

High Speed Rail in Britain

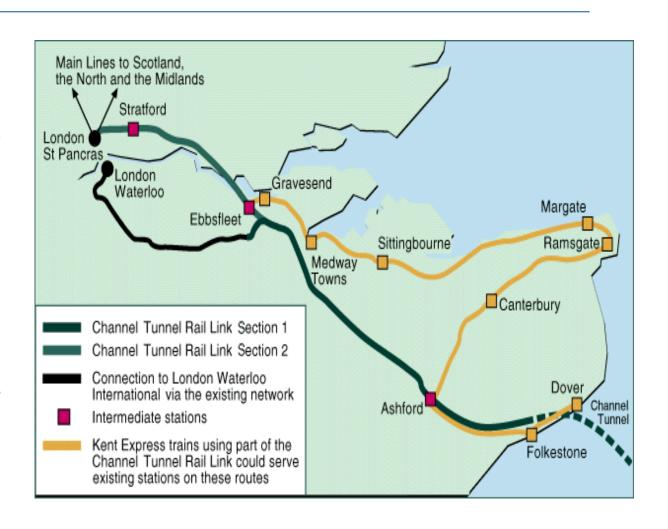
Economic and Social Effects of HS1 and HS2

Prof Andrew McNaughton Chairman, Network Rail High Speed Ltd

Prague 9 June 2023

HS1 – impact of fast reliable regional services to the isolated "left behind" towns of East Kent

- East Kent town and cities declining due to remoteness – 2hours+ from London
- New "high speed" line £5bn capital cost (2007)
- 1 or 2 long distance International services per hour London – Paris
- The key value is up to six 230km/h "regional express" trains per hour. East Kent brought within 1 hour
- Regional economic development worth £5bn+ over first 10 years
 - Access to London jobs
 - New businesses creating new local jobs
 - New tourism businesses
 - Land value rise

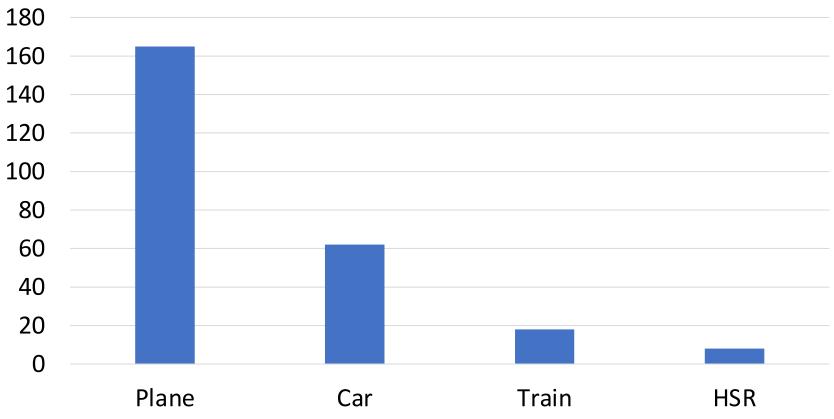


HS1 and HS2 - 5 Tiers of benefit

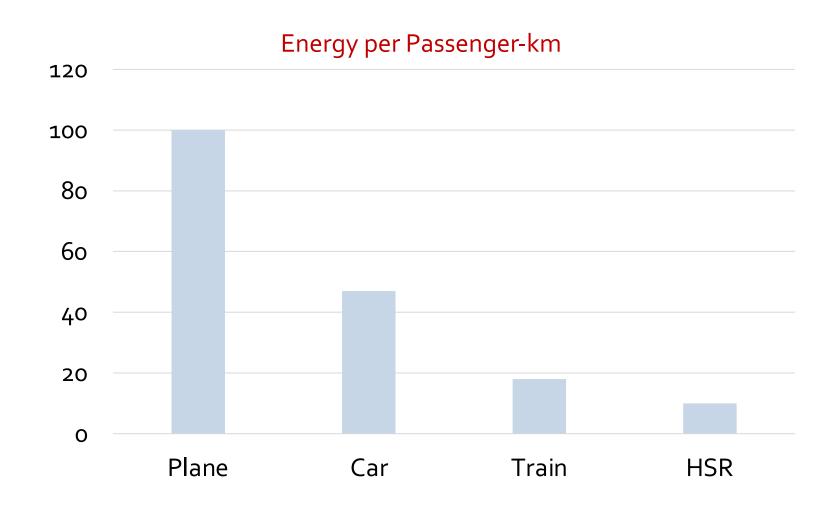
- To the direct users
 - Time saved
 - Reliability
- To other transport users
 - Capacity released on existing infrastructure (road and rail)
- To cities served
 - Activating development potential for core employment sectors
- To the wider region surrounding the cities
 - Economic and social connectivity
- Contribution to zero net carbon, and lower energy use

