticketing. The development and introduction of Oyster has been a huge success in London as it enables passengers to use one card to travel on rail, tube, bus or tram. This has been successful in reducing the time spent by passengers queuing to buy tickets. Nevertheless, these products will not be suitable for all journeys, and so

there will still be a continuing need for ticketing facilities to be available both at stations and on trains. However, the growth in usage of the system means that queuing times at ticket offices and vending machines are still often quite lengthy, especially where there are commercial pressures on train operators to reduce the costs of retailing tickets. Therefore, queuing times at stations ticket offices and ticket vending machines must be kept to a minimum so there is less inconvenience caused for passengers.

Figure 3 – Evidential examples from London TravelWatch Casework

Case 4: In recent years, we have had a number of proposals to reduce ticket office staffing and passengers are concerned that they will be unable to purchase the ticket they want.

2.2.7 Providing personal security to London passengers when they travel

Of vital importance to passengers when they travel on National Rail services is that they can travel free from crime and anti-social conduct as well as the fear of crime, especially after dark. This requires adequate staffing; further improvements to the design and lighting of stations and stops; and the use of technology such as installing help points and CCTV.

It should also be noted that more frequent services tend to attract additional passengers. The presence of more passengers creates a greater sense of security, and therefore it is important to maintain off-peak services levels throughout the day.

2.2.8 Providing London passengers with comfortable seating on the train and at interchanges

Train and station furniture design needs to change to reflect public preferences and requirements, especially for those passengers with mobility impairment, travelling with children or with heavy luggage. Particular attention needs to be given to the design, layout and spacing of train seats. Brief proposals about this are shown in Appendix 1.

Figure 4 – Evidential examples from London TravelWatch Casework

Case 5: We have received complaints from Southeastern passengers regarding the provision of priority seating on peak service trains, for especially those passengers who are disabled, pregnant, travelling with heavy luggage or travelling with young children.

2.2.9 London passengers are provided with good connections with other forms of public transport

By having an organised multi-modal transport system, passengers are able to make seamless journeys from one place to another. Passenger journeys in London in many cases require the use of multiple forms of public transport as well as walking or cycling for part of their journey. Therefore the role of interchanges is crucial to passengers' overall experience of the transport network. Interchanges need to be well laid out, easy to use and managed effectively.

Interchanges also have an important role in ensuring the best use of available capacity on the network, and in reducing passengers' overall journey time. In particular the growth of orbital journeys around central and inner London need effective interchange arrangements.

It is essential that the RUS should recognise the need to provide additional interchanges at the many places where lines cross each other but at present make no connection (see section 3.3).

An example of where improved interchange between lines could have the effect of reducing journey times would be to provide platforms on the Chiltern and Metropolitan lines at West Hampstead. This would have the effect of reducing journey times from the Chiltern to places in docklands, the City and London Bridge as well as providing relief to Marylebone as a London terminus.

2.2.10 London passengers are provided with good pedestrian and cycle access/storage at their stations

Over 50% of all journeys to and from London stations are made on foot. Typically, these journeys will be up to 15 minutes in length. Consideration needs to be made to the potential catchment area of stations, in relation to their access points, so that walking or cycling times are kept to a minimum. Proposals to limit the number of access routes to stations should be resisted where these effectively reduce the walking catchment area of station.

A particularly bad example of this is at Lewisham where proposals to shut the only passenger entrance on the north side of the station (at Silk Mills path) will considerably increase walking times and therefore reduce the attractiveness of the rail network. This has the effect of diverting passengers to other modes of transport or to other rail corridors where there may also be a constraint on capacity.

An example of where a new entrance to a station might significantly reduce overall journey times is that of the Thicket Grove estate immediately adjacent to platforms 2 and 3 at Crystal Palace station. At present there is no entrance / exit

at this location. However, it has been estimated that the walking time between this estate and the station could be reduced by seven minutes (in each direction), if such an entrance/exit were provided. This seven minute reduction in journey time is far higher than any intervention on the rail service could produce, and would effectively extend the catchment area of the station.

The RUS should consider measures to ensure that:

- Secure cycle storage space at stations is sufficient to meet demand;
- Any new station proposal in London has a sufficient catchment population within a 15 minute walk of the proposed location.

An example of good practise is the pedestrian signage audit done by Merton Council for the Mitcham Eastfields station before it opened, and similar work done by London TravelWatch for stations on the North London line.

2.2.11 A commitment to reduce the overall journey times of London passengers.

The key to reducing journey times for passengers is to relieve capacity constraints within the rail infrastructure (preferably by a means which will deliver benefits all day, every day) and by improving the opportunities for interchanges. However, as the example in paragraph 2.2.10 above shows there are other interventions which could reduce users overall journey times – not just their ‘in-train’ time.

2.2.12 London passengers having clear and concise information relating to their train service

Giving passengers clear and easy to understand information enables them to optimise the use of the transport network and therefore optimises the use of available capacity.

London TravelWatch believes by making improvements and reflecting passenger priorities (as indicated in table 1), the railway industry will achieve the following:

- Meet the requirements of passengers
- Increase its attractiveness to car users as a more sustainable and congestion-free mode for a wider range of journeys;
- Maximise the role it plays in meeting public policy objectives for enhancing access to jobs; promote modal choice; encourage modal switch and improve air quality;

3 Expansion of London area rail capacity

Having set out what matters for passengers, made clear that there is much more to railway investment than peak hour capacity, and prompted questions about the public policies which drive commuting growth – particularly longer distance commuting – we now consider how any expansion of London area rail capacity should be examined.

A serious weakness of the draft RUS is its concentration on line of route analysis. It is right to study the long term capacity issues on each route, but it is also necessary to think more laterally.

If we consider issues which are part of the Mayor's Transport Strategy, such as the aim to widen the number of jobs within 45 minutes travel from where people live, and the need to improve air quality and sustainability, then we start thinking about network improvements such as new interchanges, new stations and extending rail into areas not served presently. These are things which can provide benefits all day, every day. At the same time they can divert traffic away from overcrowded lines and thus reduce the need for schemes which do no more than solve a high peak problem which occurs for only a short period on only five days per week.

3.1 New rail routes – serving new areas

Apart from accepting the Government's policy commitment to HS2 and a brief mention of a possible extension of the Bakerloo line into south-east London, the draft RUS overlooks the opportunities and value of creating new rail routes. This is despite the fact that London and the south east is one of the few parts of the country where the population density is sufficient to make new corridors well worthy of consideration.

The value of creating new routes is well made in a new report about the wider benefits of HS2². It says that "Propositions for... new capacity need to be looked at creatively, not narrowly looking at the task that rail services perform today but also at new service opportunities that might be created. This is a key policy path to achieving modal switch and associated wider benefits."

² Capturing the benefits of HS2 - Greengauge21 February 2011
<http://www.greengauge21.net/wp-content/uploads/Capturing-the-benefits-of-HS2.pdf>

This point is particularly important where costly extra capacity to meet peak demand on an existing route would only be effectively utilised for a couple of hours per day, whereas extra capacity provided by creating a new route or a new station would be used and would create benefits all day, every day.

