

AGAHST Federation submission to APPG for High Speed Rail

1. Peak time trains from Euston only half full and spare capacity will increase

Official data on peak loading has been repeatedly refused. However, a peak time survey of Intercity trains from Euston to the Midlands and North validated by an independent market research company¹ came to the following conclusions.

- The average loading across all peak trains (16.30 – 18.59) was 56%.
- Loadings on the peak Manchester and Liverpool services were on average less than 45% full.

The load factor will reduce to even lower levels in 2012 as two extra carriages are to be added (providing 51% more standard class capacity) and significant improvements in the Chiltern Line into Birmingham are resulting in a transfer from the West Coast Main Line (WCML). Quick and easy access to free Wifi on the Chiltern Line is a factor in this transfer as business people opt for on-board productivity over time savings.

2. There are specific capacity problems that can be solved relatively inexpensively

The same survey noticed some specific problems within the overall 56% loading:

- There was a significant difference between trains making an extra stop at Milton Keynes (average loading 107%) and other trains. Milton Keynes trains appear crowded.
- The first trains after 19.00 (7 trains from 19.00 – 19.30) – when much cheaper off peak tickets are allowed – had higher loadings (average 67%).

On the WCML, there are problems of crowding on trains to Milton Keynes and Northants. This cannot wait until 2026 and can be solved at a cost of £243m through a grade separation at the Ledburn junction bottleneck.

The 'fare cliff' problem of high loading on the first off peak trains after 7pm also needs to be dealt with.

3. More urgent capacity problems elsewhere on the network should be the focus of investment

There are more urgent capacity issues: for example, some peak Reading to Paddington trains are at 200% loading.

The real capacity issue is around commuter trains into London from the South West and South. Some of these trains are also very slow.

There is also a capacity problem for commuters into Birmingham, which can be solved through four tracking and longer trains. Although this will cause some disruption this will be small compared to HS2 construction and total rebuild of Euston.

Investing so much in what are already our fastest and least crowded mainline services is a gross misallocation of resources.

4. WCML will not be full for many decades, if ever

WCML will not be full within the next ten years, despite claims by Government and Network Rail (NR):

1. NR use a misleading technical sense of 'full'², and although both say it's full, their own forecasts of rail demand do not support it³.
 - Government have re-based their demand forecasts (to 2011) to take account of the recent growth in rail traffic as a result of the massive service improvement that accompanied the completion of the £9bn WCML Route Modernisation and the December 2008 timetable – with faster more frequent services and the restoration of reliable weekend services. But this ignores the fact that the growth was concentrated in the off peak services – which requires no additional capacity to accommodate it.
 - If it were true that WCML were full then the rail alternatives would be the only way of developing capacity sufficiently quickly to accommodate extra demand without excessive crowding developing.

HS2 does not provide more capacity for 15-20yrs ie well after WCML is claimed to be full.

Given the very rapid increase in the use of Skype, webinars, web meetings, especially in Asian countries that already have much faster broadband speeds than the UK; the Government encouragement of telecommuting; and the arrival of holographic 3D virtual meetings⁴, business travel may begin to decline and therefore the WCML never reach capacity.

5. Forecast growth is optimistic

Forecast growth is inflated by the DfT because they have avoided using the latest models, i.e. the latest GDP forecasts and PDFH 5.0, both of which cut demand estimates.

Furthermore, the DfT forecast doubling of demand (which is required to attempt to justify HS2 and which has required several changes to dates to achieve) is optimistic.

- Population growth (19% to 2037) only accounts for less than one fifth of the doubling
- DfT admit total journeys by all transport modes are declining not increasing, with no increase per person in long distance domestic travel in the UK since 1995⁵. So growth in rail depends on a shift from other modes. But it is not credible that modal shift can just continue indefinitely.
- Rail may also grow by much less, as it relies on a relationship between economic growth and long distance domestic travel that for all travel modes collectively seems no longer to exist⁶.

6. The 'OA' alternative to HS2 delivers more than the DfT (inflated) forecast

The 51m 'Optimised Alternative' (OA) to HS2 delivers more than DfT's forecast long distance capacity requirement.