Operational carbon consumption





Relative energy consumption



HS2 will eventually connect our biggest city regions

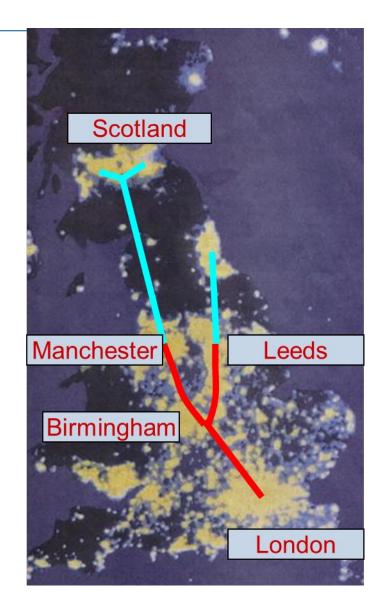
- Journey times are before and after HS2 (in hours-minutes)
- Based on operation at up to 36okm/h
- London to

	Birmingham	1-24 to <mark>0-49</mark>
•	Manchester	2-08 to 1-08

■ Leeds 2-12 to 1-22

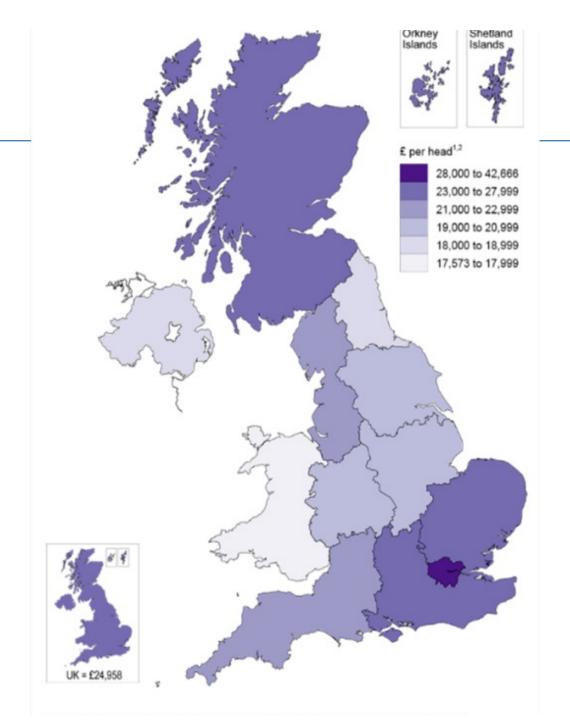
• Birmingham to

Manchester
Leeds
1-34 to 0-41
2-05 to 0-49



HS2 catalyst for growth

Regional Productivity in the UK (GVA per head, 2014)



Example: joining city regions

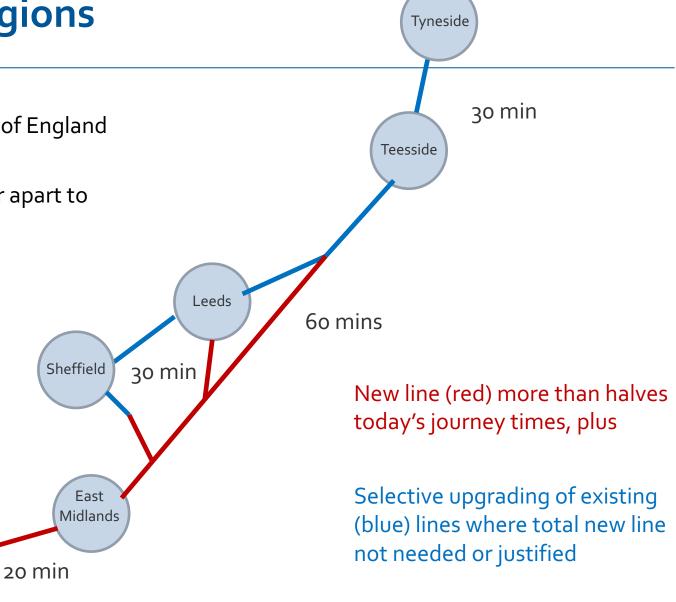
The manufacturing and technology corridor of England

Today these are separate economies, too far apart to work together and slowly declining

B'mingham

In future each city will concentrate on one of the core sectors:

- Advanced manufacturing
- Research & IT
- New "green" energy manufacture
- Financial services
- Healthcare
- Technical education

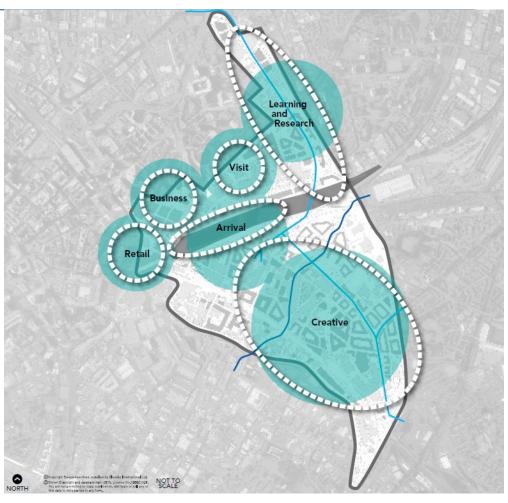


New Central Birmingham regeneration plan

HS2 is at the centre of a masterplan

- 36,000 jobs
- 5m sq ft of employment space
- 4,000 new homes
- £1.4bn of economic benefit





HS2 - West London Old Oak Common Site



The catalyst for urban development





The case for HSR is based on its ability to act as an enabler of economic growth and social equity rather than simply as transport system