We will now offer some example ideas which the rail industry, in partnership with TfL, local and national government, should be examining as part of a 20 – 30 year strategy.

3.2 New lines and stations in London

The draft RUS rightly discusses extending the Bakerloo line further into south east London, which means that the line, would become accessible to more people over a wider area and make better use of existing under utilised capacity on its' route from Elephant & Castle to the West End. The extension of the Bakerloo line would also potentially enable the regeneration of the area around Bricklayers Arms (which is currently remote from the rail network).

The service on the Bakerloo line starts at Elephant & Castle, with the result that the trains are lightly loaded at the southern end of the route; it is also a very effective route for passengers coming into Waterloo and going to the West End. With Waterloo traffic continuing to rise, and an extended Bakerloo line with more crowded trains, this presents the prospect of a new area of possible overcrowding of passengers. We therefore believe that it would be useful to provide additional interchanges between the South West Main Line and routes serving the West End.

There are solutions which could be suggested to help overcome this overcrowding issue, such as extending the proposed Northern line Battersea Power Station branch through to Clapham Junction, but this in turn would raise issues about capacity at Kennington for passengers coming from the Morden line.

Another alternative would be to extend the proposed 'carriage siding' branch of Crossrail 2 south of Victoria to Clapham Junction or to extend it further south to provide relief to the Northern Line, and the Brighton Main Line routes, with an interchange at Queenstown Road, Battersea or Battersea Park. This could also have the benefit of serving passengers in the Clapham Park area which is currently somewhat remote from the railway and Underground networks.

Further out of London we believe that a Basingstoke – Reading – Paddington service would also free up capacity within London itself, particularly on the Northern, Victoria, Bakerloo and Jubilee lines.

We also believe that there is considerable merit in developing the Croxley Link, which would re-route London Underground Metropolitan line services into Watford Junction. Further consideration could also be given to providing direct services between Aylesbury and Watford Junction as part of this scheme. We consider that the complexities of the suggestions explained, support our view that for 20 – 30 year planning there needs to be a total strategy review, not one which looks solely at peak capacity on national rail.

3.3 New Interchanges in London

Another feature to consider as opportunities for passengers, is the potential value of new interchanges. This would particularly improve rails competitiveness for non-central London journeys. For example:

- New platforms for Chiltern and Metropolitan line services at **West Hampstead**,
- New platforms at **Willesden Junction** for Euston outer-suburban services³,
- A new interchange at **Old Oak Common** linking HS2, Crossrail, West London Line and possibly Central line,
- An improved interchange at **Hackney Downs / Hackney Central** where a scheme is in progress and is ready to proceed,
- A new interchange at **Brockley** to connect Dartford to Victoria services with the East London Line
- New platforms for London Overground services at **Brixton** on the East London line
- **A new station for London Overground services at Tufnell Park / Junction Road to enable** Gospel Oak – Barking line passengers to interchange with the Northern line at Tufnell Park

There are many other possible interchange locations to meet the requirements of a wide scope of passengers; particularly in south London where the complex network has many instances of lines crossing each other. This issue is discussed further in the 'Metroisation' section (Section 3.5) of our response.

³ For how this would become operationally feasible once HS2 creates spare capacity on the West Coast Main Line, see Capturing the benefits of HS2 - Greengauge21 February 2011 <http://www.greengauge21.net/wp-content/uploads/Capturing-the-benefits-of-HS2.pdf>

3.4 Improved Signalling and Operating Methods

It is disappointing that the draft RUS gives little consideration to increasing capacity by improved signaling and operating methods.

It seems to be a fixed view that on National Rail (including Crossrail), even where trains are calling at all stations and running at a uniform speed, 24 trains per hour is the most intensive service that can be achieved and even this is regarded as 'challenging' to accomplish.

This negative view is extraordinary given that we are talking about 20 years time and that the first British trial installation of the European Rail Traffic Management System is about to commence full service. To write it off as a possible contributor to rail capacity solutions so soon seems unduly pessimistic.

In any case, new technology in signaling should not be necessary to achieve a more intensive service than 24 trains per hour. For some 20 years, RER Line A in Paris (a cross-city underground line on which the Crossrail concept is based) has used SACEM (a cab signaling system with manual driving), to operate 220 metre trains (i.e. 11 cars in British practice) at 30 trains per hour. SACEM includes automatic train protection and is overlaid on conventional trackside signaling set for 24 trains per hour. If SACEM fails, operations automatically revert to the trackside signals, and these also cater for trains which are not equipped with the system.

So far as new technology is concerned, the RER is now developing a system called NEXT which will provide for 40 trains per hour in 2020.

On the question of handling more trains at terminal stations, consideration should be given to the current practice on London Underground. They use a technique called 'stepping back', whereby the driver of an arriving train alights from his cab and is replaced at the departing end of the train by the driver of the previous arrival. The train can then be ready to depart within 60 seconds of arrival, although the schedule would normally allow an interval of two and a half minutes. With suitable signaling allowing a platform re-occupation time of 90 seconds, this technique allows a two platform terminus to handle 30 trains per hour, i.e. 15 trains per hour per platform.

For various reasons we would not expect a National Rail London terminus to be able to handle longer main line trains at the rate of 15 trains per hour per platform, but we would expect such termini (which generally have at least four platforms for each approach track) to be able to take substantially more than the 18 – 20 trains per hour which seems to be the current maximum. The potential benefits are huge because an increase from 20 trains per hour to 24 trains per hour would provide 20 per cent more capacity.

The whole question of mainline rail operators learning from metro-type operations is well covered in a recent article in Modern Railways -“Making the most of existing capacity”⁴.

As passenger representatives, it is London TravelWatch’s duty to press for the best possible use to be made of existing facilities, so that whatever funds are available for major project investment are directed where there is no alternative. We therefore have to ask what is so different about Britain’s mainline railways that they cannot use techniques which are well proven in Paris or on London Underground?

- London TravelWatch believes the RUS should investigate improved signaling systems and terminal operating methods to increase the number of trains per hour on existing lines.

We acknowledge that more intensive working may reduce punctuality; however this should not be a reason for automatically dismissing the idea. Research could be undertaken about passengers’ attitude to the trade-off between crowding, punctuality, fares, and tax.

3.5 Metroisation

One of the constraints on getting the best out of the National Rail network in London is that metro- type stations and trains are designed and operated in the same way as faster outer suburban, regional and inter-city trains. This applies even where the metro trains operate on largely separate tracks.

The benefits of separating metro services from other services are well illustrated by the London Overground service to Watford Junction, the Bakerloo line service to Harrow & Wealdstone which uses independent tracks for all but the first mile out of Euston and by the separation of London Underground’s District line from the c2c line through East London to Upminster.

Metroisation enables more trains to be operated with faster overall journey times. On the South London network in particular, there are many lines which are used exclusively by metro trains, and more could be created by relatively modest investment.

