



Greater Birmingham and Solihull Local Enterprise Partnership Limited (GBSLEP)

Business Case (Full)

Project Name	Curzon Station Enhanced Public Realm
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About the Applicant			
Name of the lead organisation (<i>applicant</i>)	Birmingham City Council	Type of Organisation	City Council
Name of the project manager / main contact	Hannah Willetts	Project Manager Contact number	0121 303 4174 / 0121 303 3988
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About the Project			
Location of the project	Curzon Street, Birmingham	Postcode	B4 7AP
Constituencies in which the project resides	Ladywood (Birmingham)		
Project start date	April 2022	Project completion date	December 2027
Total GBSLEP <i>loan</i> funding requested	N/A	Total GBSLEP <i>grant</i> funding requested	£28,787,985 (Outturn including development cost granted to date)
Total project capital cost	£32,539,210 (includes maintenance)		
Are you applying for development costs?	No, £2,408,426 already granted to date	If yes, please state the value	N/A

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A. Introduction

This document provides a template for a Strategic Outline Business Case (SOBC), an Outline Business Case (OBC) and a Full Business Case (FBC) in support of The Greater Birmingham and Solihull Local Enterprise Partnership Limited's (GBSLEP) application for investment in a project continuing on from the Expression of Interest.

The main purpose of the document is to understand the proposed project sufficiently and understand any risks associated with it in order to assess and make an informed investment decision on whether the GBSLEP should provide funding or not, and any conditions that this decision may require.. The Business Case should provide assurance to the GBSLEP that the project:

- provides strategic fit and is supported by a compelling case for change; and
- will maximise public value to society through the selection of the optimal combination of components, products and related activities; and
- is commercially viable and attractive to the supply side; and
- is affordable and is fundable over time; and
- can be delivered successfully by the organisation and its partners.

This template should be completed following the principles laid out in HM Treasury's Green Book: Appraisal and Evaluation in Central Government, Business Case Guidance for Projects and supplementary guidance. Links to these documents and further guidance is included in Appendix B – Resources, at the end of this document.

The amount of work and detail put into the Business Case should be **proportionate** to the scale of the project or programme and the expenditure involved.

Once completed the business case will be reviewed by the GBSLEP Executive and will be assessed by an Independent Technical Evaluator. Please submit completed the Business Case template in Microsoft Word format and include a scan of the **signed** original in PDF format.

The applicant is responsible for costs and charges incurred as a result of preparing the SOBC and OBC; eligible costs for preparation of the FBC may be claimed as part of the development funding should the OBC application be successful (NB *eligibility criteria and application are outlined in Section C*).

B. Project Overview

B.1 Summary of the Project (300 words max)

Provide details about the project objectives and potential impact/ benefits.

Birmingham City Council (BCC), the scheme sponsor for the Curzon Enhanced Public Realm Project, have been working collaboratively with High Speed 2 (HS2) to maximise the benefit of the HS2 Curzon Station through the public realm enhancements. This project comprises of the two specific enhancements as below and will be delivered by HS2 Limited as part of the HS2 Curzon Station development. The enhancements are:

- the development of Paternoster Place, which will improve access to Digbeth and unlock investment in this area, and
- additional works to Curzon Promenade and Curzon Square, which will include the creation of public realm in areas outside of the HS2 boundary and provide an enhanced finish to HS2's base scheme.

To maximise the economic potential of HS2, BCC published the Curzon Masterplan in 2014, setting out how the growth and regeneration opportunities around the station could be unlocked outlining five 'Big Moves' to establish a fully integrated and connected world class station. Two of these 'Big Moves' directly relate to undertaking this project (Paternoster Place; and Curzon Promenade and Curzon Square).

HS2 has a specific budget and fixed powers under the HS2 Phase 1 Act for delivering the Base Scheme. BCC through this FBC is seeking approval from the GBSLEP for additional Enterprise Zone (EZ) grant funding of £28,787,985 to deliver the enhanced public realm (including the £2.41 million already approved to undertake scheme development and design).

The station and associated public realm works are designed by a single team, thus taking the opportunity to create a station which is integrated with the surrounding area and maximises connectivity with the city core and Digbeth. HS2 Limited has appointed Mace Dragados Joint Venture (MDJV) as the works contractor, with the HS2 station at Curzon expected to be operational in 2029.

B.2 Is the project expected to be going through another assurance process (by another LEP or funding body)?

If yes, please give details.

No

B.3 What is the current position of the project and what has changed between this submission and the previous (Expression of Interest/ SOBC/ OBC or FBC)?

Provide a summary of any changes to objectives, scope, funding sources and financial costs, expected outputs and outcomes, timescales, risks and stakeholder relations.

An OBC for the scheme was submitted to GBSLEP and has undergone review through the GBSLEP approval process for an OBC, including a review by the Independent Technical Expert (ITE)¹. On 18th July 2019, the Curzon Station Enhanced Public Realm project was conditionally allocated a capital funding allocation by GBSLEP subject to the submission and approval of a satisfactory FBC as well as EZ funding being available. The sections of text below outline how the different elements of the Curzon

¹ Birmingham Curzon – Enhanced Public Realm – Review of Draft Outline Business Case Submission – 13th June 2019

Station Enhanced Public Realm scheme have progressed since the submission of the OBC and its subsequent approval to proceed to the FBC stage:

Planning approval

Since the submission of the OBC, the proposals for enhancing the public realm at Curzon Square and Curzon Promenade were submitted as one planning application to BCC and have subsequently gained planning approval. A planning application for the proposals to enhance the public realm at Paternoster Place were submitted to BCC and have also gained approval. As part of these planning applications, designs for the proposed public realm enhancements at Curzon Square, Curzon Promenade and Paternoster Place have been developed and become more detailed, although the principles of the designs have remained the same.

Objectives and scope

The objectives and scope of the Curzon Station Enhanced Public Realm scheme remain the same in that the scheme entails the upgrade and the creation of additional public realm space at three specific areas surrounding the proposed new HS2 Curzon Station in Birmingham City Centre (Curzon Square, Curzon Promenade, and Paternoster Place). It is thought that this will establish strong connections between station and the surrounding areas (particularly Digbeth) fully capitalising on the arrival of HS2 and the associated benefits it will likely bring. Further details about the objectives of the scheme can be found in **Section 1.1** of this FBC whilst details of the scope of the scheme is contained in **Section 2.4.1**.

Funding sources and financial costs

In terms of funding sources for the Curzon Station Enhanced Public Realm scheme, funding is still being sought through GBSLEP EZ grant funding. Since the submission of the OBC, the companies Mace and Dragados have been appointed as a joint venture to work with HS2 Ltd in two stages to finalise the detailed design and then build Curzon Station and the surrounding landscape (including the enhanced public realm scheme). As part of this process, MDJV have undertaken a further assessment of the costs associated with constructing the enhanced public realm scheme allowing for an appropriate level of risk which is underpinned by a more extensive and up to date risk register.

Outputs and outcomes

The expected outputs and outcomes of the scheme remain the same. These are detailed in **Section 2.4.5** of this Business Case.

Timescales

MDJV have produced an updated programme of works setting out when each element of the Curzon Station Enhanced Public Realm scheme will be constructed. All elements of the scheme are now programmed to be complete and ready for use by the end of 2027.

Risks and stakeholder relations

A live risk register which captures all the current risks up to the present stage of design has been compiled and appended to this FBC as **Appendix E5**. Since the OBC has been submitted, a relationship with key Network Rail stakeholders has been established and discussions have been progressed regarding the Paternoster Place element of the scheme which involves constructing a bridge over a live railway line.

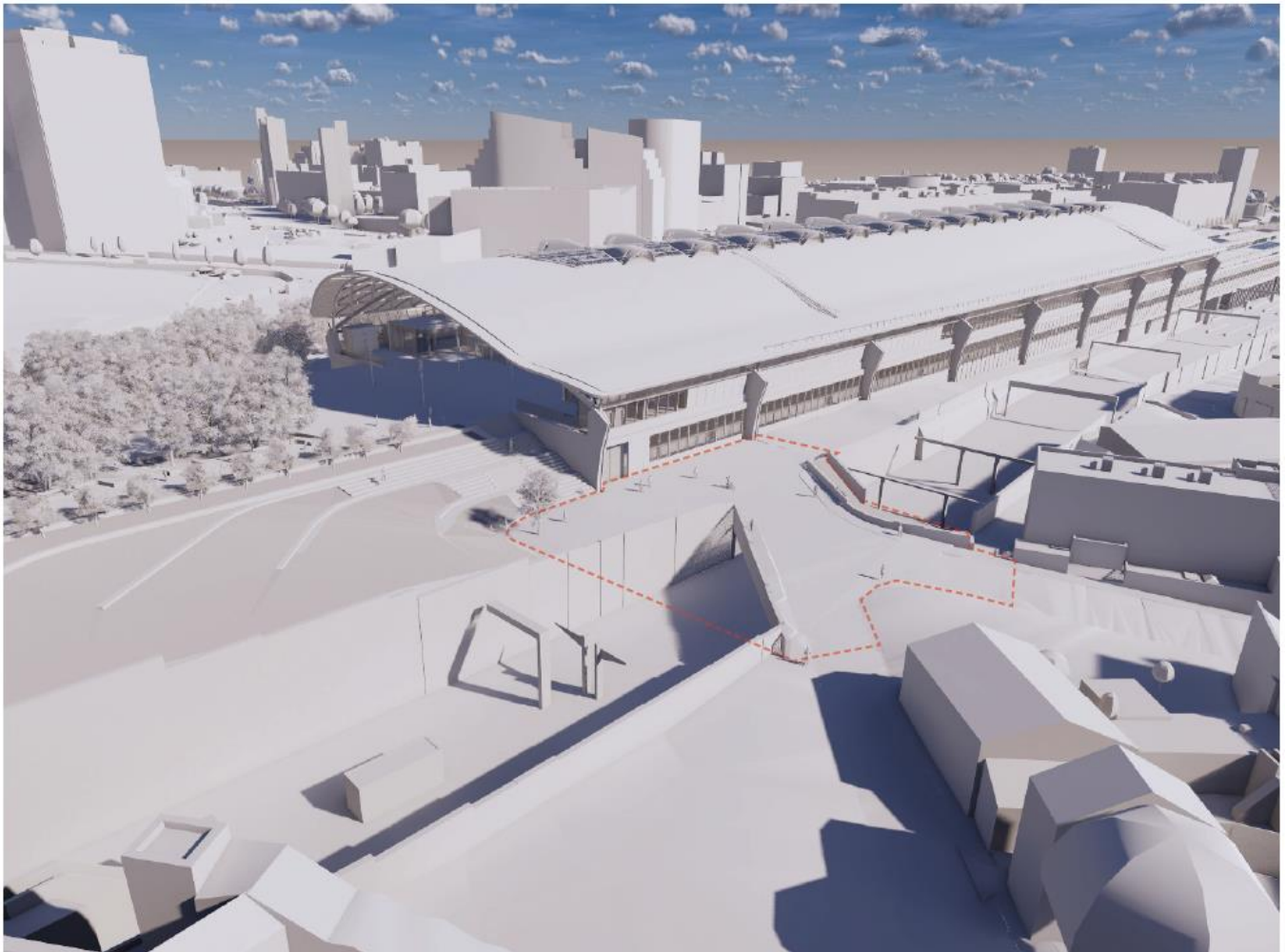
B.4 What evidence is there, or research undertaken to demonstrate the need, demand for or impact of this project?

As part of its commitments under the HS2 Act, HS2 are obligated to provide a station and urban realm design that is fully operational and that coherently ties into the existing city infrastructure. The base designs that HS2 have produced for the Curzon Square, Curzon Promenade and Paternoster Place areas of Curzon Station, which represent the reference case or “Do-Nothing” scenario in this FBC (i.e. a scenario where the Curzon Station Enhanced Public Realm proposals do not get implemented), do provide an operational environment which coherently ties into the existing city infrastructure however these designs present a number of shortfalls and constraints where opportunities are missed to truly realise the full beneficial impacts of Curzon Station. The shortfalls and constraints with the base designs at each location along with the opportunities that they miss are detailed below and demonstrate the need for the Curzon Station Enhanced Public Realm scheme which is the subject of this FBC.

Paternoster Place:

Figure 1 shows the Base Scope design at Paternoster Place with the red lines showing extent of Enhanced Paternoster Place site (proposed as part of the Curzon Station Enhanced Public Realm works).

Figure 1: Aerial View of Base Scope design with red lines showing extent of Enhanced Paternoster Place site



Due to the costs involved with decking over an operational railway and structural amendments required to the existing bridge and parapet walls, the base scheme proposed no physical alterations to the Park

Street Bridge (as shown in **Figure 1**). Not widening the bridge will have the following negative impacts on station user experience:

Obstruction to clear connection between Park Street and Curzon Station:

The existing Park Street Bridge parapet wall obstructs both the physical and visual connection when approaching Curzon Station along Park Street. Primarily the space will be used for pedestrian and cycle connections between Digbeth and The City via Station Square. These users will be adversely affected as the existing layout creates significant visual and physical disruptions. Users will be forced to follow a convoluted route through the space that forces them to break from the most natural, direct link that is perceivable despite the visual obstacles as illustrated in **Figure 2** overleaf.

Figure 2: Circulation without the enhanced public realm works proposed at Paternoster Place as part of the Curzon Station Enhance Public Realm scheme



Vehicle dominant environment not conducive to active mode travel:

The allocation of space on the bridge in the base designs prioritises vehicles, with limited paving available on either side of the road. Additionally, there are a number of engineered, traffic controlling measures incorporated to protect the bridge itself, which further dehumanise the space in favour of vehicle considerations. These include raised trief kerbs to the west with an associated galvanised steel balustrade and a raised planter to the east designed to protect the parapet wall and to disguise a number of existing services running above the bridge deck.

Existing Park Street Bridge will create a bottleneck:

The arrangement in the base designs will create a bottleneck where all users will be compressed together. This will create a situation where it is likely that cyclist will need to either mount the narrow existing footpath - currently separated from the carriageway by a tref kerb and railing - or ride into oncoming service vehicles.

Curzon Promenade:

The Curzon Station Enhanced Public Realm proposals at Curzon Promenade consist of extending the area of public realm improvements associated with Curzon Station northwards so that the Midland Metro Birmingham Eastside Extension (BEE), proposed to the north of Curzon Promenade, and the future bus and Sprint stops are better integrated into the station design.

Missed opportunity to fully integrate public transport connectivity

The base public realm designs for Curzon Promenade do not cover the areas where the Midland Metro BEE will route, the bus stops or the future Sprint stops located to the north of Curzon Station. Implementing the base public realm designs for Curzon Promenade will miss the opportunity to fully integrate these public transport options in the design of Curzon Station and will not create a seamless interchange between transport modes for users accessing and egressing the station. Taking this opportunity to better integrate public transport into Curzon Station to add further value to the proposed new Curzon Metro Stop which is being funded through the Enterprise Zone Project.

Curzon Square:

The urban realm of Curzon Square, to the centre of the station site, is extended under the Curzon Station Enhanced Public Realm project, with a new area of planted rain garden complementing the hard paved event space of the HS2 Urban Realm Scheme.

More capacity for events at Eastside City Park is needed

Eastside City Park features a central event space to the north of the Curzon Square site, and it was identified that more capacity for events was needed to meet demand, providing a clear direction for the intended usage of the main plaza at Curzon Square. The public realm proposals proposed at Curzon Square as part of the Curzon Enhanced Public Realm project include an events space to help cater for the demand at Eastside City Park.

Missed opportunity to fully integrate Eastside City Park

An aspiration for the Curzon Station identified through engagement sessions with key stakeholders such as BCC, Midlands Metro Alliance (MMA), Transport for West Midlands (TfWM) and the Eastside City Park Management Team was to integrate the new urban realm into the wider park landscape, promoting the concept of a 'Station in the Park' through extending the series of interconnected gardens southwards into the new plaza. The public realm proposals proposed at Curzon Square as part of the Curzon Enhanced Public Realm project seek to create a series of more intimate planted rain garden spaces which respond to the geometry of Eastside City Park and better integrate the park into the design of the station resulting in additional environmental benefits and further adding value to the refurbished Old Curzon Station that is being funded through the Enterprise Zone Project.

Although the HS2 base designs for the Curzon Square, Curzon Promenade and Paternoster Place areas of Curzon Station do provide an operational environment which coherently ties into the existing city infrastructure, there are limitations with these designs, ranging from creation of bottlenecks to not

providing enough capacity for events, which miss opportunities to fully realise the potential benefits of the Curzon Station, such as fully integrating the station with the local and regional public transport network and the surrounding park environment. These limitations and missed opportunities is the evidence that demonstrates that there is a need for the Curzon Station Enhanced Public Realm scheme.

B.5 List any other organisations involved in project delivery and their roles (add lines if required)

Partner Name	Role
HS2 Limited (Station Director)	Owner and delivery of HS2 Curzon Station
Mace Dragados Joint Venture (MDJV)	Undertaking the construction of Curzon Station
Network Rail	Provide consents and possessions for the delivery of Paternoster Place

B.5 Revision History

Version Number	File Name	Date submitted	Summary of changes made compared to previous draft version (please refer to previously received feedback and how issues have been addressed)
1	Curzon Station Enhanced Public Realm FBC	14/01/2022	Initial FBC submission for ITE review

1. Strategic Case

The Strategic Case for the project should present a robust case for intervention, setting out the problem, challenge faced or opportunity, fit with local, regional and national policy, including the GBSLEP Strategic Economic Plan and Local and National Industrial Strategy to provide the 'case for change'. The Strategic Case is typically almost complete at OBC stage for the project, demonstrating a clear and evidenced narrative for proceeding with the development of the project. This should be updated at FBC.

1.1 Aims and Objectives

1.1.1 Project aim

Describe the identified current situation, existing problem or opportunity and the aim of the proposed project in relation to it.

High Speed 2 (HS2) is a planned high-speed railway system in the United Kingdom linking up London, the Midlands, and the North-West of England and will include a new terminus known as Birmingham Curzon Street. The HS2 station at Curzon is expected to be operational in 2029. In order to maximise the economic potential of HS2, BCC published the Curzon Masterplan in 2014.

The Birmingham Curzon HS2 Masterplan covers 141ha of the City Centre extending across the Eastside and Digbeth quarters and the eastern fringe of the City Centre Core. It provides the framework and principles to guide development, regeneration, and connectivity to ensure that the City can capitalise upon the arrival of the HS2 railway.

The Masterplan presents the proposed HS2 railway as a once in a century opportunity to radically enhance the City's national rail connectivity and accelerate its economic growth potential. The new line and terminus will provide a catalyst to transform areas of the City Centre and unlock major regeneration sites. The Masterplan:

- Promotes the City's expectation that Birmingham Curzon HS2 station will be a world-class 21st century landmark building that further strengthens a positive image for Birmingham and its economic role.
- Seeks to ensure the station is fully integrated into the urban fabric of the City Centre and opens up accessibility between the City Centre Core, Eastside and Digbeth.
- Sets out the key requirements for the station design and proposals to ensure that high quality and efficient walking, cycling and public transport connections continue into and throughout the City Centre.

The Masterplan envisages the delivery of 14,000 (net) jobs, 600,000 sq. m of new business space, 2,000 new homes, and £1.3 billion economic uplift.

Key proposals within the Masterplan include:

- promoting the principle of securing a world-class arrival for Birmingham Curzon HS2 Station;
- identifying an extension to the Metro to create a new integrated public transport hub at New Canal Street, through Digbeth to a new park and ride facility at Adderley Street;
- key development opportunities including Martineau Square and Exchange Square, Beorma Quarter, Typhoo Wharf, Banbury Wharf, Eastside Locks, Birmingham Science Park Aston, Curzon Point and within the Fazeley area of Digbeth; and
- major new areas of public realm and open space including new squares at Moor Street Queensway and Paternoster Place; Curzon Promenade, Duddeston Viaduct Skypark, Eastside Locks and opportunities along the canal and River Rea corridors.

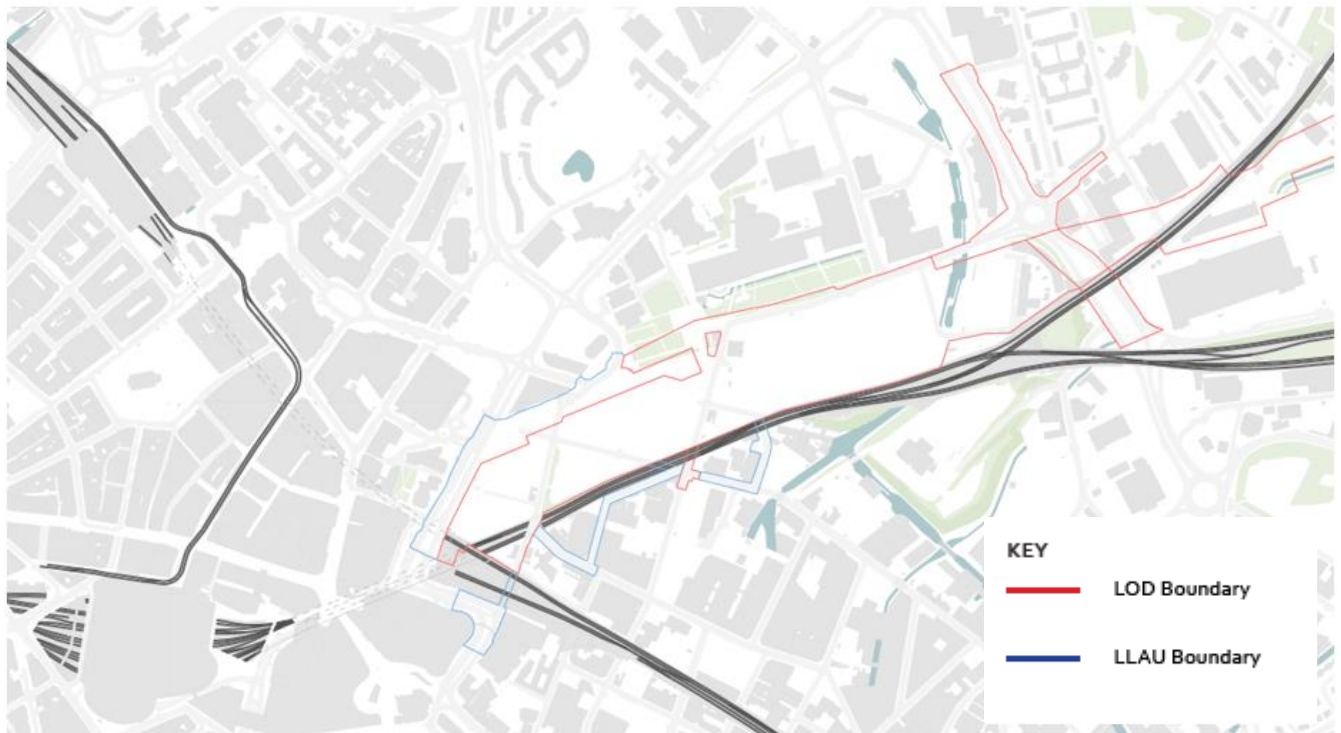
The enhanced public realm scheme

HS2 and BCC have been working collaboratively to maximise the benefit of the HS2 Curzon Station and achieve the aspirations set out in the Birmingham Curzon HS2 Masterplan. As explained in section B4 of this FBC, HS2 are obligated to provide a station and urban realm design that is fully operational and that coherently ties into the existing city infrastructure part of its commitments under the HS2 Act.

HS2 has a specific budget and fixed powers under the HS2 Phase 1 Act which has enabled them to develop the Base Scheme for public realm works at the Curzon Station. Upon review of this Base Scheme, BCC believed that it would not maximise the potential benefits that the Curzon Station public realm could generate. Therefore, BCC had asked HS2 and the Curzon Station design services contractor to undertake concept design optioneering and subsequent scheme design to enhance the base public realm surrounding the station. BCC provided a detailed brief for this work.

Figure 3 illustrates the HS2 Curzon Street Station Limits of Deviation (LOD) and Limits of Land to be Acquired or Used (LLAU), which defines the maximum extent within which the railway and ancillary works described in the Hybrid Bill can be built.

Figure 3: Diagram illustrating the extents of the LOD and LLAU boundaries in the context of HS2 Curzon Street Station



The station's public realm is defined as the publicly accessible space within the LLAU boundary that connects the station buildings and inter-modal facilities with the wider area around the station. It includes connecting roads, modal interchange; public, green, and incidental open spaces; cycle and car parking; and drop-off areas.

Enterprise Zone funding totalling £2.41million has been made available to date for this design and feasibility work associated with the Curzon Station public realm. The funding has been paid to HS2 to design and assess potential public realm enhancement schemes in five locations, based on the requirements set out within the 'Birmingham Curzon Public Realm' design brief, as follows:

- (i) Paternoster Place – area to the south east of the HS2 Station frontage and Station Square, including operational rail lines at a lower level and Park Street Bridge with links to Digbeth via Bordesley Street;
- (ii) Curzon Promenade – area to the northern side of the HS2 station which will include bus and Sprint stops, along with Midland Metro;
- (iii) Curzon Square – area around the former Curzon Street Station, which is a Grade 1 listed Building to the rear of the HS2 station;
- (iv) Curzon Street – area adjacent to the existing Eastside City Park, Millennium Point and Birmingham City University (BCU) campus; and
- (v) Curzon Canalside – to the rear of the HS2 Station area close to Curzon Circus.

Figure 4 shows the location of each of these areas.

Figure 4: Potential Public Realm Enhancement Areas surrounding Curzon Station



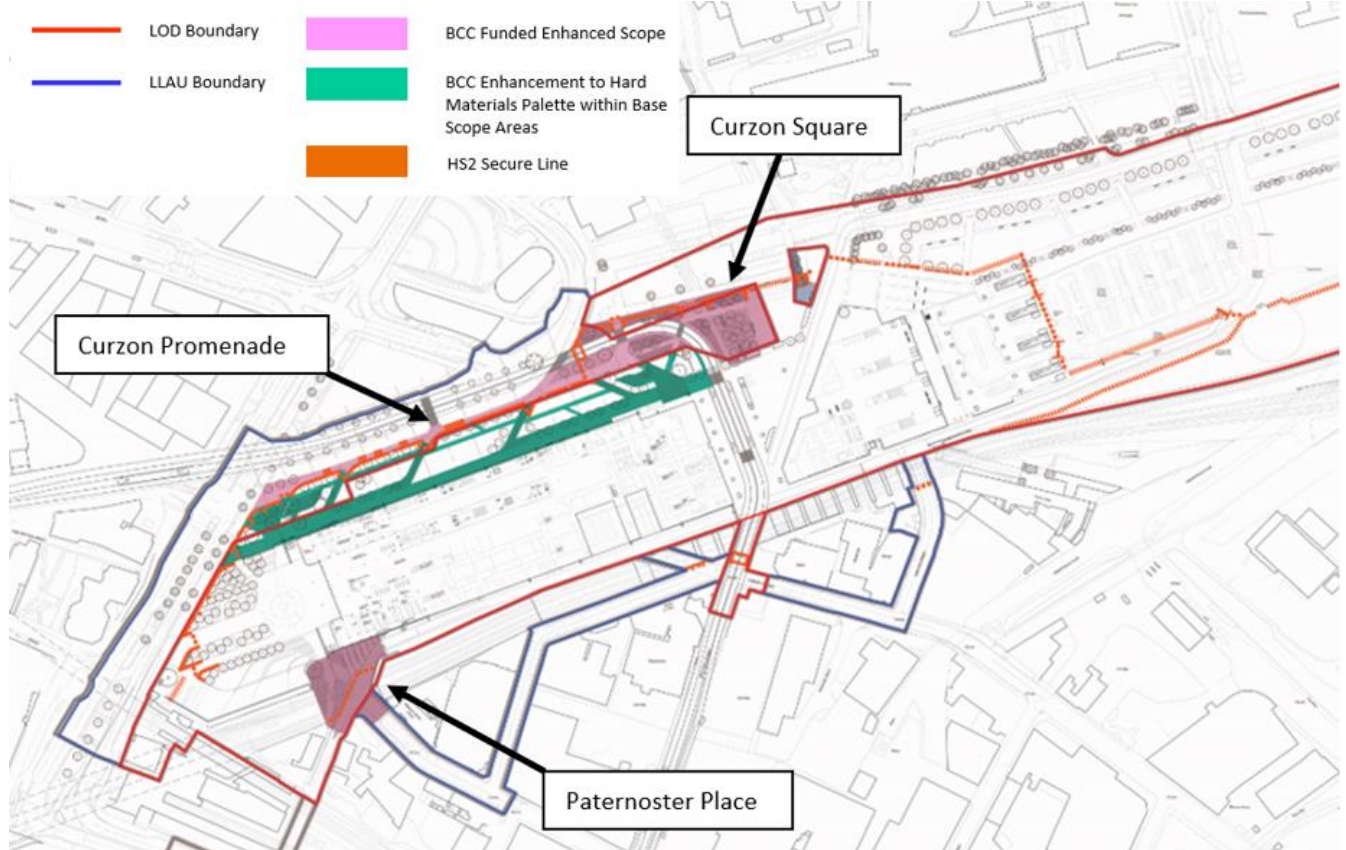
This approach has ensured that the station and associated public realm works are designed by a single team, thus taking the opportunity to create a station which is integrated with the surrounding area and maximises connectivity with the City core and Digbeth.

