

# AN INFRASTRUCTURE REVOLUTION

## HIGH SPEED TWO (HS2) THE BACKBONE OF A MODERN RAIL NETWORK

Britain's transport network has struggled to keep up with the demands placed on it, and the north-south rail line has been particularly under pressure, making services vulnerable to delays and overcrowding.

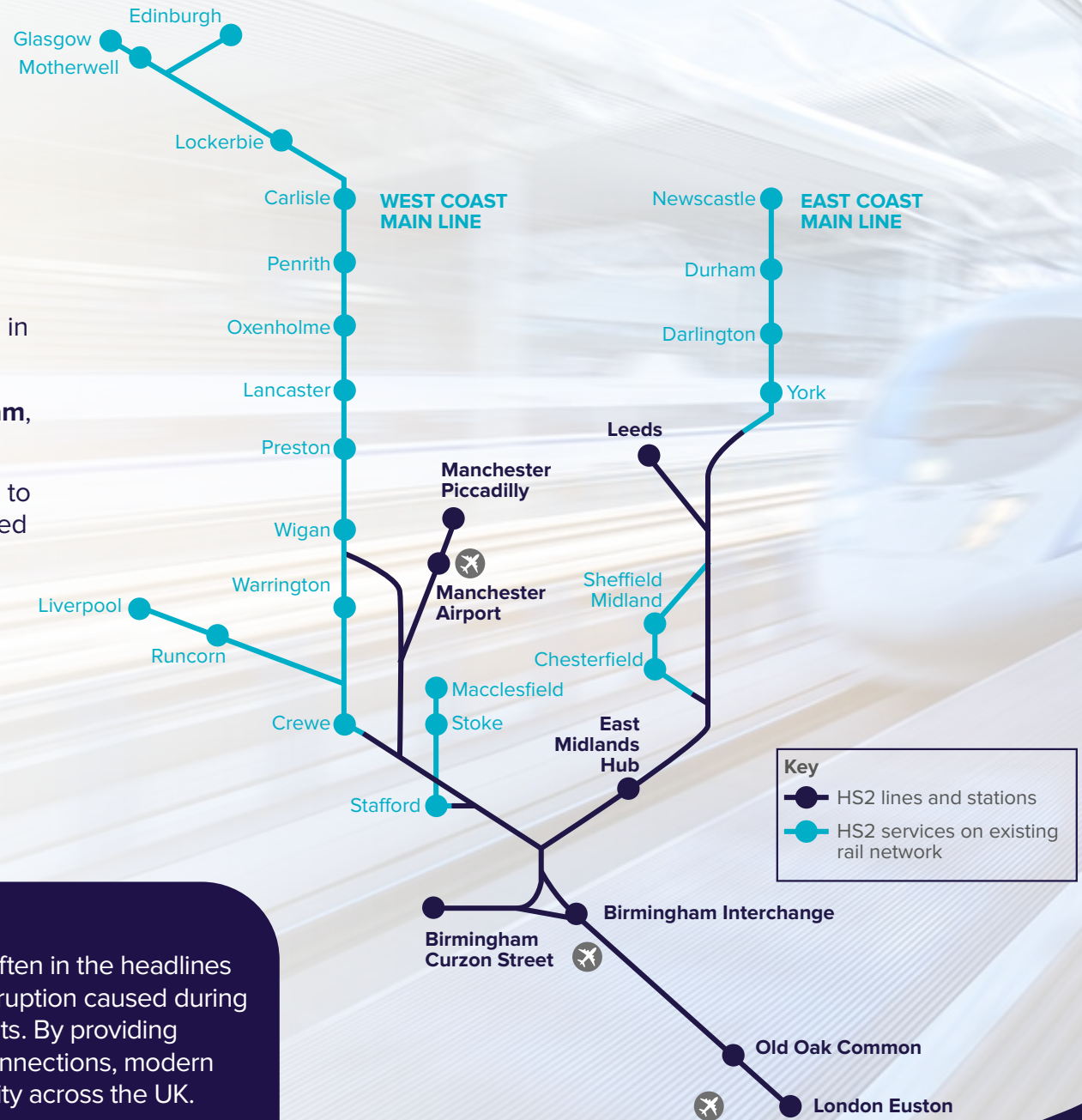
As part of its plans to deliver an 'infrastructure revolution' and level up the economy across Britain, the Government has committed to a number of major transport projects, including **High Speed Two (HS2)**, in tandem with other programmes such as the [TransPennine Route Upgrade](#) and Northern Powerhouse Rail.

