



Phase 2b Western Leg Information Paper

F1: Manchester Piccadilly Station

This paper outlines the proposals for the Manchester Piccadilly High Speed Station of the Proposed Scheme. It explains the proposed location of the station, its facilities and operation.

It will be of particular interest to those potentially affected by the Government's proposals for high speed rail.

This paper was prepared in relation to the promotion of the High Speed Rail (Crewe - Manchester) Bill. Content will be maintained and updated as considered appropriate during the passage of the Bill.

If you have any queries about this paper or about how it might apply to you, please contact the HS2 Helpdesk in the first instance.

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1 Introduction

- 1.1 High Speed Two (HS2) is the Government's scheme for a new, high speed north-south railway, which is being taken forward in a number of phases. Phase One will connect London with Birmingham and the West Midlands. Phase 2a will extend the route from the West Midlands to Crewe. The Phase 2b Western Leg will connect Crewe to Manchester. As set out in the Integrated Rail Plan, published in November 2021, HS2 East is proposed to deliver a new high speed line from the West Midlands to East Midlands Parkway.
- 1.2 HS2 Ltd is the non-departmental public body responsible for developing and promoting these proposals. The company works under the terms of a Development Agreement entered into with the Secretary of State for Transport.
- 1.3 The construction and operation of Phase One of HS2 is authorised by the High Speed Rail (London – West Midlands) Act 2017 and Phase 2a by the High Speed Rail (West Midlands – Crewe) Act 2021.
- 1.4 In January 2022, the Government introduced a hybrid Bill to Parliament (hereafter referred to as 'the Bill'), to seek powers for the construction and operation of the Phase 2b Western Leg (the Proposed Scheme), which is called the High Speed Rail (Crewe – Manchester) Bill. The Proposed Scheme comprises the Phase 2b Western Leg from Crewe to Manchester and several off-route works. It also facilitates the delivery of Northern Powerhouse Rail by providing the Crewe Northern Connection and junctions and other infrastructure to be used in future schemes.
- 1.5 The work to produce the Bill includes an Equalities Impact Assessment and an Environmental Impact Assessment (EIA), the results of which are reported in an Environmental Statement (ES) submitted alongside the Bill. The Secretary of State has also published draft Environmental Minimum Requirements (EMRs), which set out the environmental and sustainability commitments that will be observed in the construction of the Proposed

Scheme. For more information on the EMRs please see Information Paper E1: Control of environmental impacts.

1.6 The Secretary of State for Transport is the Promoter of the Bill through Parliament. The Promoter will also appoint a body responsible for delivering the Proposed Scheme under the powers granted by the Bill. This body is known as the 'nominated undertaker'. There may be more than one nominated undertaker. However, any and all nominated undertakers will be bound by the obligations contained in the Bill, the policies established in the EMRs and any commitments provided in the information papers.

1.7 These information papers have been produced to explain the commitments made in the Bill and the EMRs and how they will be applied to the design and construction of the Proposed Scheme. They also provide information about the Proposed Scheme itself, the powers contained in the Bill and how particular decisions about the Proposed Scheme have been reached.

2 Overview

2.1 This information paper outlines the proposals for Manchester Piccadilly High Speed station, as part of the Proposed Scheme. It explains the proposed location of the station, facilities and how it would operate.

3 Station overview

3.1 Manchester Piccadilly High Speed station would be a new station in central Manchester adjoining the existing Manchester Piccadilly Station. It would occupy land bounded by St Andrews Street to the east and Ducie Street to the west. Manchester Piccadilly High Speed station would be approximately 455m in length and approximately 91m in width including an intermediary concourse joining the two stations.

3.2 The station would be constructed on three main levels, platform level, lower concourse and underground Metrolink Tram stop. At platform level, a new combined entrance concourse to the existing Manchester Piccadilly

station would be provided. Passengers entering the station from the city end would enter at platform level and could access both national rail and highspeed services. Passengers could take the lifts/escalators down to a lower concourse level to access high speed services and onward connections to Metrolink. The lower concourse level will provide access up to and down from the platforms via escalators and lifts. At the western extent of the platforms there would be space for retail units with a mezzanine level above, which will provide access to a business lounge.