This should be coupled with route simplification. New interchange stations where lines cross each other would enable low frequency services to multiple London termini to be replaced by much more frequent services to a single terminal.

⁴Making the most of existing capacity – P. Connor http://www.railway-technical.com/MR%20capacity.qxd_Layout%204.pdf

Passengers for the other route would then change from one high frequency service to another to complete their journey.

For example the construction of new platforms on the Sutton to London Bridge route where it crosses the Croydon to Victoria line at Streatham Common. This would enable the low frequency (2 trains per hour) Sutton to Victoria trains to be diverted to London Bridge, and the similar West Croydon to London Bridge via Tulse Hill service to be diverted to Victoria. Both main routes would then have better frequencies, junction movements would be eliminated improving reliability, all journeys in the area would become turn-up-and-go, and journeys which are now slow and need constant reference to timetables to find the best route (e.g. Norbury to Mitcham Junction) would become quick and easy.

- The RUS should assess a metroisation strategy for the whole of London, with a view to establishing a phased programme of conversion, which could be implemented as funds become available.

In the longer term such a programme could look at measures similar to Crossrail, in order to carry as many routes as possible direct into the west end and the city.

3.6 A New Route to East Anglia

The RUS tends to assume that all London rail capacity problems have to be solved in London itself. This need not be the case.

At the moment, public debate about high speed rail focuses on the specific issue of HS2 to Birmingham. Amidst controversy over its planned route, the general public tends to lose sight of the fact that it is only the first stage of a route which will extend to Manchester and Leeds and perhaps beyond. Even if it goes no further than these cities, the speed advantage it will offer will mean that much of the existing traffic between London and the East and West Midlands, the North-West and North East and to Scotland will switch to the new line. It will also win traffic from air and road.

Opening from the mid 2020s onwards and with a planned capacity of 18 trains per hour, it will soon be full and this is based upon the pessimistic assumption used by HS2 Ltd that demand growth will cease after 2030. If this capacity can be pushed up to 22 trains per hour, it is now being realised that another route (HS3) will be needed on the east side of the country.

Greengauge21, the ‘think-tank’ on high speed rail in Britain, suggests that HS3 should include a link to Stansted Airport, for access from both north and south⁵. They suggest that the extension of this link to Colchester would improve the accessibility of Stansted Airport.

We suggest that a new route to East Anglia could provide additional services. A key finding of the draft L&SE RUS is that one of the biggest problems by 2031 will be peak hour overcrowding on the Great Eastern Main Line (GEML) which runs from Norwich, Ipswich and Colchester into Liverpool Street. This RUS suggests that Network Rail have not yet found a solution to this problem, the critical issue being finding a way to get more trains through Stratford which means there will be more tracks through a tightly constrained site. This will be expensive and will yield benefits for just a couple of hours, five days per week.

The Greengauge21 proposals would provide a fast (not necessarily high speed) link from Colchester to HS3. This could do for East Anglia and the GEML what HS1 from Ashford has done for East Kent and the South Eastern main line.

We consider that it would do more. It would end the virtual isolation of East Anglia from the main inter-city rail network, and it would help free-up the present Ely to Peterborough line for more of the Midlands freight from Felixstowe, which the draft RUS identifies as a continuing problem if routed via London. This in turn would make it easier for London’s rail network to cope with traffic from the new London Gateway port east of Tilbury.

We accept that there can be no prospect of HS3 being built as soon as 2031, although it would be worth considering safeguarding a London station site now and to take account of this in future rail plans.

A Colchester to Stansted link could be built in advance of HS3 and connected to the existing West Anglia route to Liverpool Street. This, with planned improvements proposed in the draft RUS, could be adapted to carry an additional 6 trains per hour from Colchester. The way to do this is discussed later in our response. Now that an extra 6 trains per hour could be operated, which is more than sufficient to cope with the predicted 4,200 passenger GEML overload in 2031. As well as relieving peak overcrowding, a Colchester – Stansted link would open up new rail journey opportunities and therefore provide value all day every day. It might also have value for both passengers and freight if connected to the proposed East – West Rail Link between Cambridge and Oxford.

⁵ Fast Forward – A High Speed Rail Strategy for Britain – Greengauge21 2009
<http://www.greengauge21.net/wp-content/uploads/fast-forward1.pdf>

- London TravelWatch believes the RUS should investigate the feasibility of a Colchester to Stansted link as a means of diverting Great Eastern mainline (GEML) traffic to an upgraded West Anglia route.

4 The Draft RUS Options

On the assumption that once a wider transport strategy for London and the South East has been developed, some of the options in the draft RUS will still be required, this section we give our comments on the gap options indicated in the draft RUS.

4.1 Gap A – Reading/Outer Thames Valley

4.1.1 Extend Crossrail to Reading

London TravelWatch has always supported the operation of Crossrail to Reading and is pleased that the track remodelling scheme for Reading station makes provision for this.

Passengers from west of Slough to Reading will benefit by always having through trains and, with no local Reading to Paddington service to interwork with Crossrail, it will be easier to schedule sensible stopping patterns and frequencies for the latter.

- We support the extension of Crossrail to Reading.

4.1.2 Increase peak IEP service from 15 trains per hour to 16 trains per hour

We are concerned at the present practice of designing inter-city trains with high density seating to cope with short duration commuting journeys on a maximum of two trips per day per train. This prevents the railway from providing an attractive and competitive travelling environment for the passengers for whom such trains should be designed, namely passengers making long distance journeys who need a comfortable and reasonably spacious environment as an attractive alternative to the private car.

The same basic point applies to the technical design of inter-city trains. This should be optimised which would minimise fleet costs and meet the needs of passengers using inter-city services. They should not be distorted to meet the needs of peak time commuters whose annual season tickets allow them a totally free choice of trains, often at a fare well under half the equivalent daily rate, and even less than the daily off-peak rate⁶.

⁶ 2011 fares Reading to Paddington Standard Day Return £37.50 – valid anytime; Cheap Day Return £16.00 – not valid before 1000 for arrival at Paddington, and not valid for departure from

- We do not support the use of extra inter-city trains as a means of relieving peak overcrowding between Reading and London Paddington.

4.1.3 Lengthen peak IEP trains

In the financial and economic analysis of this option the draft RUS states –

“The key issue is that this option requires lengthening of morning peak main line trains ...from Swansea and Bristol, just to meet the commuter peak from Reading inwards. It is unclear at present if this would be economically effective.”

- We welcome this statement because it acknowledges the negative implications of distorting the design of inter-city trains just to meet a once or twice a day short distance demand peak.

4.1.4 New 12- car 4 trains per hour outer Thames Valley/Reading – Paddington peak shuttle as overlay on other services

We are pleased this option is being considered as it is one which London TravelWatch has advocated in the past. However before committing to accepting it as a solution we need to consider it in a little more detail.

It is not clear from the draft RUS how many of the passengers using inter-city services in 2031 would come from Reading, and how many from further west. However, as Figure 6.4 of the document shows, demand on Paddington outer services is expected to grow by 13,600 by 2031 in the busiest hour. As the High Density High Speed (HDHS) rolling stock to be used for the 4 trains per hour Reading shuttles would also be suitable (if necessary) for trains from Oxford, Didcot, Newbury and even Swindon, they could be used for up to 12 trains per hour in total – i.e. all except the 8 trains per hour inter-city services..