## WHAT IS HS2?

HS2 is a high-speed rail network, which will be delivered in two phases:

- Phase 1: A new line connecting **London and Birmingham**, due to be completed between 2029 and 2036
- Phase 2: The creation of a **Y network** from Birmingham to support the 'Northern Powerhouse', due to be completed between 2029 and 2040.

HS2 is currently estimated to cost between £72 billion and £98 billion.



### Delivering an Infrastructure Revolution

Whilst economic and social infrastructure projects are often in the headlines due to the amount of money spent on them and the disruption caused during their construction, they generate huge long-term benefits. By providing better local services, new jobs, cleaner air and faster connections, modern infrastructure helps to level up opportunity and prosperity across the UK.

[Build UK's factsheets](#) cover a range of local and national projects explaining what they are and why they are being built in Britain today.

## WHY WE NEED HS2

HS2 will form the backbone of a modern rail network for the future. When completed, HS2 will:

- Make it easier and faster to move between the North, Midlands and South, enabling people to live and work where they want
- Increase passenger capacity and reduce overcrowding, for more pleasant journeys
- Generate £94.7 billion in benefits to the UK economy, supporting hundreds of thousands of jobs
- Be a more environmentally friendly system than we have now, helping the country meet its long-term carbon reduction commitments
- Spread economic success across the length of Great Britain in a way that is hard to imagine until it happens.

## HS2 IN NUMBERS



**£72bn**  
estimated investment



**500km**  
of new high speed track



**30,000**  
new jobs

## KEY ISSUES

- A range of management issues has resulted in significant **delays** to the project, and HS2 Ltd is currently restructuring to address these with a dedicated minister appointed in 2020 to have specific oversight and accountability for the project.
- A 2020 report by the Parliamentary Spending Watchdog criticised the project's forecasting of **costs**, and measures to increase transparency through regular ministerial reports have since been put in place.
- A House of Lords committee has questioned if the UK needs trains reaching **speeds** of 330km/h as currently planned, and whether a cheaper 200km/h line would suffice. However, such a reduction in speed would negatively impact journey times, which have been identified as a key benefit to passengers.
- Interest groups are concerned that the route travels through 43 ancient **woodland sites**. However, over 80% of these woodland sites will remain intact and £7 million is being donated to Woodland Trust to ensure their conservation, with over 550,000 new trees and shrubs planted.

# WHO WILL BENEFIT?

## The Economy

- Expected to deliver £1.50 in economic value for every £1 invested
- 98% of contracts will go to UK businesses, 70% of them SMEs
- From 2037, economic gains as a result of higher productivity will help to reduce the productivity gap between the North of England and other regions
- Project plans include large-scale investment in construction innovations that will be applied to future rail projects, making the whole infrastructure industry more efficient.

## Passengers

- The backbone of new, dedicated lines will mean more space on the existing network for local services, increasing journey speeds on existing tracks
- Many journey times reduced to half of what they are now
- 53% increase in train capacity between London and Birmingham
- Step-free access from the street to the train seat.

Journey times reduced	From (mins)	To (mins)
Manchester to Birmingham	88	41
Manchester Airport to London	127	67
Birmingham to London	82	45
Birmingham to Leeds	118	49

## Workforce

- Over 30,000 people will be employed to work on the project at peak construction
- 2,000 apprenticeships will be supported over the project's lifecycle and HS2 has committed to apprentices accounting for 4% of the workforce on its main contracts
- Once operational, the network will support 3,000 jobs across the country.

## The Environment

- HS2 will play a key role in the UK reaching its 2050 net-zero carbon objectives
- Reduced air and noise pollution as a result of passengers switching from car journeys and air travel, as well as freight shifting from road to rail, which produces 76% fewer carbon emissions
- A passenger kilometre on HS2 produces just 5% of the carbon emissions of air travel, 12% of travel by road, and less than 50% of the current intercity rail system.

## Further Information

Department for Transport (2020) [Full Business Case: High Speed Two, Phase One](#)  
Economic Affairs Committee (2017-19) [Rethinking HS2](#)  
Independent Report (2020) [Oakervee Review of HS2](#)  
Parliamentary Watchdog (2020) [HS2 Spring Update](#)

Find out more  
[www.HS2.org.uk](http://www.HS2.org.uk)

Contact us  
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