Figure 1: Manchester Piccadilly High Speed Station

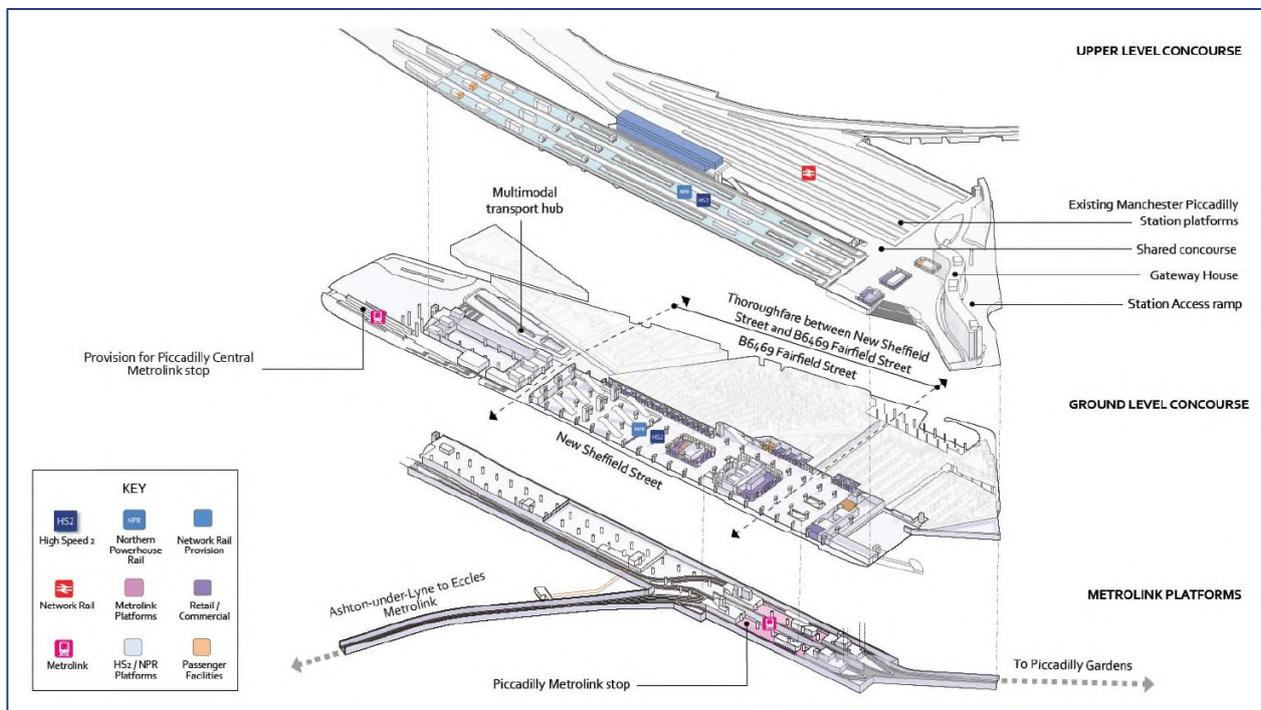
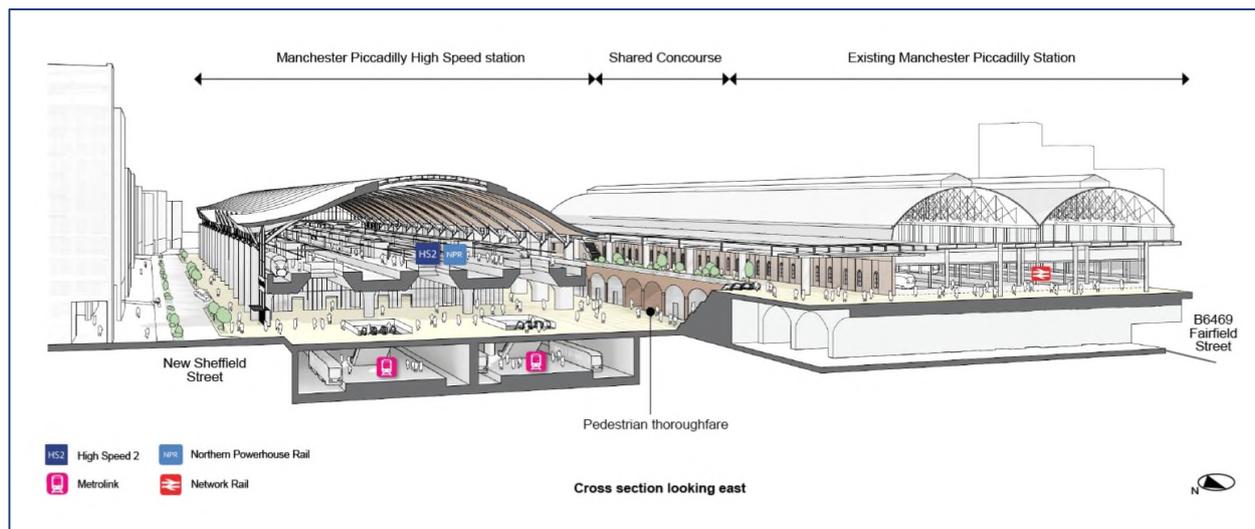