Following appraisal and a number of engagement sessions, the preferred enhanced public realm proposals now focus on three of the five areas. These have been grouped as follows:

- **Paternoster Place** – as a gateway to Digbeth, Paternoster Place will provide a wide, attractive pedestrian route that will open up the regeneration potential of the Digbeth area, bringing activity and investment to Enterprise Zone sites and help realise the potential of the underutilised land and buildings. As well as enhancing the base scheme, the works will include over bridging the existing lower level rail lines; and
- **Curzon Promenade and Curzon Square** - celebrating the view of the former Curzon Street Station, Curzon Promenade will become an extension of Eastside City Park as a pedestrian plaza enlivened with new shops and cafes built into the façade of Birmingham Curzon station. The project will include works outside of the red lined HS2 base scheme, as well as enhancements to the HS2 proposed scheme. It is also intended that an extended Metro line and Sprint rapid transit vehicles will share a route along the northern side of the promenade allowing for a transformation of public transport links into Eastside, Digbeth and ultimately to regeneration opportunities in the east of the City.

Figure 5 shows the defined areas where it is proposed that public realm is enhanced as part of the Curzon Station Enhanced Public Realm scheme presented in this FBC with the sections of text below further describing what is proposed as part of the Curzon Station Enhanced Public Realm scheme at each location. Scheme design drawings showing the Curzon Station Enhanced Public Realm works are appended to this Business Case as **Appendix S1**.

Figure 5: Areas where public realm will be enhanced as part of the Curzon Station Enhanced Public Realm scheme



Curzon Promenade

The enhanced public realm proposals proposed at Curzon Promenade as part of the Curzon Station Enhanced Public Realm scheme consists of:

- A material uplift of hard materials proposed in the Base Scheme replacing pre-cast concrete block paving with a more durable and higher quality finish of natural stone and the proprietary pre-cast concrete planks proposed for the main pedestrian route with a bespoke pre-cast concrete plank, affording more options for appearance and quality of finish and performance;
- Extending the new urban realm up to the kerb line of the future bus-way incorporating connections to the new bus and Sprint stops north of Curzon Promenade, which are proposed by TfWM, as well as the proposed Midland Metro BEE route which add further value to the proposed new Curzon Metro Stop which is being funded through the Enterprise Zone Project;
- An enlarged rain garden swale to the eastern end of Curzon Promenade which will generate environmental benefits such as improved air quality and surface water management amongst others; and
- The provision of additional low-level accent lighting integrated within urban realm furniture.

Curzon Square

The enhanced public realm proposals proposed at Curzon Square as part of the Curzon Station Enhanced Public Realm scheme consists of:

- Additional low-level feature lighting to the rain gardens, along the bus route footway and secondary paths;

- Extending the Base Scheme proposals across the interface area between Eastside City Park and New Canal Street Square;
- Introducing a series of planted wet/dry rain garden spaces, seating areas, footpath connections and tree planting in an area that is to be retained as open lawn in the Base Scheme all of which will generate environmental benefits such as decreased air pollution and the creation of biodiversity and habitat connections amongst others; and
- An extension to the existing event space within the Eastside City Park.

Paternoster Place

The enhanced public realm proposals proposed at Paternoster Place as part of the Curzon Station Enhanced Public Realm scheme consists of:

- Constructing a triangular deck adjacent to the existing Park Street bridge, which will open a direct line of access from the south to the Bordesley Stairs on the south-eastern corner of Station Square;
- The redesign of Park Street Bridge to provide increased dedicated space for cyclists and pedestrians including:
 - Quantities of dedicated cycle parking facilities above those proposed for the base scheme;
 - Additional seating areas; and
 - The introduction of trees, bushes, and smaller shrubs.

Figure 6 and **Figure 7** illustrate the differences between the Base Scheme and the enhanced public realm proposals at Paternoster Place proposed as part of the Curzon Station Enhanced Public Realm scheme.

Figure 6: View of the Base Scheme public realm proposals for Paternoster Place and the entrance to Curzon Station from Park Street included in the Schedule 17 for Birmingham Curzon Street



Figure 7: An aerial view of the enhanced public realm at Paternoster Place proposed as part of the Curzon Station Enhanced Public Realm project



Please note that **Figure 6** and **Figure 7** are representative illustrations of the two proposals and may not represent the exact details of the two schemes.

Key aims, objectives, and principles

Due to the size of the HS2 project, numerous different aims, objectives, and principles have been outlined for the different aspects of HS2 ranging from aims to guide the overall HS2 scheme to aims for the more localised aspects of the project. The following sections of text detail the aims, objectives and principles relevant for the Curzon Station Enhanced Public Realm proposals.

Birmingham Curzon HS2 Masterplan (2015) Aims

BCC's overall vision and aim set out in the Birmingham Curzon HS2 Masterplan (2015) is to maximise the regeneration and development potential of HS2 in the City Centre, in particular the Eastside, Digbeth, and eastern side of the City Centre core.

The arrival of HS2 with Birmingham Curzon station provides the opportunity to unlock a range of development sites and accelerate regeneration initiatives. This Masterplan seeks to maximise those benefits by identifying 6 'Places for Growth' located across Eastside, Digbeth and the City Centre Core. The station's location brings opportunities for all major economic and growth sectors within the City Centre - the 'arrival' opportunity for the station itself; for retail, office, leisure, education and research, creative enterprises and new residential communities. The project will address the problem that the base public realm works that form an essential part of the overall Curzon scheme do not fully meet the aims of the City Council and its partners in maximising the opportunities arising.

The Council's objectives in relation to 'places for growth – arrival' are that Birmingham Curzon will become a landmark station that will provide a catalyst for growth through the creation of well-designed, widely accessible, buildings which integrate fully and open connections to surrounding areas.

The key principles that are being sought for the development of the wider HS2 Station area are:

- (i) a statement HS2 Station building of world-class architectural quality;

- (ii) 360° station accessibility with good quality station entrances/exits facing the City Centre Core, Eastside and Digbeth;
- (iii) efficient and attractive integration with public transport connections;
- (iv) maximised pedestrian connectivity with high quality public realm and landscaping;
- (v) new pedestrian connections to Digbeth;
- (vi) a major public square fronting the station on Moor Street;
- (vii) second access to the station at New Canal Street; and
- (viii) high standards of sustainability and design.

The Curzon Enhanced Public Realm project will contribute to the achievement of principles (iv), (v) and (viii) by:

- Enhancing the pedestrian connectivity, landscaping and the quality of public realm at Curzon Promenade, Curzon Square and Paternoster Place (iv and viii); and
- Enabling more pedestrians to access the Curzon Station via Digbeth by widening the Park Street Bridge and enhancing the pedestrian environment on the bridge (v).

In addition, the Masterplan identifies the key areas for growth that surround the proposed station and highlights the importance of improving connections eastward into the development zones of Digbeth, Eastside and adjacent areas. The possibility of the new station disrupting connection between these zones is a key concern and the strategy looks to mitigate risks while creating opportunities and realising the potential of HS2. Paternoster Place is the part of Curzon Station that will facilitate movement between Birmingham City Centre (located to the north-west of Curzon Station) and Digbeth (located to the south of Curzon Station).

The BCC Curzon Street Masterplan for Growth sets out that Paternoster Place's principal function is for it to be a new, inviting threshold between The City and Digbeth. It goes on to state that Paternoster Place will be a wide, landscaped plaza that will transform pedestrian connections into Digbeth from The City with connection being clearly legible, accessible, and appealing to use whilst uniting the distinct character of the two and creating gateway development opportunities.

HS2 Birmingham Curzon Street (BCS) Design Vision

The HS2 Birmingham Curzon Street (BCS) Design Vision is presented within the BCS Design and Access Statement prepared to support the BCS Station and BCS Urban Realm Scheme Applications. This outlines the core principles which have defined the holistic approach to Station and Urban Realm design, centred on the values of People, Place and Time. The vision for the landscape and urban realm builds on these principles and helps integrate this large site into the city of Birmingham.

People

The urban realm should be people centric, carefully designed to consider the individual and collective experience of locals, tourists, and commuters as they use and circulate around the station.

- Create an integrated, enriching and fully accessible environment (station and urban realm).
- Create excellent and enjoyable customer experiences.
- Connect and inspire communities.
- Create opportunities for a wide range of social engagement.
- Integrate the ambitions and emerging development of adjacent stakeholders to create a wider successful development.

The Curzon Station Enhanced Public Realm proposals support the BCS Design Vision for *People* by:

- Supporting BCC with its aim to improve pedestrian and cycle connectivity between The City and Digbeth by widening the Park Street Bridge and enhancing the pedestrian environment on the bridge as part of the enhanced proposals at Paternoster Place; and
- Installing additional seating and creating functional pedestrian-friendly space around Curzon Station which is conducive to a wide range of social engagement.

Place

Given the importance of HS2 as a driving force for regeneration and growth within the UK and Curzon Street Station's strategic importance for Birmingham City, the new station should possess a contemporary and civic character.

- Create a sense of place for the Curzon district that complements and reinforces the wider context.
- Promote regeneration and growth in Birmingham City Centre, Eastside and Digbeth through connectivity.
- Celebrate the local: Enhance heritage assets, extend Birmingham's rich heritage of civic architecture and urbanism.
- A development that synchronises with wider (and future) movement patterns / modes.
- Enhance and promote the natural environment, creating opportunities to connect with green and blue assets.

The Curzon Station Enhanced Public Realm proposals support the BCS Design Vision for *Place* by:

- Better incorporating Eastside City Park into the station's public realm through extending the Base Scheme proposals across the interface area between Eastside City Park and New Canal Street Square and introducing a series of planted wet/dry rain garden spaces, seating areas, footpath connections and tree planting in an area that is to be retained as open lawn in the Base Scheme;
- Extending the station's urban realm up to the kerb line of the future bus-way incorporating connections to the new bus and Sprint stops north of Curzon Promenade, which are proposed by TfWM, as well as the proposed Midland Metro BEE route;
- Improving the quality of hard material used in the public realm at Curzon Promenade, Curzon Square and Paternoster Place;
- Improving pedestrian and cycle connectivity between The City and Digbeth by widening the Park Street Bridge and enhancing the pedestrian environment on the bridge as part of the enhanced proposals at Paternoster Place.

Time

HS2 as a project is so much about the efficient use of time. A balance of enabling this ethos should be instilled in the station as passengers move through the public realm as well as providing the opportunity to move at a slower pace and take in surroundings.

- Quality: Create an integrated, high quality design solution that works at all scales (big to small) and that is durable.
- Open ended: create opportunities for the city to grow and develop positively as a result of the development.
- To create a unified project that is enjoyable to experience and spend time in and around.

The Curzon Station Enhanced Public Realm proposals support the BCS Design Vision for *Time* by:

- Using better quality, more durable hard material with a better finish in the public realm at Curzon Promenade, Curzon Square and Paternoster Place;
- Extending the station's urban realm up to the kerb line of the future bus-way incorporating connections to the new bus and Sprint stops north of Curzon Promenade, which are proposed by TfWM, as well as the proposed Midland Metro BEE route which will help Birmingham to grow and will drive regeneration in the wider city area; and
- Installing additional seating and creating functional pedestrian-friendly space around Curzon Station which is conducive to a wide range of social engagement.

Curzon Station Public Realm Aims

Specific goals which are considered as requirements of the HS2 station design within the LLAU (i.e. the station's public realm) as outlined in the *SDSC2162 - Lot 4 Phase One Stations Design Services Contract Curzon Street Landscape and Public Realm - DAL 05 BCC Funded Public Realm Landscape and Public Realm Report* (which is appended to this Business Case as **Appendix S3**) include:

- A. Integration of the station with the local transport network;
- B. Appropriate location of railway infrastructure to avoid conflict with regeneration opportunities and to maximise the potential of development land;
- C. Consideration of the adjacent interfaces such as Moor Street Station and how strong and robust connections can be made;
- D. Seeking to optimise active frontages along key elevations; and
- E. Development of the environmental mitigation area which is provided for both water attenuation and as mitigation for the loss of Park Street Gardens due to the proposals for HS2.

The Curzon Enhanced Public Realm project will contribute to the achievement of goals A, C and D by:

- Extending the station's urban realm up to the kerb line of the future bus-way incorporating connections to the new bus and Sprint stops north of Curzon Promenade, which are proposed by TfWM, as well as the proposed Midland Metro BEE route (A);
- Improving pedestrian and cycle connectivity between The City and Digbeth by widening the Park Street Bridge and enhancing the pedestrian environment on the bridge as part of the enhanced proposals at Paternoster Place (C); and
- Creating a more pleasant environment which will encourage footfall and economic activity in the area attracting commercial and retail developers to invest in the surrounding areas driving land value and rental value uplifts as well as reducing vacancy rates (D).

Hierarchy of spaces strategy

The *SDSC2162 - Lot 4 Phase One Stations Design Services Contract Curzon Street Landscape and Public Realm - DAL 05 BCC Funded Public Realm Landscape and Public Realm Report* also sets out spatial hierarchy for the Curzon Station's public realm setting out to address a number of key goals:

- 1. Creation of a distinctive, inspiring setting for the new HS2 Curzon Street Station and surrounding developments.
- 2. Creation of a series of attractive, inclusive outdoor spaces that encourage use by residents, commuters, visitors, students, and travellers, young and old, alike.
- 3. Development of a clear hierarchy of spaces and routes, with clearly defined purpose and access. Station square being the primary space in this hierarchy.

- 4. Provision of legible, instinctive, accessible routes through and around the station; for pedestrians, cyclists, taxis, servicing, and private vehicles.
- 5. Connectivity with neighbouring streets and public open spaces; stitching the station into its surroundings.
- 6. Integration with nearby public transport providers to create an efficient, effective hub allowing easy access to and from a comprehensive range of travel options.
- 7. Transformation of the site into a sophisticated urban ecosystem that weaves nature, ecology, environmental design, and sustainability into the heart of the scheme.
- 8. Help transform the Digbeth/ Eastside area into a vibrant, creative, and stimulating environment for both residents and visitors to enjoy: a place where people will aspire to travel, work, live and visit, time and time again.

The Curzon Enhanced Public Realm project will support the above goals by:

- 1. Using better quality, more durable hard material with a better finish in the public realm at Curzon Promenade, Curzon Square and Paternoster Place.
- 2. Introducing additional green features such as rain gardens, trees, bushes, and smaller shrubs in the public realm surrounding the station as well as the introduction of additional low level lighting of the public realm that will enhance the attractiveness of the station's surrounding environment.
- 4. Widening the Park Street Bridge and enhancing the pedestrian environment on the bridge as part of the enhanced proposals at Paternoster Place which will cater to pedestrian and cyclist desire lines. The introduction of additional low-level lighting will also aid with night-time wayfinding around the station.
- 5 & 8. Improving pedestrian and cycle connectivity between The City and Digbeth by widening the Park Street Bridge and enhancing the pedestrian environment on the bridge as part of the enhanced proposals at Paternoster Place.
- 6. Extending the station's urban realm up to the kerb line of the future bus-way incorporating connections to the new bus and Sprint stops north of Curzon Promenade, which are proposed by TfWM, as well as the proposed Midland Metro BEE route.
- 7 & 8. Better incorporating Eastside City Park into the station's public realm through extending the Base Scheme proposals across the interface area between Eastside City Park and New Canal Street Square and introducing a series of planted wet/dry rain garden spaces, seating areas, footpath connections and tree planting in an area that is to be retained as open lawn in the Base Scheme.

The sections of text above demonstrates how the public realm enhancements proposed as part of the Curzon Station Enhanced Public Realm project aid with achievement of the aims, objectives and principles associated with the HS2 Curzon Station as well as the HS2 project overall.

1.1.2 Investment objectives

Provide details on the project's objectives, ensuring they fit the 'SMART' criteria (Specific, Measurable, Achievable, Relevant and Time-constrained). Add lines as required.

Objective	Quantity / Scope	By when
To create 1 ha of enhanced public realm adjacent to the HS2 Curzon station, including improved and extended schemes for Paternoster	1 ha of enhanced public realm including improved and extended schemes for Paternoster Place, Curzon Promenade and Curzon square.	Full benefits realised from the Curzon Station opening in 2029

Place, Curzon Promenade and Curzon square.		
To enhance the access to Digbeth by the completing the enhanced Paternoster Place component of the project.	Completion of the enhanced Paternoster Place component of the project	Full benefits realised from the Curzon Station opening in 2029
To facilitate the development of new commercial, retail, and residential developments and the growth of the GBSLEP economy. Overall, the proposed scheme is forecast to indirectly result in the creation of over 1,700 net additional jobs.	The creation of over 1,700 net additional jobs	Full benefits realised post the Curzon Station opening in 2029

1.1.3 Alignment with GBSLEP strategic objectives

Describe how the project supports the delivery of GBSLEP's [Strategic Economic Plan 2016-2030](#) and relevant sector delivery plans, including sector-specific investment criteria.

Table 1 below details the strategic objectives included in GBSLEP's Strategic Economic Plan 2016-2030 which the Curzon Station Enhanced Public Realm project supports and explains how the Curzon Station Enhanced Public Realm project would contribute to their achievement.

Table 1: The HS2 Curzon Station Enhanced Public Realm project's alignment with the strategic objectives included in GBSLEP's Strategic Economic Plan 2016-2030

Strategic Objective	Alignment with Objective
Harness the transformational opportunity presented by HS2.	The GBSLEP recognises that HS2 presents a “ <i>once in a generation opportunity</i> ” to drive productivity, economic growth, and prosperity across the Midlands. Good connectivity to the city core, the wider city and the West Midlands conurbation is essential in maximising the benefits of HS2. The HS2 Curzon Station Enhanced Public Realm project will enhance the overall public realm in the wider Curzon Station area. This will encourage pedestrian activity between the Station and the city centre and quarters including Eastside and Digbeth making these more attractive places to live, work, visit and invest in; increasing the transformational opportunity presented by HS2. An improved public realm will complement the HS2 Curzon Station Metro Stop which will ensure the HS2 Curzon Street station is fully accessible to the Midland Metro network and the surrounding area. The environment for buses and the new Sprint bus services will also be improved which further enhances the connections between the station and surrounding areas. This will improve connectivity between HS2, the city centre and the wider city and regional area encouraging business relocation, access to jobs and related economic activity in these areas.
Develop thriving local and town centres	The HS2 Curzon Station Enhanced Public Realm project will enable HS2 to be more easily accessed from Birmingham city centre and nearby areas such as Digbeth and Eastside. This will encourage more businesses and people to relocate to these areas to benefit from the improved public realm environment and connectivity. It will support local and city centre development and help to ensure that short distance trips to/from HS2 can be made safely by walking, cycling and public transport.

Enhance connectivity and mobility	The HS2 Curzon Station Enhanced Public Realm project will enhance connectivity between HS2 and Birmingham city centre, Digbeth and Eastside and the public transport options available in these areas. This will also improve the connectivity between HS2 and the wider Birmingham and West Midlands area. Mobility through the HS2 Curzon Station will also be bettered with all walking routes designed to be inclusive helping create a seamless transition for all passengers from HS2 to the local public transport network, particularly to the Sprint bus and local bus network that will stop to the north of Curzon Promenade.
Deliver major growth and regeneration opportunities	The HS2 Curzon Station Enhanced Public Realm project will directly enhance the regeneration of the Curzon Station area by establishing a more attractive environment than that which would be provided in the reference case (Do-Nothing) scenario. The GBSLEP describes HS2 Curzon Station as a “landmark station” which will act as a destination in its own right and will be a catalyst for regeneration and growth in its localities and across the wider region. The HS2 Curzon Station Enhanced Public Realm project will enhance the environment of the Curzon Station encouraging further higher value types of commercial investment and development in the local area surrounding the station whilst also uplifting the land value, rental value, and reducing vacancy rates of these developments.

1.1.4 Alignment with regional and national objectives and policies

Please ensure you include reference on how the project will contribute towards the targets set in the [#WM2041 Climate Action Plan](#) and [WM Energy Strategy](#)

Table 2 below details the targets included in the *#WM2041 Climate Action Plan* and *A Regional Energy Strategy for the West Midlands (November 2018)* documents which the Curzon Station Enhanced Public Realm project supports and explains how the Curzon Station Enhanced Public Realm project would contribute to their achievement.

Table 2: How the HS2 Curzon Station Enhanced Public Realm project will contribute towards achieving the targets set in the #WM2041 Climate Action Plan and A Regional Energy Strategy for the West Midlands (November 2018)

Target	Document	How project would contribute to the achievement of the target
Boost health and wellbeing	#WM2041 Climate Action Plan	The project will create an enhanced environment for walking and cycling outside the HS2 Curzon Station. This will encourage people to undertake journeys to and from the HS2 Curzon Station via active modes, such as walking and cycling, which will boost their health and wellbeing.
Make space for sustainable transport	#WM2041 Climate Action Plan	The project will create an enhanced environment for walking and cycling outside the HS2 Curzon Station. This will encourage people to undertake journeys to and from the HS2 Curzon Station via active modes,

		such as walking and cycling, and mass transit, such as the bus and metro, which will reduce congestion and associated pollution on the wider road network.
Take a 'circular' approach	#WM2041 Climate Action Plan	There are opportunities to re-use elements of paving material reclaimed from site in the construction of the Curzon Station Enhanced Public Realm proposals which will be further explored as the detailed design of the proposals are further progressed.
Active travel and cleaner transport	#WM2041 Climate Action Plan	The project will create an enhanced environment for walking and cycling outside the HS2 Curzon Station. This will encourage people to undertake journeys to and from the HS2 Curzon Station via active modes, such as walking and cycling, and mass transit, such as the bus and metro, which will encourage active travel and low carbon connectivity.
Creating breathable places	#WM2041 Climate Action Plan	The project involves the planting of numerous different tree types which will aid with carbon sequestration creating healthy and breathable spaces outside the HS2 Curzon Station. The project also encourages people to travel to the HS2 Curzon Station via modes alternative to the car by creating an enhanced environment for walking and cycling and one that is integrated with public transport. This will indirectly make the streets of Birmingham more breathable as it will help to reduce the number of vehicles travelling on the City's road network.
Behaviour change campaigns	#WM2041 Climate Action Plan	The project will support any travel behaviour change campaigns by making an environment that is conducive to cycling, walking and active travel.
Delivering the West Midlands' share of national and global carbon budgets by reducing regional carbon emissions	A Regional Energy Strategy for the West Midlands November 2018	The project will create an enhanced environment for walking and cycling outside the HS2 Curzon Station. This will encourage people to undertake journeys to and from the HS2 Curzon Station via active modes, such as walking and cycling, and mass transit, such as the bus and metro, which will reduce the number of single occupancy car journeys made to and from the station resulting in reduced carbon emissions from vehicular traffic in the West Midlands.

1.2 Project Context

1.2.1 PESTLE analysis

Outline the current situation in terms of relevant Political, Economic, Social, Technological, Legal and Environmental factors; confirm what the drivers for change are, and why the change needs to happen now.

Political

Royal Assent was granted to HS2 on the 27th February 2017, granting powers to build Phase 1 of the HS2 network between London and Birmingham (Curzon Street Station). As part of its commitments under the HS2 Act, HS2 are obligated to provide a station and urban realm design that is fully operational and that coherently ties into the existing city infrastructure. The base designs that HS2 have produced for the Curzon Square, Curzon Promenade and Paternoster Place areas of Curzon Station present a number of shortfalls and constraints where opportunities are missed to truly realise the full beneficial impacts of Curzon Station. This was recognised by the GBSLEP with the Curzon Station Enhanced Public Realm works that are the subject of this FBC being identified as a strategic priority and is included within the Enterprise Zone Investment Plan (2019). The Enterprise Zone Investment Plan (2019) highlights that if the Curzon Station Enhanced Public Realm works do not happen then the benefits presented by HS2, the expansion of the Midland Metro and the Curzon Station Metro Stop will not be locked together to provide well integrated interchange and public realm scheme. It is 'once in a lifetime opportunity'.

Digbeth and the Eastside area are earmarked within the Big City Plan and Birmingham Development Plan as areas expected to accommodate expansion of the City Core as well as key centres set to benefit from the regeneration opportunities presented by HS2 and the Midland Metro. The enhanced Curzon Public Realm project promotes a fully integrated Curzon Street Station delivery with providing enhanced public realm promoting seamless connectivity between Eastside and the Digbeth Creative Quarter in line with policy objectives and to will help maximise the benefits of the Curzon HS2 Station, the Curzon Station Metro and Curzon Station Enhanced Public Realm.

Economic

The HS2 station at Curzon is expected to be operational in 2029. In order to maximise the economic potential of HS2, BCC published the Curzon Masterplan in 2014. This sets out how the growth and regeneration opportunities around the terminus station could be unlocked. Through infrastructure investment, including in the public realm, the strategy set out in the Masterplan is to deliver a fully integrated and connected world class station, which will support the development of the City Centre and the wider area, in particular, through five 'Big Moves':

- (i) Station design to create a landmark building and arrival experience;
- (ii) Paternoster Place;
- (iii) Curzon Promenade and Curzon Square;
- (iv) Station Square and Moor Street Queensway; and
- (v) Curzon Station Metro Stop.

The proposals presented in this FBC directly relate to Big Moves (ii) and (iii) whilst also adding value to the remaining Big Moves. For instance, the enhanced public realm proposals at Curzon Square will better integrate the Midland Metro into the station and also enhance the environment surrounding the Curzon Station Metro Stop which is being funded through the Enterprise Zone Project.

The Birmingham City Centre Enterprise Zone (EZ) was first established in 2011 by the GBSLEP. As part of the West Midlands Devolution Deal (2015) the EZ was extended to cover the Curzon area in order to enable the delivery of local infrastructure and to drive growth associated with the arrival of

HS2. As a consequence, the number of sites within the EZ was increased from its original 26 to 39 covering 113 hectares (ha).

In July 2016, the GBSLEP Board approved the Curzon Investment Plan, which included the allocation of additional EZ funding of £556.8m towards a £724m local infrastructure investment package to maximise the impact of HS2 arriving in the region in at the time in 2026. The package is being delivered in two phases:

- Phase One - upfront investment in the infrastructure required to unlock growth immediately around the station including the Big Move projects and the Metro Extension to Digbeth; and
- Phase Two - further investment over a wider area including area wide public realm and local transport/highway improvements, and social infrastructure to support new residential neighbourhoods.

In June 2018 a single draft Enterprise Zone Investment Plan (EZIP) was prepared for all EZ sites which set out a £1bn programme of investment for projects to be delivered in phases. This identified a budget of £60 million to go towards “HS2 Curzon Station public realm” in phase 3 of the programme (“Maximising early opportunities for HS2”) which incorporated Paternoster Place, Curzon Promenade and Curzon Square, Station Square and Moor Street Queensway, and Curzon Station Metro Stop. The draft EZIP is funded through the projected growth in business rates generated within the Enterprise Zone sites managed through a financial model. The investment is borrowed by the Accountable Body (BCC) and repaid through the growth in business rates generated on designated EZ sites.

