

Rail is the key to Olympic success

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Transport was a key to Britain's success in winning the Olympic Games for London in 2012.

And one of the transport gems was the international station at Stratford – on Britain's first high-speed rail line – which was marketed to Olympic officials as London's gateway to Europe.

The Olympic Park in east London will be served by 10 separate train lines with a train every 15 seconds. The rail and Tube links will be capable of transporting 240,000 passengers per hour.

The 140mph Olympic Javelin shuttle service, pictured right, will take just seven minutes to whisk many of those passengers between the Park and St Pancras.

Hugh Sumner, Olympic Transport Director at Transport for London, is the man responsible for the plans.

"It's about moving athletes, teams and media to their events and keeping London moving in the meantime," he said.

By comparison, New York's bid proposed using the city's existing transport network.

One of the things which may well have weighed on the International Olympic Committee, in rejecting the US bid, was the experience of

what happened in Atlanta in 1996. While there were pious intentions to build a new Amtrak station in the city centre, visitors had to make do with the existing station, a two-track through station with an island platform. Passengers had to queue up for their trains in the street outside.

Many Olympic venues were only accessible by car or bus. As a result the roads were overloaded with athletes caught up in the jams. Plans to move more people by rail never materialised – resulting at times in total gridlock.

By contrast, in 2012, Britain will have the bright new Channel Tunnel rail link and possibly even Crossrail. With some real determination even the Chelsea-Hackney line could be built

Unless there is a careful and consistent approach – and real action – and if the current inadequacies of the existing Tube and rail network are not dealt with, the horrible Olympic reality could be gridlock on the roads and Britain being laughed at by European countries which have put good, sustainable public transport links at the centre of their policies.

Can Britain show it is fit for a sustainable future or be shown up as disastrously over-reliant on the petrolhead planners of the past?

Concerns over Crossrail

The parliamentary Bill to prepare for the construction of Crossrail received its second reading in the Commons in July. It is now being examined by a committee which will consider any objections to and "petitions" about the scheme made before 16 September 2005. EWS and the Rail Freight Group are worried about its effect on freight.

The apparent policy of letting Crossrail take priority over all other services is causing ripples as far as Wales where campaigners warn that it will reduce the number of long-distance trains from Paddington. Railfuture also has worries about proposals to change the fare zone boundaries around Heathrow and about the prospect of BAA demanding premium fares for airport services. Heathrow Express, for instance, already charges four people £72 to get to the airport from Paddington. The Tube fare to Heathrow is £24 for four people.

London's big ideas for future

By Philip James

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London's Crossrail project has been on the transport agenda since the 1980s and there is a chance that it may finally come to pass although funding remains a hurdle.

So what are we to make of the proposed Superlink scheme? Will it distract attention from Crossrail at a critical time or will it add value to the overall objective of improving the transport infrastructure in and around London?

Could Crossrail Line 1 (see map) evolve into Superlink? The original objectives were to provide rapid east-west links and to relieve congestion on existing Underground lines. By connecting existing surface lines, fewer passengers will need to change trains, layovers at terminus stations can be avoided, overall journey times will be reduced and depots can be located outside the central area.

Capacity freed up in existing terminals could then be used for new or enhanced services on other routes. Despite the protracted debate, Crossrail Line 1 in all its guises has retained this philosophy.

Superlink also embodies these objectives but adds to them the objective of serving areas outside London where new housing development is to take place.

Crossrail intends to serve Maidenhead and Heathrow while Superlink proposes services to Reading via Maidenhead, Reading via Ascot, Basingstoke, Guildford and Milton Keynes.

A Crossrail extension from Maidenhead to Reading is a relatively trivial future addition and a connection to the West Coast main line near Willesden could be added. Crossrail has already considered a connection to the DC lines to serve Watford Junction and a similar connection to the slow lines could be built.

The remaining branches are all dependent on a southern connection from Heathrow towards Staines and

the creation of a western chord at the junction of the Reading and Windsor lines. This has featured as part of a separate airport link scheme and while combining this scheme with Crossrail offers new travel options, it is not vital that the two schemes be implemented simultaneously.