It is also not clear how many passengers each of the proposed 12-car trains could carry. With the long platforms available on the Great Western Mainline (GWML) route these HDHS trains could presumably comprise 26 metre carriages. The generous GWML loading gauge might allow these to be sufficiently wide to allow 2 plus 3 seating, in which case they could have around 120 seats per carriage, which would result in a seating capacity of some 1,400 passengers per train after allowing for reduced capacity in the end cars. If trains

Paddington on inter-city trains from 1600 to 1915. Annual Season £3584 based upon 48 weeks' travel minus 10 days' bank holiday etc. = 230 days = £15.58 per day – valid any time plus at weekends.

of this size are impractical, we can consider the lower end of the scale. Here we suggest 14 x 20 metre carriages with 90 seats per carriage should be possible, resulting in a seated capacity of 1,100 passengers per train (plus standing on trains calling at Slough).

At around 14,000 seats in the busiest hour on HDHS trains, there would be only a small margin over the projected 13,600 passenger demand for the Paddington outer services. However some of these passengers will be travelling on inter-city trains from more distant origins than Oxford, Swindon or Newbury, so we believe that the HDHS trains would have some spare capacity for further growth.

Equally important, by taking the main commuting pressure off the inter-city trains, the design of the latter can focus on their appropriate role of providing a comfortable and inviting environment for all-day long-distance passengers, rather than being forced to adopt the cramped and unappealing layout of First Great Western's recently refurbished High Speed Trains.

We would also support the idea of these trains being extended to run to and from Basingstoke, so as to also provide capacity relief to the South West Main Line into London Waterloo. Passengers from Hampshire and Berkshire travelling to West London and the West End would be given an alternative route to Paddington. This would also be consistent with the objectives for the Bakerloo line as set out in paragraph 3.2 above.

- We support the use of HDHS trains to deal with peak demand on the Reading to Paddington route.

4.1.5 New 12 car 4 trains per hour outer Thames Valley / Reading – Paddington peak shuttle with Heathrow Express incorporated in to Crossrail and continuing to run on a) fast lines at all times b) the relief lines at least at peak times

For passengers the most important issue is that the non-stop Heathrow Express should be integrated into the Crossrail network instead of terminating at Paddington.

Crossrail already plans to operate 4 trains per hour to the airport, running semi-fast between Paddington and Terminals 123 in 23 to 25 minutes. This is only 8 to 10 minutes slower than the 15 minutes of Heathrow Express. Most passengers continue further into or via central London, and Crossrail will be the fastest route for many destinations. The need to interchange at Paddington from a terminating Heathrow Express train will negate the time saving, to which must be added the penalty factor which people apply when given the choice between a through

journey and the need to change. The competitive position of Heathrow Express will be seriously eroded and it is difficult to believe that it could survive as an independent premium fare service; particularly as the government's decision not to permit the building of a third runway gives it little opportunity to benefit from market growth.

- We consider that integrating Heathrow Express into Crossrail would benefit of the great majority of passengers.

Also, for such a short journey we can see little sense in serving Heathrow Airport by a mixture of fast and semi-fast trains. A simple even interval of an 8 trains per hour service calling at Old Oak Common (for HS2 and orbital connections), Ealing Broadway, then perhaps alternately at Southall and Hayes & Harlington, would be the most reliable to operate and the easiest for passengers to understand.

This would have to be compatible with a proper turn-up-and-go service at Acton Main Line, West Ealing, Hanwell and West Drayton. It would also be necessary to review the proposed design of Crossrail rolling stock to make sure that it can adequately cater for the amount of luggage to be carried.

We would add that the existing Heathrow Express trains which would be displaced would have substantial residual value, with only modest refitting as 100 miles per hour Express units elsewhere on the network.

We recognise that the market for travel to Heathrow Airport needs a quality environment on train as provided by Heathrow Express at present and so any replacement rolling stock and services provided by Crossrail need to be of a similar or better quality to the current Heathrow Express service

4.2 Gap B – East Coast Main Line – London Approaches

All the options, and the proposed strategy, seem to assume that over the next 20 to 30 years it will be acceptable for the interiors of inter-city trains to be similar to those used today, i.e. with limited leg room, a high proportion of airline-style seats giving a claustrophobic feeling, seats which do not align with windows, and no amenities such as children's play areas.

London TravelWatch does not consider that such designs are acceptable for long journeys today, and we believe they will become even less acceptable as passengers' demand higher standards. They will certainly not be effective as a means of inducing people who presently do not use trains to switch from their increasingly comfortable cars, a switch which will be essential if public policy's environmental and sustainability objectives are to be achieved.

- Passengers do not like trains that are perceived to be cramped and claustrophobic, particularly on inter-city journeys. We consider that the specification for the design of inter-city trains needs to be reviewed.

In Appendix 1 we propose a high-level specification for the design of inter-city trains. This is intended to address this issue, but it means that for any given length the capacity of such trains will be lower than now. This has implications for line capacity.

4.3 Gap C – Lea Valley Corridor and Gap D – Great Eastern Main Line (GEML)

We believe that Gap C and Gap D need to be considered together, particularly as Liverpool Street is currently a congested location and is likely to remain so, even with the advent of Crossrail.

We support the references to the role of train service improvements in assisting the regeneration of the Lea Valley area. However as previously explained (in section 2.2.2) the aim for turn up and go services must be 6 trains per hour.

The issue of regeneration is very important to this draft RUS, because the Lea Valley area has good potential for the development of new communities close to the railway. Given the 20 to 30 year horizon of the RUS, this provides an opportunity for the rail industry, working with local authorities and developers, to help steer future commuting demand into an area which is close to London's main employment centres, rather than simply being forced to react to the projected trend of increasing long distance commuting. As already discussed, the latter demand imposes higher costs, but not pro-rata higher revenue.

One of the main messages of the draft RUS is that almost all the capacity problems forecast for 2031 will be caused by projected increases in long distance commuting from outside Greater London. The Lea Valley provides an opportunity to counter this trend by providing good quality, frequent train services for well designed new residential developments. There is ample historical evidence that new housing will follow improved rail services. Seizing this opportunity will benefit passengers and taxpayers, as well as contributing to environmental and sustainability objectives.

We believe that the previous proposals suggest that, with the scaling back of plans for major expansion of Stansted Airport, the previously adopted strategy of 4-tracking all the way from Tottenham Hale to Broxbourne might also be cut back. The potential for development all the way up the Lea Valley means that a

full 6 trains per hour metro service will be required, and this could not be satisfactorily accommodated if it has to share tracks with faster outer area trains.