GVA (real estate advisory business) was commissioned by BCC to provide advice on development viability and funding of the proposals for Curzon (GVA, December 2014) based on the Birmingham Curzon HS2 Masterplan (although predating the final version). Its report provided an overview of property market conditions prevalent at the time and an assessment of the effects of transport infrastructure on land and property values as a context, as the basis for estimating expected development in Curzon on the basis of development appraisals of 32 individual sites under two scenarios:

- Scenario 1 (baseline) – development of the new HS2 station but with low level associated public realm and infrastructure; and
- Scenario 2 (preferred option) – development of the new HS2 station with high-quality associated public realm, infrastructure, and transport improvements.

In terms of the effects on rents, GVA state that, *“With the comprehensive improvement to public realm and public transport connectivity under Scenario 2 we forecast commercial rental growth up to 2031 amounting to 37% cumulative in respect of transport improvements and 20.3% in response to public realm works.”*

GVA concluded that an estimated total of 1,057,000 sq. m of commercial, community, and housing development would take place as a result of the HS2 investment under Scenario 2, compared with 745,000 sq. m under Scenario 1, resulting in an additional estimated 312,000 sq. m of development (+42%) with much higher development values and achievable rents.

Social

Through the enhancement of the public realm at HS2 Curzon Station, social benefits in terms of place making, user experience and pedestrian connectivity to local growth sites and the new BEE scheme will be improved.

Physical Activity: The Curzon Station Enhanced Public Realm scheme will improve pedestrian connectivity between HS2 Curzon Station and Birmingham Eastside, Birmingham City Centre and Digbeth. This is therefore anticipated to provide direct walking links and a pleasant and inclusive user environment that is accessible to all user types which will encourage short journeys to be undertaken by foot to and from the HS2 Curzon Station with consequential health benefits.

Journey quality: The Curzon Station Enhanced Public Realm scheme will contribute to providing a high-quality multi-modal interchange for passengers traveling into the City Core and further afield by providing better connections with, and a more pleasant environment when transitioning to, the local and regional public transport network (e.g. the Midland Metro BEE scheme, Sprint, and wider bus services) enhancing users' journey quality. The Curzon Station Enhanced Public Realm scheme proposals also improve the journey quality for active travel mode users travelling to and from Curzon Station, particularly at Paternoster Square where the proposals mitigate the potential bottleneck and point of conflict for users accessing and egressing the station to and from Digbeth. Planted Sustainable Urban Drainage Systems (SUDS) rain gardens in Curzon Square and Curzon Promenade create aesthetically pleasing, seasonal, sensory gardens that create important biodiversity and habitat connections through the site as well as contributing to the surface water management strategy. A mixture of planted and grass lawn terraces on Curzon Promenade create aesthetically pleasing garden spaces whilst facilitating significant changes in level to the surrounding existing landscape. A framework of trees across the site creates aesthetically pleasing environments, seasonal interest, and important biodiversity and habitat connections through the site as well as contributing to localised microclimates providing shade and shelter all of which further improve the journey quality of people travelling to and from Curzon Station.

Security: The Curzon Station Enhanced Public Realm scheme proposals create a greater sense of personal security through enhancing lighting, installing additional street furniture and cycle parking facilities, and introducing additional greenery. For instance, the improved lighting proposals, such as the enhancement to the tree lighting within the Curzon Square rain gardens and linear lighting integrated into the additional furniture proposed, will provide adequate and safe lighting levels and improving the legibility and line of sight through the station particularly enhancing the feeling of personal security after dark. The HS2 public realm boundary edges to Curzon Promenade are extended as part of the Curzon Station Enhance Public Realm proposals and function as both seating elements and secure line features as part of an integrated security strategy for the station. Enhanced Scheme proposals to Paternoster Place rationalise the street furniture and extend the secure line further south through a combination of PAS 68/IWA 14 rated bollards and street furniture to ensure a continuous secure line separating the public realm of the station from the wider urban realm. The proposals include additional planting which will further improve the sense of amenity and help create a more enjoyable walking environment, provides natural surveillance, and generates greater user confidence. The proposed improvements to the public realm at Paternoster Place allow maximum visual connectivity to Digbeth, increasing personal perception of safety and include additional cycle parking facilities located in areas which encourage natural surveillance.

Severance: Overall, the Curzon Station Enhanced Public Realm proposals will reduce severance by providing additional specifically defined space for pedestrians accessing and egressing Curzon Station via Curzon Promenade, Curzon Square and Paternoster Place. For example, the proposals create additional movement routes along Curzon Promenade across the proposed tramway to the city, improving pedestrian permeability within this area. At Paternoster Place the proposals include the construction of a triangular deck adjacent to the existing Park Street bridge, which will open a direct line of access from the south to the Bordesley Stairs on the south-eastern corner of Station Square. This will reduce the impediment to pedestrian and cyclist movement across the Paternoster Place which, in

the reference-case scenario, is caused by the Park Street Bridge parapet wall obstructing both the physical and visual connection to Curzon Station when approaching along Park Street.

Access to Services: The Curzon Station Enhanced Public Realm proposals will create greater access to jobs and services within the city core through the provision of short, convenient, and pleasant walking and cycling trips and integration with the BEE scheme for residents with no or little access to a private vehicle. Better connections to wider services such as BEE and local bus services as well as regional and national train services from both HS2 and local rail stations will also be provided by the Curzon Station Enhanced Public Realm proposals.

Technological

The public realm will present an opportunity to integrate way-finding and real-time information for onward travel into the city centre and the wider Digbeth area via rail, Midland Metro, local bus and Sprint networks.

Legal

Royal Assent for HS2 was secured on the 27th February 2017. This authorised the construction of Phase 1 between London and Birmingham. Although the preferred option being discussed in this business case differs from the Hybrid Bill, the extents of the design are within the LLAU and therefore does not require an amendment to the Hybrid Bill.

Delivery of the scheme will be under agreements between HS2 and BCC. This will be the one of a number of such agreements that HS2 is likely to require in order to deliver undertakings and assurances made through the Hybrid Bill process. The agreement will need to document the arrangements for ongoing collaborative working to deliver the scheme. All parties are committed to work together to reduce the overall cost of the project and to agree the mechanism for identifying the additional cost of delivering an enhanced Curzon Public Realm Scheme.

Environmental

Birmingham is required to reduce levels of NO₂ in the air to a maximum average of 40µg/m³ as soon as possible. Improvements to local connectivity through walking and public transport measures are key to support this target towards a cleaner city. Improvements to public realm will also encourage short trips to be undertaken by walking.

As part of Birmingham's response to the requirement to reduce levels of NO₂, a Clean Air Zone (CAZ) has been introduced inside the Birmingham Inner Ring Road. The area covered by this scheme lies inside the CAZ area, and as such any measures to facilitate the use of transport modes other than the private car should be encouraged.

Birmingham City Council declared a 'Climate Emergency' on 11th June 2019 and made the commitment to take action to reduce the city's carbon emissions to limit the climate crisis. The Council set a target for the city to become net zero carbon by 2030. By facilitating interchange between transport modes and providing an improved environment for pedestrians, this scheme is compatible with the objectives of reducing the use of private travel which contributes to climate change and carbon emissions.

1.2.2 Organisational context

Outline the applicant organisation's strategic objectives and how the project aligns with these. Reference how the project relates to any organisational strategic documents here and if required provide a link or append the document.

The applicant for this scheme is Birmingham City Council. This scheme is proposed to be delivered as a part of HS2 Curzon Street Station. This scheme is therefore delivered by HS2 on behalf of public bodies (HS2 and BCC). This section outlines the organisational objectives of the applicant i.e. BCC, with the policy objectives of other partners set out in **Section 1.2.3**.

BCC's corporate priorities are articulated within the **Council Plan and the Budget 2018-2022** document. The Council Plan and Budget covers the 2018/19 – 2021/22 period and sets out the objectives, priorities, and spending plans for the City.

The scheme aligns with **Council Plan** "*Outcome 1 - Birmingham is an entrepreneurial city to learn, work and invest in:*", "*Priority 4: We will develop our transport infrastructure, keep the city moving through walking, cycling and improved public transport.*" of Council Plan.

The plan aims to contribute to jobs and skills and sets itself a target to that by 2031 Birmingham will be renowned as an enterprising, innovative and Green City. This will be achieved by investment in infrastructure and improved connectivity. The document identified one of the key actions to be:

"City Centre Enterprise Zone – continued implementation of the £1bn investment plan to accelerate development by delivering support for site enabling, gap funding, public transport infrastructure and public realm improvements"

The progress is to be measured and tracked by:

- *Facilitating 40,000 jobs, 1m sq. metres of commercial floor space and 4,000 new homes across the City Centre in the period to 2038;*
- *Publication of consolidated EZ Investment Plan*
- **HS2 Public Realm Environment and Connectivity Projects reach Full Business Case;** and
- *Paradise redevelopment Joint Venture and infrastructure investment*

Key to meeting these targets is the development and delivery of a series of Major Projects and Programmes, including the Curzon Station Enhanced Public Realm scheme.

The Curzon Station Enhanced Public Realm proposals supports local, regional, and national policies related to the integration of HS2 with other modes including those of Central Government, GBSLEP, WMCA and BCC. The key documents are set out in **Section 1.2.3** below.

It also meets objectives set out by HS2 including:

- Catalyst for growth – "increase investment around new stations, providing new opportunities for jobs and regenerating local environments and boosting economic growth."
- Capacity and connectivity – "HS2 will bring more destinations within easy reach, increasing employment and leisure options."
- Passenger experience – "HS2 will offer improved accessibility to trains, stations and depots and increased choice and flexibility of service to meet individuals' needs".

The Curzon Station Enhanced Public Realm proposals will improve accessibility, convenience and comfort for passengers making onward travel by Metro, Sprint, local bus, cycling, and walking.

1.2.3 Policy context

Outline how the project fits with national, sub-regional and local policy and investment plans and strategies, such as West Midlands Industrial Strategy, West Midlands Combined Authority or a neighbouring LEP's Strategic Economic Plans, or Midlands Connect. Provide a referenced excerpt or link to the key relevant sections in such document.

National strategic context

Fixing the foundations: Creating a more prosperous nation, Her Majesty's (HM) Treasury (July 2015)²

The strategic context at the UK level, in terms of economic development policy, remains focused on improving the country's long-term competitiveness and tackling its underlying weaknesses, in particular the large productivity gap that continues to exist between the UK and leading advanced economies and the disparity in economic performance between different parts of the UK. This policy focus is evident in the Government's original Productivity Plan, Fixing the Foundations (July 2015). The plan sets out a framework for raising productivity, built around two pillars: encouraging long-term investment in economic capital, including infrastructure, skills, and knowledge; and promoting a dynamic economy that encourages innovation and helps resources flow to their most productive use. The Curzon Station Enhanced Public Realm proposals, and in particular the key development principles around connectivity, facilitating a dynamic mix of uses and sustainable development, is strongly aligned with these aspirations.

Industrial Strategy: Building a Britain fit for the future, HM Government (November 2017)³

In November 2017, the Government published its Industrial Strategy, which set out its approach to achieving the core aim of improving living standards and economic growth by increasing productivity and driving growth across the whole country. The Strategy is organised around five foundations and four grand challenges to the UK:

Foundations:

- Ideas: the world's most innovative economy;
- People: good jobs and greater earning power for all;
- Infrastructure: a major upgrade to the UK's infrastructure;
- Business Environment: the best place to start and grow a business; and
- Places: prosperous communities across the UK.

Grand challenges:

- put the UK at the forefront of the artificial intelligence and data revolution;
- maximise the advantages for UK industry from the global shift to clean growth;
- become a world leader in shaping the future of mobility; and

² Fixing the foundations: Creating a more prosperous nation, Her Majesty's (HM) Treasury (July 2015)
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/443897/Productivity_Plan_print.pdf

³ Industrial Strategy: Building a Britain fit for the future, HM Government (November 2017)
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/664563/industrial-strategy-white-paper-web-ready-version.pdf

- harness the power of innovation to help meet the needs of an ageing society.

The Strategy recognises that every region in the UK has a role to play in boosting the national economy and announces an intention to further develop city, growth and devolution deals and continue to work in partnership with local leaders to drive productivity. As well as introducing Local Industrial Strategies, of particular relevance to the Curzon Station Enhanced Public Realm project are the commitments to create more connected infrastructure and ensuring land is available for housing and economic growth. The delivery of a new high-speed rail network (referred to as HS2) forms an important component of the infrastructure foundation.

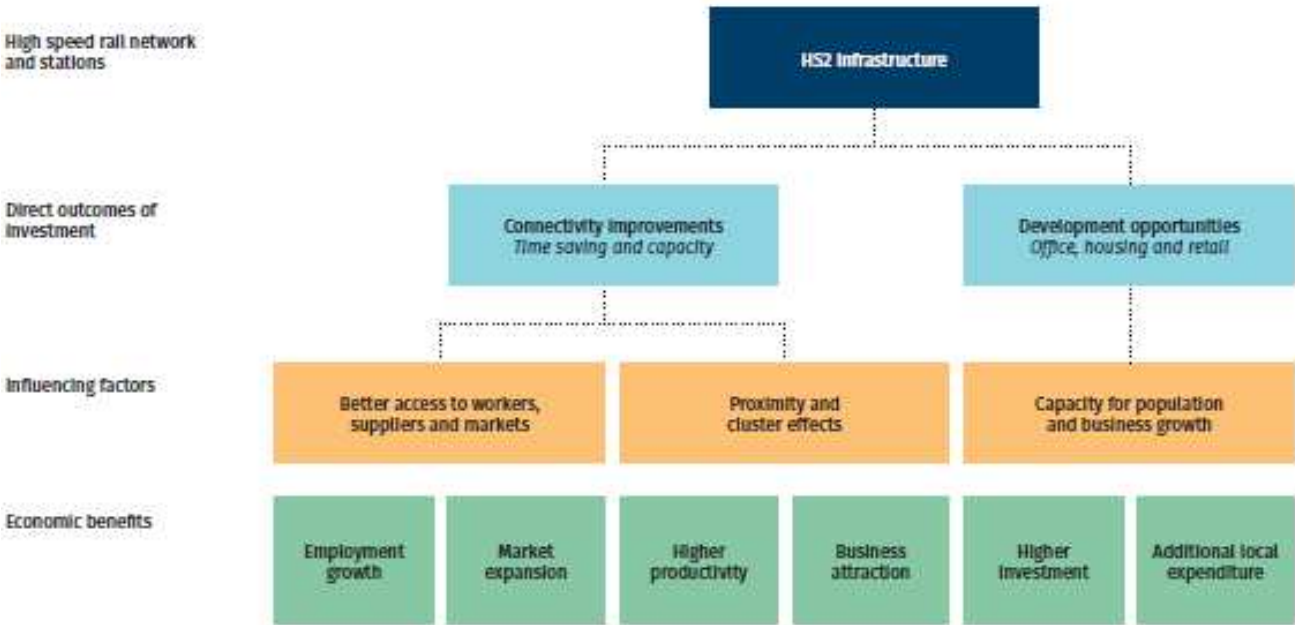
The Government is to build HS2, which will initially link London to Birmingham (Phase 1) and then go on to Manchester (Phase 2). In February 2017, the HS2 Bill gained Royal Assent for Phase 1, successfully completing over three years of Parliamentary scrutiny. The West Midlands will be the first region to receive HS2 and will be served by two stations, Birmingham Curzon, and the Birmingham Interchange (located in Solihull).

HS2 will provide increased speed, capacity and connectivity producing better links between businesses in the West Midlands and locations southwards and northwards. It will help to solve the capacity problem facing the existing railway network and provide better connectivity across the UK by decreasing journey times – for example, journey times from Birmingham to London will be cut to just 49 minutes – and offer more reliable journeys.

HS2 therefore has the potential to greatly improve accessibility in terms of time, cost and convenience between businesses and their suppliers, employees, and customers. Enhancing connectivity can result in productivity gains through cost savings or increased efficiencies to businesses locating close to the Station.

International evidence shows that with appropriate interventions the development of high-speed rail networks can result in significant economic benefits, with new development and growth clustered around stations. In addition, there are a growing number of transport hubs that are becoming a focal point for economic activity. **Figure 8** shows how HS2 can be a catalyst for economic growth.

Figure 8: HS2 – Catalyst for growth



In terms of economic impacts, outward or market-facing activities would be expected to make greater use than back office-type functions and higher skilled, higher value occupations are more likely to benefit from the presence of HS2 than other occupations. These are the type activities that would locate within Birmingham City Centre if the right conditions and opportunities are created.

National Planning Policy Framework, (2019)⁴

The adopted National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how they should be applied. It provides a framework within which locally prepared plans for housing and other developments can be produced. It also seeks to promote the incorporation and development of sustainable transport both as integrated and standalone development projects.

The NPPF places major importance on achieving sustainable development by meeting the needs of the present without compromising the ability of future generations to meet their own needs. The interdependent pillars of sustainable development are:

- **Economic Pillar** - *“to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure”;*
- **Social Pillar** – *“to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can provide to meet the needs of the present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being”;* and
- **Environmental Pillar** – *“to contribute to protecting and enhancing our natural, built and historic environment; including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy”.*

In particular, the NPPF states that “...transport issues should be considered from the earliest stage of plan making” to ensure that:

- *“opportunities to promote walking, cycling and public transport use are pursued”;* and
- *“patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places”.*

The project is able to meet each pillar and objectives by helping to build on the footfall created by HS2 and help funnel investment into the Eastside and Digbeth area, creating sustainable access to new and existing jobs, leisure and educational facilities whilst ensuring detrimental impacts to the environment are minimised through the promotion of active travel.

Transport Investment Strategy, Department for Transport (DfT) (2017)⁵

⁴ National Planning Policy Framework, Ministry of Housing, Communities and Local Government, 2019.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf

⁵ Transport Investment Strategy, DfT, 2017.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/918490/Transport_investment_strategy.pdf

The adopted Transport Investment Strategy (TIS) is a vital part of the government's industrial strategy and plan for Britain. The TIS sets out how the UK will respond realistically and pragmatically to existing and future transport challenges and putting the travelling public at the heart of the choices it makes.

The TIS contains four key objectives:

- 1. *"To create a more reliable, less congested, and better-connected transport network that works for the users who rely on it".*
- 2. *"Build a stronger, more balanced economy by enhancing productivity and responding to local growth priorities".*
- 3. *"Enhance our global competitiveness by making Britain a more attractive place to trade and invest".*
- 4. *"Support the creation of new housing".*

The Curzon Station Enhanced Public Realm proposals align with elements of the TIS key objective 1,2 and 3 (see above) with the proposals better integrating the HS2 Curzon Street Station with the surrounding local and regional public transport network enabling better public transport connectivity and encouraging more people to use public transport which will help create a more reliable and less congested road network surrounding the station. In addition, the proposals will create an environment that is more conducive to active mode travel, such as walking and cycling, surrounding the station which will further contribute to a less congested road network surrounding the station. The provision of a more attractive, comfortable, and visually pleasant environment surrounding the station that the Curzon Station Enhanced Public Realm scheme will deliver will also help generate inward investment into Birmingham and the wider West Midlands region helping build a stronger, more regionally balanced (less London-centric) economy and potentially enhance Britain's global competitiveness.

Improving the user experience is a key strategic priority of the TIS highlighting that the satisfaction and benefits derived from a journey is not driven solely by its speed, reliability, and punctuality – it is also affected by factors such as comfort and design. The TIS also acknowledges that the attractiveness, design, and retail experience around transport hubs can play a part in improving user experience, as well as the attractiveness of the UK as a place to invest and do business. By making the most of our [Britain's] transport hubs as desirable and practical places to visit, offering services and opportunities that those using the network need, we [Britain] can also build a transport network that plays a fuller role in creating growth and opportunity. Enhancing the public realm surrounding the Curzon Station plays a key role in improving station user experience helping establish Curzon Station as a place to visit in its own right.

Regional strategic context

The Midlands Engine Strategy, Department for Communities and Local Government (March 2017)⁶

The Midlands Engine concept aimed to close the gap in productivity between the Midlands and the rest of the UK, retain more graduates, increase residents' skill levels, and improve transport links between areas. The Midlands Engine Strategy (March 2017) sets out the five themes underpinning the Midlands Engine concept:

⁶ The Midlands Engine Strategy, Department for Communities and Local Government (March 2017).

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/598295/Midlands_Engine_Strategy.pdf

- Midlands Connect – the long-term transport strategy for the Midlands;
- Innovation and Enterprise – initiatives to improve productivity and competitiveness;
- Skills – ensuring that skills training is tailored to employer demand;
- International Trade and Investment – increasing employment and diversifying the business base; and
- Shape Great Places – strengthening the Midlands’ reputation across global markets and supporting UK economic growth prospects.

With the Strategy recognising the importance of Birmingham within the UK, realizing the potential of HS2 and the Curzon station area, which the Curzon Station Enhanced Public Realm proposals will help do, is fully aligned to each of the five Midlands Engine themes.

Strategic Economic Plan, WMCA, (2016)⁷

The WMCA Strategic Economic Plan (WMCASEP) sets out the vision and strategy for a smarter, more sustainable, and more inclusive growth for the benefit of the West Midlands. *“Using the momentum of HS2 to improve connectivity within the area and exploiting the strengths of the UK Central Growth Corridor through Birmingham, Solihull and Coventry – and between the West Midlands and national and international markets”* is part of the WMCASEP’s vision.

The WMCASEP recognises Birmingham City Centre as the regional hub and a natural focal point for growth and investment. It emphasises the importance of harnessing the transformational opportunities presented by HS2 and identified both HS2 stations (Curzon Street and UK Central) as creating new areas of regeneration, housing, and business growth.

The Curzon Station Enhanced Public Realm project will improve the connectivity between HS2, Birmingham City Centre, Digbeth and Eastside by creating new, and enhancing existing, pedestrian and cycle desire lines to and from the HS2 Curzon Street Station itself. The proposals will also improve connectivity between HS2 and the wider Birmingham and West Midlands regional area by better integrating Curzon Station with the existing and proposed future local and regional public transport network. This improved connectivity to HS2 will help maximise the potential regeneration and investment benefits for the Digbeth, Eastside, Birmingham City Centre, wider Birmingham, and West Midlands areas.

Midlands HS2 Growth Strategy 2021: The Defining Decade – The Midlands high speed path to recovery, WMCA, (2021)⁸

The WMCA’s Midlands HS2 Growth Strategy 2021 provides an update to original West Midlands HS2 Growth Strategy launched in 2015, which set out the opportunities that the arrival of HS2 affords the region and how the WMCA aimed to leverage the benefits delivered by HS2 to drive local growth on a nationally-significant scale over and above the construction of HS2. The takes an approach which focuses on three interlinking strands of People, Business and Place and targets action over the short,

⁷ Strategic Economic Plan, West Midlands Combined Authority. (2016).

<https://www.wmca.org.uk/media/1382/full-sep-document.pdf>

⁸ Midlands HS2 Growth Strategy 2021: The Defining Decade – The Midlands high speed path to recovery, WMCA, (2021)

<https://www.wmca.org.uk/media/4530/hs2-growth-strategy-2021-accessible.pdf>

medium, and long term as we [WMCA] plan for the sustainable impact of HS2 within the region and across the UK.

Within the Place strand, improved regional connectivity is highlighted as a key desired outcome of HS2 with focus around maximising HS2's national (and international) connectivity and improving access to the region's two HS2 Hubs and spreading the benefits of HS2. The Strategy highlights that connectivity improvements must be invested in to facilitate access to the HS2 hubs for workers, residents, and businesses we will expand the extent of the potential agglomeration benefits by increasing the economic mass of key sectors gravitating around the new hubs. The revised HS2 connectivity programme aims to:

- Improve access for appropriately qualified labour to the stations and associated development zones.
- Improve access to HS2 for key business sectors.
- Improve access to opportunity for key regeneration areas such as East Birmingham and North Solihull.

The Curzon Station Enhanced Public Realm works will directly improve access to and from the Curzon Station and will also improve connectivity between HS2 and the local and regional public transport network surrounding the Curzon Station such as the Midland Metro BEE and proposed Sprint route which are planned to route through East Birmingham and North Solihull.

Realising the regeneration potential of the Curzon and Digbeth areas also forms a key part of the Strategy, with the strategy stating that the unrivalled connectivity that the Curzon Station will provide must be exploited to unlock land in strategic development areas that will build on our sectoral strengths and target key growth areas. The Strategy describes the Curzon Station as a once in a century opportunity to radically transform areas of the city centre by unlocking major development sites and accelerating growth. The Curzon Station Enhanced Public Realm proposals will help the regeneration potential of HS2 Curzon Station be realised by creating a more attractive environment surrounding the station encouraging inward investment as well as helping provide better connectivity to areas surrounding the station and wider Birmingham and West Midlands areas.

In addition, the Strategy sets out the aim that HS2 should contribute towards the achievement of the UK Government's target to bring all greenhouse gas emissions to net zero in the UK by 2050; helping the green recovery. By improving pedestrian and cycle connectivity to and from the Curzon Station, the Curzon Station Enhanced Public Realm works will encourage people to travel to and from the Curzon Station using modes of transport that are carbon neutral.

Strategic Economic Plan, GBSLEP, (2016-2030)⁹

The adopted GBSLEP Strategic Economic Plan (GBSLEPSEP) sets out the vision and strategy for *"...delivering smarter, more sustainable and more inclusive growth for the benefit of our area, the wider West Midlands City region and the UK as a whole"*. The GBSLEPSEP also identifies their contribution to the delivery of the ambitious growth targets set by the WMCA.

⁹ Strategic Economic Plan, GBSLEP, 2016-2030.

<https://gbslep.co.uk/wp-content/uploads/2017/06/SEP-2016-30.pdf>

The strategic vision for the GBSLEPSEP is for “...Greater Birmingham to be a top global city region that drives the Midlands Engine and is the major driver of the UK economy outside London – harnessing our strengths and assets for the benefit of our area and the wider UK economy”.

The GBSLEPSEP sets out to support the development of masterplans for key sites, including the Birmingham Curzon HS2 Masterplan which sets out what will be done to maximise the regeneration and connectivity potential of HS2 in the city centre. As part of this, Eastside and Digbeth are highlighted as key areas with high regeneration potential. The Curzon Station Enhanced Public Realm works will improve connectivity between Curzon Station, Digbeth, Eastside and Birmingham City Centre helping to unlock the regeneration potential of these areas.

The Curzon Station Enhanced Public Realm scheme will work towards achieving the GBSLEPSEP mission “...to create jobs and grow the economy – and, in doing so, to raise the quality of life for all of those that lives and work here” by improving the quality of the environment outside of the Curzon Station which will contribute to HS2 wider catalyst for investment and growth in the local area.

The Curzon Station Enhanced Public Realm project will contribute towards specific strategic objectives set out within the GBSLEPSEP including:

- *Increase private sector investment, including overseas investment:*
 - by improving pedestrian and cycle connectivity to Digbeth and Eastside, the Curzon Station Enhanced Public Realm will help these areas become an attractive location to invest from both local and overseas private sector sources.
- *Enable more inclusive growth that delivers benefits more widely and reduces unemployment – particularly in parts of Birmingham and North Solihull with high rates.*
 - by providing a more sophisticated and accessible connection between key growth sites such as the city core and the Digbeth area, as part of a wider sustainable transport network, will provide more economic and social opportunities for people living within Digbeth and Eastside.

The GBSLEPSEP sets out to support the development of masterplans for key sites, including the Birmingham Curzon HS2 Masterplan which sets out what will be done to maximise the regeneration and connectivity potential of HS2 in the city centre, in particular the Eastside, Digbeth and eastern side of the city centre core. The Curzon Station Enhanced Public Realm will improve the integration of the local public transport network with the HS2 Curzon Street Station which will improve the connectivity to areas earmarked for growth and regeneration.

