

## **Written Evidence to the All-Party Parliamentary Group for High Speed Rail Capacity Inquiry**

### **How do you view the current capacity situation on Britain's railways?**

There has been strong growth in both passenger and freight traffic on the rail network over the past fifteen years, increasing the contribution of rail both to the national economy and delivering significant environmental benefits.

The network is now congested on a number of routes and at some key bottlenecks, and in some cases the situation has now been reached where at peak times track capacity is fully used and trains are operating at the maximum possible length and at high load factors, with serious overcrowding on some routes. Examples include the South Western Main Line from Waterloo, the Great Eastern Main Line from Liverpool Street and the Brighton Main Line from Victoria and London Bridge.

There are a number of other routes where track occupation is close to or at the maximum capacity of the route, but trains do not yet operate at maximum length, or are not fully loaded. As an example, the Great Western Main Line out of Paddington has many of the most overcrowded trains in the country, but in most cases this reflects the operation of short trains, and much of the serious overcrowding on this route can be addressed simply by the provision of additional rolling stock. The main cities outside London also have serious overcrowding on many corridors, which can often be resolved by the provision of additional rolling stock. This is generally the case, for example, for the suburban networks in Manchester, Birmingham and Leeds.

There are also emerging issues for freight, particularly on routes where there is likely to be substantial growth in freight movements, predominantly intermodal traffic, both to and from the ports and also increasingly for domestic movements within Britain. The problems in relation to freight capacity are most acute where two track routes, such as the Peterborough – Doncaster section of the East Coast Main Line and the Crewe – Glasgow section of the West Coast Main Line, are used by a mix of fast InterCity trains, slower freight trains and, in some cases, local passenger services. Even where freight growth can be accommodated on these sections, the freight trains have to be “looped” to allow fast passenger trains to overtake, increasing freight transit times and reducing the productivity of drivers, locomotives and wagons.

In contrast, the Euston – Crewe section of the West Coast Main Line, the route primarily relieved by High Speed 2 (HS2), is, except for a couple of bottlenecks, a four track railway, allowing segregation of fast InterCity trains from freight and local passenger services. Also, in contrast to the some of the routes discussed above, the InterCity trains on the West Coast Main Line can be extended up to 12 car length (except to Liverpool Lime Street), and the existing services generally have significant spare capacity, except for the artificial peaks at the “cliff edge” when much cheaper off peak fares become available, particularly at seven o'clock in the evening.

## **What capacity do you believe Britain's railways will require in the future?**

The key probable needs for additional capacity on the rail network can be categorised as follows:

- Additional commuter capacity into central London and other major cities, driven by the growth in city centre employment
- Additional interurban capacity for middle and longer distance travel where rail is already or potentially competitive with car use
- Capacity on key routes to cater for expected growth in rail freight, concentrated on specific corridors for intermodal flows both to and from major ports, and long distance domestic intermodal movements, primarily to and from Scotland.

The future scale of passenger growth depends both on rail's existing modal share, and the progressive impact of IT developments. On mode share, rail already has a high proportion of medium and long distance business travel to and from central London, so the potential for growing market share is limited. In contrast, the rail share of travel between cities outside London is generally low, as journey times are slower and congestion and parking is generally less of a deterrent than when driving into central London.

It is likely that IT will over time reduce the current scale of business travel, as the quality and ease of use of video conference facilities improves. It is already the case that some businesses are reducing travel costs and improving productivity by this means, and the continued explosion in the use and functionality of smart technology will almost certainly accelerate this trend. This is not to say that business travel will cease – but the historic link with GDP growth is almost certain to break down in the future. There will probably be a similar, but less marked effect on commuting; again, there is a steady increase in non-daily commuting, and the relationship between city centre employment, GDP and commuter volumes is also likely to change over time.

The above analysis suggests three conclusions:

- The greatest scope for increasing rail use is for interurban travel between cities outside London, where rail's current mode share is low. This will require investment to reduce journey times, improve quality and increase capacity.
- Potential changes in the market, particularly further developments in smart technology, make investment in major projects such as HS2, with very high capital costs and no benefits in the short/medium term, high risk and unattractive.
- There is a need to ensure that sufficient capacity is available for freight growth on key corridors

## **What is the best way of providing capacity and future proofing Britain's rail network?**

Incremental investment across the rail network to increase capacity, reduce journey times and improve quality is by far the most cost effective means of improving the capability of the network and delivering **early** benefits.

Taking the West Coast Main Line as an example, the alternative to HS2 developed by 51m costs less than 10% of HS2, meets the Department for Transport's forecasts of growth in demand, and would deliver benefits from as early as 2017. The alternative focuses on the key pinchpoints on the route, both passenger and freight:

- There is already serious overcrowding on fast Euston – Milton Keynes/Northampton commuter services. Capacity on this corridor can be doubled by constructing a new flyover south of Milton Keynes and introducing higher performance rolling stock on the route
- Construction of extra tracks between Rugby and Nuneaton and south of Stafford would enable complete segregation of InterCity passenger and freight services between the London area and Crewe, thus increasing capacity for freight growth

The 51m alternative is described in detail on the 51m website<sup>1</sup>

This approach is a good illustration of how capacity can be increased by sensible incremental action. Similar analysis of other routes demonstrates that in many cases targeted improvements can increase capacity for both passenger and freight, and plans should be developed for transformation of the regional networks in the Midlands and the North, with targeted investment in electrification, new rolling stock and infrastructure enhancements to deliver increased capacity and reduced journey times.

There may also be some routes for which major projects are a necessary and appropriate means of increasing capacity, while at the same time better serving the market. A potential example would be to link the South Western Main Line from Woking to Crossrail via Heathrow; this would deliver significant modal shift to the airport and provide a direct through route for many commuters to the West End, the City and Docklands, relieving the main line into Waterloo and the Underground lines from there. There are similar potential schemes elsewhere in Britain, for example early full implementation of the Northern Hub proposals.

### **What will the effects of providing extra capacity be, beyond addressing journey supply? What would be risked by failing to provide that capacity?**

The consistent evidence from academic experts is that the regeneration benefits of High Speed Rail are at best limited, and frequently benefit the “hub” city at the expense of the other cities served. There is certainly no serious evidence that construction of high speed rail leads to major employment growth. Indeed in Europe, Spain has both the largest high speed rail network and the highest level of unemployment.

There is clearly a redistribution effect within regions. For example, Lille has apparently benefited (although its unemployment level has not improved relative to the French national average), but other major towns in Northern France have

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<sup>1</sup> 51m.co.uk Consultation Appendix 1 Optimised Alternative to HS2  
<http://51m.co.uk/sites/default/files/uploads/App%201%20-%20Optimised%20Alternative%20to%20HS2.pdf>

continued to decline. The likely impact on the North West is similar; there would almost certainly be significant development at and around the high speed rail station, but this would be at the expense of other towns and cities such as Liverpool, Bolton and Rochdale. And links between the major cities and London are already good: is it really credible to believe that HS2 will transform the economy of the North West when there is already a train every twenty minutes from Manchester to London, taking only two hours eight minutes?

Real potential economic benefits would be achieved by transforming **regional networks**. Again, taking a specific example in the North of England, electrification and acceleration of the Manchester – Rochdale – Halifax – Bradford – Leeds route, with the service extended through to Manchester Airport, would produce real benefits for all the towns and cities along that route, at a fraction of the cost of HS2, and with no leakage to London and the South East: all the benefits, including the work on construction, would be concentrated in the North of England.