We believe the strategy should be to:

- a) “Metroise” the Chingford, Broxbourne, Southbury and Enfield Town lines, with the Chingford and Broxbourne services having exclusive use of the two track section through Clapton.
- b) We propose that an interchange be constructed between Hackney Downs and Hackney Central to connect the West Anglia line with London Overground services to Stratford and north-west London, so as to help minimise the need for passengers to interchange at Liverpool Street.
- c) Build the Colchester to Stansted link as previously described and run additional Norwich / Ipswich / Colchester trains to Liverpool Street via Stansted, the Lea Valley and Stratford. This will avoid the need to run additional trains on the GEML. It should also create sufficient spare capacity to allow reinstatement of proper inter-city trains to Norwich, with the current intention of introducing unsuitable higher density trains on this line becoming a short term interim solution.
- d) Divert the planned 6 trains per hour Gidea Park to Liverpool Street Crossrail supplementary peak service to run into the Crossrail tunnel. This would increase the Crossrail service to 30 trains per hour which, as per the evidence of the Paris RER as previously described, should be achievable. This would free the present electric lines from Bow to Liverpool St. for use by GEML outer area trains.

Table 3: The potential peak service levels we envisaged with the Gap C and Gap D strategy

Route	Trains per hour	Comments
Metro		
Chingford	6	
Broxbourne	6	
Southbury / Enfield Town	6	
Total metro via Hackney Downs	18	Scope for up to 24 trains per hour with appropriate signalling and operating methods
Lea Valley Main Line via Stratford		
Cambridge/Stansted Airport	10	Two more trains now, to meet the 2031 capacity gap.
Hertford East	4	Can run fast from Broxbourne, instead of present semi-fast services.
Colchester via Stansted	6	
Total Lea Valley main line via Stratford	20	
Shenfield Metro		
Shenfield	12	To Crossrail as presently planned
Gidea Park	6	Diverted from Liverpool St. to Crossrail
Total Shenfield metro to Crossrail	18	With 12 trains per hour to Abbey Wood and Crossrail = 30 trains per hour
Great Eastern Main Line		
Colchester	14	
Southend/Southminster	8	
Total Great Eastern Main Line	22	

4.4 Gap E – Brighton Main Line (BML) and Gap H – Elephant & Castle Corridor

The key Brighton Main Line (BML) issues appear to be line capacity through the East Croydon area and terminating capacity at London Bridge, with no viable solution to either, but a recommendation that a tunnel for fast trains from the Purley area to central London be kept under review for the very long term. This latter faces the usual objection to costly peak hour capacity works that it offers no daylong benefits. An alternative solution would be to extend the Crossrail 2 line from Victoria to rejoin to the BML at Streatham Common to provide metro services.

The Elephant & Castle corridor faces complex infrastructure works at Tulse Hill, Herne Hill and Elephant & Castle, again with the problem of high cost but no daylong benefit.

We suggest that all these issues could be resolved if considered in conjunction with our proposal for “metroising” the inner area services. New stations could be sited at key traffic objectives and might replace some existing stations and routes. Existing capacity on the surface would then be freed up for more outer area trains.

4.5 Gap F – South West Main Line (SWML)

As the overcrowding issue is said to arise inwards from Guildford and Basingstoke and one of the issues is the need for a grade separated junction at Woking, we ask if consideration has been given to routeing some of the additional trains via the Cobham line. We also ask if a consideration can be given for an extension of the Reading to Paddington shuttle services to Basingstoke as described above.

Consideration could also be given to a lower cost solution at Woking. This would be to provide a recess line between the down and up fast tracks so that northbound trains crossing from the Guildford line to the main line do not require simultaneous gaps in the Basingstoke service before starting the movement. For further flexibility, a similar arrangement might be applied at the north end of the station, to be used by northbound Guildford line trains running via either of the down platforms.

4.6 Gap G – Windsor Lines

We support the provision of AirTrack but would also urge consideration of additional infrastructure such as a provision for 4 through platforms at Twickenham.

4.7 Gap I – Orbital routes

We find it astonishing that it is so difficult to find a path for one extra train from the West Coast Main Line (WCML) to the West London Line (WLL). The only other passenger trains on the slow lines are those operated by London Midland. A check of the timetable shows they have only 11 arrivals at Euston in the peak hour 0800 – 0859, some of which run on the fast lines. We accept that there may also be some freight trains. Nevertheless we find it difficult to understand why some means can't be found to schedule an extra WLL train – even if it has to start from Tring rather than from Milton Keynes.

We must also draw attention to the fundamental inadequacy of the present daylong services on the West London Line, even after the London Overground service is increased to 4 trains per hour. This matter has been discussed between London TravelWatch and interested local authorities, leading to the following agreed aspirations.

Table 4: London TravelWatch’s aspirations for the West London Line

Priority	Type of Service	Service Detail	Ideal Frequency	Minimum Frequency
1	Metro, turn up and go	Stratford to Clapham Junction serving Inner London and connecting with the East London Line Phase 2 to make an orbital service	6 trains per hour	4 trains per hour
2	Sub-regional, link main centres and interchange with West Coast Main Line	Core Watford to Gatwick Airport, preferably to Milton Keynes and Brighton	4 trains per hour 2 trains per hour to Milton Keynes & Brighton	2 trains per hour 1 train per hour to Milton Keynes & Brighton
3	Long-distance, Cross country	Brighton to Gatwick Airport – Birmingham and / or Manchester	Every 2 hours	Twice a day

Preferred stopping pattern for the sub-regional service

The following stations are passenger’s preferred stopping pattern:

- Gatwick Airport
- [Redhill if possible]
- East Croydon
- Balham
- Clapham Junction
- Imperial Wharf (minimum of 1 train per hour)
- West Brompton
- Kensington Olympia
- Shepherd’s Bush
- Willesden Junction – new platforms required (might be replaced by Old Oak Common now that this is under consideration for HS2)
- Wembley Central
- Harrow and Wealdstone
- Watford Junction
- Hemel Hempstead

- Berkhamsted
- Tring
- Leighton Buzzard
- Milton Keynes Central

Stations

New stations, (not in any order of priority):

- Mitre Bridge
- North Pole
- North Battersea

Prioritised List of Aspirations

- 1) 4 trains per hour on Metro service and 2 trains per hour on North/ South service
- 2) Extension to Gatwick Airport from Milton Keynes (but we would accept Watford Junction as an alternative)
- 3) East Croydon service to Gatwick Airport
- 4) 6 trains per hour on Metro service and 4 trains per hour on North/ South service
- 5) Reintroduction of long distance service
- 6) Secure more interchange stations
- 7) New stations

We strongly support the statement on Page 15 of the draft RUS for the introduction of four trains per hour between London Victoria and Denmark Hill / Peckham Rye as part of the post-Thameslink Programme timetable. The introduction of the New South London line (also known as East London line phase 2b) while improving service levels at station on this route, has had significant detrimental impact by severing links to London Victoria.

We believe that there is scope for extending this service from Peckham Rye via the relatively poorly served stations on the Catford Loop to either Bellingham or Bromley South. In addition if these trains could call at Clapham High Street and Wandsworth Road, this through interchange with the Northern line at Clapham North would open up significant journey opportunities by public transport between South East and South West London that can either only be done by travelling via Central London, or for which a journey by car would currently be considered a realistic option.

