

AN INFRASTRUCTURE REVOLUTION

A sleek, white and blue high-speed train (HS2) is stopped at a modern railway station platform. The platform has a glass and steel structure with large windows. In the background, another similar train is visible. A few people are standing on the platform, and a clock and platform number '6' are visible. The overall scene is brightly lit, suggesting daytime.

HIGH SPEED TWO (HS2) BRITAIN'S NEW ZERO CARBON, HIGH-SPEED RAILWAY

Much of the UK rail network was built over a century ago and, with demand for rail travel more than doubling in the last 20 years, services have become increasingly vulnerable to delays and overcrowding. Poor connectivity has also meant economic development has been concentrated in London and the South East, restricting growth in other regions of the UK.

To meet growing demand and level up the economy across the UK, the Government has committed to a number of major transport projects, the largest of which is **High Speed Two (HS2)**, in tandem with Northern Powerhouse Rail, TransPennine Route Upgrade and East West Rail.

WHAT IS HS2?

HS2 is Europe's largest infrastructure project and will deliver 230 miles of new high-speed track across England to transform the country's transport system. It will be delivered in three phases:

- **Phase 1:** A new high-speed line connecting the West Midlands and London due to be completed between 2029 and 2033, with new stations at Birmingham Curzon Street, Interchange (near Birmingham), Old Oak Common and London Euston.
- **Phase 2a:** A new high-speed line connecting Birmingham and Crewe, with HS2 services continuing northwards on the existing network.
- **Phase 2b:** The extension of the high-speed network from Crewe to Manchester, with stations at Manchester Airport and Manchester Piccadilly.

Investment in HS2 is spread over several decades and will cost between £65 billion and £74 billion in 2019 prices.

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 the future UK rail network. 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 on the existing network, allowing passengers to travel in comfort, particularly during peak hours
- Support 34,000 jobs during peak construction and 2,000 apprenticeships during the lifetime of the project
- Help the UK meet its 2050 net zero carbon target by providing zero carbon travel as an alternative to regional air and road transport
- Deliver the Government's levelling up agenda by significantly improving access to, and the desirability of, towns and cities across the UK.

HS2 IN NUMBERS



£65bn
minimum estimated
investment



230
miles of new
high-speed track



34,000
jobs supported
at peak construction

KEY ISSUES

- Whilst the Parliamentary Spending Watchdog previously raised concerns about the project's forecasting of **costs**, measures have since been put in place to increase transparency through regular ministerial reports.
- A House of Lords committee has questioned if the UK needs trains reaching **speeds** of 225 mph as currently planned, and whether a cheaper 125 mph line would suffice. However, such a reduction in speed would negatively impact journey times and the number of trains able to use the network, when speed and capacity have been identified as key benefits to passengers.
- Interest groups are concerned that the route travels through **ancient woodland** sites. However, careful route planning means less than 0.1% of England's ancient woodland will be lost and HS2 is working to reduce this further.

WHO WILL BENEFIT?

The Environment

- Journeys on HS2 will be zero carbon, with the project set to be net zero in construction and operation by 2035. This means the emissions produced by the project will be balanced by those removed, driving the country towards its objective to reach net zero by 2050.
- Intercity rail services will move to their own dedicated tracks, significantly increasing capacity for regional services and freight on the existing network. Not only will this reduce overcrowding at peak hours, it will allow more freight to travel by rail, with each freight train removing up to 76 lorries from the road.
- A 'Green Corridor', comprising seven million trees and a 13 square mile network of connected woodlands, ponds and meadows, will be created for people to enjoy and will support a growing wildlife population.

The Economy

- Improved capacity and connectivity between the UK's major cities will boost investment and opportunities in the Midlands and the North. For example, it is forecast that 175,000 jobs will be supported in the West Midlands by the arrival of HS2 services and £20 billion will be added to the regional economy.
- In Greater Manchester, the combined effect of HS2 and Northern Powerhouse Rail will help to double the economic output of the city, delivering 96,000 jobs and 16,800 homes.
- Over 34,000 people will be employed at peak construction of the project, including 2,000 apprentices trained over its lifetime, of which 1,100 have already started work on the project.

The Local Community

- The benefits of HS2 are spread across the UK, with over 2,000 businesses involved in the supply chain, many of which come from communities close to the HS2 route.
- High-speed trains will significantly reduce journey times, with the route from Manchester to Birmingham reduced to 41 minutes from the current fastest time of 1 hour 27 minutes and Manchester to London Euston taking 1 hour 11 minutes as opposed to over 2 hours.
- Over £45 million of funding is available for local communities impacted by the construction of HS2. It is leaving a lasting legacy of improved facilities and opportunities for local people with over £12 million already spent.

Further Information

Department for Transport (2020) [Full Business Case: HS2 Phase One](#)
Department for Transport (2021) [Integrated Rail Plan for the North and Midlands](#)
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

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