The Superlink advocates make the point that terminating many of the Crossrail services just west of Paddington will not make optimum use of the new infrastructure.

This is the result of the deletion of the Kingston and other branches from the project. While this may be a valid criticism now, it is one that can be addressed in the longer term and hence is not a fundamental failure in the concept.

The central section is key to both Crossrail and Superlink and both envisage a line linking Paddington and Liverpool Street although the latter offers some alternative alignments between these points.

Anyone who regularly uses the Central line in the peak periods, particularly the part through the City, will appreciate the need for relief so the Crossrail alignment looks like a good selection even if the alternatives also have merit.

In the centre, Crossrail and Superlink are similar if not identical, although in the long term will 24 or even 30 trains per hour be sufficient for either?

Crossrail Line 2, although aligned north-east to south-west, addresses future capacity needs, serves central locations not reached by Line 1 and provides connections to more surface routes, some of which feature in the Superlink scheme.

In the east, the precise alignment for Superlink has not been made clear so I will speculate about the route. It can be assumed that the line will run to the south of Whitechapel and the station at Canary Wharf will be located to the north of the Jubilee line station. From there, a plausible route is towards Canning Town, below Barking Road as far as Green Street

and then cut across the street plan to run below the District Line and C2C route from Katherine Road to East Ham depot. The link to the Tilbury loop could diverge here while the main line could go under the A406 and river Roding towards Ilford Hill and Ilford station.

Crossrail has been criticised for splitting the Great Eastern suburban service with some trains running to Liverpool Street and others via Crossrail line 1. This is a consequence of the branch via Canary Wharf taking much of the available track capacity in the central section but may complicate operations in the Stratford area.

Unfortunately, Superlink appears similarly to split services coming from Southend, Chelmsford and the Cambridge line so it will need to demonstrate that joining these routes further from London will reduce operating problems.

Crossrail has branches serving Stratford as well as Canary Wharf with the latter continuing to Abbey Wood. Therefore it is not possible for it easily to evolve into Superlink. However, it is still possible for it to deliver some of the benefits of Superlink. Diversion of Great



OLYMPIC DREAM: How Stratford International station could look in 2012

Eastern local services via Crossrail will free up 12 paths per hour into Liverpool Street. These can be used by additional services from the Lea Valley line and track capacity permitting, East Anglia.

Exploitation of this capacity may require additional work such as quadrupling part of the Lea Valley line but this should be less expensive than miles of new tunnel and

completely new alignments. It may be possible to deliver further benefits either through Crossrail Line 2 or by upgrades to infrastructure at certain key locations. For example, Bethnal Green junction to Liverpool Street is and will continue to be a pinch point as eight tracks converge into six. The demolition of Bishopsgate goods depot and subsequent redevelopment may offer an opportunity to widen this alignment to eight tracks.

Coupled with improvements to the Lea Valley and Chingford lines and routing of some trains via Stratford, service upgrades may be possible.

Connecting Crossrail to the former LTS (now C2C) lines presents problems. The obvious connection point is at Forest Gate junction but the resulting conflicting movements over a flat junction coupled with limited paths to Stratford limit its viability.

In the east, Crossrail cannot easily be transformed into Superlink but in combination with improvements to existing infrastructure can achieve many of its benefits. A significant issue may be the vehicle lengths used. Crossrail originally proposed the use of 23 metre vehicles but the latest plans are for 20-

metre coaches. Apart from clearing routes for longer vehicles another constraint could be the position of door openings in relation to platform edge doors.

I have not seen any proposals for the use of these in either scheme but if they were to be used and there could be safety reasons for promoting their use, then this could constrain the classes of rolling stock able to operate for years to come. Superlink has not addressed the rolling stock issue in detail so it is not clear what compatibility issues might arise although it should be possible to manage these.

The Superlink philosophy is to invest more in infrastructure now to generate more income from the completed scheme. It compares this with a lower cost for Crossrail but lower income.