We would also request that the rail industry consider how these changes might be brought forward to deal with the gap in services to London Victoria from these stations after 2012.

4.8 Gap J – Heathrow Airport

We believe there should be a rail link from the Chiltern line to Heathrow. London TravelWatch has proposed such a link to be built in conjunction with the HS2 branch to Heathrow. Full details are in our paper ‘Development of Train Services for Chiltern Routes’⁷, issued in conjunction with our response to the draft West Midlands and Chiltern RUS.

The suggestion in the draft RUS that there would be no capacity for new services following the Evergreen 3 project is not borne out by Chiltern’s track access application. This states that “Capacity utilisation levels are not changed significantly by Evergreen 3. On those route sections where increased train service levels are proposed, these are matched by an increase in infrastructure capability.”⁸

We accept that a Heathrow link would require electrification of the Chiltern line but, as also discussed in the Chiltern paper, we regard this as desirable anyway.

4.9 Gap K – Maximising the Benefits of Crossrail

We support the view that the number of trains terminating at London Paddington or Old Oak Common should be kept to a minimum, although we recognise that our own proposal to increase the peak service from 24 trains per hour to 30 trains per hour would increase the present east / west service imbalance.

We do not agree with the reasons set out in the draft RUS for dismissing the idea of running peak Bourne End and Henley-on-Thames trains on to Crossrail. With Great Western Mainline (GWML) electrification to Reading and beyond, it would

⁷ Development of Train Services for Chiltern Routes – London TravelWatch February 2011
<http://www.londontravelwatch.org.uk/document/13892/get>

⁸ Chiltern Railways Seventy Third Supplemental Track Access Agreement
<http://www.networkrail.co.uk/browse%20documents/track%20access/2%20completed%20consultations/2009/2009.10.27%20chiltern%20railways%2073rd%20supplemental%20agreement%20-%20consultation%20closed%2023%20november%202009/form%2022%2073rd%20for%20eq3.pdf>

make little sense to leave these branches as diesel 'islands' and feel sure that they could be electrified quite economically. 10 car Crossrail trains on peak workings should not be a problem. The low number of passengers involved, the vast majority of whom would be regular travellers, would make it practical to use selective door opening at branch line stations with short platforms.

We support the view that development work on a scheme to link WCML slow line services to Crossrail should proceed. As part of this we would expect stations to be provided on both the North and West London Lines as part of the Old Oak Common complex, but as the interchange distances would be long we consider that travolators would be necessary. If adopted, this scheme would replace our proposal to provide WCML slow line platforms at Willesden Junction.

We would also draw attention to a proposal from the London Borough of Hillingdon that the present line from Paddington to Northolt Junction (South Ruislip) be reconstructed to provide a new a parallel fast service to the Central line from Ruislip, but starting back at Uxbridge. It would only stop at major stations e.g. Northolt, Greenford, Hangar Lane and then run onto Crossrail. As HS2 is planned to take over this line, this proposal would clearly only be possible if HS2 is not built, or if it's planned route out of London is changed. In the event of either of these outcomes, we recommend that serious consideration be given to the Hillingdon proposal.

4.10 Gap L – Future Crossrail 2

Whilst we fully support the concept of a new south-west to north-east tunnel across London, we believe such a line should connect with HS2 at Euston, and also any HS3 station if this were located in north or east London.

4.11 Gap M – High Speed 2

The recommendation to develop a strategy for local flows between London, the wider south east and both Euston and Old Oak Common station is fully supported. London TravelWatch looks forward to the appropriate consultation.

4.12 Gap N – High Speed 2 to High Speed 1 link

We share the implied concern at the effect of this link on the North London Line in the Camden area. The idea of an intensive metro service having to interwork with inter-city trains travelling several hundred miles across Britain and Europe fills us with trepidation. This is made even worse by the proposal that these trains would be using a single track tunnel between Camden and Old Oak Common.

- We propose that North London Line services and HS2 to HS1 services must be kept separate.

In addition, whilst we can understand the desire to keep the cost of this link to a minimum, we believe that it's design should at least make passive provision for accommodating trains running between a possible HS3 station in north or east London and the Old Oak Common interchange.

4.13 Freight Affecting Passengers

4.13.1 London Gateway/Essex Thameside

- We totally endorse the recommendation that the Barking to Gospel Oak line (GOB) should be electrified.

We regard it as essential that a high number of freight trains from London Gateway / Essex Thameside which will have to be routed this way should be electrically hauled, as only electric traction has the reserves of power to ensure that heavy freight trains can accelerate quickly across junctions and from signal stops. The need to minimise delays from these causes is essential to protect the various intensive passenger services with which these freight trains will have to interwork.

Electrification of the GOB line will also benefit its London Overground (LO) passenger service. It will enable faster timings, improve rolling stock utilisation by operating in a common pool with the rest of the London Overground network; provide the opportunity to extend the route at both ends (i.e. towards Willesden Junction in the west and towards Purfleet or Chafford Hundred for Lakeside in the east) if this became desirable: and would reduce local emissions.

Given the high priority that GOB electrification was given in the Electrification RUS, we find it astonishing that this scheme has not yet been authorised. Parts of the line are already electrified, and another section of the line will be electrified as part of the Thameslink programme. Its brand new diesel trains would also be ideal to relieve severely overcrowded services elsewhere in the country or within London

4.13.2 Haven Ports

A Colchester to Stansted link, allied with the East-West Rail Link, could have a role to play in keeping Haven Ports – West Coast Main Line and West Country freight away from London.

4.13.3 Channel Tunnel / Kent Thames Gateway

For the same reasons as stated for London Gateway / Essex Thameside, we consider that all freight traffic from these locations via London should be electrically hauled. This would require a change of policy by freight operators, who at present use diesel traction for many trains even though their entire journey might be on an electrified route.

To support 100 per cent electric haulage, it would be necessary to electrify the short Kew – Acton – Dudding Hill route. This would also provide potential benefits as an emergency diversionary route for London Overground services.

4.14 Stations

In addition to the specific schemes listed in the draft RUS, we would make the general point that at London terminals congestion at exit gatelines can sometimes slow the rate at which passengers can alight from trains. In extreme cases such congestion can cause knock-on delays for passengers alighting from successive arrivals.

This issue must be reviewed where it is planned to operate more trains or higher capacity trains, or where improved operating methods enable terminal dwell times (i.e. reversing time) to be reduced.

We support the introduction and retention of gatelines to reduce ticket fraud, crime and anti-social behaviour on stations and trains, but where congestion does occur, such as at Liverpool Street operators should seek to find means of alleviating this.

5 Conclusion

London TravelWatch believes more frequent services (to 'turn-up-and-go' standards in urban areas) and good connectivity to and between towns, not just to central London should be provided. The quality of trains, stations and interchanges, good advance and real-time information, affordable fares and good customer service are also very important to passengers.