Enterprise Zone Investment Plan, GBSLEP, (2019)¹⁰

The Enterprise Zone Investment Plan (EZIP) 2019 sets out the next steps in creating the conditions for economic growth within the Birmingham and Curzon EZ over the period 2019-2028, through a phased programme of investment in major schemes and infrastructure. It describes how investment will continue to accelerate development across the EZ to maximise the potential of HS2 arriving in 2026 (previously).

With nearly £1 billion of planned investment, GBSLEP and BCC aim to unlock the delivery of 1.1 million sq. metres of new commercial floorspace, create over 71,000 new jobs and contribute £2.3 billion GVA

¹⁰ Enterprise Zone Invest Plan, GBSLEP, (2019)

https://www.birmingham.gov.uk/downloads/file/1319/birmingham_city_centre_enterprise_zone_investment_plan

per annum (p.a.) to the economy. Ensuring that both residents and businesses share in the benefits that will be generated, will be of paramount importance.

One area where the plan states that investment will be focussed on is the improvement of the public realm to provide safe and attractive routes for walking and cycling and enhanced public spaces. The public realm surrounding Curzon Station is highlighted as an area to invest in to maximise the early opportunities from HS2 with the draft EZIP including an indicative allocation of £60 million to go towards schemes at Paternoster Place, Curzon Promenade and Curzon Square, Station Square and Moor Street Queensway, and Curzon Station Metro Stop. This money has been allocated to help the achievement of the Curzon Masterplan's (2015) strategy to deliver a fully integrated and connected world class station, which will support growth and regeneration for the City Centre and the wider area. The Curzon Station Enhanced Public Realm works will better integrate the station with its surroundings and provide better connections to the surrounding area and public transport network which will help drive growth and regeneration for the City Centre and the wider area.

Movement for Growth: West Midlands Strategic Transport Plan, WMCA, (2016)¹¹

The Movement for Growth document sets out the WMCA's plan for growth and the long term-approach for improving the transport system serving the West Midlands stating how the vision is for West Midlands to build "a world class, sustainable, infrastructure system, which is proudly comparable to its European counterparts". As part of its vision, the Strategic Transport Plan sets out key objectives that need to be achieved in order to realise its vision.

The Curzon Station Enhanced Public Realm project will directly support the delivery of the following objectives:

- Use transport improvements to enhance the public realm and attractiveness of our centres.
- Ensure that walking and cycling are safe and attractive option for many journeys, especially short journeys.
- Maintain and develop our transport infrastructure and services to ensure they are efficient, resilient, safe, and easily accessible for all.

The project will also indirectly support the following objective:

- Introduce a fully integrated rail and rapid transit network that connects our main centres with quick, frequent services, and which is connected into wider local bus networks through high quality multi-modal interchanges.
 - This will be achieved through creating an environment which will enhance pedestrian mobility and their ability to access the local transport network, such as the Midland Metro system and the local bus network, and the national public transport network (i.e. HS2).

Reimagining transport in the West Midlands: a conversation about change, TfWM, (2021)

TfWM is in the process of supporting the WMCA to update its current Local Transport Plan (LTP). This is a document that sets out the policies to promote safe, integrated, efficient, and economic transport to, from and within the WMCA area as well as plans to implement those policies. Prior to updating the LTP, TfWM have published a Green Paper to start a conversation about what a new LTP should look

¹¹ Movement for Growth: West Midlands Strategic Transport Plan, West Midlands Combined Authority. (2016). <https://www.tfwm.org.uk/media/1099/movement-for-growth.pdf>

like. The contents of the Green Paper will be used to engage with four key groups using a range of techniques:

- **General public** – deliberative engagement and consultation
- **Private organisations** – targeted events with representative organisations
- **Transport service providers** – targeted events with key operators and public agencies
- **Transport and place policymakers and planners** – transport summit and ongoing co-development of LTP

The Green Paper outlines how TfWM have adopted five Motives for Change (shown in **Figure 9** below) from which their vision for transport in the West Midlands (to be set out in the new LTP) is based around.

Figure 9: TfWM's five Motives for Change



The Curzon Station Enhanced Public Realm scheme directly and contributes towards the achievement of the Motives for Change in the following ways:

- Supporting and driving economic activity and growth in the areas surrounding Curzon Station;
- Creating an improved environment for active travel; and
- Encouraging the public and active mode transport use when travelling to and from Curzon Station helping the UK and West Midlands meet their target dates for achieving net zero.

In addition, the Green Paper highlights the importance of the region's City and Town centres being efficiently connected to the wider local, regional, and national public transport network which the Curzon Station Enhanced Public Realm scheme will help to support by improving connectivity between HS2 national public transport network and the existing wider local and regional public transport network.

Midlands Connect Strategy, Powering the Midlands Engine, GBSLEP, (2017)¹²

¹² Midlands Connect Strategy: Powering the Midlands Engine, Midlands Connect. (2017).

<https://www.midlandsconnect.uk/media/1224/midlands-connect-strategy-march-2017.pdf>

The Midlands Connect Strategy sets out proposals to drive economic growth, create more and better jobs, and create more trade and investment in the Midlands region through new and improved transport infrastructure. The key outcomes that the strategy aims to achieve include:

- **Regionally Connected: Powering the Midlands Engine** – Transforming East to West connectivity will widen access to markets, supply chains and labour markets releasing the full potential across the whole region – from the Welsh borders to the Lincolnshire coast;
- **UK Connected: The Midlands transport networks power the UK economy** – Strategic road and rail networks that bring the country's economic regions closer together boosting productivity, access to markets and international gateways;
- **HS2 Connected: Getting the Midlands HS2 ready** – Investing in complementary connectivity will spread the growth unlocked by HS2 across the Midlands and the country as a whole;
- **Ensuring connectivity of the region with HS2** and the regeneration potential it has on local communities; and,
- **Global connectivity**, linking the West Midlands and the rest of the world.
- **Intelligently Connected: Leading the technology revolution**, promote innovative technology such as integrated ticketing solutions, open data, and driverless cars to enhance journeys, provide transport planning solutions and reduce the need for expensive infrastructure.

The Curzon Station Enhanced Public Realm proposals will directly contribute to the achievement of outcomes 3 and 4 above by improving connectivity between HS2, and the areas served via the Midland Metro, rail, bus, and Sprint networks as well as improving active mode connectivity to the areas immediately surrounding the Curzon Station (e.g. Digbeth and Eastside) which will help drive the development and regeneration of these areas.

The Curzon Station Enhanced Public Realm project will also indirectly contribute to the achievement of outcomes 2 and 5 above by improving access to the HS2 Curzon Station itself. HS2 Curzon Street Station will in turn improve Birmingham's connectivity to key national hubs and airports. This national and international connectivity provided by HS2 will also help maximise HS2's potential regeneration and investment benefits for Digbeth and the Eastside areas.

West Midlands Low Emissions Towns and Cities Programme (LETCP) 2014

The Low Emissions Towns and Cities Programme (LETCP) aims to design and deliver key policies that promote the reduction in vehicle use, enable "a shift to sustainable transport modes" and promote sustainable procurement, which is defined as "a process whereby organisations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organisation, but also to society and the economy, whilst minimising damage to the environment".

The West Midlands area currently breaches the UK Air Quality Objective for Nitrogen Dioxide and could face substantial penalties, passed on through the Localism Act. The LETCP was established in response to the high levels of toxic air pollutants in the region to "produce a West Midlands Low Emission Strategy capable of delivering policies and measures that can reduce air pollution, simultaneously reducing greenhouse gas emissions and noise from road transport." Through increased cycling and the promotion of walking as sustainable alternatives to highly polluting vehicles, the LETCP aims to "achieve the UK Air Quality Objectives and EU Air Quality Limit Values".

The Curzon Station Enhanced Public Realm aligns with the LETCP as the scheme proposals will encourage the use of active modes and public transport when travelling to and from Curzon Station by

creating an environment surrounding the station that is more conducive to active mode travel and is better connected to the surrounding public transport network. In addition, opportunities to re-use elements of paving material reclaimed from site in the construction of the Curzon Station Enhanced Public Realm proposals will be further explored as the detailed design of the proposals are further progressed aligning with the LETCP's promotion of sustainable procurement.

A West Midlands Approach to healthy and active streets: Evidence Statement, TfWM¹³

The West Midlands Approach to healthy and active streets: Evidence Statement document sets out the West Midlands' approach to providing "good quality street environments" in the region which result in benefits to "health", "problems of congestion" and "delays on the road network" and the evidence underpinning this approach.

The Statement highlights how around 2 out of every 5 journeys under 2 miles in the West Midlands are made by car showing that many journeys in the West Midlands that can be undertaken via active modes are currently not. The Statement goes on to highlight how effective street design can create "walkable cities" and well-designed spaces that encourage greater numbers of people walking at all times of the day and night.

The social and health benefits of walking and cycling are presented throughout the Evidence Statement. For instance, the Statement highlights how walking and cycling represent an inclusive form of transport, where there "are no cost barriers" and are a great way to exercise which lead to long-term physical health improvements along with mental health improvements. Evidence around the benefits associated with introducing green spaces into the street environment is also presented.

The Curzon Station Enhanced Public Realm proposals align with the aims and evidence presented in the West Midlands Approach to healthy and active streets: Evidence Statement document as the proposals will encourage more active mode trips to be made to and from the new Curzon Station by better designing the public realm environment surrounding the station as well as introducing some new green spaces.

West Midlands Cycling Charter, TfWM¹⁴

The West Midlands Cycling Charter seeks to deliver a step change in cycling across the West Midlands Metropolitan area setting the target of increasing levels of cycling to 5% of all trips made within the West Midlands Metropolitan area by 2023. The Charter recognises cycling's contribution to creating more sustainable places, as part of an integrated transport system in the West Midlands. This includes "improvements to the environment by helping to reduce carbon emissions, air pollution and noise" and "create better places to live and visit, by making it easy for people to move around their local communities".

Alongside the environmental benefits of cycling, the Charter highlights the improvements in health that cycling can achieve by "tackling obesity" and improving air quality. The overarching purpose of "promoting and encouraging cycling" is to realise the full potential of "cycling's contribution to the health and wealth of the West Midlands", by "creating more sustainable suburbs, towns and cities that are healthier, safer and more desirable places to live, work and learn".

¹³ A West Midlands Approach to healthy and active streets: Evidence Statement, TfWM
<https://www.tfwm.org.uk/media/3246/wm-healthy-and-active-street-evidence-statement.pdf>

¹⁴ West Midlands Cycling Charter, TfWM
<https://www.tfwm.org.uk/media/38955/cycling-charter.pdf>

According to the Charter, and as part of an integrated transport system, cycling can:

- improve the environment by helping to reduce carbon emissions, air pollution and noise.
- offer an affordable, convenient, and low-cost travel option to access jobs, education, and leisure opportunities, particularly for people without access to cars.
- increase people's physical activity levels, tackle health inequalities and improve both the physical and mental health of West Midlands residents.

The Curzon Station Enhanced Public Realm proposals will help TfWM achieve its vision associated with cycling in the West Midlands Metropolitan area, as outlined in the West Midlands Cycling Charter, by creating an environment surrounding the Curzon Station that is more conducive to cycling which will encourage more people to travel to and from the station by bike.

Covid-19 Transport Action Plan, TfWM, (2020)¹⁵

In October 2020, TfWM released its Covid-19 Transport Action Plan which set out how TfWM planned to approach transition out of Covid-19 for transport within the WMCA area. Although much of the plan is focussed on short-term actions, the regeneration around the Curzon Street and Digbeth areas of Birmingham that will be stimulated by the arrival of HS2 at Curzon Station is mentioned as a key opportunity that will help drive the recovery of Birmingham and the wider region in the long-term. The Curzon Station Enhanced Public Realm scheme supports the achievement of this opportunity as it will encourage the further regeneration of these areas by creating a more attractive environment and better connections which will entice more and better quality commercial and residential development to invest in the areas surrounding areas.

In addition, the importance of capitalising on the increased use of active travel modes that was observed during the initial national lockdowns associated with the COVID-19 pandemic in the long-term is highlighted throughout TfWM's Covid-19 Transport Action Plan. The plan pledges to support investment in active mode travel infrastructure throughout the region. The Curzon Station Enhanced Public Realm scheme will create an environment surrounding the Curzon Station that is more conducive to walking and cycling which will encourage users to travel to and from the station using active travel modes and is thus in line with TfWM's aspirations for promoting active mode travel usage that are set out in their Covid-19 Transport Action Plan.

West Midlands Local Industrial Strategy, HM Government, (2019)¹⁶

The West Midlands Local Industrial Strategy sets out the Government's intended path to increasing productivity and earning power across the country in the West Midlands region. The potential transformative effects of High Speed 2 and Curzon Station on strengthening the economies and communities of the region are highlighted throughout the Strategy with the Strategy pledging the Government's support of initiatives which seek to maximise these transformative effects. The Curzon Station Enhanced Public Realm scheme will help drive the transformative redevelopment of the areas surrounding Curzon Station (particularly Eastside and Digbeth) through the establishment of connections with the station and the creation of a more aesthetically pleasing environment which will encourage economic activity and investment.

¹⁵ Covid-19 Transport Action Plan, TfWM, (2020)

<https://www.tfwm.org.uk/media/nk2nv3ax/wm-covid-response-action-plan.pdf>

¹⁶ West Midlands Local Industrial Strategy, HM Government, (2019)

<https://www.wmca.org.uk/media/3094/west-midlands-local-industrial-strategy-single-page.pdf>

Another key part of the Government's West Midlands Local Industrial Strategy is to ensure that all communities of the West Midlands are connected to and can access High Speed 2 through the development of an integrated, clean, multi modal transport system. The Curzon Station Enhanced Public Realm scheme supports this aspiration as it will help better integrate the surrounding local and regional public transport network by better incorporating the bus, Sprint and metro stops into the station fabric enabling a smoother transition between the modes.

Recharge the West Midlands, TfWM, (2020)¹⁷

The Recharge the West Midlands document sets out the key immediate funding asks of the Government from the West Midlands, which total £3.2bn of investment over the next three years, for schemes and initiatives which will improve the economic prosperity of the West Midlands. The document asks for £70m to regenerate the wider Curzon Street and Digbeth area, through the Martineau Galleries development and £61m to develop the creative and cultural hub which it estimates would bring forward the creation of 30,000 jobs and 4,300 new homes. The Curzon Station Enhanced Public Realm scheme will support this regeneration of the wider Curzon Street and Digbeth area helping to attract further investment into the area.

Local strategic context

Birmingham Transport Plan 2031, BCC, (2021)¹⁸

The Birmingham Transport Plan sets out what the city needs to do to directly meet future transport demand. The vision for the Transport Plan is:

"The vision for Birmingham's transport is to have a sustainable, green, inclusive, go-anywhere network. Safe and healthy environments will make walking, cycling and active travel the first choice for people making short journeys. A fully integrated, high quality public transport system will be the go-to choice for longer trips. A smart, innovative, carbon neutral and low emission network will support sustainable and inclusive economic success, tackle the climate emergency, and promote the health and well-being of Birmingham's citizens".

The vision will be secured through the following four set of principles:

- Reallocating road space
- Transforming the city centre
- Prioritising active travel in local neighbourhoods
- Managing demand through parking measures

The Curzon Station Enhanced Public Realm proposals align with the "Transforming the city centre" principle as they will encourage the use of public and active transport modes when accessing and egressing Curzon Station, as opposed to vehicle use, by creating pedestrian and cycle friendly spaces outside the station which are integrated with the public transport network.

¹⁷ Recharge the West Midlands, TfWM, (2020)

<https://www.wmca.org.uk/media/3975/west-midlands-economic-recovery-our-ask-and-offer-hd-spreads.pdf>

¹⁸ Draft Birmingham Transport Plan, Birmingham City Council. (2020).

https://www.birmingham.gov.uk/downloads/file/14861/birmingham_transport_strategy

The plan also highlights that a complementary package of connectivity improvements to HS2 will be needed to ensure that the benefits of HS2 are spread wide driving further economic growth and generating more employment opportunities. The Curzon Station Enhanced Public Realm proposals form part of this package of complementary HS2 connectivity proposals.

Birmingham Development Plan 2031 (2017)¹⁹

The Birmingham Development Plan (BDP) 2031 was adopted by Birmingham City Council on 10th January 2017. This document sets out a spatial vision and strategy for the sustainable growth of Birmingham for the period 2011 to 2031 and guides decisions on planning, development, and regeneration. It outlines the framework in which Birmingham will achieve its ambition to be renowned as an enterprising, innovative, and green city. Eastside and Digbeth are both identified as strategic locations for growth and regeneration within the plan highlighting how the Curzon Station forms an important part of the wider development of the City Centre, which is identified under Policy GA 1.2 (Growth and Wider Areas of Change).

The BDP sets out a diverse set of policies to help guide new development. Those policies which the Curzon Station Enhanced Public Realm project will help to deliver upon are outlined below.

- Policy PG1: Overall levels of growth - The project will help to improve connectivity and mobility which will support and attract new investment opportunities within the city centre, Digbeth, Eastside area, helping to contribute to wider growth aspirations.
- Policy PG3: Place making – The project will create a more pleasant and aesthetically pleasing environment surrounding the Curzon Station that is more conducive to walking whilst also incorporating more greenery creating a better sense of place.
- Policy GA1.2 – Growth and Wider Areas of Change - Eastside – The project will better integrate Curzon Station with its surrounding environment creating a world class arrival experience with enhanced multi-modal connectivity to surrounding areas including Digbeth and the City Core.
- Policy GA1.3 The Quarters – Eastside - The project will help to build upon the positive impact resulting from HS2 by creating an attractive and well-connected pedestrian environment, allowing for greater footfall in the areas surrounding Curzon Station and potential growth and investment.
- Policy GA1.4 – Connectivity – The project will improve accessibility and connectivity between HS2 and Birmingham City Centre enhancing the integration of public transport within the city. The project will also enhance the integration of public transport with Curzon Station.
- Policy TP1: Reducing the City's carbon footprint - The Curzon Station Enhanced Public Realm project will contribute towards the increased provision of a sustainable multi-modal transport network in the city which will contribute towards reducing car dependency and carbon emissions within the city helping drive the economic performance of the city.
- Policy TP19: Core employment areas - The project will contribute towards the physical and economic regeneration of Digbeth and Eastside by improving connectivity with HS2 and the city centre which will encourage private investment and growth.
- Policy TP21: The network and hierarchy of centres - The project will improve connectivity between Digbeth, Eastside, HS2 and the wider city centre helping establish these areas as a preferred location for retail, office and leisure developments as set out within the policy, by attracting and encouraging greater footfall and passing trade.

¹⁹ Birmingham Development Plan, Birmingham City Council. (2017).

https://www.birmingham.gov.uk/downloads/file/5433/adopted_birmingham_development_plan_2031

- Policy TP38: A sustainable transport network – The project will contribute to the development of a sustainable, high quality, integrated transport system in Birmingham by establishing a pedestrian and cycle friendly environment surrounding Curzon Station as well as better integrating Birmingham's and the wider West Midlands' public transport networks into the station.
- Policy TP39: Walking - The project will deliver a safe and pleasant walking environment surrounding the Curzon Station which will improve pedestrian safety and prioritise it as a primary method of travel when accessing the station over the private vehicle. The scheme proposals accommodate high desire lines linking Curzon Station to Birmingham City Centre, Eastside and Digbeth.
- Policy TP40: Cycling – The project will deliver a safe and pleasant cycling environment surrounding the Curzon Station which will improve pedestrian safety and prioritise it as a primary method of travel when accessing the station over the private vehicle. The scheme proposals include additional cycle parking facilities at Paternoster Place.
- Policy TP41: Public Transport - The project will better integrate local and regional public transport modes into Curzon Station by extending the station's urban realm up to the kerb line of the future bus-way incorporating connections to the new bus and Sprint stops north of Curzon Promenade, which are proposed by TfWM, as well as the proposed Midland Metro BEE route.

The plan supports the development of a sustainable, high quality, integrated transport system with particular reference to opportunities to maximise benefits from HS2 and Midland Metro BEE.

Big City Plan, BCC, (2011)²⁰

The Big City Plan (BCP) sits alongside the BDP as a non-statutory document that sets out a vision and framework for how Birmingham City Centre will be transformed, reflecting the key proposals in the BDP. The Big City Plan sets out the vision for the future transformation of the City Centre over a 20-year period to 2031. It identifies the opportunities available in the City Centre and the actions that would need to be taken to deliver long-term economic growth and secure a competitive and successful centre for the future. As one of the five "areas of transformation", the Eastside area aims to expand the City Core eastwards, with the new HS2 rail terminus identified as providing a significant catalyst for growth. The BCP highlights Eastside as an opportunity for mixed use development "...including office, residential, learning and leisure space" as well as building upon the arrival of HS2 to act as a significant catalyst for regeneration. The Curzon Station Enhanced Public Realm proposals will improve connectivity between Eastside, Curzon Station and the city centre which will help drive regeneration in Eastside supporting the BCP's aspirations for the Eastside area.

The BCP highlights how BCC has set itself an ambitious target for a "...60% reduction in the city's carbon dioxide emissions by 2026" through "...improving public transport, promoting a network of pedestrian and cycle routes". In addition, the BCP recognises the importance of good quality connections in relation to the city's economic performance including those for pedestrians within and beyond the city centre. One of the objectives is for a connected city that "*is safe and convenient for pedestrians and cyclists to move around and has an effective and attractive public transport system with an efficient highway network.*" The Curzon Station Enhanced Public Realm proposals will help BCC to deliver upon these aspirations as they will create an environment surrounding the Curzon Station that is more conducive to walking and cycling as well as being better integrating the Curzon Station with the wider local and regional transport system. In this sense, the Curzon Station Enhanced Public Realm project will contribute towards the increased provision of a sustainable multi-modal transport network which works towards reducing car dependency and carbon emissions within the city helping drive the economic performance of the city.

²⁰ Birmingham Big City Plan, Birmingham City Council. (2011).

https://www.birmingham.gov.uk/downloads/download/214/big_city_plan

Birmingham Curzon HS2 Masterplan, BCC (2015)²¹

The Birmingham Curzon HS2 Masterplan (2015) provides the framework and principles to guide development, regeneration, and connectivity of HS2 in the Curzon area to ensure that Birmingham can capitalise on the arrival of HS2 and fully realise its transformational impact such as the area surrounding the Curzon Station becoming one of the best connected and most productive business locations in the country.

The Masterplan identifies that the arrival of HS2 at Birmingham Curzon station provides the opportunity to unlock and accelerate regeneration at six development sites surrounding the new station. Labelled as 'Places for Growth', these six sites are:

- 'Arrival' – the quarter incorporating the new HS2 station and certain 'Big Moves' which integrates fully and opens connections to surrounding areas;
- 'Retail' – the quarter that links the new station with the traditional retail core of the city centre by creating a retail frontage to a new Station Square through a redesigned Moor Street Queensway through to the transformed retail High Street;
- 'Visit' – the quarter that links 'Arrival' with 'Learning & Research' and builds on and enhances the existing visitor destinations of Millennium Point and Eastside City Park;
- 'Creative' – the largest of the quarters and including much of Digbeth, it provides the opportunity to enhance the existing creative industries sector and the growing number of companies involved in digital technologies, design, TV production, and arts, and to create new mixed development and a new canal-side residential neighbourhood;
- 'Business' – this quarter is intended to open up new opportunities to extend the traditional office core from the Colmore Business District with new developments such as Martineau Square and Exchange Square aligned with the extension of the Metro line; and
- 'Learning & Research' – this quarter will further develop the R&D business and educational focus around the Birmingham Science Park Aston and the Birmingham Metropolitan University campus, with opportunities to deliver a major mixed-use commercial, leisure, and residential development at the Eastside Locks site.

The Curzon Station Enhanced Public Real project forms part of the 'Arrival' 'Places for Growth' area whilst also enhancing connections to the 'Retail', 'Visit', 'Business' and 'Creative' 'Places for Growth' areas.

For HS2 to succeed in delivering growth in the Curzon Masterplan area, the Masterplan identifies the 5 Big Moves needed as part of the delivery of the station to transform Birmingham, reinforcing and extending the City as a destination and creating a wider economic impact. These 5 Big Moves are:

- 1. World class arrival – *"...with an exemplary passenger experience and full integration with its surroundings, establishing a strong sense of place both inside and outside the station."*
- 2. Midland Metro extension – *"An integrated Metro stop at New Canal Street will provide HS2 travellers with fast and efficient connections to the wider City Centre, with additional stops transforming connections and boosting the regeneration potential of Digbeth."*
- 3. Paternoster Place – *"A wide, landscaped plaza that will transform pedestrian connections into Digbeth and create gateway development opportunities."*

²¹ Birmingham Curzon HS2 Masterplan, BCC (2015)

https://www.birmingham.gov.uk/downloads/download/155/birmingham_curzon_hs2_masterplan_for_growth

- 4. Station Square and Moor Street – *“A new high quality pedestrian destination fronting Birmingham Curzon...”*
- 5. Curzon Promenade and Curzon Square – *“An extension of Eastside City Park, the Promenade will set Birmingham Curzon station in a landscaped, green setting with cafes, shops and restaurants creating a vibrant edge to the station and the park. Curzon Square will be an extension of the park’s event space providing a high quality setting for the Grade I listed former Curzon Street Station and the Woodman public house (Grade II listed).”*

The Curzon Station Enhanced Public Realm will help deliver two of the five ‘Big Moves’ (3 and 5) needed as part of the delivery of the station to transform Birmingham, whilst also complementing the other three ‘Big Moves’. This will reinforce and expand the City as a destination and creating a wider economic impact which is a key aim of the Birmingham Curzon HS2 Masterplan.

Route to Zero Taskforce, BCC, (2019)²²

The Route to Zero (R20) Taskforce was created in autumn 2019 and brings together Members and officers from the council and representatives from the West Midlands Combined Authority, the NHS, higher education, the business community, faith communities, young climate strikers, climate campaigners, and other key partners and stakeholders. Between January and February 2020 the council ran an online survey to understand the barriers the people of Birmingham face in helping to tackle the climate change, and to seek people's views and ideas for how different people can take action. The vision for the enhanced public realm around Curzon Station has been developed to contribute to the Birmingham’s environmental and route to zero agendas with a series of positive upgrades being made to the public realm environment surrounding Curzon Station which will influence the way people move through and travel to and from the station and to create an attractive, environment, helping to reduce carbon emissions and limit the climate crisis. For instance, the Curzon Station Enhanced Public Realm scheme includes the introduction of an enlarged rain garden swale to the eastern end of Curzon Promenade, a series of planted wet/dry rain garden spaces at Curzon Square, and additional tree planting in an area that is to be retained as open lawn in the Base Scheme. All of these will help contribute towards BCC achieving its target for Birmingham to become carbon neutral by 2030.

Brum Breathes: A city wide approach to tackling air pollution, BCC, (2019)²³

In January 2019, BCC released their Clean Air Strategy under the “Brum Breathes air quality programme” which is the overarching Council programme that directs air quality interventions that aim to deliver health improvements to citizens, workers, and visitors to Birmingham, all within the context of sustainable growth. The Clean Air Strategy affords the Council the opportunity to go beyond their legal duties to deliver and/or support and/or enable interventions which contribute towards better air quality based on current priorities and relevance to local communities.

The strategy recognises the key role that transport plays in contributing towards poor air quality and accordingly sets out priorities for improving air quality around improving the wider transport network by investing in public transport as well as increasing the range of cleaner and environmentally/health-friendly journey options available to travellers (e.g. cycling networks, walking schemes) with the aim of reducing the number of so-called “dirty journeys” (e.g. journeys made using polluting vehicles). BCC

²² Route to Zero Taskforce, BCC, (2019)

<https://www.birmingham.gov.uk/downloads/file/18618/route-to-zero-action-plan-call-to-action>

²³ Brum Breathes: A city wide approach to tackling air pollution, BCC (2019)

https://www.birminghambeheard.org.uk/economy/clean-air-strategy-consultation/supporting_documents/62.10_BrumBreathes2019_V3.pdf

make a number of pledges in the strategy with Pledge 2 being to “continue to deliver a world class transport system, which prioritises public transport, cycling and walking” outlining their commitment to creating a cleaner, greener, go-anywhere, integrated transport system that puts people first and delivers better connections. The Curzon Station Enhanced Public Realm scheme will help BCC achieve this pledge as it will really enhance the integration of HS2 with the wider Birmingham public transport network and establish connections to surrounding areas improving the attractiveness of public transport and active modes of travel.