Figure 2: Cross Section of Manchester Piccadilly High Speed Station



- 3.3 To accommodate the proposed number of HS2 and Northern Powerhouse Rail (NPR) services, the platform layout would be arranged with three island platforms, giving six platform faces. HS2 and NPR services would be capable of using any platform to provide maximum operational flexibility.
- 3.4 The site benefits from good connections to major highways including the ring road (Mancunian Way), existing Metrolink and bus services which would aid onward dispersal of passengers. Piccadilly station is served by six train operating companies serving intercity routes to London Euston, Birmingham New Street, South Wales, the south coast of England, Edinburgh and Glasgow Central, as well as routes throughout northern England. Piccadilly also serves as a terminus for Manchester Metrolink services to Bury, Altrincham, Eccles, Ashton-under-Lyne and MediaCityUK.
- 3.5 The Proposed Scheme includes two new multi-storey car parks adjacent to the station accommodating a total of 2029 spaces. The station proposal has provision for 630 secure cycle storage spaces in and around the station. A new forecourt is also included in the scheme providing taxi ranks and private vehicle pick up and drop off facilities.
- 3.6 The Manchester Piccadilly High Speed station will include public facilities, such as waiting areas, ticket machines, information, public toilets and retail, food and beverage outlets. There will also be station control rooms,

on-board staff facilities, management mess rooms and on-board staff mess rooms, as well as staff toilets and changing room facilities

- 3.7 It is anticipated that over 29,000 jobs would be supported through development around Manchester Piccadilly High Speed station, as well as over 3,000 housing units supported.

4 Metrolink

- 4.1 The Proposed Scheme would see the existing Piccadilly Tram stop relocated underground, beneath the new High Speed Station. Piccadilly Tram stop would also change from a two-platform to a four-platform stop. In order to integrate the relocated Piccadilly Tram stop with existing Metrolink tracks, these tracks would be realigned. At the western end of the existing Manchester Piccadilly Station, it is proposed that Metrolink would be realigned from Piccadilly Place across London Road, under Gateway House and Station Approach, across Store Street and underneath the High Speed Station, before calling at the relocated Piccadilly Tram stop. From this relocated Piccadilly Tram stop, Metrolink tracks would run beyond the High Speed Station in a cut-and-cover tunnel to the north east, where it would gradually rise back to ground level between New Sheffield Street and Great Ancoats Street, then re-join the existing Ashton and Etihad Campus line.

- 4.2 Further, it is proposed that provision is made for another, new, Metrolink stop at the eastern side of the High Speed Station. This new tram stop would be known as Piccadilly Central and would have space for two-platforms. It is proposed that the hybrid Bill for the Western Leg of HS2 includes a spur from the Metrolink tracks beneath the high speed platforms to serve a Piccadilly Central tram stop that would be built in the future.

