Interchange Station design
January 2020
HS2 Interchange Station & People Mover

Introduction

The new HS2 Interchange Station will be located in Solihull, and will be a major gateway station for the region. The site is located within a triangle of land formed by the M42, A45 and A452. It will be part of a new public transport interchange serving Solihull and the West Midlands, with links to local roads and the UK motorway network.

A new People Mover system will serve the station, providing fast and frequent connections between Interchange Station and the National Exhibition Centre (NEC), Birmingham International Railway Station and Birmingham Airport.

We are now preparing to submit a Schedule 17 application to the local planning authority for a final decision on the designs of Interchange Station and the People Mover. These designs are outlined on the following pages.
HS2 Interchange Station & People Mover

Site Location
HS2 Interchange Station & People Mover

Station Design

Interchange Station will sit within a unique setting. The location of the station is currently rural, and is very close to a built up area including the NEC and Birmingham Airport. The station has been designed to maximise views over the surrounding Arden landscape, providing a pleasant passenger experience. We have designed the roof to maximise natural daylight and capture rainwater for recycling, which will reduce the demand for electricity and water.

Key Facts

- Up to 5 trains per hour in each direction;
- Two 415 metre long platforms;
- Four platform sides for trains to stop at; and
- New People Mover system carrying up to 2,100 passengers per hour in each direction.

HS2 Core Design Principles

People

Place

Time
Artist's impression of Interchange Station
HS2 Interchange Station & People Mover

Station Design

Improved access for pedestrians and cyclists

Since the initial designs were shared in 2018, we have worked hard to make the station as easy to use and accessible as possible. The separation of the road bridge and pedestrian bridge means there is now a dedicated pedestrian access into the station from the east of the railway. This has resulted in:

· an improved user experience, as passengers are no longer walking alongside a busy road but over a bridge with views of newly planted areas alongside the railway;

· shorter travel distances from the drop and go and short stay car park to the station; and

· additional, convenient and secure cycle parking located east of the station.

Around 150 cycle parking spaces will be provided, with room for additional cycle racks should demand increase in the future.

Cycle access to the station will be provided from the north, west and south-east through a mixture of dedicated routes and shared space footpaths.
Artist’s impression of the western entrance to Interchange Station

Artist’s impression of eastern entrance to Interchange Station
The People Mover will provide a high quality transport connection between HS2 Interchange Station, the NEC, Birmingham International Railway Station and Birmingham Airport. People Movers are reliable, efficient and environmentally friendly modes of transport that are ideal for complex, built up areas. They are automated, driverless transport systems, and a similar system is already in use at Birmingham Airport. With vehicles departing each stop approximately every 3 minutes, the People Mover will carry up to 2,100 passengers per hour in each direction. This will reduce the amount of traffic on the roads between the key destinations it serves.
Artist’s impression of the People Mover viaduct through Pendigo Lake
HS2 Interchange Station & People Mover

Accessibility and Inclusive Design

Inclusive design

We place people at the heart of the design process. Interchange Station and the People Mover have been designed to be used safely, independently, easily and with dignity by everyone.

Step-free access will be provided along the entire HS2 route, including for those passengers travelling through Interchange Station and on the People Mover.

You said, we did

In 2018 we asked for your views on how to ensure we provide accessible and inclusive passenger experience at Interchange Station. To provide this, the design of Interchange Station will include:

· accessible parking bays located close to the station entrance;

· cycle parking designed to enable access for disabled cyclists and the storage of adapted cycles;

· high quality, accessible toilets, and facilities to meet a variety of needs including a multi-faith room;

· clear and concise wayfinding, providing options for all needs and requirements; and

· ample and appropriately located seating for passengers with reduced mobility.
Artist’s impression of Interchange Station. The station interior will be bright and airy, providing a high quality user experience.

Artist’s impression of People Mover stop at Interchange Station. Step-free access will be provided along the entire HS2 journey.
HS2 Interchange Station & People Mover

Sustainability & Environment

Sustainable design
We aim to build the most sustainable high speed railway of its kind in the world. We have designed Interchange Station to be net zero carbon with respect to energy consumption and sustainable design features include:

- station building designed to maximise natural daylight and ventilation;
- sustainable drainage for the car parks; and
- around 2,000m$^2$ of solar panels to generate electricity and over 200 charging points for electric vehicles.

Minimising environmental impacts
The environmental impacts of the scheme were assessed through an Environmental Impact Assessment, and the results were reported in an Environmental Statements in 2013 and 2015.

During the design process, we have carefully considered how we can minimise impact on the natural environment, including the Hollywell Brook and protected wildlife species.

