BLUESPACE THINKING

Bluespace Thinking Ltd. (Amended April 2011)

A Short Review of the HS2 consultation reports (Feb 2011).

1 Introduction

In our original paper issued in final form in August 2010 we raised concerns about the case for HS2. Based on the HS2 consultation documents it is now clear that the alternative of increasing North – South (to/from London) rail capacity by a portfolio of improvements to existing lines will not only meet the forecast demand but will provide more spare capacity with lower load factors than HS2, it is a better use of government funds, provide similar economic regeneration and do less environmental damage than HS2.

2 HS2 proposals

The new 2 track HS2 Y scheme infrastructure and rolling stock will cost the Government (tax payer) about £38 billion (total capital PV=£30.4 bn). If the demand assumptions are met the first phase to Birmingham will deliver transport for up to 145,000 passengers per day at a load factor of 61% using 14 of the planned 18 trains/hour capacity. (136,000 passengers by 2043)

HS2 Ltd have not developed the details of the Y extensions to Leeds and Manchester, the link to HS1 or the link to Heathrow. They anticipate that by 2043 an additional 95,000 passengers will use the line. Trains that run from Europe and trains stopping at Heathrow have not yet been added to the service schedule and unless load factors are to increase there needs to be about a 60% increase in seat capacity from the additional 4 trains/hour, we do not believe that HS2 Ltd have published the load factor for the full Y case. If this is achievable the anticipated NBR is 2.2, in addition about £6.3 billion (PV) of regeneration or wider economic benefits are forecast. HS2 anticipate 8,160 passengers/ day shifting from air to rail, 9,520 from road and 29,920 new generated trips.

3 The alternative

Enhancing the capacity of the existing 10 tracks of major North-South capacity not only provides more additional capacity at much lower cost it is also a more flexible option. Atkins Scenario B is sub optimal, it includes projects that are not required and the cost of running some virtually empty trains. However It still has an investment cost of just £13.5 billion (total capital PV=£10.3bn) and it provides an additional 246,000 seats per day, far more than are required to meet the predicted demand increase.

The schemes produce load factors of 56% on the West Coast Main Line, 28% on the Midlands Main Line and 45% on the East Coast Main Line, significantly better than HS2. At these load factors the schemes provide significant capacity for further passenger growth without further investment. At present the DfT calculate that the NBR of this scheme will be 1.4 but once optimised it is probable that this will increase to above 2 (We are submitting FOI requests to help evidence this point). These improvements will also add regeneration/ wider economic benefits that have not yet been quantified by the DfT.

The Scenario B scheme forecasts that 6,023 passengers/day will shift from air, 6,084 from road and 24,320 new trips. It would appear that the "very" high speed nature of HS2 only switches 2,137 additional air passenger and only attracts an additional 11,209 new rail passengers in total, just 2% of the seating capacity available in the Scenario B alternative. The enhancement plan offers timing flexibility and the ability to risk manage the demand forecasts, it can address pre 2026 WCML congestion and obviously has lower associated environmental impact and blight.

4 Summary

It has been suggested that HS2 is a once in a lifetime strategic opportunity however any corporate planer/strategist or investment manager will observe that the enhancement scheme provides more capacity at a similar NBR and leaves £24billion of Government (taxpayer) funds to be invested elsewhere.

Commercially viable transport schemes have an NBR of infinity, in UK rail there are not be many such opportunities, however Birmingham, Manchester, Liverpool, Leeds. Newcastle, Glasgow, and Edinburgh as well as all other major UK urban conurbations have, we believe, unfunded transport schemes with NBRs in excess of four (we are in the process of evidencing this further). By investing in some of these in addition to the Scenario B rail projects, transport investment can provide greater benefit than HS2, to millions of people not just those that frequently use long distance rail.

5 Further work

We are issuing a series of FOI requests to better understand a) the HS2 Y scheme, b) the Atkins Scenario B Alternative, c) The scope for investment in urban transport schemes that have moderate NBRs in the range 4 to 10, and d) The basis of DfT and TfL economic benefits calculation that produce unreasonably high added GDP/GVA attributable to new rail schemes.

We then intend to prepare a line by line comparison of HS2 to the alternative using the DfT NATA criteria for the evaluation of projects. Hopefully this will help individuals and organisations to more fully understand the alternative to HS2 before responding to the formal consultation.

6 Acknowledgements

Since their original reports and our initial review in March 2010 the DfT and HS2 Ltd have been helpful in the provision of information and have modified their demand forecasts downward by about 30% (145,000 in 2033 to 136,000 in 2043) and the base case NBR has been brought down from 2.4 to 1.6. It remains our view that these are still overestimates and that if built, when reviewed by the Public Accounts Select Committee circa. 2060, the NBR will be below 1.

As in the case of our original review if we have misunderstood or misinterpreted the February 2011 reports we would be pleased to receive comments and will make any appropriate changes.