5 Operation

- 5.1 Once operational, Manchester Piccadilly High Speed station would offer significant journey time reductions to other stations on the HS2 and Northern Powerhouse Rail networks, providing convenient onward

connections to numerous local and national transport services via the existing Manchester Piccadilly Station and via Metrolink.

- 5.2 Manchester Piccadilly High Speed Station could enable up to four HS2 services per hour from London and two from Birmingham Curzon Street to call at the station, with a further four services from Liverpool and up to six between Manchester Piccadilly and Leeds once NPR becomes operational. The addition of NPR services will offer more frequent and faster journeys directly from Manchester to other cities across the north, including Liverpool, Warrington, Huddersfield, Leeds and further locations in the North East.
- 5.3 Services are expected to operate between 05:00 and midnight from Monday to Saturday and between 08:00 and midnight on Sunday.
- 5.4 Passenger demand is based on a 24hr demand for the station per day and is based on boarding and alighting numbers. For the year 2038 it is projected that over 28,000 passengers will board and alight HS2 trains, and by the year 2051 this will have increased to over 30,500.

6 Why Piccadilly?

- 6.1 The process of generating options for routes and stations, developing and sifting them is described in detail in 'Options for phase two of the high speed network'. A link to this document can be found in the references section at the end of this paper. Assessment of options was based on four key sifting elements covering engineering, sustainability, demand and cost. An integral part of the development of station options was been the involvement of regional delivery partners - representatives of local authorities, passenger transport executives (including TfGM), the Highways Agency and Network Rail. Their views and advice informed the development of station options.
- 6.2 Options not progressed from earlier development, sifting and assessment stages included a number of underground station options in central Manchester, including Manchester Piccadilly Undercroft.

- 6.3 The three final options for a station serving Manchester city centre were Manchester Piccadilly and two options in the Salford area known as Salford Central Middlewood and Salford Central Combined.
- 6.4 The locations of demand in Manchester are such that either the Salford or Piccadilly locations would have made suitable locations. However, overall Manchester Piccadilly would provide connectivity to a wider range of public transport links, allowing the wider region to be served, including Manchester Airport, and would attract demand from the whole of the Manchester area.
- 6.5 As a result, a high speed station at Manchester Piccadilly offers the best potential benefits and revenue. Whilst the station and approach via the Airport combined would be marginally more costly to construct than the two Salford options, the additional cost would be substantially outweighed by the benefits it would deliver.
- 6.6 All three options would have an impact through demolitions. The potential demolitions would be higher for the two Salford options. Approaching Manchester from the west would also mean that a high speed interchange station serving Manchester Airport would not be viable. The consideration of connectivity with principal airports was part of the Government's original remit for HS2 and a station here would also enable the capture of the Stockport and south Manchester demand markets.
- 6.7 Overall, Manchester Piccadilly, with its city centre location and its connectivity to the wider region, was considered to be the best location for a high speed city centre station. The selection of Manchester Piccadilly as the preferred location for a high speed station has informed the approach options into central Manchester.

7 Alternative Underground station options

- 7.1 As plans for the Northern Powerhouse Rail (NPR) network developed, the DfT instructed HS2 Ltd to make provision for future NPR services at Manchester Piccadilly High Speed Station, including additional platform

capacity. These were subject to public consultation in 2020. Please see Information Paper A3: Northern Powerhouse Rail interfaces on the Phase 2b Western Leg for more information.

7.2 In June 2020, DfT in agreement with the Mayor for Greater Manchester Combined Authority, instructed HS2 Ltd to carry out a review of the optimum form of station at Manchester Piccadilly for HS2 and NPR services.

7.3 HS2 Ltd examined a number of options to compare against the surface station included in the Proposed Scheme. These were:

- Optimised 6 platform combined underground station; and
- A split level station with 4 surface platforms and 2 underground platforms.