- The OA enables a tripling in capacity from a 2008 base, comfortably accommodating the Government forecast of doubling in demand to 2037. The Transport Select Committee (TSC), Atkins (for DfT) and NR all accept OA is able to deliver this capacity⁷ and NR confirm the illustrative timetable demonstrating its feasibility is sound
- The OA is entirely based on existing technology, unlike HS2. With the same technological developments as HS2, there is the prospect of even greater capacity.

Despite this, Government, TSC and NR all claim that the OA does not provide sufficient capacity:

- TSC questions if it can meet peak demand, referring to the 'recent dramatic growth' in WCML as evidence – but as noted above this growth was in fact achieved predominantly in the off peak
- NR says it does not deliver the capacity needed for forecast growth in suburban demand
- Government observe that OA makes no contribution to inner suburban capacity into Euston⁸.

But inner suburban demand was not the problem OA addressed, nor did Government's own alternatives consider it. It is a new issue raised because OA is overwhelmingly superior to HS2. 51m were not invited by NR to discuss their OA, and have since shown how it can meet commuter demand into Euston. No one would seriously suggest a new high speed railway just to relieve commuter overcrowding.

7. HS2 has capacity problems and is high risk

It is HS2, rather than the existing rail system alternatives, that has capacity problems:

- The HS2 trains serving places beyond the high speed network (on the existing network) have less capacity than those trains they replace⁹. This means that HS2 trains would be impossibly crowded with the additional demand induced by HS2.
- The Feb. 2011 consultation business case of 18 trains/hr was groundless. An FOI investigation confirmed that the only documented assessment that HS2 Ltd had prior to consultation showed that 18 trains/hr was not possible¹⁰. HS2 Ltd commissioned their studies after the consultation began.
- The service pattern for the Y now assumes a maximum of 17 (not 18) trains/hr, and does not reduce off-peak (as previously). This is because 2 trains/hr (each way) are planned for Heathrow, which carry few people, leaving an increased demand to be carried by fewer trains. It is doubtful that such an intensive service could operate, or be reliable (due to an inability to recover from perturbations).

Furthermore, if rail demand doesn't grow as predicted, as HS1 found (running at just over a third of forecast), then:

- Because HS2 is an all or nothing project, we would have a new railway running at a large loss, requiring an even larger subsidy for generations to come.
- In contrast, the alternatives can be implemented quickly and in stages, with more capacity only created – and paid for – if it is needed. It also addresses commuter overcrowding long before 2026.

We acknowledge with thanks the research from HS2 Action Alliance in preparing this document and the development of the 'OA' alternative by 51. Further information is available in our document "A Better Railway for Britain" available at www.betterthanhs2.org.

¹ Customer Research Technology Ltd, 30.11.2011

² HofC Transport Committee, High Speed Rail, 10th Report of Session 2010-2012, Para 32, Page 19. 'Full' is when, at certain times of day, it would not be possible to provide train paths for extra services which train operators wanted.

³³ Network Rail forecast in WCML RUS; DfT's forecast of doubling by 2037

⁴ http://www.musion.co.uk/Cisco_TelePresence.html

⁵ From the National Travel Survey, table NTS0307

⁶ This is a development found in other developed economies. Crozet in an OECD discussion paper observed: '.....In Germany, the UK, Italy and France, domestic passenger traffic has been more or less flat since the early 2000s.' ('The Prospects for Inter-Urban Travel Demand', Y. Crozet — Discussion Paper 2009-14 — OECD/ITF, 2009, section 2.2)

⁷ HofC Transport Committee Report, High Speed Rail, 10th Report of session 2010-12 pages 92/3; Network Rail's Review of the Strategic Alternatives to HS2, November 2011, Section 2.3.3, page 17 and section 2.3.2 page 13; High Speed Rail Strategic Alternatives Study Update by Atkins, January 2012

⁸ 'The economic case for HS: Value for money assessment'. January 2012, section 10.11, page 24

⁹ HS2 'classic compatible' trains have 550 seats, compared to 600 on an 11-car Pendolino, 664 with 11 car, and about 649 for 10-car IEP trains.

¹⁰ Work by Systra for Greengauge 2 (reported in October 2009), and a series of workshops documented by Greengauge 21 ('High Speed 2 Interfaces' July 2010) that DfT and HS2 Ltd attended, both of which show that a maximum of 15-16 trains per hour might be achievable, instead of the 18 trains per hour that was accepted without evidence by HS2 Ltd and their Technical Challenge Group in September 2009.