HS2 fails the Journey Time Challenge

It is only possible to evaluate the performance of a railway system through the development of a timetable; but so far, HS2 Ltd has failed to publish any detailed timetable to show how the national rail network will operate with HS2 and NPR in place.

The disconnection of HS2 from the existing network is of course so great that it is probably not possible to develop a meaningful timetable. This supposition is generally supported by the best information currently available i.e. Table 23 from *HS2 Regional Economic Impacts* (report by KPMG for HS2 Ltd, 2013), which lists both new high speed services between the primary cities, and the reduced intercity services on existing main lines.

High Speed UK's route design of over 1,000km of new-build and upgraded railway, including over 50 connections to the existing network, has allowed the development of a 'Demonstrator Timetable' that describes most primary UK intercity services.

This timetable demonstrates HSUK's following key benefits:

- Average 46% journey time reductions;
- Existing CrossCountry and TransPennine intercity routes greatly improved, with a new South Coast to Scotland route via Milton Keynes, the East Midlands and Yorkshire;
- Direct high speed services from all UK primary cities to Heathrow, using existing Heathrow Express platforms;
- All 'Top 20' cities directly interlinked with high speed services operating at hourly or better frequencies;
- Service levels across network maintained or enhanced. Considering 32 key centres, 455 out of 496 possible intercity journeys are improved, and none are made worse;
- Capacity requirements on all routes defined, and the need for a 4-track high speed line from London to South Yorkshire has been conclusively established;
- All intercity journey time targets met for Northern Powerhouse.

HSUK's comprehensively superior network performance is demonstrated on the diagram opposite.

High Speed UK

The HSUK timetable is based on 496 possible journeys between 32 principal stations. ○
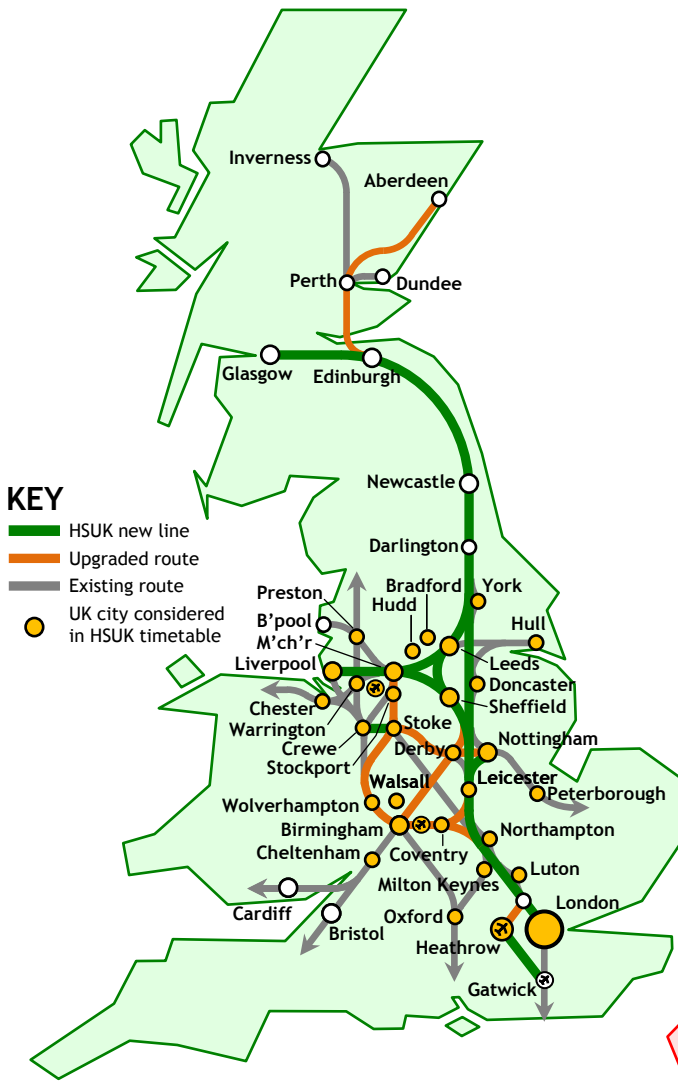
This timetable shows:

455 improved by HSUK

41 unimproved

0 made worse

455
41

46% average journey time reduction

KEY
- ▬ HSUK new line
- ▬ Upgraded route
- ▬ Existing route
- ○ UK city considered in HSUK timetable

Inverness • Aberdeen • Perth • Dundee • Glasgow • Edinburgh • Newcastle • Darlington • Preston • B'pool • M'ch'r • Liverpool • Bradford • Hudd • York • Hull • Chester • Warrington • Crewe • Stockport • Stoke • Leeds • Doncaster • Sheffield • Derby • Nottingham • Walsall • Leicester • Peterborough • Wolverhampton • Birmingham • Northampton • Cheltenham • Coventry • Luton • Cardiff • Milton Keynes • Bristol • Oxford • London • Heathrow • Gatwick

HS2 and NPR

HS2 Ltd has developed no timetable. Our assessment of 496 possible journeys between 32 principal stations ○ shows:

88 improved by HS2

14 improved by NPR

300 unimproved

94 made worse

88
14
300
94

9% average journey time reduction*

* Effect of journeys improved by NPR and made worse by HS2 not assessed

KEY
- ▬ HS2 route
- ▬ NPR route
- ○ UK city included in connectivity assessment

Inverness • Aberdeen • Perth • Dundee • Glasgow • Edinburgh • Newcastle • Darlington • Preston • Bradford • Hudd • York • Manchester • Hull • Liverpool • Leeds • Doncaster • Chester • Sheffield • Warrington • Stoke • Crewe • Stockport • Derby • Nottingham • Walsall • Leicester • Peterborough • Wolverhampton • Coventry • Northampton • Birmingham • Milton Keynes • Cheltenham • Luton • Cardiff • London • Bristol • Oxford • Heathrow • Gatwick