Our Future City Plan, BCC, (2021)²⁴

Our Future City Plan (OFCP) outlines BCC’s template for major change in terms of delivering development and the supporting infrastructure in the central Birmingham area. Using the climate emergency as impetus, it sets a new direction where there is an aim for a zero-carbon approach to development.

The vision set out in the OFCP has strong impetus on the role in which development in the Birmingham area has in placemaking and how it should contribute towards an attractive, distinct, and green environment that is well connected with the wider public and active travel transport network. Implementing the Curzon Station Enhanced Public Realm will help achieve this vision as it entails the upgrade and the introduction of additional public realm containing green spaces and improved facilities for pedestrians and cyclists which will not only create an attractive environment surrounding Curzon Station but will also drive the improvement environment further afield.

Improving access to public transport in the central Birmingham area is a key theme which permeates throughout the OFCP with the plan noting that this is key to reducing the current car dominance and associated infrastructure in the area. The Curzon Station Enhanced Public Realm scheme supports this vision as it will better integrate the wider Birmingham public transport network within the Curzon Station and improve pedestrian and cyclist facilities which will make these a more attractive option to choose when travelling.

1.2.4 Links to other projects

Does the project link with other GBSLEP, other LEP, WMCA or Local Authority supported projects? If so, how?

The Curzon Station Enhanced Public Realm project sits within an emerging context which includes:

1. Martineau Galleries
2. Moor Street Station Regeneration
3. Beorma Quarter
4. Birmingham Smithfield
5. Midland Metro BEE
6. Sprint
7. Digbeth Estate
8. Digbeth High Street Public Realm
9. Curzon Street Metro Stop
10. HS2 Curzon Station base public realm scheme

²⁴ Our Future City Plan, BCC, (2021)

https://www.birmingham.gov.uk/downloads/file/18589/our_future_city_plan_2021_screen_version

Figure 10 shows the indicative locations of the above projects associated with the Curzon Station Enhanced Public Realm proposals with **Table 3** describing them in further detail and outlining how they are linked with the Curzon Station Enhanced Public Realm proposals.

Figure 10: Indicative locations of projects associated with Curzon Station Enhanced Public Realm proposals

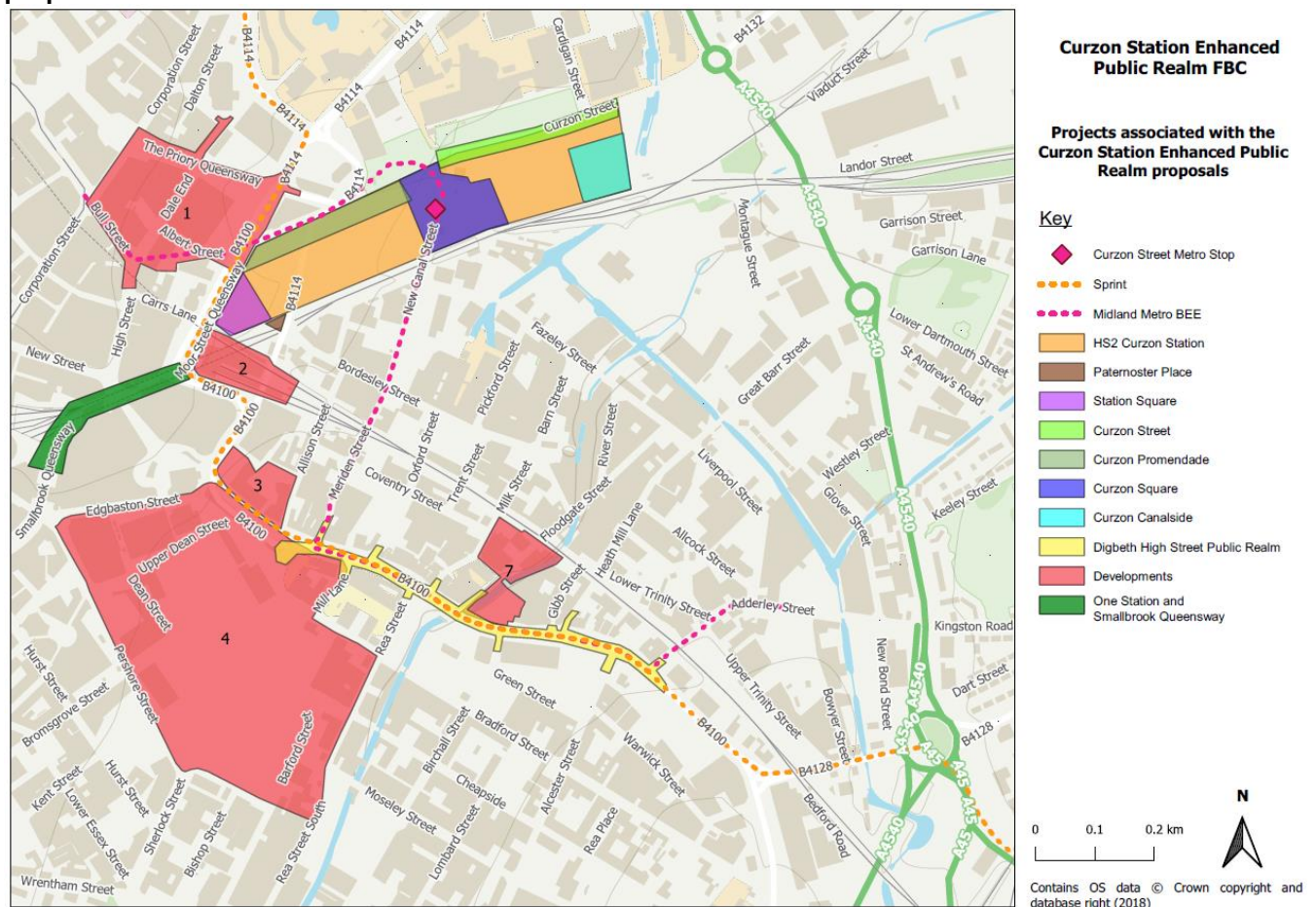


Table 3: Projects associated with the Curzon Station Enhanced Public Realm proposals

Organisation	Map Ref	Project	Description	Link
BCC	1	Martineau Galleries	The proposed redevelopment of Martineau Galleries will include the demolition of all buildings and structures within the existing site to accommodate a mixed-use development of up to 255,000 sq. m of floorspace, including commercial, residential, retail, leisure and food beverages uses.	The Curzon Station Enhanced Public Realm proposals on Curzon Promenade will improve connectivity between Martineau Galleries and Curzon Station as Martineau Galleries is located adjacent Curzon Promenade which should improve footfall between Curzon Station and Martineau Galleries.
West Midlands Rail Executive	2	Moor Street Station Regeneration	The Moor Street Station Regeneration project refers to a radical yet respectful	The Curzon Station Enhanced Public Realm proposals will improve

			transformation of Birmingham Moor Street Station. The project includes options to more than double the size of the concourse from 910m2 to 2000m2; the introduction of two new platforms; an iconic new transfer deck with access to every platform and links to a new footbridge taking passengers directly to HS2 services from Curzon Street; options to improve pedestrian access between Moor Street and New Street; and a second entrance to the south of the station on Moor Street along with associated public realm improvements.	connectivity between Curzon Station and Moor Street Station helping realise the "One Station" vision which aims to enable a seamless transition for passengers between New Street, Moor Street and Curzon stations.	
BCC	3	Beorma Quarter	Beorma Quarter is a proposed mixed use development comprising demolition and retention of some buildings and facades on Digbeth High Street and the construction of 3 new blocks including a 30 storey tower to provide retail, business space, residential apartments, and live-work units.	The Curzon Station Enhanced Public Realm proposals at Paternoster Place will enhance connectivity between Curzon Station and the wider Digbeth area helping to facilitate the development of the Beorma Quarter and accommodating the increased footfall it will bring.	
BCC	4	Birmingham Smithfield	The Birmingham Smithfield development represents one of the largest city centre development sites in the country with more than £500m of investment. The improvements to the public realm and connectivity will provide direct walking links to the development and is compatible with the possibility of future Metro extensions to the development.	The Curzon Station Enhanced Public Realm proposals at Paternoster Place will enhance connectivity between Curzon Station and the wider Digbeth area helping to facilitate the development of the Birmingham Smithfield and accommodating the increased footfall it will bring. In addition, there is potential for future Metro extensions to be routed through the Birmingham Smithfield development meaning the Curzon Station	

				Enhanced Public Realm proposals on Curzon Promenade could further facilitate the development of the Birmingham Smithfield and further accommodate the associated increased footfall by providing better connectivity between Midland Metro and HS2.
WMCA	5	Midland Metro BEE	The Birmingham Eastside Metro extension to Digbeth will serve the HS2 Curzon Station, separating from the existing West Midlands Metro line at Bull Street. The route is planned to consist of 1.7km of twin track running from Bull Street to a new terminus at High Street Deritend. The scheme includes four additional West Midlands Metro stops serving the east of Birmingham City Centre. The extension will service the Eastside regeneration area offering connections with New Street, Moor Street and Snow Hill Railway Stations, in addition to the new HS2 station. The scheme also includes a new bus interchange adjacent to Clayton Hotel Birmingham to provide an efficient bus, Sprint, and coach interchange with HS2.	The Curzon Station Enhanced Public Realm proposals will better integrate the Midland Metro into Curzon Station providing better pedestrian connectivity between the Midland Metro and helping facilitate expected increase in footfall at the station that BEE will deliver.
WMCA	6	Sprint	Sprint is a bus priority corridor that will link Walsall to Solihull and Birmingham Airport via Birmingham City Centre, along the A34 and A45. Sprint will support the region's economic growth and expanding population, and will combat congestion by offering reliable,	The Curzon Station Enhanced Public Realm scheme will better integrate the Sprint stops outside of Curzon Station into the station environment by extending the station's urban realm up to the kerb line of the future bus-way incorporating connections to

			connected, and sustainable public transport.	the new bus and Sprint stops north of Curzon Promenade. This will help create a seamless interchange between the HS2 and public transport network.
Oval Real Estate	7	Digbeth Estate	Digbeth Estate refers to the plans for a £1bn transformation of the area around the iconic Custard Factory which include up to 2.2 million sq. ft of commercial space and 1,850 homes alongside shops, restaurants, cafes, and additional leisure facilities. The plans are expected to 16,000 jobs.	The Curzon Station Enhanced Public Realm proposals at Paternoster Place will enhance connectivity between Curzon Station and the wider Digbeth area helping to facilitate the development of the Digbeth Estate and accommodating the increased footfall it will bring. In addition, Midland Metro BEE will be routed along Digbeth High Street with a stop provided at the end of Floodgate Street meaning the Curzon Station Enhanced Public Realm proposals on Curzon Promenade could further facilitate the development of Digbeth Estate and further accommodate the associated increased footfall by providing better connectivity between Midland Metro and HS2.
BCC	8	Digbeth High Street Public Realm	The Digbeth High Street Public Realm project will deliver a world class urban realm in Digbeth through façade to façade reconstruction of Digbeth High Street. The project includes realigning the centrally aligned tramway to the southern side of Digbeth High Street; reducing the carriageway width on the northern side of Digbeth High Street; altering turning	The Curzon Station Enhanced Public Realm proposals at Paternoster Place will enhance connectivity between Curzon Station and the wider Digbeth area helping increase footfall in the Digbeth area and on Digbeth High Street; helping maximise the development opportunities that the Digbeth High Street Public Realm project will drive. In

			movements, including road closures and banned turns and changes to the direction of flow of traffic onto and off Digbeth High Street; and the creation of a high-quality, easily accessibly multi-modal interchange closer to Digbeth Coach Station.	addition, the improved pedestrian access to the Midland Metro at Curzon Station, that the Curzon Station Enhanced Public Realm proposals will contribute to, will further improve connectivity between HS2 and Digbeth increasing the footfall and driving development opportunities on Digbeth High Street.	
BCC	9	Curzon Street Metro Stop	The Curzon Street Metro Stop project alters the footprint of the HS2 Curzon Street station, changes the alignment of the Midland Metro BEE that will route through station and will provide a large public square underneath the HS2 station viaduct.	The Curzon Station Enhanced Public Realm proposals will improve the public realm environment surrounding the Curzon Street Metro Stop further improving pedestrian connectivity between the Midland Metro and HS2.	
HS2	10	HS2 Curzon Station base public realm scheme	<p>As part of its commitments under the HS2 Act, HS2 are obligated to provide a station and urban realm design that is fully operational and that coherently ties into the existing city infrastructure. HS2 have committed to deliver public realm environment at the following six areas surrounding Curzon Station:</p> <ul style="list-style-type: none"> (i) Paternoster Place – area to the south east of the HS2 Station frontage and Station Square, including operational rail lines at a lower level and Park Street Bridge with links to Digbeth via Bordesley Street; (ii) Curzon Promenade – area to the northern side of the HS2 station which 	The Curzon Station Enhanced Public Realm proposals will enhance the HS2 Curzon Station base public realm scheme at Paternoster Place, Curzon Promenade and Curzon Square. The enhanced public realm proposals at Paternoster Place will increase pedestrian connectivity between Digbeth and Station Square and the enhanced public realm proposals at Curzon Square will improve connectivity between Eastside and HS2 by improving connectivity between Curzon Street and Curzon Square.	

			<p>will include bus and Sprint stops, along with Midland Metro,</p> <p>(iii) Curzon Square – area around the former Curzon Street Station, which is a Grade 1 listed Building to the rear of the HS2 station</p> <p>(iv) Curzon Street – area adjacent to the existing Eastside City Park, Millennium Point and Birmingham City University (BCU) campus;</p> <p>(v) Curzon Canalside – to the rear of the HS2 Station area close to Curzon Circus; and</p> <p>(vi) Station Square – the area outside the western entrance to the station linking to Moor Street station.</p>		
WMCA	11	One Station and Smallbrook Queensway	<p>The government has awarded the WMCA £1.05bn of City Region Sustainable Transport Settlement (CRSTS). CRSTS is a five-year capital settlement to enable the region to achieve its ambitions in terms of transport investment. The fund is overseen by DfT and aligns with the planned publication of a new West Midlands Local Transport Plan (LTP). Within the original investment prospectus to the government there was a request for funding for the 'One Station and Smallbrook Queensway' £25m project which comprises of £2m development and £23m delivery funding; comprising of a £20m request from</p>	<p>The Curzon Station Enhanced Public Realm proposals on Curzon Promenade will improve pedestrian connectivity between Curzon Station and Moor Street Station thus contributing towards the aim of the One Station and Smallbrook Queensway project. Enhancing the public realm surrounding Curzon Station will complement the One Station and Smallbrook Queensway by creating a better pedestrian environment.</p>	

			CRSTS and £5m request from the EZ. The 'One Station and Smallbrook Queensway' is listed as an upgrade of strategic walking routes between Birmingham New Street, Birmingham Moor Street, Birmingham Curzon Street and Birmingham Snow Hill to enhance integration.	
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1.3 Project Benefits

1.3.1 Logic model

Provide a logic model for how the desired change will be achieved through the outcomes and impacts of the project. A separate appendix including the model can be referred to.

Based upon the objectives of the scheme, a logic map has been prepared in support of this application and is presented in **Appendix S2**. The logic map outlines the objectives for the scheme and links inputs/outputs with the outcomes that can be derived from the scheme.

1.3.2 Evidence of what works

Confirm how the project draws on what has worked in the past or in other similar contexts.

The effect of public realm interventions can be considerable and is reflected by significant and positive impacts on individuals, communities, local economies, and land values. Using Jan Gehl measurement of human experience of place, the Place Making: The Value of the Public Realm report (CBRE, 2017) demonstrates the value of public realm interventions in financial terms, through the impact on land value, rents, and capital values. The study identifies that public realm can generate an uplift in value by a "change of image", "creation of a destination", "versatility of public realm" and the stimulus a public realm intervention can have "as part of wider redevelopment project". The paper argues that public realm intervention "dramatically improves the economic competitiveness of an urban area". In particular, the research identifies that:

- successful placemaking initiatives can revitalise an area and act as a magnet for people wanting to both live and work in a place that offers an attractive employment, with consequent benefits for real estate values (through the impact of land value and rents and capital rents);
- by altering the public image of a location, public realm intervention has a proven impact on visitor numbers and attracting retailers by improving the overall attractiveness of an urban space. The impact of "a change of image" in the Place du Marche Saint Honore public realm development in Paris has led to non-residential land values within 100 metres of the development rising by 33% and by 7.3% within 500 metres of the development. Retail values also have the potential to increase considerably and have done so by 166% in the Place du Marche Saint Honore case study;
- the "change of image" in the Place du Marche Saint Honore area has increased residential rents by 53% in the last twelve years since the project's completion as the reimagining of the public space attracts "prosperous and dynamic new tenants";

- the successful creation of “a sense of destination” when designing a public realm space can incentivise further regeneration in the wider area, boosting visitor numbers and increasing the attractiveness of an area to residential and retail development activity;
- the improved human experience of an urban area can readily translate into appreciating real estate values. In response to the “increased liveability” of the development of the High Line public realm in New York has facilitated the development 15 new residential buildings and the addition of 2000 new units, which equates to a 50% housing stock increase, since its creation. Moreover, the median resale price for residential real estate surrounding the redevelopment increased to just shy of \$2.3 million, in comparison to the median sale price of the neighbourhood in general which is \$763,000;
- the increased residential value of developments can lead to wider commercial benefits. Asking rents of buildings in the immediate area surrounding the High Line in New York have risen by 51% comparable to asking rents one block away. The increase in rents has acted as a stimulus for further development activity. The demand which is driving rents higher is also prompting further development activity, in the form of an extensive 12-storey office building and the expansion of the Chelsea Market complex;
- public realm interventions, as part of wider redevelopment, can be a focal point of the visiting public especially when the area offers a wide range of uses and activities. The retail rents in the Porta Nuova public realm area, which hosts Milan Fashion Week, open-air concerts and other large-scale entertainment events, have increased by 27% from 2004 to 2009, while the wider area has seen no rental growth; and
- growth in retail rent prices in the immediate area of public realms can be more resilient than the average growth in wider area/city. The development of Liverpool One into a mixed-use commercial and residential space has increased retail rents by 17.5%, compared with a decline of 7.4% in the city overall since 2008.

Public green spaces are a common and popular form of the public realm which provide a wide range of amenities to residents alongside tangible financial gains in the form of increased land values. The Curzon Enhanced Public Realm project includes the creation of a rain garden within the Curzon Promenade and Square. In London, it is calculated that public parks have a gross asset value in excess of £91 billion, comprising the value of recreation in the capital, huge benefits to health and land value uplift, with all sizes of functional green space within 200 metres of property having a positive impact on land prices. Analysis by the Office of National Statistics estimates that the presence of a ‘small functional green space within 200 metres of a property is associated with a rise in property price of 0.5%’. The greater the size of the functional green space the greater the effect on property prices, for example, presence of very large functional green space is associated with a rise in property price of 1.4%.

In Port Sunlight, public realm intervention transformed unused land into a 30-hectare park and wetland. The creation of the park has had a considerable economic impact in the area, increasing visitor numbers to the site by 40,000 per year, generating £48,000 of revenue per year to the businesses that operate in the park and adding £7.8 million to the value of the community within 500 meters. Local property values have also increased by 5.4%, as residents enjoy access to the park for recreational purpose, shopping, and volunteering opportunities.

Formal green spaces such as public gardens, parks and wilderness park have a high expected amenity value for society. Moreover, the Fields in Trust (2018) report shows that the utility individuals derive from public green spaces is not uniform, with lower socio-economic groups and Black, Asian, Minority Ethnic (BAME) groups deriving significantly more wellbeing from accessible green spaces. The willingness to pay for local parks or green spaces for lower socio-economic groups, especially in

urban areas, is significantly higher than the national average at £4.32 per month while BAME groups valuing parks and green spaces more than double the UK average at £5.84 per month. The higher value ascribed to parks and green spaces by these group is also reflected in their likelihood to visit public green spaces more often.

More generally, research undertaken by the Royal Institute of Chartered Surveyors (RICS) which explored the impacts of placemaking, including public realm, on values found uplifts ranging from 5% to 56%. Research by Savills (2016) found that additional early spend on placemaking activities can cause sales values to rise by 20% and increase land values by up to 25%.

As well as improving the public realm environment surrounding Curzon Station, the Curzon Station Enhanced Public Realm proposals also help to better integrate the surrounding public transport network with Curzon Station. Multi-modal interchanges have been successfully integrated at major transport hubs to create a seamless experience for passengers as they move between public transport services and active modes. Best practice examples include those which feel safe and are accessible to all, create a sense of place and tackle social inclusion.

Guidance produced by Campaign for Better Transport outlines ways that high quality interchanges can influence the travel choices, facilitate easier access to networks and support new retail and housing development.

Transport for London's Interchange Best Practice outlines four key best practice themes which include:

- **Efficiency** – Efficient movement of people and modes will help create an effective multi-modal interchange. Clear permeability through the interchange with clearly defined movements between services will help make an efficient interchange.
- **Usability** – Accessible design of the interchange that meets the requirements set out in the Equality Act 2010 for all users will help passenger's perception of personal security making the area more usable. Good quality lighting and CCTV will remove the perception of a hostile environment and increase the usability of the interchange.
- **Understanding** – Integrated wayfinding and real-time information of different modes along with good permeability through the interchange will help passenger's experience and quality of journey.
- **Quality** – Urban realm plays an important role in place-making and perception of safety. Creation of a high-quality interchange environment and the feeling of a sense of place for passengers arriving at the interchange for the first time will leave a lasting perception and experience.

1.3.3 Equality impact

Outline how the project would affect the social well-being of the relevant area and how it could be modified to further improve this. Attach a relevant assessment if conducted.

As part of the HS2 Design Vision, it is a requirement that the design of Curzon Station is inclusive and user-led given due consideration to the protected characteristic groups; for everyone to benefit and enjoy and meeting the needs of the station's diverse audiences. The Curzon Station Enhanced Public Realm proposals have been developed so that an environment which assists a range of different types of users with accessing and egressing Curzon Station is created outside of the station.

For instance, the Curzon Station Enhanced Public Realm proposals improve and create pedestrian and cycle desire lines between Curzon Station, the areas surrounding the station and the public

transport stops located close to the station creating more direct spacious routes for people accessing and egressing the station. This will reduce the amount of obstructions and potential conflict points creating an inclusive environment surrounding the station helping those users who suffer from mobility and/or visual impairments access and egress the station more safely. The size of Paternoster Place is increased as part of the Curzon Station Enhanced Public Realm proposals which reduces potential conflict points in Paternoster Place, improves access to the lifts up to Station Square and also enables the inclusion of additional seating in Paternoster Place.

A coordinated approach to the street furniture strategy has been adopted when designing the Curzon Station Enhanced Public Realm proposals which locates furniture in areas that assist placemaking, wayfinding, inclusivity and form part of the security strategy secure line. The boundary edges to Curzon Promenade function as both seating elements, providing rest points for those users who are less mobile, and secure line features as part of an integrated security strategy for the station.

The Curzon Station Enhanced Public Realm proposals also improve the lighting of Curzon Promenade, Curzon Square and Paternoster Place. The improved lighting proposals include:

- Introducing tree lighting within the Curzon Square rain gardens;
- Linear lighting integrated into the additional furniture proposed; and
- Additional low-level feature lighting along the bus route footway and the secondary paths in the Curzon Promenade and Curzon Square.

This improved lighting will provide adequate and safe lighting levels outside the Curzon Station and will improve the legibility and line of sight through the station; particularly catering to those users who will use the station in the dark.

1.3.4 Environmental impact

Outline what impact the project will have on the environment. If an Environmental Impact Assessment has been undertaken, append it and summarise the proposed risks, issues and mitigation measures here. Describe the metrics and measures included in the design and operation in order to reduce carbon emissions or other environmental safeguards. Evaluate the potential positive impact on climate change/zero carbon targets on the short/ medium and long term benefits of the project

An Environmental Impact Assessment has been undertaken for the proposal under the Hybrid Bill (Volume 2 CFA26). The majority of environmental impacts identified are associated with the construction of the HS2 rail line and station, and do not differ between the Hybrid Bill layout of Curzon Station and the proposed Curzon Station Enhanced Public Realm scheme layout.

However, differences between the Hybrid Bill scheme and the Curzon Station Enhanced Public Realm scheme which result in differing environmental impacts can be summarised as follows:

Introduction of additional greenery:

The Curzon Station Enhanced Public Realm proposals include an enlarged rain garden swale to the eastern end of Curzon Promenade and the introduction of a series of planted wet/dry rain garden spaces, seating areas, footpath connections and tree planting in an area that is to be retained as open lawn in the Hybrid Bill scheme. The additional greenery will create aesthetically pleasing, seasonal, sensory gardens that create important biodiversity and habitat connections through the site as well as contributing to the surface water management strategy and contributing to localised microclimates

providing shade and shelter. It will also contribute to localise carbon sequestration helping to improve air quality, decrease air pollution and mitigate climate change.

Increased use of recycled materials:

The increased size of Paternoster Place potentially allows for a greater area of reclaimed materials to be used in its construction thus reducing the amount of material waste associated with the construction of HS2.

1.3.5 Environmental indicators

Have appropriate environmental, quality control, monitoring indicators, processes and targets been identified as part of the projects?

All works associated with HS2, and thus the Curzon Station Enhanced Public Realm project, will be undertaken in accordance with the High Speed Rail (London - West Midlands) Environmental Minimum Requirements Annex1: Code of Construction Practice and all construction methods will follow the High Speed Rail (London - West Midlands) Environmental Minimum Requirements Annex1: Code of Construction Practice. Compliance to these codes of practice will be monitored by HS2.

As further explained in **Section 5.3** of this FBC, the management and implementation of the Curzon Station Enhanced Public Realm project will be monitored by BCC, as funding applicant, in accordance with their governance procedures. It is recommended that BCC monitor the following environmental indicators with HS2 and the contracted builders of the project to ensure that a high quality of public realm is installed along with the desired building processes being followed:

- Volume of recycled materials used in the construction of the enhanced public realm;
- Sq. m. of SUDS rain gardens installed as part of the enhanced public realm;
- Number of trees installed as part of the enhanced public realm; and
- Number of raised planting beds installed as part of the enhanced public realm.

A landscape management and maintenance plan, including long term design objectives, management responsibilities, maintenance operations, and their timing and frequency for the enhanced public realm areas for the expected lifetime of the development is being developed by HS2. This should ensure that the greenery installed as part of the enhanced public realm should be sufficiently maintained for the lifetime of the development. BCC should monitor whether or not the landscape management and maintenance plan is implemented in accordance with the approved details and thereafter maintained.

1.4 Constraints and Dependencies

1.4.1 Constraints and barriers to change

Provide details of the external conditions and parameters (policy decisions, ethical and legal considerations, rules and regulations, timescales, spend limits) that constrain project delivery and mitigating strategies to minimise their impact.

Project delivery is dependent on the construction of the HS2 Curzon Street station proceeding with adequate funding. HS2 Ltd is funded to deliver the scheme as set out in the HS2 Hybrid Bill. Funding to cover the additional costs of this scheme is being sought through this business case submission.

Since the submission of the OBC, the enhanced public realm proposals have received planning permission subject to a number of conditions; a lot of which relate to receipt of the detailed designs of the scheme which have since been finalised by HS2 and the construction contractor. It is required that these conditions are met in order for the project to proceed.

In addition, details around agreements with Network Rail relating to works that will be undertaken on and around the Park Street Bridge as part of the Paternoster Place element of the Curzon Station Enhanced Public Realm scheme are being developed. Since the submission of the OBC, the project team have commenced and completed Form 001 of Network Rail's consents process (which provides an 'approval in principle' for the works) and a review and risk assessment of the Park Street Bridge has been undertaken by Aecom (on behalf of Network Rail). Regular working groups meetings with members of BCC, HS2, Network Rail and MDJV have also been scheduled.