Additionally, we have moved the People Mover maintenance facility to a location near the M42 since the plans were originally developed, reducing the length of the viaduct and minimising environmental impacts.
You said, we did

In 2018 you told us that you want green design features to be integrated into Interchange Station and the People Mover. We have developed the designs to include:

- station roof designed to capture rainwater which can be reused;
- sunken rain gardens in the public plaza;
- a partial green roof on the People Mover stop at Interchange station; and
- an outdoor terrace to the station concourse with landscaped areas, raised planters and benches.
HS2 Interchange Station & People Mover

Site Overview

Transport connectivity

We have designed the station to be easy to access with connections provided to different forms of transport including:

- Short stay and long stay car parking
- Drop-and-go
- Taxi
- Buses
- People Mover
- Cycle parking

Landscape

The strategy for the site has been developed to reflect the surrounding Arden landscape character. Trees and hedgerows will be retained where possible, and tree planting is proposed to provide screening along the edge of the site.

A drainage pond will be located next to the station. The pond will be landscaped to encourage biodiversity and will be visible from both the People Mover stop and Interchange Station concourse.
Transport connectivity proposals

Artist's impression of station pond
We are working with the Urban Growth Company (UGC) to consider additional design elements which will support wider growth at the UK Central Hub.

The UGC is an organisation set up by Solihull Council to coordinate existing growth plans and lead infrastructure investment and development, with support from local, regional and central government.

The UGC has predicted thousands of new jobs, 650,000 square metres of new commercial space and up to 5,000 new homes across the wider area known as The Hub, generating £6.2bn GVA per year.

We have been working with the UGC to:

- adjust the alignment of the People Mover to fully integrate with the proposed redevelopment of Birmingham International Railway Station;

- allow for utilities such as gas and electricity to cross the HS2 railway. This will enable potential future development of the Arden Cross site; and

- design alternative proposals which utilise surrounding land for commercial development to create a new, sustainable, mixed-use destination.

Find out more about the Urban Growth Company at www.ugcsolihull.uk
UGC 2030 vision for The Hub - © Urban Growth Company
HS2 Interchange Station & People Mover

Stakeholder and Community Engagement

We have worked closely with local people and organisations throughout the design of Interchange Station and the People Mover, and will continue to do so as the designs develop further and construction begins. This includes:

· regular engagement with Solihull Metropolitan Borough Council and its Urban Growth Company;

· meetings with statutory bodies such as Historic England and the Environment Agency;

· co-ordinating plans with transport bodies such as Network Rail and Transport for West Midlands;

· working together with local businesses and landowners including the NEC and Birmingham Airport, to develop the designs of the People Mover; and

· regular design review sessions, with an independent design panel of specialists including local stakeholders.

Since we started designing Interchange Station and the People Mover in 2018, we have held 15 events to talk to local communities and key stakeholders in the Birmingham and Solihull area. We have talked to over 1,500 people at events and received around 100 responses to design questionnaires. We have carefully considered your feedback to influence the designs.

Regular drop-in sessions are held in the local area, where you can find out more about HS2 works and meet members of our engagement teams. You can find out more about engagement events in your local area at: www.hs2insolihull.co.uk
Community Engagement Event
We are currently preparing to submit a Schedule 17 application to Solihull Metropolitan Borough Council. Schedule 17 of the High Speed Rail (London to West Midlands) 2017 Act is a process for the approval of certain matters relating to the design and construction of the railway. Following this, we will seek to appoint a construction contractor to undertake the detailed design and construction of Interchange Station and the People Mover. During construction, the appointed contractor will be required to comply with our ‘Code of Construction Practice’. This sets out a series of measures and standards of work which will seek to manage and control the effects of construction on communities and the environment.
For more information on HS2 in the Solihull area, please visit: www.hs2insolihull.co.uk

Artist’s impression of Interchange Station at night
Keeping You Informed

We are committed to keeping you informed about work on HS2. This includes ensuring you know what to expect and when to expect it, as well as how we can help.

Our independent commissioners

We have an independent Residents’ Commissioner whose job is it to make sure we keep to the promises we make in our Residents Charter.

Our independent Construction Commissioner’s role is to mediate and monitor the way in which we manage and respond to construction complaints.

For more information visit www.hs2.org.uk/in-your-area

Holding us to account

If you are unhappy for any reason, you can make a complaint by contacting our HS2 Helpdesk team. For more information visit www.hs2.org.uk/how-to-complain

Property and compensation

You can find out all about HS2 and properties along the line of route by visiting our website. You can also find out if you’re eligible for compensation. Visit www.hs2.org.uk/in-your-area/

Contact us

Our HS2 Helpdesk team are available all day, every day. You can contact them via:

Freephone 08081 434 434
Minicom 08081 456 472
Email hs2enquiries@hs2.org.uk
Write to FREEPOST HS2 Community Engagement
Website www.hs2.org.uk
To keep up to date with what is happening in your area, visit: www.hs2inyourarea.co.uk

Please contact us if you’d like a free copy of this document in large print, Braille, audio or easy read. You can also contact us for help and information in a different language.

HS2 Ltd is committed to protecting personal information. If you wish to know more about how we use your personal information please see our Privacy Notice (www.gov.uk/government/publications/high-speed-two-ltdprivacy-notice)