Relief of overcrowding, as discussed in the draft RUS, is very important, but rail investment planning for the next 20 to 30 years must address all the needs of passengers, including those who do not at present use the rail services. This is one reason why we consider that this RUS should not be regarded as a strategy in its own right, but rather as an important input into a wider 20 to 30 year strategy.

It is also important to recognise the limitations of the 'predict and provide' methodology used in this RUS, and to consider whether growth could be directed to where capacity is available. An example of this is London TravelWatch's recent consultation on a development plan for the Chiltern route in response to the West Midlands and Chilterns Route Utilisation Strategy.

London TravelWatch's Detailed Recommendations

Political input into a 30 year transport and land use strategy might therefore wish to consider if it would be better to incentivise more housing within London rather than encourage continued development further away, as longer distance commuting incurs higher costs but at season ticket fares which are pro rata the lowest.

A 30 year transport and land use strategy will need to look at new rail facilities within London. New routes and stations to consider include:

- Clapham Park
- Bricklayers Arms
- Crouch End – Muswell Hill – Friern Barnet
- Lea Bridge
- Barking Riverside
- Crowlands (between Chadwell Heath and Romford)
- York Way / Kings Cross lands
- Mitre Bridge and North Pole.

New or expanded interchanges to consider include:

- West Hampstead (Chiltern and Metropolitan lines)
- Willesden Junction
- Old Oak Common
- Hackney Downs / Hackney Central
- Brockley
- Brixton
- Tufnell Park/ Junction Road
- Streatham Common

In its role as an input to a 30 year transport and land use strategy the RUS should:

- Investigate afresh improved signalling systems and terminal operating methods to increase the number of trains per hour on existing lines.
- To enable high frequency services to be operated on a simplified network, assess a strategy to “metroise” lines within London, with a view to establishing a phased programme of conversion which could be implemented as funds become available.
- Initiate studies to link more London terminals by tunnels across the central area, thus improving journey times for ‘metro’ passengers and releasing terminal capacity for use by longer distance trains.
- Investigate a Colchester to Stansted link as a means of diverting Great Eastern Main Line traffic to an upgraded Lea Valley route.

For the Great Western Main Line, we support the following options identified in the draft RUS:

- Extension of Crossrail to Reading
- Use of High Density High Speed trains to deal with peak demand between Reading and Paddington
- Integration of Heathrow Express into Crossrail

For the Lea Valley and Great Eastern Main Line routes into Liverpool Street, we **recommend** a totally new strategy –

- “Metroise” the Chingford, Broxbourne, Southbury and Enfield Town lines, with exclusive use of the two track section through Clapton.
- Send all outer Lea Valley trains to Liverpool Street via Stratford
- To free up capacity at Liverpool Street for GEML outer area trains displaced from Stratford by Lea Valley trains, divert the planned 6 trains

per hour Gidea Park to Liverpool Street Crossrail supplementary peak service to run into the Crossrail tunnel.

- Build the Colchester to Stansted link as previously described and run additional Norwich / Ipswich / Colchester trains to Liverpool Street via Stansted, the Lea Valley and Stratford.

For the Brighton Main Line and Elephant & Castle corridors we **recommend** early investigation of a strategy to –

- “Metroise” the south central suburban lines
- Extend Crossrail 2 from Victoria to Streatham Common to provide an alternative route for metro services from the Brighton Main Line into central London.

For the South West Main Line we **recommend** consideration of

- Routeing more trains from Guildford via Cobham
- Track layout alterations at Woking as a cheaper option than a grade-separated junction

For the West London Line we **call for**

- Urgent introduction of an extra morning peak train on the Milton Keynes service
- Progressive implementation of a service strategy agreed between London TravelWatch and local authorities

For the Barking – Gospel Oak line we **call for**

- Early electrification

For other proposed new lines we **recommend**:

- The construction of a new south-west to north-east tunnel across London (**Crossrail 2**), but consider that its precise purpose and alignment should be considered afresh. As well as looking to serve HS2 at Euston, such a line might serve an HS3 station if this were located in north or east London.
- Extension of Crossrail 2 to Streatham Common as above

- For **HS2**, there is a consultation on a strategy for local flows between London, the wider south east and both Euston and Old Oak Common.
- That consideration be given to the effect on the North London line in the Camden area of the HS2 **to HS1 link** we believe that the two lines must be kept separate. Also, we believe that at least passive provision should be made for a link between a possible HS3 station in north or east London and the Old Oak Common interchange.
- Early extension of the Bakerloo line further into South East London to provide additional capacity.

In regard to **freight**, we **say** that

- All freight trains operating across London should be electrically hauled. This will require electrification of the Kew – Acton – Dudding Hill route as well as the Barking – Gospel Oak line

6 Appendix

6.1 Appendix 1 – A note about train capacity and interior design

In recent years the rail industry has debated the use of high capacity trains to meet peaks of demand – a crucial issue for this draft RUS. However there has so far been no clear definition of what high capacity means. It can sometimes mean high density seating, i.e. squeezing in as many seats as possible. In other cases it can mean the exact opposite – few seats and maximum standing space. A further requirement is the need on some services (e.g. the new trains for the longer distance Thameslink routes) for high density seating but wide doorways and aisles for rapid unloading and loading.

Also a feature of recent years is the design of new and refurbished inter-city trains with reduced leg room, many more airline type seats so few table seats suitable for families and groups, seats which have poor or even no window view, and luggage space banished to vertical stacks out of many passengers' view. These changes were made in response to the post-Clapham research into interior crashworthiness and the need to provide an element of head restraint for passengers thrown forward and then back into seats, causing severe head and neck injuries .

The outcome of these design trends is that trains are now unattractive to some potential passengers – particularly families and groups, who are not necessarily commuters, but who are nevertheless potential users of the rail network . This cannot be helpful in the quest to attract new business from the private car – the interiors of which have become more comfortable and attractive

This is an example of how it is important to understand that the railway must deliver much more than just high capacity for commuters. This note therefore proposes a specification for inter-city trains to address this matter.

Our proposed definitions and specifications for types of trains - which we put forward for discussion - are as follows.

Metro (orbital) All-station trains with a high turnover of passengers who are making short journeys typically of 10 – 15 minutes, with few travelling more than 30 minutes. High standing capacity with good circulation space around doorways. Side facing seats are acceptable.

Metro (radial) All-station trains on routes into central London. Typically with a low turnover of passengers, so loads increase approaching London. Maximum

journey time around 45 minutes. High standing capacity, but more seats than Metro (orbital). Good circulation space around doorways and into seating areas. 2+2 cross-seats, with ample facing bays for groups travelling together.

Outer suburban Semi-fast trains on journeys up to around 60 minutes from London. Heavy peak traffic, mostly requiring seats as per the current “20 minute rule”. 2+3 cross seats, with ample facing bays (well aligned with windows) for groups travelling together. Off-peak train length to be sufficient to allow 2 + 3 seats to be used as 1 + 2.

Current example – none: FCC class 365 but with 2+3 seats, or SWT class 450 with more bays and better window alignment would be nearest.