There are no further barriers to the progression of the Curzon Station Enhanced Public Realm scheme once the planning conditions are met and funding agreements are in place.

1.4.2 Dependencies

Confirm how the project's success depends on factors outside its control, be that internal to the organisation, across implementing partners or in the external environment.

There are several dependencies that are required to be completed for the scheme to be implemented and gain the proposed benefits:

- Continued delivery of HS2
- Meeting planning permission conditions
- Delivery Agreement with HS2 with appropriate risk allocation and change management
- Development and approval of FBC by the GBSLEP and BCC
- Development of the on-going maintenance strategy
- Ongoing engagement with Network Rail pertaining to the Park Street Bridge.

BCC, HS2 and Network Rail are continuing to work collaboratively on delivering the Curzon Station Enhanced Public Realm scheme.

1.4.3 If there are specific constraints on the project's start / end dates, please state these below

	Date	Details
Project cannot start before	March 2022	Funding via GBSLEP grant to be confirmed and ratified by BCC

2. Economic Case

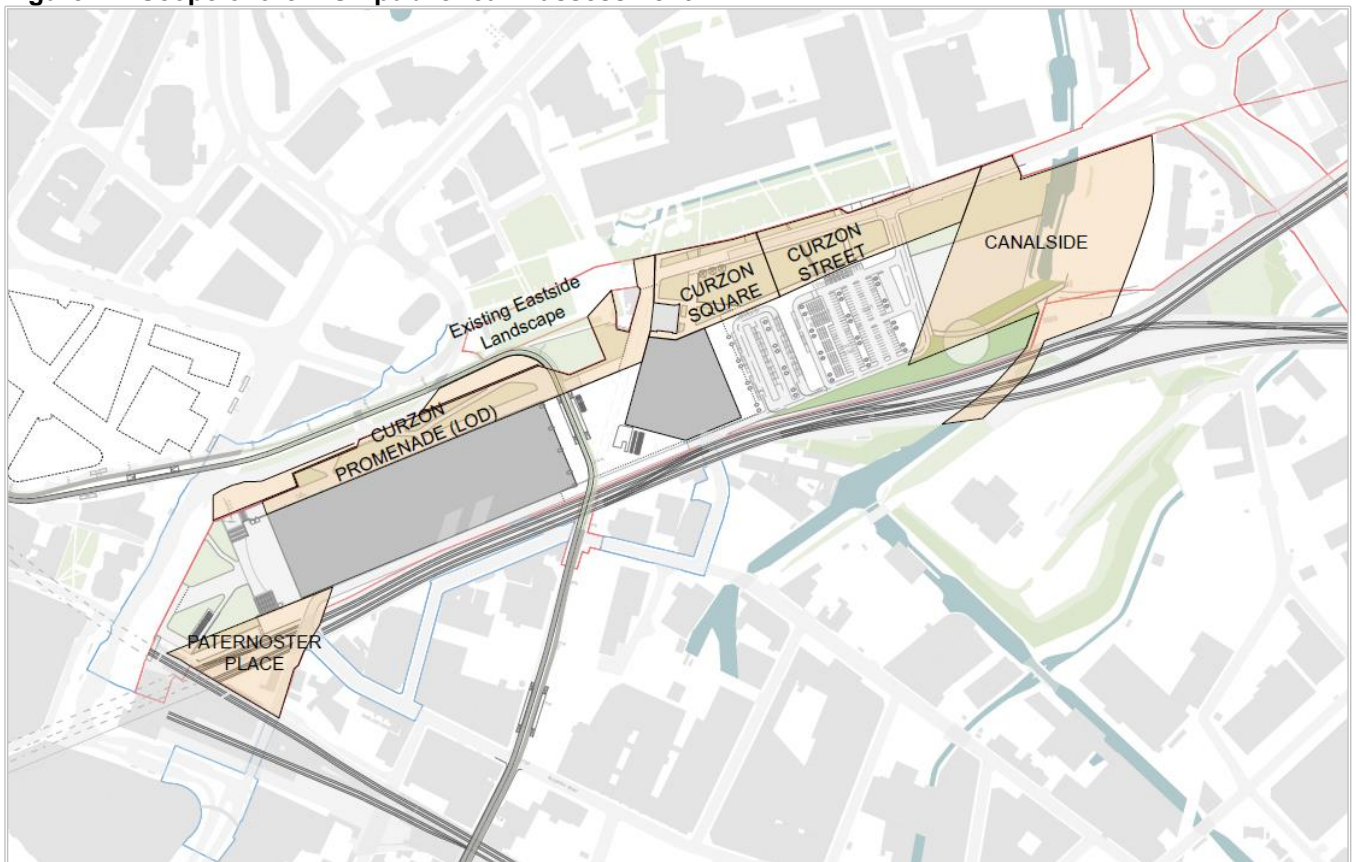
The economic case determines whether the scheme demonstrates value for money and assesses options considered to identify all their potential impacts – both beneficial and adverse – and summarises the resulting value for money. The level of appraisal included will be determined based on the project type. This Case considers impacts on the economy, environment and society using monetised information, qualitative and quantitative assessment. At SOBC it is expected that the Economic Case will be approximately 50% complete and 75% complete at OBC. The FBC will therefore revisit and update the Economic Case in relation to the shortlisted options and based on finalised scope and target costs of the preferred option to be delivered subject to approval of the business case.

2.1 Critical Success Factors

*Explain what criteria have been used for selecting the option that would achieve the project objectives. A sample list of critical success factors is included in **Appendix 1**; add more project-specific factors as required.*

A range of alternative design options for enhancing the landscape surrounding Curzon Station were developed by HS2 Limited's design consultant WSP. Potential public realm enhancement schemes were initially developed in five distinct locations surrounding Curzon Station, based on the requirements set out within the 'Birmingham Curzon Public Realm' design brief, which are shown in **Figure 11** below.

Figure 11: Scope of the WSP public realm assessment



A number of different options for each of the five locations were assessed against Critical Success Factors (CSFs) within the broad categories under **Appendix 1** which varied by which area the option was for. Within each CSF, option appraisal parameters were defined which included specific Appraisal Criteria

from which each public realm enhancement option could be assessed against. This criteria was specific to each of the five locations as covered in the **Appendix E1** attached to this FBC.

Table 4 shows the option appraisal parameters within each CSF that were used to assess the enhanced public realm options.

Table 4: Option appraisal parameters for each CSF

Key Critical Success Factors	Option Appraisal Parameter
Strategic fit and meets business needs	<ul style="list-style-type: none"> Strategic Goals and HS2 Programme Benefits Commitments
Potential Value for Money	<ul style="list-style-type: none"> Demand Environment Commercial Development
Supplier capacity and capability	<i>Given the similar nature of the different enhanced public realm options for the different areas surrounding Curzon Station, it was unlikely that there would have been a material variance in the ability of potential suppliers to deliver the required services or that the required works for the different options would have altered potential suppliers' interest in the contract for the works. Therefore, the "Supplier capacity and capability" CSF was not considered as a criterion for the purpose of the appraisal.</i>
Potential affordability	<ul style="list-style-type: none"> Costs
Potential achievability	<ul style="list-style-type: none"> Construction Feasibility Health and/or Safety
Operational Feasibility*	<ul style="list-style-type: none"> HS2 Operation Feasibility –Operations (Stations, Depots etc.) HS2 Operation Feasibility – Travelling Public Maintenance

*Additional CSF incorporated to assess the operation of the options

2.2 Options Appraisal – Longlist

2.2.1 Longlist of options

Use **Appendix 2** to list a wide range of possible ways (options) that have been considered for delivering project objectives (an alternative template can be used providing it satisfies this as minimum criteria). The longlist should reflect a range of solutions in terms of size, scope, location, costs, outputs and outcomes, and include the "do nothing / do minimum" and "do maximum" options. Describe each option's advantages and disadvantages in terms of project's critical success factors.

A longlist of options to enhance the public realm at the locations shown in **Figure 11** were developed and appraised against the 'Main Station Base Scheme' (i.e. the base public realm that is being delivered as part of the main Curzon Station works) which is the 'Reference Case'. Options CP1, CS1, CaS1 and PP1 all refer to 'Main Station Base Scheme'.

The longlist of options appraised include:

Curzon Promenade:

- CP2 – Ecology & Sculpture Park;
- CP3 – Active Terraced Garden; and
- CP4 – Sports, Fitness & Play.

Curzon Square & Curzon Street:

- CS2 – Formal Tree Grove;
- CS3 – Garden Square; and
- CS4 – Multi-functional Garden Square.

Canal Side:

- CaS2 – Option 1;
- CaS3 – Option 2; and
- CaS4 – Option 3.

Paternoster Place:

- PP2 – Stepped Terracing & Ramp;
- PP3 – Small Corner Chamfer;
- PP4 – Medium Corner Chamfer;
- PP5 – Large Corner Chamfer;
- PP6 – Large Corner Chamfer with Void;
- PP7 – Bridge Link with Steps;
- PP8 – Enhanced Bridge Link with Steps;
- PP9 – Comprehensive Redevelopment of Site;
- PP10 – Expanded Landscape to Bordesley Street and Park Street;
- PP11 – Further Expanded Landscape (Bordesley Street up to the junction with Alison Street); and
- PP12 – Further Expanded Landscape (B4114 Park Street under Moor Street viaduct).

Appendix 2 provides further details of the different options listed above outlining the strengths, opportunities, weaknesses, and threats in terms of the CSFs.

2.2.2 Options shortlisting

Describe the process and methodology of shortlisting the options, providing a clear justification for why the discarded options were ruled out. Include who was involved in this process and how the decision was endorsed.

An initial shortlisting of the options was undertaken by HS2 Ltd and their consultants (WSP) in engagement with BCC. Each of the longlist options were assessed against the relevant CSFs detailed in **Section 2.1**. Each option was scored out of five and rated using a red, amber, and green (RAG) approach per relevant CSFs. Full details of the initial shortlisting exercise can be found in “SDSC2162 - Lot 4 Phase One Stations Design Services Contract Curzon Street BCC Funded Public Realm Optional Scope Single Option Selection SIFT Report” (2018) which is appended to this Business Case as

Appendix E1. A summary of the strengths, opportunities, weaknesses, and threats of each option in terms of the CSFs can also be found in **Appendix 2**.

The information in **Table 5** summarises the findings of the option sifting process with further details covered in **Appendix E1**.

Table 5: Curzon Station Enhanced Public Realm Initial Shortlisted Options

Area	Sift Outcomes
Curzon Promenade	Option CP2 - To be taken forward for further development. CP2 was deemed to provide most intuitive pedestrian routing & access and provide a secure & flexible environment.
Curzon Square & Curzon Street	Option CS2 - To be taken forward for further development. When viewed in isolation from the potential attenuation canal, which currently is not yet accepted Design Assurance Level 3 (DAL3) design, this would appear to be the preferred option, with the acknowledgement that if/when the attenuation canal becomes accepted DAL3 design, the area of Curzon Street will change to accommodate it as part of the base scheme.
Canal Side	Option CaS4 - To be taken forward for further development. CaS4 provides most facilitates and connections to adjacent areas which appears to be the desired outcome, with the acknowledgement that items which we may choose to omit or simplify e.g. Victorian Bridge renovation can be omitted or simplified going forwards.
Paternoster Place	Option PP5 - To be taken forwards for further development. Options PP3 & PP4 - To be taken forwards for further consideration Whilst it is understood that PP5 may be the aspirational design for the bridge widening, going forwards it may be BCC's and the team's recommendation that the option be simplified to either the PP4 or PP3 variant, due to impact on existing NR infrastructure & the Taboo Cinema.

The initial shortlisted options detailed in **Table 5** were then further shortlisted using a process which built upon the sifting process undertaken by WSP in consultation with HS2, Birmingham City Council and other professional advisors. This entailed subjecting the shortlisted options to a strategic assessment involving a review and scoring assessment, based on the ability of each option to meet key assessment criteria; namely strategic fit, potential VfM, potential achievability, and potential affordability. Scores were applied ranging from very high (a maximum score of 5) to very low (a score of 0) which determined those that best met the key assessment criteria and that were subsequently short-listed for more detailed appraisal. The options which scored zero for any criterion or had an overall score of 8 or less were not short-listed, with the exception of the Business as Usual case.

Table 6 sets out the results of the further shortlisting exercise.

Table 6: Curzon Station Enhanced Public Realm Further Shortlisting Exercise

	Strategic fit	Potential VfM	Potential Achievability	Potential Affordable	Short-listed
Reference case					

Business as Usual	Does not fit with the strategic vision and policy objectives	N/A	Would likely be deliverable/achievable	N/A	Yes (as reference case)
Enhanced public realm components					
Paternoster Place – small corner chamfer (Option PP3)	Enhances access to Digbeth in line with strategic objectives for the enhancement works, but impact lower than other Paternoster Place options. Score: 3	Lower cost has potential to be offset by reduced impact arising from more limited linkage with Digbeth. Score: 2	Likely to be achievable subject to securing agreement and rights from Network Rail. There are no other major impediments to delivery. Score 3	Expected to be affordable within the wider budget envelope of the scheme, subject to the approval of LEP capital funding. Score: 4	No. Overall score: 12
Paternoster Place – medium corner chamfer (Option PP4)	Enhances access to Digbeth and directly facilitates the delivery of new commercial accommodation in accordance with the objectives of Birmingham City Council for the enhancement works. Score: 4	Unlocks significant HS2 commercialisation opportunities, offsetting cost impact of overbridging rail line. Score: 4	Likely to be achievable subject to securing agreement and rights from Network Rail. There are no other major impediments to delivery. Score 3	Expected to be affordable within the wider budget envelope of the scheme, subject to the approval of LEP capital funding. Score: 4	Yes Overall score: 15
Paternoster Place – large corner chamfer (Option PP5)	Enhances access to Digbeth in accordance with the objectives of Birmingham City Council for the enhancement works. Score: 3	Significant impact on development activity within Digbeth partly offset by cost increases. Score: 3	Likely to be achievable subject to securing agreement and rights from Network Rail. There are no other major impediments to delivery Score 3	Expected to be affordable within the wider budget envelope of the scheme, subject to the approval of LEP capital funding. Score: 4	Yes. Overall score: 13

Curzon Promenade (Option CP2)	Enhances the public realm to provide an improved arrival experience for passengers and creates an environment that facilitates the delivery of new commercial and residential development. Score: 4	Potential for costs to be offset through enhancing connectivity and environment adjacent to strategic development schemes, notably Martineau Place. Score: 3	Achievable as land within the ownership and control of Birmingham City Council. Score: 4	Expected to be affordable within the wider budget envelope of the scheme, subject to the approval of LEP capital funding. Score: 4	Yes. Overall score: 15
Curzon Square (Option CP2)	Enhances the public realm to provide an improved arrival experience for passengers and creates an environment that facilitates the delivery of new commercial and residential development. Score: 4	Important to link effectively with existing public realm provision, but direct benefits may not be sufficient to justify level of investment envisaged. Score: 2	Achievable as land within the ownership and control of Birmingham City Council. Score: 4	Expected to be affordable within the wider budget envelope of the scheme, subject to the approval of LEP capital funding. Score: 4	Yes. Overall score: 14
Curzon Street (Option CS2)	Enhances public realm but limited impact in terms of facilitating the delivery of new commercial and residential development. Score: 2	Level of benefit achieved above baseline scheme potentially insufficient to justify level of investment. Score: 2	Achievable as land within the ownership and control of Birmingham City Council. Score: 4	Potentially affordable within the wider budget envelope of the scheme, subject to the approval of LEP capital funding. Score: 3	No. Overall score: 11
Canalside (Option CaS4)	Enhances public realm but limited impact in terms of facilitating the	Within current market conditions, the level of benefit is	Potentially achievable as designed subject to	Unlikely to be affordable within the wider budget	No Overall score: 8

	delivery of new commercial and residential development. Score: 2	unlikely to be sufficient to justify the considerable delivery cost. Score: 2	ensuring environmental compliance and securing appropriate rights and ownerships. Score: 3	envelope of the scheme, subject to the approval of LEP capital funding. Score: 1	
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The options listed as being shortlisted in **Table 6** above were combined in different combinations to produce the following shortlisted options that were appraised in the Economic Case “*Birmingham Curzon – Enhanced Public Realm OBC*” which has been appended to this FBC as **Appendix E7**:

- **Option 1: Business as Usual (Do Nothing)** - under this option, only the HS2 baseline scheme would be delivered. While this would create a high quality environment, opportunities to maximise the strategic impact of the HS2 station would not be realised. In particular, it would fail to secure high quality links to strategically important development sites within Digbeth. In addition, the integration with existing public realm and key institutions to the north of the station would be of a lower quality.
- **Option 2: Curzon Promenade and Curzon Square** – this option includes works to extend the baseline public realm scheme beyond the HS2 land to enhance integration and linkages along the corridor to the north of the station. Under this option, no enhancement works would be progressed at Paternoster.
- **Option 3: Paternoster (medium corner chamfer), Curzon Promenade and Curzon Square** – in addition to the works proposed under Option 2, this option would support the creation of enhanced linkages to Digbeth. The delivery of a medium chamfer would further support HS2 commercialisation opportunities, with emerging proposals for a 40,000 sqm office scheme fronting onto Station Square.
- **Option 4: Paternoster (large corner chamfer), Curzon Promenade and Curzon Square** – this option would enhance linkages with the Digbeth area. However, the chamfer would not be expected to promote the HS2 commercialisation opportunity.

The options above were then appraised in order to identify a preferred scheme option.

2.3 Options Appraisal – Short list

2.3.1 Cost-benefit analysis

Provide a cost-benefit analysis for each shortlisted option, ensuring that:

- *both capital and operating costs are included;*
- *these costs cover the entire benefit realisation period;*
- *appropriate discounting techniques are applied; and*
- *optimism bias is shown in the calculation of both costs and benefits.*
- *How changes in the climate can impact on the cost and benefit (on the long term too) of each option?*

Appendix 3 provides a template to detail the cost-benefit analysis (CBA) of shortlisted options. Alternative templates that satisfy this as minimum criteria can be used.

The analysis must follow the standard appraisal practice for the type of intervention, such as DfT, DfE or MHCLG.

Approach

This section sets out the approach that was adopted when undertaking the CBA of the Curzon Station Enhanced Public Realm shortlisted scheme options which is summarised in Section 4.2 of the “*Birmingham Curzon – Enhanced Public Realm OBC*” which has been appended to this FBC as **Appendix E7**.

The Curzon Station Enhanced Public Realm project will comprise public sector support towards key works of public benefit involving augmented public realm improvements. The methodology for assessing the economic case of the project applied an approach that is consistent with the HM Treasury’s Green Book (April 2018) and MHCLG’s Appraisal Guide (December 2016) which sets out that projects should be appraised on the basis of a benefit cost ratio (BCR) reflecting the private benefit associated with the change in land use (land value uplift) and the external benefits (and costs) of the scheme, compared to the net public sector cost. **Table 7** sets out a summary from the MHCLG Appraisal Guide of the potential benefits and costs that inform the assessment of the BCR.

Table 7: Description of the benefits and costs identified within the MHCLG Appraisal guide*

	Consumer and business impacts	External impacts and public sector finance impacts
Present value benefits (numerator)	Private benefits e.g. land value uplift [Private sector costs if not captured in land value] Public sector grant or loan if not captured in land value [Public sector loan repayments if not captured in land value] Distributional benefits	External benefits [External costs]
Present value cost (denominator)		Public sector grant and/or loan [Other public sector loan repayments] Other public sector costs [Other public sector revenues]

*The benefits and costs in brackets are negative values

In line with guidance, two BCRs for each shortlisted scheme were calculated:

- An ‘initial’ BCR which took into consideration all appraisal values where there is a strong underlying evidence base (i.e. land value uplift); and
- An ‘adjusted’ BCR which included additional evidence that is not currently widely-recognised but may reflect an appraiser’s own accredited experience (i.e. net additional jobs and GVA benefits).

As outlined in **Section 1.3.2** of this Business Case, numerous studies undertaken have shown that enhancing the public realm can have a wide range of beneficial economic impacts on surrounding residential and commercial property. Based on this evidence review of the impacts of public realm, it is anticipated that the provision of an improved public realm will influence surrounding new development activity in a variety of ways:

- **Vacancy rates** – there is evidence that the creation of an attractive environment can reduce levels of vacancy. While this is particularly evident within a retail setting, there is indirect evidence that the amenity and image benefits associated with proximity to high quality public realm can increase demand for other commercial accommodation resulting in reduced vacancy.
- **Values** – the evidence outlined in **Section 1.3.2** of this Business Case highlights examples from the UK and overseas where investment to deliver a comprehensive public realm solution has resulted in an increase in rental values. This applies to both residential and commercial premises and reflects the importance of location for the valuation of land and premises.
- **Intensity of development** – through enhancing values and reducing vacancy, public realm investment also has the capacity to increase the intensity of development. This is particularly relevant within a core city centre location such as Curzon.
- **Pace of development** – the creation of a high quality and cohesive public realm environment is expected to create the conditions to attract occupier and investor. Through bolstering demand, investment in public realm has the potential to mitigate risk and enable the developer to accelerate the commencement and rate of delivery. This is expected to be particularly relevant for complex, multi-phase schemes.
- **Type of activity** – through transforming the environment, public realm investment has the potential to generate development demand from alternative uses. This is particularly relevant within an edge of centre location, where investment in former industrial zones can catalyse demand for higher value uses including office, leisure and residential.

The economic appraisal of the Curzon Station Enhanced Public Realm shortlisted scheme options was based on the premise that enhancing the public realm around Curzon Station will influence surrounding new development activity in the above ways.

Level of impacts

Consideration has been given to the level of impact associated with each of the variables identified above arising as a result of public realm enhancements around the Curzon Station. An evidence review of what impacts improvements to public realm can and have had (detailed in **Section 1.3.2** of this Business Case) found that public realm can have significant economic impacts with evidence from case studies suggesting that public realm improvements can increase non-residential land values by up to 33%; retail land values by 166%, residential rents by 53%; and generate up to a 50% increase in the quantum of residential development in the surrounding areas²⁵.

Due to the scheme entailing enhancements to new public realm that would be built even if the enhancements weren't undertaken (rather than implementing completely new public realm in an old run-down environment), a more conservative approach regarding the scheme's effect on development has been adopted for the economic appraisal presented in this Business Case. This conservative approach has been adopted to reflect that the economic appraisal analysis presented in this Business Case focuses on the additional impact of the enhanced public realm project over and above the effects associated with the HS2 base scheme.

²⁵ Place Making: The Value of the Public Realm report (CBRE, 2017)

Table 8 details the level of impact on forecast development which is attributable to the public realm enhancement works that has been assumed for this economic appraisal (covered in Section 4.5 of the “Birmingham Curzon – Enhanced Public Realm OBC” which has been appended to this FBC as **Appendix E7**).

Table 8: Public realm enhancement impact

	EZ Sites which cover the area where the enhanced public realm works will be built	Other EZ sites
Forecast Development Sites		
Vacancy rates	Reduce assumed vacancy rates by 5.0%	Reduce assumed vacancy rates by 2.5%
Values	Increase rents by 5.0%	Increase rents by 2.5%
Intensity of development	Increase density of development by 2.5% above baseline	Increase density of development by 2.5% above baseline
Pace of development	Accelerate delivery by 1 year over baseline	Accelerate delivery by 1 year over baseline
Type of use	No change assumed	No change assumed
Existing development premises		
Vacancy rates	No impact	No impact

It should be noted that public realm enhancement works would also be expected to result in positive economic impacts for existing premises but, as indicated within **Table 8**, the impact on existing development premises has not been assessed as part of this economic appraisal. As stated above, the assumptions used in the economic appraisal (detailed in **Table 8**) are considered to be conservative compared with those identified in previous studies (see **Section 1.3.2** of this FBC for further details of these previous studies as well as Section 3.4 of the “Birmingham Curzon – Enhanced Public Realm OBC” which has been appended to this FBC as **Appendix E7**). For example, in the case of the Place du Marche Saint Honore in Paris, retail values increased by 166% and residential values by 53% when a “change of image” was implemented through upgrading the public realm in the area. In addition, work undertaken by GVA (real estate advisory business) in December 2014 predicted that commercial rents in the Curzon area would grow by 20.3% due to public realm enhancements at Curzon Station, once more highlighting that the values used within this economic appraisal and contained within **Table 8** are conservative.

Economic Benefits

The economic benefits of the shortlisted options have been assessed in line with the MHCLG Appraisal Guide, which identifies that the value to society of a given intervention can be separated into two elements:

- The private benefit associated with the change in land use; and
- The net external benefit of the resulting development.

The monetised benefits included in the CBA are related to the enhanced public realm scheme's impact on the following:

- Land value uplift (private benefit);
- Amenity benefit (external benefit); and
- Distributional impacts (external benefit).

Land value uplift

In terms of the private economic benefit, land value uplift is MHCLG's recommended approach to valuing the benefit of development. Land value uplift estimates for the forecast developments surrounding Curzon

Station were calculated for each enhanced public realm option based on its forecast impact to new development activity.

The land value uplift (present value in constant 2019 prices) associated with each option is set out in **Table 9** which has been taken from Section 4.6 of the “Birmingham Curzon – Enhanced Public Realm OBC” (appended to this FBC as **Appendix E7**) and the associated Economic Appraisal model that formed the appendix to the OBC (appended to this FBC as **Appendix E8** - OBC Economic Model).

The assumptions feeding into the land value uplift calculations have been further detailed in **Section 2.3.2** of this FBC and in Section 4.5 of the “Birmingham Curzon – Enhanced Public Realm OBC” which has been appended to this FBC as **Appendix E7**.

Table 9: Land value uplift (£m, 2019 prices, discounted)

	Land value uplift
Option 2 - Curzon Promenade and Curzon Square	£6.30
Option 3 - Paternoster (medium corner chamfer), Curzon Promenade and Curzon Square	£26.37
Option 4 - Paternoster (large corner chamfer), Curzon Promenade and Curzon Square	£10.56

Amenity benefit

In addition to the private benefits, there are external impacts that are likely to be associated with the enhanced public realm. For example, the MHCLG Appraisal Guide identifies amenity cost/benefit values across different ‘greenspace’ land types, with £109,138 per hectare per annum for “Urban Core” projects (£120,809 in 2019 prices). The development of the Curzon Enhanced Public Realm Project will result in the reuse of up to 1 ha of brownfield land for high quality public realm under Options 3 and 4, with 0.8 ha enhanced under Option 2.

The estimated amenity benefit using the MHCLG Appraisal Guide value of each option is set out in **Table 10** which has been taken from Section 4.6 of the “Birmingham Curzon – Enhanced Public Realm OBC” (appended to this FBC as **Appendix E7**) and the associated Economic Appraisal model that formed the appendix to the OBC (appended to this FBC as **Appendix E8** - OBC Economic Model).

Table 10: Amenity benefits (2019 prices, £m, discounted)

	Amenity Benefits
Option 2 - Curzon Promenade and Curzon Square	£1.28
Option 3 - Paternoster (medium corner chamfer), Curzon Promenade and Curzon Square	£1.56
Option 4 - Paternoster (large corner chamfer), Curzon Promenade and Curzon Square	£1.56

Distributional impacts

The Curzon scheme is seeking to help rebalance activity from London and the South East to Birmingham and the West Midlands. As such it has a clear focus is on redistributing growth. Consequently, local authority level distributional weights were applied to the calculated benefits of the shortlisted options. The approach used to calculate these is that set out in the HM Treasury Green Book, based on equivalised disposable household income and welfare weights (the estimate of the marginal utility of income). A distributional weight of 1.4 was applied for Birmingham.

The distributional benefits associated with the shortlisted options are shown in **Table 11** which has been taken from Section 4.6 of the “Birmingham Curzon – Enhanced Public Realm OBC” (appended to this FBC as **Appendix E7**) and the associated Economic Appraisal model that formed the appendix to the OBC (appended to this FBC as **Appendix E8** - OBC Economic Model).

