

# HS2 fails the London Hub Airport test

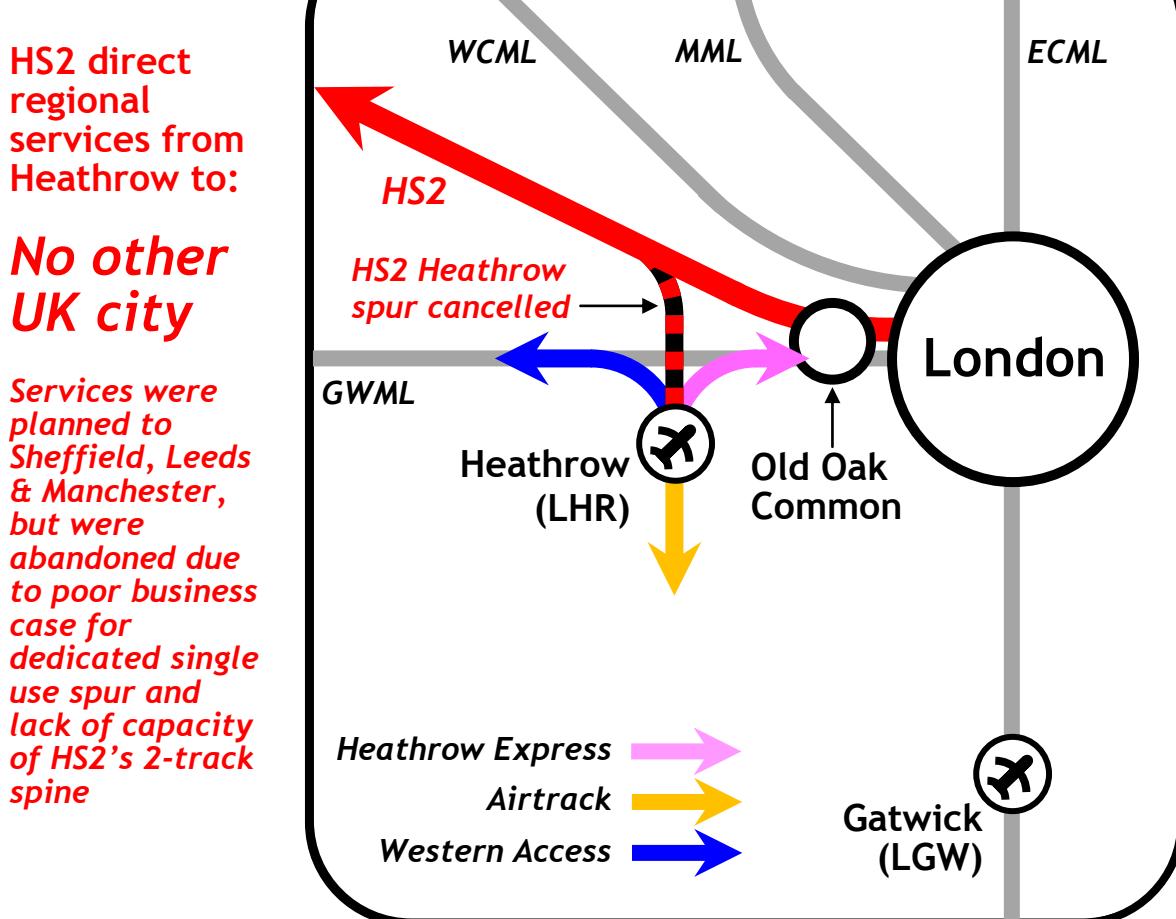
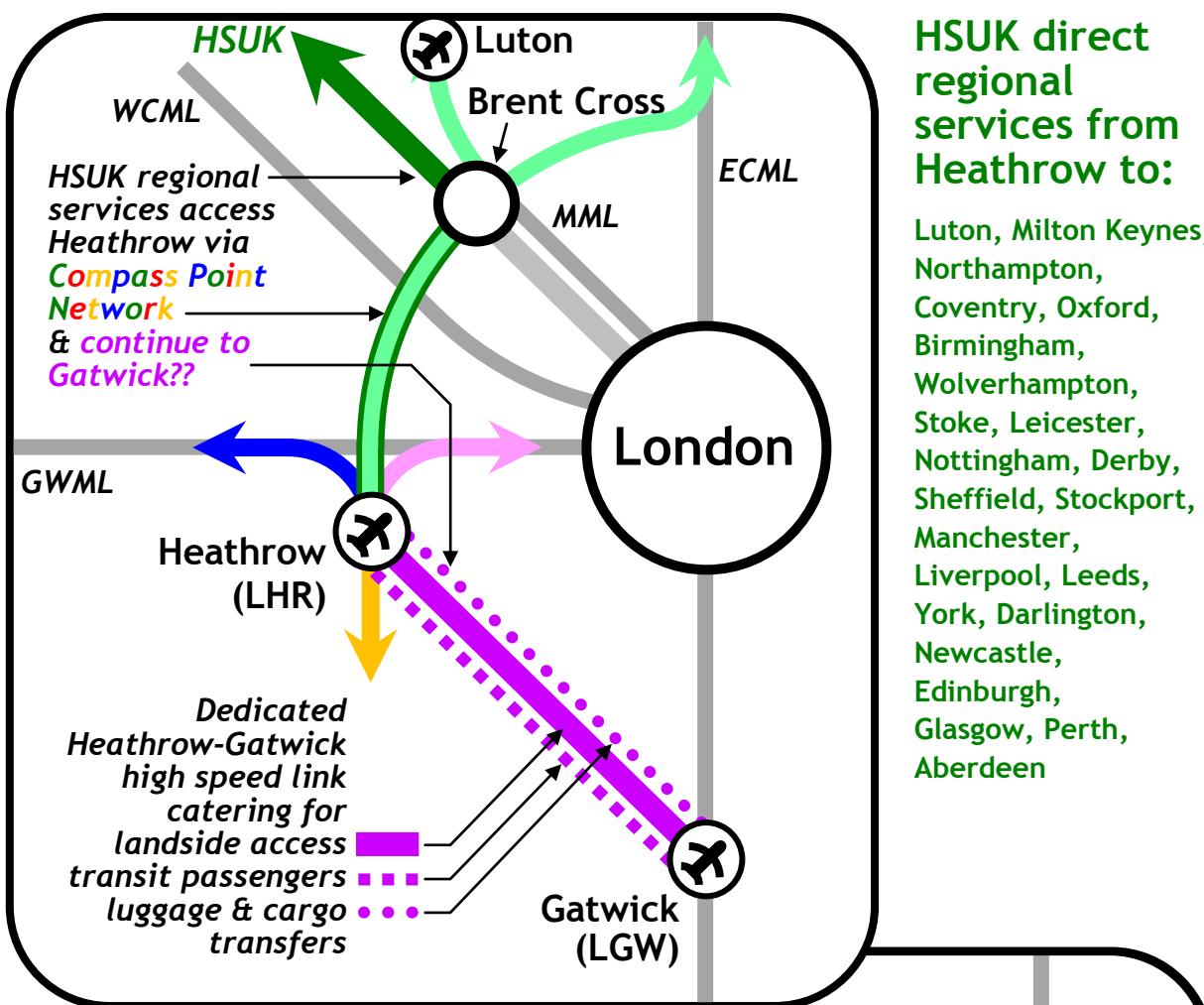
The recommendation of the Davies Commission to increase London's airport capacity with a new runway at Heathrow Airport has placed the Government in an impossible quandary. It is pulled in one direction by the strong desire of the business community and the aviation industry to expand Heathrow, and it is pulled in the opposite direction by the implacable opposition of the local community to any form of expansion.