The problem with this "spend to save" proposal is that it can only work if the initial cost is affordable.

An alternative could be to spread the cost by building the essential parts of the infrastructure now and adding extras later. Superlink includes an element of this thinking but then upgrading Crossrail later is a similar way of spreading cost.



How the transport plans for the Games in 2012 should

Railfuture has considered the transport plans being made for the 2012 Olympics and believes there is a good chance the necessary work will be completed in time.

Railfuture's London and South East branch also has high expectations that the work will be cost-effective and also leave a valuable legacy for the area in future. In July, Transport for London allocated £500million for railway upgrades to be carried out in time for the Olympics.

Railfuture is keen to see that the transport projects for the Games will be part of an integrated, long-term transport plan for London.

With some Olympic events taking place on the Excel site at Custom House and at sites around the capital, transport plans could not solely concentrate on Stratford where the main events will take place. Although it seems to be

accepted that Crossrail cannot be completed before 2013, Railfuture believes it is worth investigating whether the core section could be built with three key stations (Paddington, Farringdon and Liverpool Street) open in time for the Olympics.

Heathrow Airport will not otherwise have a direct connection to Stratford in time for the Games but the core section would allow a limited Shenfield-Heathrow service to be operated. Remaining stations could be fitted out later.

Stage one of the East London Line should be fully operational well before the Olympics.

Bridges are already being rebuilt in Hackney to carry the line and invitations to tender for the £400million of work on the tracks were being sent out this month. There should be a four-car electric train every five minutes at Dalston

Junction by 2010. Railfuture however believes the Dalston East Curve could be reinstated to allow some East London Line trains to go to Hackney Central and Stratford.

In the longer term the curve could provide for trains to go well beyond Stratford towards Chingford although this would be impossible during the Games because of capacity problems on the North London Line.

Certainly East London services ought to be extended at least to Highbury and Islington by the time of the Games to provide a proper connection with North London services.

The orbital North London Line has the capability if not the current capacity to become a major carrier into the area during the Games and beyond. However the route's short trains and quarter-hourly service can barely cope with the

leave good railway legacy for the capital and beyond

traffic that now uses the line. Two-thirds of the line will be re-signalled to allow eight trains an hour by 2010. Platforms are also to be lengthened along the route to allow for six-car trains, rather than the current three-car units.

With the possible extension of the East London Line to Highbury, Railfuture believes it will be necessary to reinstate four tracks between Dalston West Junction and Camden Road.

There are other important works, such as improving the interchange at West Hampstead, and ideally implementing the long-proposed plan to put platforms on the Chiltern Line. This would provide easy access with one change for people from the South Midlands to get to the Olympics.

Laing Rail has devised a privately financed scheme to improve the West Hampstead inter-

change with a high-level pedestrian footway. Willesden Junction also needs to be improved, with platforms reinstated on two of the four main line tracks, for major interchange for travel to and from the Home Counties and West Midlands and the Olympics.

The North London Line should also be able to take special trains from regional destinations in the North West and West, provided platform and siding space are enhanced at Stratford.

Currently international services will not stop at Stratford during the Games, forcing European visitors to change into Javelin and Kent domestic services at Ebbsfleet. During the early morning and evening periods, international services should call at Stratford to encourage day visitors from France and Belgium to the Games. The high-speed Kent and Javelin servic-

es should provide excellent connections to the Games from most places in Kent. The domestic Javelin shuttle services will be a key factor in the rapid dispersion of large numbers of people to and from the Games, but the new St Pancras Thameslink station must be fitted out in time.

Completion of Thameslink is now sadly unlikely before 2012 but a modicum of upgrading at Loughborough junction and Herne Hill will improve the reliability of the existing Thameslink service. On the C2C from London to Southend, additional stops at West Ham would improve interchanges to the North London Line or the Docklands Light Railway to Stratford.

The DLR will be working to capacity during the Games. By 2008, North London Line services will not go beyond Stratford but the line will be converted for DLR operation.