Table 11: Distributional benefits (2019 prices, £m, discounted)

	Distributional Benefits
Option 2 - Curzon Promenade and Curzon Square	£3.03
Option 3 - Paternoster (medium corner chamfer), Curzon Promenade and Curzon Square	£11.17
Option 4 - Paternoster (large corner chamfer), Curzon Promenade and Curzon Square	£4.85

Project Costs

The public sector economic costs associated with the delivery of each of the Curzon Enhanced Public Realm shortlisted scheme options were estimated by the project team at OBC stage and shown in **Table 12** below.

Table 12: Public sector costs of shortlisted options (£m)

	Option 2		Option 3		Option 4	
Cost item	Total (2019 prices)	Present value (2019 prices)	Total (2019 prices)	Present value (2019 prices)	Total (2019 prices)	Present value (2019 prices)
Feasibility & design	£1.50	£1.36	£1.50	£1.47	£1.50	£1.36
Public realm works	£6.09	£4.96	£14.54	£11.83	£13.27	£10.80
Land/Rights	£0.00	£0.00	£1.00	£0.97	£1.00	£0.97
BCC management cost	£0.30	£0.28	£0.62	£0.54	£0.30	£0.28
Lifetime costs	£1.41	£0.93	£1.41	£0.93	£1.41	£0.93
Optimism bias	£3.89	£3.08	£8.04	£6.51	£7.37	£5.92
Total	£13.19	£10.60	£27.10	£22.24	£24.84	£20.24

Work undertaken in the OBC Economic Model (appended to this FBC as **Appendix E8**) has been used to collate **Table 2**. Please refer to tab “ Report Tables” in **Appendix E8** for full details.

Value for Money

Table 13 brings together the costs and benefits of the short-listed intervention options and provides an overall indication of value for money in terms of the BCR and Net Present Social Value (NPSV). The Curzon enhanced public realm scheme proposed under Option 3 was calculated to achieve an adjusted BCR of 1.26:1 if distributional benefits are excluded, which represents acceptable value for money, and 1.76:1, which is acceptable/good value for money, if they are included. This has been covered in further detail in Section 4.7 of the “Birmingham Curzon – Enhanced Public Realm OBC” (appended to this FBC as **Appendix E7**).

Table 13: Costs and benefits (discounted, £m)

	Option 2	Option 3	Option 4
Present Value Costs (including OB)	£10.60	£22.24	£20.24
Present Value Benefits			
<i>Land value uplift</i>	£6.30	£26.37	£10.56
<i>Amenity benefit</i>	£1.28	£1.56	£1.56
<i>Distributional benefits</i>	£3.03	£11.17	£4.85
Total benefits	£10.61	£39.10	£16.96
Net Present Social Value (NPSV)	£0.01	£16.86	-£3.28
BCR (incl distributional impacts)	1.00	1.76	0.84
BCR (excl distributional impacts)	0.71	1.26	0.60

Additional economic benefits

As well as land value uplift benefits, amenity benefits, and distributional impact benefits; enhancing the public realm surrounding Curzon Station is expected to have additional economic benefits such as creating additional Full Time Equivalent (FTE) jobs, increasing Gross Value Added (GVA), and generating additional business rates income. Although the value of these additional economic benefits have not been included in the BCR calculation (in line with guidance in the MHCLG Appraisal Guide), they have been calculated over a 30 year appraisal period to ensure that the scheme's full economic impact is properly understood.

The net additional economic benefits of the shortlisted options were also assessed – that is the extent to which activity takes place at all, on a larger scale, earlier or within a specific designated area or target group as a result of the intervention. In order to assess the additionality of the proposals, the following factors were considered:

- **leakage** – the proportion of outputs that benefit those outside of the target area;
- **displacement** – the proportion of the proposed development's outputs accounted for by reduced outputs elsewhere in the target area. Displacement may occur in both the factor and product markets;
- **multiplier effects** – further economic activity associated with additional local income and local supplier purchases; and
- **deadweight** – outputs which would have occurred without the proposed development.

The assumptions applied for each of the above factors are outlined in **Section 2.3.2** of this FBC.

Further details regarding the calculation of the shortlisted options' additional economic benefits is covered in Sections 4.5 and 4.6 of the "Birmingham Curzon – Enhanced Public Realm OBC" (appended to this FBC as **Appendix E7**) and the associated Economic Appraisal model that formed the appendix to the OBC (appended to this FBC as **Appendix E8 - OBC Economic Model**).

A detailed methodology and approach with all estimates are included within section 4.5.3 of the OBC

Table 14 details the net additional economic benefits that were calculated for the shortlisted options.

Table 14: Costs, benefits, and cost effectiveness of shortlisted options

	Option 2	Option 3	Option 4
Attributed total public sector economic costs (adjusted for optimism bias, £m)*			
Discounted marginal public sector cost	£10.60	£22.24	£20.24
Benefits			

Net additional attributable jobs	182	1,923	298
Net additional attributable cumulative (5 years) GVA (£m)	£41.97	£407.10	£67.49
Net additional attributable housing units	21	35	35
Cost effectiveness (attributed)			
Cost per net additional job	£58,233	£11,568	£67,941
BCR (GVA: economic cost)	3.96	18.30	3.33
Cost per net additional housing unit	£493,932	£638,731	£581,366

*The total public sector cost has been attributed between economic (jobs and GVA) and housing outcomes.

Key Findings

The key results of the shortlist options appraisal is included in **Table 15** below.

Table 15: Shortlist Options Appraisal Summary Table (£m)

		Option 2	Option 3	Option 4
A	Present Value Benefits – based on Green Book principles and Green Book Supplementary and Departmental guidance	£7.58	£27.93	£12.12
B	Present Value Costs / (Surplus)	£10.60	£22.24	£20.24
C	Present Value of other quantified impacts	£3.03	£11.17	£4.85
D	Net Present Public Value A-B & [A-B+C]	-3.02 [0.01]	5.69 [16.86]	-8.13 [-3.28]
E	'Initial' Benefit-Cost Ratio [A/B]	0.71	1.26	0.60
F	'Adjusted' Benefit-Cost Ratio [A+C]/B]	1.00	1.76	0.84
G	Significant Non-monetised impacts	Active travel mode, Agglomeration, Wage premium, Amenity, Regeneration benefits, image benefits, community health and wellbeing, tourism benefits and labour supply. The benefits are expected to be greatest under Option 3, reflecting the scale of intervention and associated transformation achieved.		
H	Value for Money (VfM) Category	Poor/Acceptable	Acceptable/Acceptable	Poor
I	Switching Values and rationale for VfM category	Benefits: -0.1% Costs: 0.1%	Benefits: -43.1% Costs: 75.8%	N/A

The key findings of the shortlist option appraisal (shown **Table 15**) resulted in Option 3 being recommended as the preferred scheme option as it was forecasted to offer acceptable value for money on a BCR basis as it was found to compare favourably with traditional unit cost and GVA value for money benchmarks. In addition, it was also found to deliver substantial wider benefits. Full details of the shortlist option appraisal

can be found in the “Birmingham Curzon – Enhanced Public Realm OBC” (appended to this FBC as **Appendix E7**) and the associated Economic Appraisal model that formed the appendix to the OBC (appended to this FBC as **Appendix E8** - OBC Economic Model).

2.3.2 Assumptions

Displacement: will the proposed intervention lead to a reduction in economic activity or duplication of skills provision elsewhere in Greater Birmingham? List and describe assumptions underpinning the above analysis, including the rationale for the proposed benefit realisation period, optimism bias and any contingency.

The sections of text below detail the assumptions which underpin the different elements of the economic appraisal of the Curzon Station Enhanced Public Realm scheme shortlisted options.

General economic appraisal assumptions

The following key inputs and assumptions have been applied to the economic appraisal of the Curzon Station Enhanced Public Realm scheme presented in this FBC:

- The scheme has been appraised over a 30-year period, consistent with appraisal guidance.
- Where Present Value figures are presented, costs and values have been discounted at 3.5%, in line with the HM Treasury Green Book.
- Please note that the monetised costs and benefits calculated for the shortlisted options have been presented in 2019 prices (with general inflation excluded) because this is when the shortlisted options CBA was undertaken. Refer to “Birmingham Curzon – Enhanced Public Realm OBC” (appended to this FBC as **Appendix E7**) and the associated Economic Appraisal model that formed the appendix to the OBC (appended to this FBC as **Appendix E8** - OBC Economic Model) for more details. *Please note for the preferred option and the Economic Model for the FBC (Section 2.4 onwards), the monetised costs and benefits have been presented in 2021 prices, with general inflation excluded.*
- The costs and benefits of the enhanced urban realm scheme are presented in gross terms and relative to the reference case (Business as Usual (do nothing) option). Adjustments have also been made for leakage, displacement, and multiplier effects where appropriate.
- An allowance of 40% of the total scheme costs (excluding risk) was made to account for optimism bias during the shortlisted options CBA. This allowance is in line with suggested percentages in Table 8 of Department for Transport's TAG Unit A1.2 Scheme Costs (November 2021) for a scheme between Stage 1 and Stage 2 of design. *Please note for the updated CBA of the preferred option, that is presented in Section 2.4 of this FBC, an allowance of 20% of the total scheme costs (excluding risk) was made to account for optimism bias to reflect the fact that cost estimates at the current stage of scheme design have been ratified by HS2's appointed contractor MDJV and have a greater degree of certainty and robustness than those costs presented at FBC.*

Additional economic benefits

The following assumptions were applied when calculating the net additional economic benefits of the enhanced public realm shortlisted options:

- **leakage** – a leakage rate was applied at the GBSLEP level, based on commuting data derived from the 2011 Census. While many of the jobs created will be in higher value sectors, there will also be a number of employment opportunities provided in business support, retail, and leisure sectors, which were considered likely to be relatively accessible to local residents. Overall, the leakage rate was estimated to be 15%;

- **displacement** – although enhancing the public realm surrounding Curzon Station will help attract economic activity to the area that may have occurred in other areas within Birmingham without the scheme in place, it is also thought that the proposals will also attract new investment and economic activity to the area, helping to stimulate growth within the wider Birmingham economy and increase the competitiveness of indigenous businesses. It is also worth noting that the majority of the future developments which will be impacted by the enhanced public realm (those from which the benefits of the scheme are derived from) will happen without the scheme in place; the scheme is just forecast to increase their density. Therefore, in line with guidance contained in the DCLG Appraisal Guide, displacement rates of 50% was applied to all uses;
- **multiplier** – alongside directly supporting employment creation, the proposed development will also lead to additional job opportunities through supply chain expenditure (indirect effects) and induced effects through employee spend on goods and services within the region. In order to take into account both the indirect and induced multiplier effects associated with the scheme, reference has been made to benchmarks outlined within additionality guidance. A composite employment multiplier of 1.46 was applied reflecting the scale of the proposed development; and
- **deadweight** – deadweight was calculated through the assessment of the Business as Usual (do nothing) option. The outcomes under this scenario have been deducted from the assessment of the calculated gross marginal effects of the shortlisted options to generate the net economic impact of each option.

2.3.3 Qualitative benefits

Describe qualitative benefits of each shortlisted option, including impact on social value. What evidence is available that these benefits will be realised?

The shortlist option appraisal also determined that enhancing the public realm surrounding Curzon Station would likely result in substantial wider unquantifiable economic benefits which are related to the following:

- Active travel mode usage;
- Agglomeration;
- Wage premium;
- Existing property value;
- Construction and supply chain;
- Regeneration;
- Community, health, and wellbeing;
- Image;
- Tourism; and
- Labour supply.

It was determined that each shortlisted option would generate a similar level of qualitative benefits relating to those detailed in the list above. A more detailed description of how these benefits would arise is contained in **Section 2.4.2** of this Business Case.

2.3.4 Digital Infrastructure

Demonstrate how you have evaluated the potential positive or negative impact of new technology (5G/digital) on the short, medium, and long-term benefits of the project.

Although the Curzon Station Enhanced Public Realm scheme does not include the implementation of any digital infrastructure, the scheme will be compatible with any digital infrastructure proposed for Curzon Street Station and the BEE Metro line, including provision of passenger information, Wi-Fi/4G/5G mobile connectivity, and any public information provided around Curzon Station.

2.3.5 Environmental Benefits

Demonstrate how the environmental benefits of each option have been included and calculated in the CBA (Consider carbon emission value). Provide evidence of measures to reduce carbon emissions from the project and associated activities

As outlined in **Section 2.3.3**, enhancing the public realm surrounding the Curzon Station will encourage the use of active modes (e.g. walking and cycling) for travelling to and from Curzon Station by creating an environment surrounding the station that is more conducive to active mode travel. This suggests that the scheme proposals will increase the use of active transport modes. Based on the assumption that increasing active transport mode use will decrease motorised traffic, the scheme is forecast to have environmental benefits relating to the reduction of noise, air pollution and greenhouse gas emissions relating to reduced vehicular traffic.

In addition, the Curzon Station Enhanced Public Realm proposals include the introduction of a net increase in area of greenery and the introduction of additional trees above what is proposed in the base scheme. For example, the scheme enlarges a rain garden swale located to the eastern end of Curzon Promenade and introduces a series of planted wet/dry rain garden spaces and tree planting in an area that is to be retained as open lawn in the Hybrid Bill scheme. The inclusion of additional trees in the Curzon Station Enhanced Public Realm scheme will absorb additional Carbon Dioxide (CO₂) from the surrounding environment and release additional oxygen back into the air, thus helping combat climate change. Trees also absorb odours and pollutant gases (nitrogen oxides, ammonia, sulphur dioxide and ozone) from the surrounding environment and filter particulates out of the air by trapping them on their leaves and bark. This will increase the air quality in the vicinity of Curzon Station, which is another environmental benefit of the scheme.

The environmental benefits of the Curzon Station Enhanced Public Realm scheme outlined above have not been quantified and are not accounted for in scheme's CBA. It is expected that the scheme's value for money would increase if they were.

2.4 Options Appraisal – Preferred Option (OBC and FBC stage only)

2.4.1 Scope of work

Provide a description of the preferred option in terms of what it will deliver, over what time period, and what the output acceptance criteria will be.

The scheme appraised in this Business Case entails the enhancement of public realm in the following three distinct areas surrounding the Curzon Station:

- Curzon Promenade;
- Curzon Square; and
- Paternoster Place.

These three areas are shown in **Figure 12** below.



Figure 12: Potential Public Realm Enhancement Areas surrounding Curzon Station

The exact measures proposed as part of the Curzon Station Enhanced Public Realm scheme presented in this Business Case are detailed in the sections of text below.

Curzon Promenade

The enhanced public realm proposals proposed at Curzon Promenade as part of the Curzon Station Enhanced Public Realm scheme consist of:

- A material uplift of the hard materials proposed in the Base Scheme replacing pre-cast concrete block paving with a more durable and higher quality finish of natural stone and the proprietary pre-cast concrete planks proposed for the main pedestrian route with a bespoke pre-cast concrete plank, affording more options for appearance and quality of finish and performance;
- Extending the new urban realm up to the kerb line of the future bus-way incorporating connections to the new bus and Sprint stops north of Curzon Promenade, which are proposed by TfWM, as well as the proposed Midland Metro BEE route;
- An enlarged rain garden swale to the eastern end of Curzon Promenade; and
- The provision of additional low-level accent lighting integrated within urban realm furniture.

Curzon Square

The enhanced public realm proposals proposed at Curzon Square as part of the Curzon Station Enhanced Public Realm scheme consist of:

- Additional low-level feature lighting to the rain gardens, along the bus route footway and secondary paths;
- Extending the Base Scheme proposals across the interface area between Eastside City Park and New Canal Street Square;
- Introducing a series of planted wet/dry rain garden spaces, seating areas, footpath connections and tree planting in an area that is to be retained as open lawn in the Base Scheme; and

- An extension to the existing event space within the Eastside City Park.

Paternoster Place

The enhanced public realm proposals proposed at Paternoster Place as part of the Curzon Station Enhanced Public Realm scheme consist of:

- Constructing a triangular deck adjacent to the existing Park Street bridge, which will open a direct line of access from the south to the Bordesley Stairs on the south-eastern corner of Station Square;
- The redesign of Park Street Bridge to provide increased dedicated space for cyclists and pedestrians including:
 - Quantities of dedicated cycle parking facilities above those proposed for the unenhanced scheme;
 - Additional seating areas;
 - The introduction of trees, bushes, and smaller shrubs.

HS2 Limited has appointed Mace Dragados Joint Venture (MDJV) as the contractor through a robust procurement exercise to construct the Curzon Station and the enhanced Curzon Public Realm works. MDJV have provided a project programme which covers the construction of the main station as well as the surrounding public realm (both enhanced and not enhanced) and has been appended to this Business Case as **Appendix E2**. Please note that the works associated with the Curzon Station Enhanced Public Realm project have been marked as “Enhanced Urban Realm (EUR)” and the Curzon Square element of the Curzon Station Enhanced Public Realm scheme is named as “Eastside City Park (EUR)” on the project programme.

The project programme shows that the civil works associated with building the triangular deck at Paternoster Place will be undertaken prior to the station opening (which is currently programmed to open in 2029) whilst the other enhancement works will be carried out throughout 2027, with the overall enhanced public realm scheme scheduled to be completed by December 2027.

Delivering the works detailed in the BOQ compiled by MDJV (included in **Appendix E3**) is the output acceptance criteria for the Curzon Station Enhanced Public Realm scheme presented in this Business Case.

2.4.2 Value for money

Explain how your preferred option represents value for money, referencing the Net Present Value (NPV) and Benefit Cost Ratio (BCR) measures. If the preferred option is not the one with highest BCR, explain how unquantified benefits justify the cost.

Approach

The approach used to calculate the Value for Money of the shortlisted options (detailed in **Section 2.3.1**) has been adopted and updated where appropriate (e.g. to account for current market conditions and updated design information etc...) to calculate the preferred option's value for money. The economic appraisal model that has been used to calculate the preferred option's value for money is appended to this Business Case as **Appendix E6**.

Developments Impacted

The economic appraisal of the Curzon Station enhanced public realm works presented in this FBC is based on the premise that developments surrounding Curzon Station will benefit from an enhancement in the public realm as a result of enhanced visual amenity and/or improved connectivity and that these benefits will manifest themselves economically in the different ways outlined above.

For the purpose of this economic appraisal, it has been assumed that the developments which will benefit from an enhancement in the public realm surrounding Curzon Station are those which are located within 300 metres (as the crow flies) and five minutes walking time of the works. This assumption has primarily been based on the findings of the research summarised in **Section 1.3.2** including how in the case of Place du Marche Saint Honore in Paris, an increase in the value of land attributable to the public realm works was recorded up to 500 metres away from where the works were undertaken and how in Port Sunlight, the implementation of a new greenspace was found to generate additional monetary income for businesses located within a 500 metre radius of the new greenspace. In addition, the Paternoster Place element of the Curzon Station Enhanced Public Realm works will establish strong connections between Digbeth and Curzon Station. Adopting the assumption that the developments which will benefit from an enhancement in the public realm surrounding Curzon Station are those which are located within 300 metres (as the crow flies) and five minutes walking time of the works will ensure that the scheme's benefits to the developments located in the wider surrounding Digbeth area are sufficiently captured.

Information about the developments forecast to be built around Curzon Station has been derived from the Enterprise Zone Project Monitoring site database managed by BCC which details the current development forecasts in the Birmingham Enterprise Zone as of Quarter 1 of 2021-2022 financial year. While recognising that the proposals for a number of future developments are indicative at this early stage, regard has been given to the most up-to-date information available at the time of the assessment which have been validated with BCC's Planning Team.

Figure 13 shows the EZ sites in which forecast development will be impacted by the Curzon Station Enhanced Public Realm scheme. The EZ sites outlined and shaded in red represent the EZ sites whose forecast developments were considered as part of the economic appraisal presented in this Business Case. Further details about the developments forecast in each of the EZ sites outlined and shaded in red in **Figure 13** is included in **Appendix E4**.

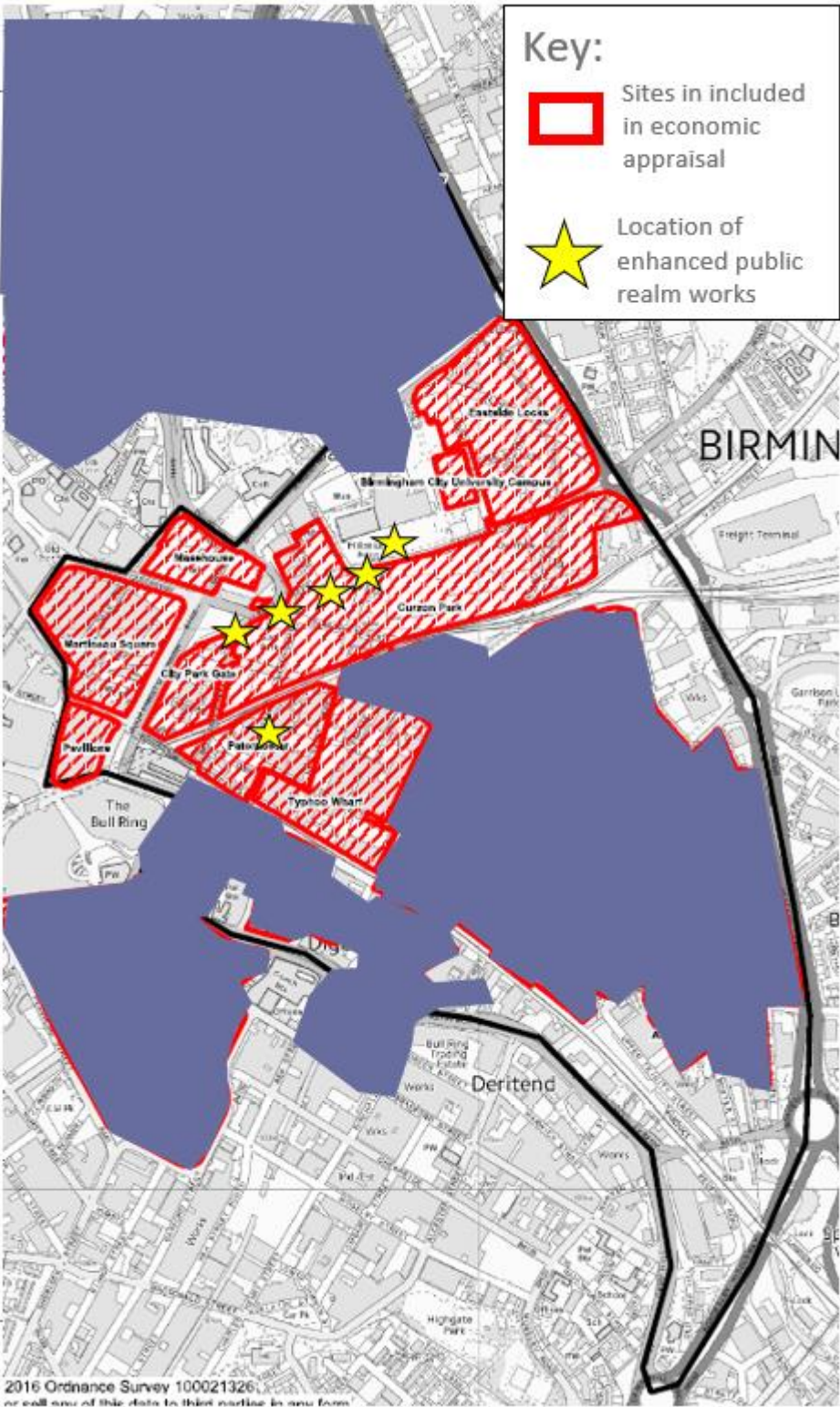


Figure 13: Location of EZ sites considered in FBC economic appraisal in relation to enhanced public realm works

Economic Benefits

Table 16 details the calculated economic benefits of the Curzon Station Enhanced Public Realm preferred scheme option.

Table 16: Preferred option economic benefits (2021 prices, discounted, £m)

Benefits	Curzon Station Enhanced Public Realm preferred scheme option
Land Value Uplift	Gross: £102.98 Net: £52.78

Amenity Benefits	£1.51
Distributional Benefits	£16.28
Total	£70.56

Project Costs

The public sector economic costs associated with the delivery of the Curzon Station Enhanced Public Realm preferred option have been compiled and are detailed in **Table 17** below:

Table 17: Public sector costs of preferred option (£m)

Cost item	Total (2021 prices)	Present value (2021 prices)
Scheme Development Costs To-Date	£2.41	£2.41
Public realm works	£10.9	£9.54
Design	£0.82	£0.77
HS2 Fee	£2.56	£2.25
BCC management cost	£0.60	£0.53
Risk	£6.83	£6.22
Lifetime costs	£3.75	£1.95
<i>Optimism bias (20% of total scheme costs excluding risk)</i>	<i>£4.21</i>	<i>£3.41</i>
Total	£32.08	£27.08

Benefit Cost Ratio (BCR)

Table 18 brings together the costs and benefits of the preferred option providing an overall indication of value for money in terms of the BCR and Net Present Social Value (NPSV).

Table 18: Costs and benefits of preferred option (2021 prices, discounted, £m)

	Preferred option
Present Value Costs (including OB)	£27.08
Present Value Benefits	
<i>Land value uplift</i>	£52.78
<i>Amenity benefit</i>	£1.51
<i>Distributional benefits</i>	£16.28
Total benefits	£70.56
Net Present Social Value (NPSV)	£43.49
BCR (incl distributional impacts)	2.61
BCR (excl distributional impacts)	2.00

The Curzon Station Enhanced Public Realm preferred scheme had a BCR (incl distributional impacts) of 2.44 which represents a high value for money as per the DfT's Value for Money Framework.

Additional economic benefits

Table 19 details the net additional economic benefits that were calculated for the preferred option.

Table 19: Costs, benefits, and cost effectiveness of preferred option

	Preferred option
Attributed total public sector economic costs (adjusted for optimism bias, £m)*	
Discounted marginal public sector cost	£27.08

Benefits	
Net additional attributable jobs	1,717
Net additional attributable cumulative GVA (£m)	£454.10
Net additional attributable housing units	42
Cost effectiveness (attributed)	
Cost per net additional job	£15,774
BCR (GVA: economic cost)	16.77
Cost per net additional housing unit	£638,521

*The total public sector cost has been attributed between economic (jobs and GVA) and housing outcomes.

In addition, it should also be noted that the Curzon Station Enhanced Public Realm scheme is expected to generate additional Business Rate income by enabling key commercialisation investments; improving the values of development located around in proximity to the scheme whilst also increasing the occupancy rates of these developments. Based on these assumptions, it is estimated that an uplift of £56.65 million of additional business rates income would be attributable to the Curzon Station Enhanced Public Realm scheme.

Value for Money Summary

Table 20 summarises the economic appraisal results of the Curzon Station Enhanced Public Realm preferred option which demonstrates its Value for Money.

Table 20: Preferred Option Appraisal Summary Table (£m)

		Preferred options
A	Present Value Benefits – based on Green Book principles and Green Book Supplementary and Departmental guidance	£54.28
B	Present Value Costs / (Surplus)	£27.08
C	Present Value of other quantified impacts	£16.28
D	Net Present Public Value A-B & [A-B+C]	27.20 [43.49]
E	'Initial' Benefit-Cost Ratio [A/B]	2.00
F	'Adjusted' Benefit-Cost Ratio [A+C]/B]	2.61
G	Significant Non-monetised impacts	Active travel mode, Agglomeration, Wage premium, Amenity, Regeneration benefits, image benefits, community health and wellbeing, tourism benefits and labour supply.
H	Value for Money (VfM) Category	High
I	Switching Values and rationale for VfM category	Benefits: -61.6% Costs: 160.6%

Qualitative Benefits

As highlighted in **Section 2.3.3** of this Business Case, enhancing the public realm surrounding the Curzon Station is likely to result in substantial wider unquantifiable economic benefits which are related to the following:

- Active travel mode usage;
- Agglomeration;
- Wage premium;
- Existing property value;

- Construction and supply chain;
- Regeneration;
- Community, health, and wellbeing;
- Image;
- Tourism; and
- Labour supply.