Although HS2 was once seen as an alternative to building a third runway at Heathrow, HS2 Ltd has failed to develop viable proposals for direct rail links to the UK regions, that might reduce the pressure to expand. With HS2's planned spur to Heathrow cancelled, HS2 is now largely irrelevant to whatever decision Parliament might ultimately take on airport expansion.

High Speed UK has the potential to transform the Heathrow debate through the radically improved surface access that it can offer. Direct high speed services, operating at hourly frequency, will extend from Heathrow to all principal mainland UK cities. This will bring about the following key benefits:

- Transformed 'hub & spoke' airport operation, with fast and comprehensive rail services forming the spokes;
- Elimination of most domestic flights, thereby freeing up 'slots' for new routes to emerging economies.

The establishment of national high speed rail access to Heathrow opens up the possibility of an onward extension to Gatwick. HSUK has already undertaken the design of a high speed link between the two airports, with a length of 46km and a journey time of around 15 minutes. This would be a dedicated route, capable of handling not just 'landside' surface access but also all 'airside' activities i.e. transfer of luggage, cargo and transit passengers. With such a link in place, operation of the two airports could be integrated; and any expansion of London's airport capacity can be achieved with a new runway at Gatwick, for which detailed plans are already in place.



# HS2 fails the Heathrow test

Improved links to Heathrow Airport are seen as vital for the economic development of the UK regions, and the prospect of direct HS2 services to Heathrow has been crucial in securing support for the project from UK regional communities.

However, despite many hopeful lines drawn on maps, HS2 Ltd has failed to fulfil the aspiration for improved and direct international connectivity to the UK regions. This has happened for a combination of reasons:

- Lack of capacity on HS2's 2-track stem. *It only has capacity for 18 trains per hour, and with all this capacity already allocated to London-bound services, there is no capacity for additional services to Heathrow;*
- Inefficiency of HS2's 'Y' configuration. *All primary cities are located on separate spurs, and it will be impossible to meet the demand of each city for direct services to Heathrow;*
- High cost of long tunneled spur from HS2 to Heathrow.

These problems have ultimately led to the cancellation of the Heathrow spur, and no direct HS2 services are now proposed to link Heathrow to UK regional cities. Instead, passengers will be forced to change trains at Old Oak Common.

As shown on the diagram opposite, all these problems are avoided under the alternative High Speed UK proposals, which include the following design features:

- A 4-track HSUK stem from London to South Yorkshire;
- An efficient HSUK national network, with multiple cities on single lines of route;
- Full integration with the existing Heathrow Express system.

With these features, HSUK is able to offer direct services from Heathrow to most principal regional cities. This will hugely improve the international connectivity of the UK regions, and it is expected to have a greatly beneficial effect in stimulating regional development.



## Direct HSUK services to Heathrow

1. HSUK direct services proposed from Heathrow to all primary regional cities, with single split of train.
2. Timetabled direct services possible with the efficiency of HSUK's 'spine & spur' network, with multiple cities on a single line of route.
3. HSUK 4-track spine has sufficient capacity for services to UK regions from Heathrow *and* from London.
4. HSUK Heathrow services to run from existing Heathrow Express platforms, with capacity hugely increased by transformation of Heathrow Express into through system.
5. Note onward link to Gatwick.

## No Direct HS2 services to Heathrow

1. Direct services originally proposed from Heathrow to Leeds, Sheffield & Manchester - *but not to other regional cities*.
2. Comprehensive regional services never practicable given the inefficiency of HS2's 'network' - *note that each primary city would be located on a separate branch*.
3. HS2's 2-track stem also lacks the capacity to accommodate direct Heathrow services from all cities.
4. No prospect of regional high speed services to Heathrow with cancellation of dedicated spur.
5. Sheffield to LHR service not practicable with recent route changes.