Outer suburban (metro) As outer-suburban, but with the need for rapid unloading / loading at key intermediate stations (e.g. Stratford, Clapham Junction, or the Thameslink central area). More doorways and / or good circulation space around doorways and into seating areas

Express Journeys in the 1 – 3 hour range on routes where there is no inter-city service (e.g. London to south coast, Chiltern London to Oxford / Birmingham). Good leg room, 2+2 seats mostly in facing bays, aligned with big windows and with luggage space between seats.

Current example – Chiltern class 168.

Airport (dedicated services) As Express, with luggage stacks by doors. Current example

Heathrow Express class 332.

Inter-city 125 mph (or higher) trains for journeys 1 hour upwards. Spacious interiors, 2+2 seating with some bays, aligned with big windows and with luggage space between seats. Provided with two toilets per carriage; wide end doorways; Children’s play areas; and some compartments. Seat pitch no less than ex-BR Mk I / II stock - allowing for modern wide end doors and crash resistant design, this equates to 64 seats per 23 metres carriage or 72 seats per 26 metres.

Current example – none in UK: Hull Trains / Grand Central ‘Adelante’ class 185 comes closest. In Europe, Deutsche Bhan ICE3.

High density (HD) Trains for heavy peak loadings on outer suburban routes – journeys max 1 hour. 2+3 mainly airline seating. Should not normally be used on off-peak services.

Current example – South Eastern class 375/9

Could have end-doors where dwell times are not critical.

Current example – none: 2+3 version of Southern class 442 would be nearest.

High density High speed (HDHS) 125 mph (or higher) version of HD where trains have to share tracks with inter-city. Off-peak could be used on inter-city routes on 1+2 basis as a separately branded 'economy' service aimed at very budget conscious travellers.

Current example – none.

6.2 Appendix 2 – The Wider Picture

For various economic and social reasons, transport infrastructure in the UK has been developed under the leadership of government, not by the free market. Fares are generally not directly related to the costs of providing the infrastructure, so decisions about building (or not building) new or enlarged facilities are essentially political.

For 40 years up to the late 1990s rail traffic declined and the broad political direction was for the industry to reduce its capacity. Now the trend is upward and, despite government policy to increase fares in real terms, it is forecast to continue rising throughout the 20 – 30 year period of the RUS. This is particularly the case for commuting into central London and Docklands, where employment has risen (with political encouragement) and is projected to continue increasing.

Therefore, during the last few years, government has authorised several schemes to increase London's rail capacity. Because rail is a long lead time industry many of the improvements have yet to be completed. However the capacity increases which are now coming on stream (and will continue to do so until 2018) fall into two categories.

Firstly there are schemes which create new rail journey opportunities and substantially reduce journey times. As well as relieving overcrowding on peak commuting flows, these schemes aid regeneration, improve social and economic mobility and ease of access to jobs, and encourage modal shift. Most important, these new facilities will be used all day, every day, and thus provide benefits for large numbers of people. London Overground, Thameslink and Crossrail are in this category.

Secondly, are those schemes which allow small increases in the number of trains along particular sections of line such as longer platforms for longer trains,

and track and signalling improvements to. These schemes, although justified by business case analysis and having the merit of being relatively cheap, do no more than allow small numbers of additional passengers to be accommodated at the height of peak demand. This generally amounts to less than one hour per day, five days per week. For the rest of the time, the investment yields nothing because there is no improvement in service to encourage modal switch or attract new passengers.

It is also notable from the draft RUS that the projected growth of peak rail trips into central London will be much faster from outside Greater London (40 – 45%) than from within (15 – 20%) and it is the longer distance traffic that will outstrip capacity. These trips are the highest cost to provide, as longer journeys require seats for all, so each train can carry fewer passengers. Also there is no time for these trains to make more than one journey in each peak, so the effective utilisation of the rolling stock and train crew is poor.

Yet despite the higher costs of longer distance commuting, the price per mile of season tickets generally falls as distance increases, although some proportion of rail costs are not distance related e.g. stations, ticketing and administration which it would not be unreasonable to reflect in ticket prices. Illustrative examples are shown below:-

Example of weekly season rates for short, medium and longer distance London commuting – January 2011 fares

To Waterloo from	Weekly season £	Miles	Rate per mile per week £
Surbiton (London boundary)	38.70	12	3.23
Woking	65.70	24½	2.68
Winchester	103.00	66½	1.55
To Paddington from	Weekly season £	Miles	Rate per mile per week £
West Drayton (London boundary)	38.70	13¼	2.92
Slough	53.00	18½	2.86
Reading	90.00	36	2.50
Swindon	103.00	77¼	1.33
To Liverpool St. from	Weekly season £	Miles	Rate per mile per week £
Harold Wood (London Boundary)	38.70	15	2.58
Chelmsford	81.50	29 ¾	2.74
Colchester	103.50	51¼	2.00
To Kings Cross from	Weekly season £	Miles	Rate per mile per week £
Hadley Wood (London boundary)	38.70	10½	3.69
Stevenage	75.50	27½	2.75
Peterborough	133.00 (FCC only) 155.80 (Any train)	76¼	1.74
Newark	197.30	120	1.64

It seems to London TravelWatch that to propose rail investment providing benefits for just a brief period each day, to a small number of longer distance passengers, whose journeys cost the most to provide and whose fares are pro rata the lowest, raises legitimate questions as to whether this is the best way to use public money. There is also the view quite commonly expressed that long-distance commuting has undesirable economic, environmental and social effects in the areas concerned.

- A 30 year transport and land use strategy might therefore wish to consider if it would it be better to incentivise more housing within London, rather than encourage continued development further away with its associated high-cost commuting. This would be a topic for local and national government to debate in greater detail.

7 Glossary

- Research into Passenger Attitudes to First Class Travel (London TravelWatch, July 2010)
<http://www.londontravelwatch.org.uk/document/4222/get>
- Development of Train Services for Chiltern Routes (London TravelWatch, February 2011)
<http://www.londontravelwatch.org.uk/document/13892/get>
- London TravelWatch Requirements for Train Services – Principles (London TravelWatch, June 2010)
<http://www.londontravelwatch.org.uk/document/4156/get>
- Chiltern Railways Seventy Third Supplemental Track Access Agreement (Network Rail, November 2009)
<http://www.networkrail.co.uk/browse%20documents/track%20access/2%200completed%20consultations/2009/2009.10.27%20chiltern%20railways%202073rd%20supplemental%20agreement%20-%20consultation%20closed%2023%20november%202009/form%2022%20073rd%20for%20eq3.pdf>
- Capturing the benefits of HS2 (Greengauge21, February 2011)
<http://www.greengauge21.net/wp-content/uploads/Capturing-the-benefits-of-HS2.pdf>
- Making the most of existing capacity – P. Connor (Modern Railways, October 2010)
<http://www.railway-technical.com/MR%20capacity.qxd> Layout%204.pdf
- Passenger's Priorities for Improvements in Rail Services – MVA (Passenger Focus, 2007)
www.passengerfocus.org.uk/news-and-publications