

Why the business case is flawed and HS2 is not in the National interest

Summary

1. HS2 is a waste of money (with a huge £33bn cost)

HS2 is very poor value for money with every update showing it getting worse. The Government's own figures show the Benefit to Cost ratio (BCR) is now half what it was in 2010 (for phase 1 from 2.4 to 1.2; for the Y from 4 to 1.3/1.5) ie it pays back £1.2 in benefits for **every £1 of subsidy spent**.

But the real figures are far worse. Not only do they exclude the lower GDP estimates, but key assumptions are flawed. This was emphasised again by the Public Accounts Committee (PAC) report into HS1 with lessons for HS2 eg unrealistic pricing assumptions; exaggerated demand; 'untenable' values for time savings and using a 'simplifying' assumption that people don't work on trains (that accounts for 40% of HS2's benefits); **and insufficient analysis of alternatives**.

The real figures reveal the benefits to be far less than the cost of the subsidy, less than 20p back for every £1 spent. There are much cheaper and better value for money alternatives that meet capacity needs eg uprate West Coast Mainline for £2bn, a BCR over 5 and in 5yrs -not 14yrs time.

2. HS2 is not needed for capacity

Claims that WCML will soon be full are not sound, and in terms of rail priorities, Euston for long distance services is the second least busy London terminus (with HS1 the least busy). The rail demand forecasts are over optimistic (doubling by 2037) as were those for HS1 and many other High Speed Rail (HSR) projects. The DfT have not assumed premium prices for HS2 (so exaggerating demand) and the PAC calls for a re-work of the figures. The alternatives to HS2 (uprating WCML) indisputably more than meet even the DfT's demand forecast, and are a better, low risk option.

The much talked of 'capacity crunch' is real when we come to Heathrow and air, but not for a rail line that has just 60% capacity used in the morning peak and that's before the Pendolino trains are extended to 11-cars, as is already happening which increases 'standard class' capacity by 50%.

3. HS2 will create few jobs and rebalance the economy in favour of London

The academic experts agree that there is no valid evidence for the claimed transformational benefits ie that it can redress the north south divide. If you connect two cities then theory and evidence say the dominant one gains. So London not the West Midlands or North will benefit most.

As PAC notes, our understanding of how transport projects affect regional economies is limited. But even HS2 Ltd say there will only be 40,000 jobs created by Phase 1 (9,000 to build it, 1,500 to operate it, and 30,000 jobs in the vicinity of new stations), with the 30,000 unlikely to be new jobs, simply existing jobs attracted from the hinterland, and anyway 73% of these are in London!

4. HSR is not needed to catch up with Europe

Compared to Europe, our geography, passenger priorities and existing intercity network suggest there is no case for HSR, as we are already ahead on connectivity. This was Roy Eddington's conclusion in 2006 and remains so. It's also what the latest passenger survey found (92% satisfied with journey times – 2nd highest in EU and top scoring factor for satisfaction with UK railways).

If there is catching up to be done, it's recognising we too must sweat our assets and invest in what we have and cancel **the vanity project of a 'rich man's toy'**. High Speed Rail projects are being cancelled and curtailed in many European countries as economic realities take their toll.

5. HS2 is not green

Speed is not green. HS2 is environmentally destructive and disruptive, far more so than the alternatives that have not been sufficiently investigated (as PAC notes) – whether upgrades to existing long distance lines (eg WCML); **improving our poorer regional rail connections**; or focusing on the future means of connectivity through spending on High Speed Broadband

Fuller report of 'Why HS2 is not in the national interest' available at www.hs2aa.org

The HS2 business case figures (from 2010 to 2012)

1. Summary of DfT central case (all adjusted to 2011 money)

£bn NPV 2011 prices	PHASE 1				FULL 'Y'				* jan 2012 range
	Mar-10	Feb-11	Jan-12	Apr-12	Mar-10	Feb-11	Jan-12	Apr-12	
Benefits	£32.70	£18.9	£19.0	na	c £76	£42.7	£44.15*	na	(£41.4 - 46.9)
(with WEI)	£36.8	£23.6	£23.1	na	c £83	£50.1	£53.25*	na	(£47.2 - 59.3)
Costs									
capital	£20.2	£20.2	£18.8	na	c £33	£34.6	£36.4	na	
operating	£8.6	£7.0	£8.6	na		£15.8	£21.7	na	
Revenues	£17.0	£15.5	£13.9	na		£31.0	32.9*	na	(£31.8 - 34.0)
Subsidy	£13.5	£11.7	£13.5	na	c £19.2	£19.4	£25.2*	na	(£26.3 - 24.1)
VfM: benefits per £1 of subsidy									* jan 2012 range
BCR	£2.4	£1.6	£1.4	£1.2	£4.0	£2.2	£1.7*	£1.4**	(£1.6 - 1.9)
(with WEI)	£2.7	£2.0	£1.7	£1.5	c 4.3	£2.6	£2.1*	£1.8**	(£1.8 - 2.5)

WEI = Wider Economic Impacts

* range midpoint (low end if stations are out of town, high end if in city centre)

** DfT say April 2012 range is 0.3 to 0.4 lower than in Jan 2012 ie presumed to be 1.3 to 1.5 (excl WEI)

BCR = Benefit Cost Ratio - shown as benefits per £1 taxpayer cost ie subsidy

2. Summary of best alternatives for improving WCML

VfM: benefits per £1 of subsidy

BCR with:	DfT's Rail Package 2 (RP2)				51m optimised alternative (OA)*			
	Mar-10	Feb-11	Jan-12	Apr-12	Mar-10	Feb-11	Jan-12	Apr-12
Purchased train	£3.63	£1.90						
(with WEI)	£3.83							
Leased trains	£2.85	£1.30	£4.01	na			£5.17	na
(with WEI)			£4.66	na			£6.06	na

WEI = Wider Economic Impacts

OA = 12 car trains (ex Liverpool), 3 first class instead of 4, addressing 4 pinchpoints

RP2 = 11 car trains, addressing 7 pinchpoints

3. The real Business Case for HS2

	Phase 1	Full Y	Notes
BCR April 2012 (excl WEI)**	1.2	1.3	
<i>Adjusted by DfT for:</i>			
1. Nov. 2011 GDP forecasts	-0.1	-0.1	Further reduction expected
2. Latest demand (PDFHv5.0) model	-0.4	-0.4	Change from PDFHv4.1 confirmed by research
3. Assuming time not wasted on trains	-0.3	-0.3	DfT research says use 50% of Value of Time figure*
adjusted BCR	0.4	0.5	
<i>Other adjustments</i>			
4. Incorrect use of 41% optimism bias	-0.07	-0.1	DfT say no relevant guidance (to savings)
5. Underestimate in PM/prelim costs	-0.05	-0.05	Identified by Network Rail
6. Updated businessmen's earnings	-0.15	-0.15	11yr old fig. DfT don't adjust (Oxera suggest 1/3rd too high)
adjusted BCR	0.13	0.2	
Real Benefit Cost Ratio (BCR)	between 10p and 20p benefit for every £1 spent on subsidy		

* DfT also add back + 0.2 for HS2 'crowding' benefit but this ignores evidence that businessmen book their seats

** full Y BCR assumes lowest point in range (average is only slightly higher at 1.4)