7.4 These alternative options were not progressed as the Promoter remains of the view that a combined HS2/NPR surface station is the right solution at Manchester Piccadilly because:

- the likely timescales to prepare designs, seek consents, and then build an underground station would mean Western Leg opening benefits would be delayed by a minimum of seven years compared with current proposals.
- this would also delay releasing adjoining plots for development compared with a surface station;
- the difference in passenger benefits between the two options is expected to be minimal: an underground station could be quicker for passengers making through journeys (by 2–3 minutes), but this could be at least partly offset by slower approach speeds in some scenarios, longer access times to platforms for passengers boarding or alighting at Manchester, and longer interchange times between HS2/NPR and existing Network Rail platforms at Manchester Piccadilly.
- an underground station is expected to cost a minimum of at least £4–5bn more than a surface station and demonstrate weaker value for

money and the risk of increasing construction costs would also be higher;

- the additional costs could not be justified by the value of additional regeneration benefit;
- underground options would likely cause greater disruption to Manchester City Centre in terms of property demolitions and the impacts of construction, including noise pollution and poorer air quality; and

7.5 constructing an underground station at Manchester Piccadilly would be expected to generate a significant amount of additional carbon emissions.

8 Station requirements

8.1 The layout and configuration of Manchester Piccadilly High Speed Station in the Proposed Scheme were identified through a process of sifting.

8.2 In order to identify potentially suitable layouts and configurations, the key requirements HS2 Ltd has assessed include:

- Connectivity to the existing Manchester Piccadilly Station, local transport and the city centre;
- Multiple entrances and exits to ensure minimum distances when interchanging between transport modes;
- Step free access from all local transport connections;
- Circulation to minimise conflicting pedestrian movement;
- Clear lines of sight;
- As near as possible to straight platforms;
- Orientation dictated by expected approach and departure routes of the track alignment;
- Ensuring that the designs respond to their locations, create a sense of place and recognise the stakeholders' aspirations; and

- Ensuring that the designs support the local authority's plans for Public Realm.

8.3 As requirements for Northern Powerhouse Rail emerged it was identified that additional services would use Manchester Piccadilly which subsequently amended the station platforms to meet a six-platform station.

8.4 Until the Bill is enacted, the station design is at 'concept' stage. The layout has been planned so that it would comply with operational requirements and statutory regulations. It defines the scale and massing of the buildings and structures so that their environmental effects can be assessed. Detailed designs for both the station building and the external areas will be prepared in due course. They will be submitted to the local planning authority for approval before construction in accordance with the requirements of the Bill.

9 Highway Works

9.1 Construction of the station will require changes to the highway network around Manchester Piccadilly. These are described in detail in volume 2 of the Environmental Statement map book and report for MA08.

9.2 The proposed highway works include a new road parallel to the proposed Manchester Piccadilly High Speed Station, named New Sheffield Street, which will run between B6469 Fairfield Street and Ducie Street. This will re-provide the east-west connections currently provided by Store Street, Broad Street, Sheffield Street and St Andrew's Street.

9.3 The roads that currently connect into the above roads will also require modification, such as Ducie Street, Store Street, Baird Street, Adair Street, St Andrew's Square, and Helmet Street. Chapeltown Street will also be connected to New Sheffield Street.

9.4 The presence of the new Manchester Piccadilly High Speed Station and Metrolink proposals would require closure of Travis Street between the

existing Network Rail overbridge, and the proposed New Sheffield Street, and also Store Street between A6 London Road and New Sheffield Street.

9.5 The A6 London Road will also require modifications as a result of the revised crossing of the Metrolink tram tracks over London Road.

9.6 Modifications to A6469 Fairfield Street, A665 Pin Mill Brow, A635 Ashton Old Road, A665 Devonshire Street North, A665 Chancellor Lane, A636 Mancunian Way, and others will be required to change the existing series of junctions to form a gyratory.

10 Environmental impacts

10.1 As part of the preparation of the Bill, the potential environmental impacts of the Manchester Piccadilly High Speed Station have been assessed and are set out in the Environmental Statement. This details the impacts and mitigation measures for both construction and operation of the Proposed Scheme, including for Manchester Piccadilly Station.

11 More information

11.1 More detail on the Bill and related documents can be found at www.gov.uk/hs2-phase2b-crewe-manchester.

References

Options for phase two of the high speed rail network

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/68965/options-for-phase-two-of-the-high-speed-rail-network.pdf