The following sections of text describe the qualitative economic benefits relating to the list above that the preferred Curzon Station Enhanced Public Realm scheme is forecast to generate.

Active Travel Mode usage

As outlined in the Strategic Case, the Curzon Station Enhanced Public Realm scheme proposals will encourage the use of active modes (e.g. walking and cycling) for travelling to and from Curzon Station by creating an environment surrounding the station that is more conducive to active mode travel. This suggests that the scheme proposals will increase the use of active transport modes.

The DfT recognises the important economic benefits that can be derived from promoting active travel providing guidance in the Transport Analysis Guidance (TAG) A5.1 paper on how to estimate and report the impact of active travel modes. The TAG Unit identifies the following key economic benefits resulting from the implementation of a scheme that increases active travel mode usage:

- Physical activity impacts – which “*monetise the change in mortality resulting from a change in [the number and activity of] walkers and cyclists, i.e. monetises the benefits from gaining life years*”;
- Absenteeism impacts – refer to the fact that improvements in health caused by increased physical activity can lead to reduction in short term absenteeism from work and thus have monetary benefits;
- Journey quality impacts – refer to the monetary benefits that improving the perceptions around safety, infrastructure, and environmental conditions for active travel modes can generate;
- Accident impacts – refer to the changes in the rate of accidents involving active travel modes that a scheme can generate;
- Environmental impacts – are based on the assumption that increasing active transport mode use will decrease motorised traffic and hence decrease the associated environmental externalities relating to noise, air pollution and greenhouse gas emissions;
- Decongestion and indirect tax impacts – also based on the assumption that increasing active transport mode use will decrease motorised traffic, decongestion and indirect tax impacts capture the economic benefits to those who continue to use the highways as a result of less congestion and increased indirect tax revenues; and
- Time saving impacts on active mode users – refer to the time savings for pedestrians and cyclists as a result of the scheme creating a quicker or shorter route for pedestrians and cyclists.

It is likely that implementing the Curzon Station Enhanced Public Realm scheme will generate economic benefits as a result of increasing the use of active travel modes relating to all of the above. If quantified, these benefits would further improve the scheme’s value for money.

Agglomeration

A consistent feature of modern economies is the concentration of economic activity in certain locations, most often cities or urban areas. Urban economists explain such phenomena by reference to features known as ‘localisation’ and ‘urbanisation’ economies both of which relate to the underlying proximity of economic activity.

Localisation economies result from the geographic concentration of businesses in the same industry. Firms cluster together for a number of reasons all of which improve efficiency and productivity. In particular, clustering:

- allows businesses to specialise;
- facilitates more proximate supplier linkage;
- facilitates R&D, information, and technology transfer and spill overs; and
- reduces risk for both employers and employees by developing specialist labour pools.

Urbanisation economies result from the concentration of a large number of economic activities that are not necessarily in the same industry but emerge to serve several different industries. These result from:

- urban transport systems;
- well organised labour markets;
- legal, financial, and commercial services;
- services to support and sustain large population concentrations; and
- public infrastructure.

Together, these economies are often labelled agglomeration economies and are measured in terms of a productivity 'gain' to firms in the urban area in the form of agglomeration elasticities – the percentage change in area productivity given a percentage change in agglomeration.

As outlined in **Section 2.3.1**, implementing the Curzon Station Enhanced Public Realm scheme is forecast to reduce vacancy rates and drive higher value uses for developments in the surrounding area whilst also improving and creating infrastructure links between adjacent development sites and the Curzon Station itself. It is therefore sensible to expect that the scheme will result in agglomeration economies as it will contribute towards attracting high value businesses and organisations to locate to, and stay located in, the area surrounding Curzon Station. While the agglomeration impact to new firms locating to the Curzon area are captured within the calculations of land value uplift associated with the Curzon Station Enhanced Public Realm scheme, this does not account for the impacts which affect existing firms or individuals in the area. If quantified, these additional agglomeration impacts would further improve the scheme's value for money.

Wage premium

As outlined in **Section 2.3.1**, implementing the Curzon Station Enhanced Public Realm scheme is expected to help attract high value added activities to locate in the area, which will help to improve productivity. The Department for Business, Energy, and Industrial Strategy (BEIS) uses a wage premium approach to monetise productivity improvements from the movement of labour into more productive sectors. Although it is expected that the Curzon Station Enhanced Public Realm scheme will increase wage premiums for the Birmingham area, the wage premium impact of the scheme has not been quantified.

Existing property value and the developments up to scheme opening

Although not assessed as part of the CBA, the enhanced public realm is expected to have a positive impact on the values of existing properties as well future developments, including the new developments in the years leading up to the scheme opening (2029). The HM Treasury Green Book (2020) recognises that improving the environment surrounding existing properties can have economic amenity benefits stating that, *"analysis of house prices suggests that proximity to habitats, designated areas, heritage sites, domestic gardens and other natural amenities can add as much as £68,000 to the price of a £200,000 house in the UK, a premium of one-third."* The economic amenity benefits relating to increases in existing property values have not been quantified in the economic appraisal analysis presented in **Section 2.3.1**. It is expected that, if quantified, they would improve the scheme's value for money.

Construction and supply chain

Building the enhanced public realm works will also generate economic benefits by supporting employment in the construction sector and supporting the associated supply chain for the materials required in the construction. For example, based on estimated Curzon Station Enhanced Public Realm's construction costs of £10.9 million and using the now Homes England *Calculating Cost Per Job | Best Practice Note 2015 (3rd Edition)* coefficient of output per person year of infrastructure construction employment, the enhanced public realm works would be expected to support some 152 person years of employment. The monetary benefits associated with the 152 person years of employment have not been captured in the quantified economic appraisal of the scheme.

Regeneration

Enhancing the urban realm surrounding the Curzon Station will contribute strongly to the continued regeneration of the wider Birmingham City Centre which will generate economic and social benefits for people residing in Birmingham and small businesses.

As captured in the economic appraisal of the Curzon Station Enhanced Public Realm scheme (detailed in **Section 3.2.1**), it is estimated that enhancing the urban realm surrounding Curzon Station will generate an additional 1,717 FTE jobs. These additional jobs will be additional employment opportunities for local residents, many of whom reside in deprived areas. Although the economic benefit associated with these additional jobs has been captured in the economic appraisal of the enhanced public realm scheme, the social value and impacts of having a job such as its contribution to an individuals' socialisation, fulfilment, income, skills, and wellness should also be noted.

Enhancing the public realm surrounding Curzon Station will improve the attractiveness of the environment with the Paternoster Place element of the works opening up and establishing a strong connection between Digbeth and Curzon Station. It is therefore a sensible assumption that the Curzon Station Enhanced Public Realm works will generate additional footfall in the scheme and surrounding area (particularly in Digbeth). This additional footfall would likely have positive economic impacts for existing businesses in the local area as these businesses are likely to attract more trade due to the increased passing footfall. The monetary benefit associated with this increased trade for existing businesses have not been captured in the quantified economic appraisal of the scheme.

Enhancing the public realm outside Curzon Station will also improve the civic pride, confidence, and well-being of the area's local residents. The scheme will have a positive effect on the appearance of the urban fabric and create a distinct sense of place and character.

Community, health, and wellbeing

Enhancing the public realm surrounding the Curzon Station will contribute towards the establishment of a new safe and accessible living, working, and leisure environment. It is considered that the enhanced public realm proposals will make a valuable contribution towards the socio-economic well-being of people who use the area as a result of the introduction of increased open space area and improved public accessibility linkages.

Image

Much of the current environment surrounding the Curzon Station is relatively poor in its environmental and built environment quality, with the environment primarily containing run-down industrial buildings. By its nature, the enhanced public realm proposals will improve the environmental and built environments directly surrounding the Curzon Station and will influence the improvement of the environmental and built environments further afield. The enhancements are designed in a way that creates places that will further enhance the image of the area.

Labour supply

Labour shortages can constrain the development of an economy because individuals with the necessary skills are not available. The provision of the appropriate type of housing in the right location can help to attract new residents, thereby potentially increasing the pool of skilled labour. Local housing analysis suggests that there is a general requirement for an increase in housing in Birmingham City Centre to support economic growth. The Curzon Station Enhanced Public Realm scheme will increase the density of housing that will be built around Curzon Station thereby providing more housing in the centre of Birmingham, which could be filled by workers with the necessary skills.

Summary

The information detailed in this section of the FBC demonstrates that the Curzon Station Enhanced Public Realm preferred scheme option offers acceptable value for money on a BCR basis as it is found to compare favourably with traditional unit cost and GVA value for money benchmarks. In addition, it is also forecasted to deliver substantial wider benefits.

2.4.3 Sensitivity analysis

Describe what sensitivity tests have been applied to the cost-benefit analysis and how they impacted the BCR.

A number of sensitivity tests have been undertaken to test the sensitivity of the value for money results to changes in key variables. The outcomes of these sensitivity tests provide an understanding of the extent to which the key variables would have to change in order for the Curzon Station Enhanced Public Realm scheme to have a BCR of less than one, and therefore represent 'poor' VfM using the DfT's VfM category. A COVID-19 sensitivity test has also been undertaken to provide an understanding of what the VfM of the scheme would likely be in a future scenario where people's long-term behaviour has significantly changed as a result of COVID-19 and the associated national lockdowns to what their behaviour was pre-COVID-19.

Switching values

An analysis of 'switching values' has been carried out which calculates how much public sector costs or benefits would have to change in order for the Curzon Station Enhanced Public Realm scheme to have a BCR of less than one (i.e. is considered to represent "poor" value for money). Calculations found that costs would have to increase by some 144.2% or benefits to reduce by around -59.2% for the Curzon Station Enhanced Public Realm scheme to have a BCR to be less than one. The results of the 'switching values' test suggest that the Curzon Station Enhanced Public Realm scheme should deliver VfM as it would take a significant increase in scheme costs or a significant reduction in scheme benefits for it not to. As the estimate of the public sector cost for the scheme has been provided by the contractor who are responsible for building it (MDJV), it is not likely that the costs of the scheme presented in this Business Case will increase dramatically from the actual scheme costs, particularly as the costs are supported by an extensive risk management process allowing for adequate allowance for risk. The extent to which the scheme's calculated benefits may change is discussed in more detail below.

Table 21: Switching values (adjusted BCR less than one)

	Preferred option
% change in net additional benefits	-61.6%
% change in net cost	160.6%

Change in key variables

In addition to the analysis of switching values, alternative scenarios have also been modelled to test the sensitivity of the BCR results to a change in a key variable. The key variables adjusted were as follows:

- **Scenario 1** – reduce the impact of the public realm enhancement works in relation to land value uplift, reduced vacancy rates and intensity of development (as outlined in **Table 8** Error! Reference source not found.) by 50%; and
- **Scenario 2** – increase costs by adjusting optimism bias to 60% to reflect guidance for non-standard civil engineering projections.

The results of the scenario testing are set out in **Table 22**.

Table 22: Scenario testing (adjusted BCR inclusive of distributional benefits)

Scenario (Values in £000s)	PVB	PVC	BCR	BCR change from Central Case
Central case	£70.56	£27.08	2.61	N/A
Scenario 1	£54.67	£27.08	2.02	-22.61%
Scenario 2	£70.56	£33.89	2.08	-20.31%

The results in **Table 22** show that the Curzon Station Enhanced Public Realm scheme would still represent VfM in both of these scenarios.

COVID-19

Throughout 2020 and the first quarter of 2021 the UK Government enforced a series of national lockdowns to try to combat the spread of the COVID-19 coronavirus where, amongst other measures, people were forced to work from home and all non-essential retail and services were forced to close, significantly changing people's behaviours during this time. At the time of writing it is still not clear if and what the long-term impacts of the lockdowns associated with the COVID-19 pandemic will be and how it will impact people's behaviours but emerging data suggests that, where possible, people will work from home more often (e.g. people may travel to their place of work once or twice a week rather than five times a week as they did prior to COVID-19) and that people will shop online more often instead of entering a physical building to shop in person. Based on this emerging data it can be assumed that the long-term behaviour changes resulting from the lockdowns associated with the COVID-19 pandemic are likely to impact the demand for office development and retail development.

A sensitivity test where the quantity of future office and retail development forecast to be built around Curzon Station (and be impacted by the Curzon Station Enhanced Public Realm scheme) was reduced by 30% was undertaken to assess the scheme's VfM in a future scenario where the lockdowns associated with the COVID-19 pandemic have significantly changed people's behaviours in the long-term.

Under the COVID-19 sensitivity test the scheme is forecast to have a BCR of 1.87 which represents a Medium VfM using the DfT's VFM category.

Additional Sensitivity Analysis

Rental yields

A further sensitivity to test the impact of rental yield assumption of 5% for all commercial property types has also been undertaken by applying varying rental yields across different types of commercial properties (office, industrial, retail, leisure, hotel, cinema, and community). The rental yields within this sensitivity have been based on Knight Frank's Prime Yield Guide October 2021 which gives rental yields for different

sectors²⁶. Most relevant rental yields have been used within this sensitivity duly considering that the developments will be new and located within/close to the city centre and the new HS2 Curzon Station, providing the rationale that any office space will be prime office space. Using this information, a sensitivity test where the following differing yields were assumed for the different types of commercial property has been undertaken for robustness purposes:

- Office: 5%
- Industrial: 4%
- Retail: 6.5%
- Leisure: 4%
- Hotel: 4%
- Cinema: 7%
- Community: 5%

Adopting the yield percentages detailed above results in the scheme having a BCR of 2.33 which represents Value for Money.

Reduced amenity benefits:

The benefits associated with the amenity impact of the scheme has been calculated by multiplying the hectareage that the enhanced public realm scheme covers (0.98 ha) by the “Urban Core” ‘greenspace’ land type value set out in the MHCLG Appraisal Guide (£125,021.34 in 2021 prices, discounted). A further sensitivity test has been undertaken, where the hectareage that the enhanced public realm scheme covers was reduced by 50% has been undertaken to reflect the fact that the scheme entails enhancements to new public realm surrounding the Curzon Station that would be built even if the enhancements weren’t undertaken (rather than implementing completely new public realm in an old rundown environment).

This sensitivity test results in the scheme having a BCR of 2.57 which represents good Value for Money.

Summary

Table 23 below summarises the results of the sensitivity analysis undertaken.

Table 23: Summary of sensitivity analysis results

Switching values (adjusted BCR less than one)				
% change in net additional benefits			-61.6%	
% change in net cost			160.6%	
Scenario Testing				
Scenario (Values in £000s)	PVB	PVC	BCR	BCR change from Central Case
Central Case	£70.56	£27.08	2.61	N/A
Scenario 1 <i>(Public Realm impacts reduced by 50%)</i>	£54.67	£27.08	2.02	-22.61%
Scenario 2 <i>(Optimism bias increased to 60%)</i>	£70.56	£33.89	2.08	-20.31%
COVID-19 <i>(quantity of future office and retail development reduced by 30%)</i>	£50.73	£27.08	1.87	-28.35%

²⁶ Knight Frank's Prime Yield Guide October 2021

(<https://content.knightfrank.com/research/522/documents/en/investment-yield-guide-october-2021-8499.pdf>)

Additional Sensitivity Analysis				
Rental yields	£63.01	£27.08	2.33	-10.73%
Reduced amenity benefits	£69.59	£27.08	2.57	-1.53%

2.4.4 Associated issues and risks

Outline the key issues and risks to project delivery and benefit realisation, and mitigating strategies to minimise their impact

An extensive risk register collaboratively developed by HS2 Limited, their contractor MDJV and BCC, which identifies the key risks associated with the construction of the proposed scheme, identifies actions to mitigate these risks, and quantifies the likely costs associated with each risk both pre and post mitigation actions. The risk register is attached to this Business Case as **Appendix E5**.

The key risks to the scheme delivery and benefit realisation relate to the bridge decking works that need to be undertaken as part of the Paternoster Place element of the enhanced public realm scheme.

Other risks include:

- The risk that there are existing assets with unknown ownerships within the works area and no and/or incorrect as-built information relating to these assets;
- The risk that the site is not left in agreed condition to allow the enhanced public realm works to commence (particularly as the enhanced public realm works are being completed post the Midland Metro works); and
- Risks around the ownership, maintenance, and liability a joint between new and existing bridge deck at Paternoster Place which could result in extended negotiations and potential redesign effort.

Actions to mitigate the impact of the above risks which are being, or will be, undertaken relate to continued engagement with relevant parties and organisations to establish good working relationships and ensure that each party knows what information and actions are required from them. Regular working group meetings have been taking place throughout project development between members of BCC, HS2, and MDJV and additional working groups with representative Network Rail in attendance have also been scheduled for the future.

The overall value of risk associated with the Curzon Station Enhanced Public Realm scheme (post mitigation actions) has been valued at £6.83 million (forecast risk value). This value of risk is based on the Total Estimated Value (TEV), which is the metric used for HS2 reporting (including for third party schemes) and produces a similar result to a P50 confidence level, albeit without the need to run a Monte-Carlo simulation. This forecast risk value has been accounted for in the scheme costs which feeds into the calculation of the scheme's BCR and VfM.

2.4.5 Proposed outputs and outcomes

In the table below insert a summary of the proposed outputs and outcomes that are expected to be achieved as a result of the project. Add further rows to the tables as required.

Provide a detailed profile of forecast outputs and outcomes as an appendix. A template can be provided on request, to include definitions for a series of set outputs that the GBSLEP monitors performance against.

Provide a clear description of the project Beneficiaries linked to each outcome i.e. who will benefit from the outcome

Proposed outputs

Output	Output description	Output quantity	Beneficiaries	Method of independent verification	Delivered by date
1	Construction of triangular bridge deck at Paternoster Place	Circa 300m ²	All Curzon Station and BEE users accessing the station from Digbeth and Eastside.	Construction outputs	3 rd December 2027
2	High-quality pedestrian urban realm	9,807.86m ²	Active travel mode users	Construction outputs	3 rd December 2027
3	Additional greenery including rain gardens and additional vegetation (trees, bushes, and smaller shrubs)	Circa 1,500m ² of planting areas along with 24 x trees	All station users	Construction outputs	3 rd December 2027
4	The creation of circa 20,000m ² of developable land at the current site of the Taboo Cinema	20,000m ²	Business owners and BCC	Site measurements	3 rd December 2027

Proposed outcomes

Outcome	Outcome description	Outcome quantity	Beneficiaries	Method of independent verification	Delivered by date
1	Supporting economic growth and the creation of additional FTE jobs in the areas surrounding Curzon Station	1,717 additional FTE jobs and circa £450m additional GVA	Residents, business owners	Business survey and monitoring of volume, value, and rental values etc... of new commercial and residential developments through Enterprise Zone Project Monitoring site database managed by	2040

				BCC and other market research	
2	Supporting business through increased footfall in areas surrounding Curzon Station	Approximately 500,000 HS2 passengers per annum in 2041 delivered in tandem by Curzon Station and the associated public realm enhancements. These have been estimated by HS2 Ltd.	Business owners	Business survey	2041
3	Attractive environment directly surrounding Curzon Station for active mode users	9,807.86m ² of public realm enhancements that will support active mode travel such as improved paths, paving and surfacing, and additional railings and lighting columns etc. which will be delivered as part of the scheme.	Active travel mode users	Surveys	1 year after Curzon Station opening
4	Efficient Interchange provision	Support the multi-modal interchange (local buses, Sprint, HS2, Metro and active travel modes.	Public Transport Users	User Surveys	1 year after Curzon Station opening
5	Improved air quality	N/A - the scheme will be contributing to improving air quality in the wider Birmingham area (through	Pedestrians, residents, and all users	Air quality measurements	1 year after Curzon Station opening

		encouraging the use of public and active mode travel when accessing Curzon Station) which will also be influenced by a range of different schemes.			
6	Land value uplift	In excess of £50m (2021 prices, discounted, £m) net marginal land value uplift	Land owners / businesses	Annual market reports	2040
7	Business rates	Circa £48m worth of additional business rates income	BCC	Monitoring of business rates income	2040

3. Commercial Case

The Commercial Case provides evidence of the commercial viability of a project and the procurement strategy that will be used to engage the market – providers, developers and suppliers to deliver the project. The OBC should be based on pre-procurement discussions and the FBC should document the final outcome of the procurement process.

3.1 Procurement

3.1.1 Procurement scope

Outline what procurement needs to be or has been undertaken if private development partners or suppliers are required to deliver project outputs.

The main works – construction of the station and public square – will be delivered by HS2 Ltd through a Design and Build contract using their contractor arrangements.

HS2 Ltd has already appointed a team made up of Mace and Dragados in May 2021 to build the Curzon Station and the enhanced Public Realm. A joint venture between the companies Mace and Dragados (MDJV) will work with HS2 Ltd in two stages to finalise the detailed design and then build the landmark station. Mace and Dragados have a strong track record delivering some of the world's most complex and exciting infrastructure projects, including the refurbishment of Birmingham New Street, Battersea Power Station (phase 2) and work on delivering the Spanish high speed rail network, including the major new Madrid Atocha and Barcelona Sants stations. They are also working together in a separate joint venture delivering HS2's London terminus at Euston.

Grant funding for the project is requested to cover the additional construction costs to HS2 Ltd, over and above those committed in the HS2 Hybrid Bill and funding package agreed with Government. This additional funding request is for £28.79 million.

3.1.2 Procurement strategy

Describe the project procurement strategy, including regulatory / mandatory / best practice standards incorporated; process to be undertaken; evaluation criteria; and the contractor selection timetable. Outline how procurement is supporting local growth and how carbon reduction considerations are accounted for in the procurement process.

Background

The proposed works and services has been procured through HS2 Ltd. As a publicly funded organisation, HS2 Ltd is bound by EU Procurement Directives and associated UK legislation as set out in the HS2 Supplier Guide. It has established a tiered procurement structure for all aspects of HS2 requirements comprising:

- Tier 1 – HS2 Ltd will procure a relatively small number of high-value, direct, contracts through the Bravo e-procurement portal <https://hs2.bravosolution.co.uk>. Where these exceed the EU Utility Contract Directive spending thresholds (currently £363,424 for Supply, Services and Design Contracts, and £4,551,413 for Works Contracts), it is required to advertise the contract opportunities in the Official Journal of the European Union (OJEU); and
- Tiers 2–5 – Tier 1 contractors will purchase sub-contract works, supplies, and services at various levels through the CompeteFor e-procurement portal (www.competefor.com), advertising all

appropriate opportunities on the website, in order to provide opportunities for organisations of all sizes to tender. HS2 Ltd indicates that these opportunities are not subject to public procurement legislation.

In addition to these categories, HS2 have various requirements for the day-to-day management and running of its business resulting in more numerous, lower value, opportunities that have been procured via existing public sector frameworks.

Within this procurement structure, HS2 Ltd has procured the baseline Curzon Station public realm works within the overall package of contracts for Curzon Station, for which designs were unveiled in October 2018. The Curzon Station Enhanced Public Realm works have been incorporated into this process.

In July 2019 the GBSLEP approved an Outline Business Case based on the understanding that HS2 initially planned to undergo a single stage procurement model to appoint the preferred contractor to deliver the station and surrounding landscaping works but following a period of market testing, a decision was made to adopt a revised procurement approach which consisted of a two-stage contract model with the aim of reducing tenderer pricing risk and facilitating a collaborative approach to setting the target price. The two-stage model also reduced the tender burden during procurement as a target price was not required to be submitted until Stage 1 in comparison to a single stage procurement model where a target price was to be submitted during procurement thus making it a more attractive approach to the market.

Two-Stage Procurement Process

The text below provides further detail regarding the two-stage procurement process that was tendered to the market.

Stage 1

Stage 1 included additional time to enable the successful contractor (MDJV) to work with HS2 to develop the following for Curzon Station and the surrounding landscaping (Paternoster Place, Curzon Promenade and Curzon Square).

- Validate the design inherited from Station Design Services Contractor (WSP);
- Identify construction risks and opportunities;
- Develop a deliverable construction programme;
- Demonstrate affordability and value for money;
- Identify key supply chain partners at Tier 2 and below; and
- Develop an agreed Target Price.

Under the one stage model this work had to be completed during the tender period itself. Adopting this additional stage approach enabled all parties to have a higher confidence of delivery within Target Price and schedule in Stage Two, thus reducing project risks to all parties including the GBSLEP.

Stage 1 includes a number of Stage Gates where MDJV have/will have to submit deliverables to HS2. These Stage Gates and the associated deliverables are outlined in **Table 24** below:

Table 24: Stage 1 Stage Gates and associated deliverables

Gate	Description	Activities	Deliverables
1	Mobilisation	Collaboration Events, Hot Starts, Shared Office, Resource in Place, Agree Innovation Ideas	Stage 1 Project Execution Plan and Programme, Collaboration

			Implementation Plan (Update from ITT)
2	Soft Gate	Integrated Project Team (ITP) Set Up, Working up Target Price	Draft Target Price, Programme and Risk (submitted monthly)
3	Draft Submissions - to support target price	IPT Teams working up documents together	Draft documents
4	Final Submissions – agreed target price at programme level	Refinement of all documents	Agreed Target Price and supporting documents

The draft Target Price submitted at Gate 3 or Stage 1 has been fed into this FBC, ensuring costs are robust as they can be at this stage.

Subject to an agreed position re. the final Target Price and programme, necessary governance approvals will be sought and notification of stage two will be provided to the contractor.

Stage Two

During stage two the Contractor shall deliver the detailed design, construction, testing and commissioning and Completion of Curzon Station and the adjacent landscaping works within Target Price produced in Stage 1.

Procurement Timetable

The Package Procurement Plan (PPP) and the Pre-Qualification Pack (PQP) for a two-stage procurement process was approved by the HS2 Ltd Board on 28th August 2019, which subsequently gave delegated powers to HS2 Commercial Investment Panel (CIP) for PQP release.

HS2 CIP approved the release of the PQP on 4th November 2019, which at the time was subject to the outcome of the 'Oakervee Review'. Following the review, PQP was released on 24th January 2020.

The following three organisations expressed an interest in pre-qualification of the ITT, and were subsequently evaluated and short-listed:

- Mace Dragados JV
- Laing O'Rourke
- BAM Ferrovial JV

Following approval by HS2 CIP on 1st June 2020 and subsequent approval of the procurement strategy and contract delivery model by DfT at IPDC followed by Treasury, Cabinet Office and Ministerial approval, the ITT was released on 3rd August 2020 and all three tenders were received and opened on 1st December 2020.

Obtaining High Quality Tenders

Throughout the contractor selection timetable (outlined above) HS2 held a number of 'Hot Start' sessions where HS2 directly engaged with prospective tenderers to provide further detail and clarifications on the tender details. These 'Hot Start' sessions were at the PQQ and ITT stages of the contractor selection timetable. In addition, Tenderers were also offered a confidential one to one session with any matters raised during the one-to-ones which added to or changed the ITT or otherwise affect the other Tenderers being broadcast to all Tenderers via the HS2 eSourcing Portal. Individual 'mid-bid' clarification meetings were

held with all Tenderers to allow confidential discussions on their Tender approach and development. Two meetings were held for each Tenderer, one with a technical focus and one with a commercial focus. All Tenderers were given the same access to information at these one-to-ones and the time allocated for each session was the same. As with the Hot Start one to ones, any matters raised during the meetings which added to or changed the ITT or otherwise affected the other Tenderers, was broadcast via the HS2 eSourcing Portal to ensure equal treatment of all parties.

The following steps were also undertaken to maximise the quality of the tenders received:

- Tenderers were given a minimum of four weeks tenderer mobilisation time from issue of the short-list letters;
- Tenderers were given early access to over 3000 individual documents of design and site information;
- Interactive meetings were held with the tenderers where the ITT documents were discussed along with the design ethos and the contract conditions; and
- Submissions of any tenderer concerns with the terms of contract were allowed to be pre-tender and were followed by an HS2 response.

The above steps contributed to an overall high quality and high level of ITT compliance from all tenders received and a low number of clarification messages issued in comparison with other HS2 projects of this size and nature.

Tender Evaluation Process

The following tender evaluation process was adopted.

- Three Tenders were received and opened on 1st December 2020 and all Compliance Checks were confirmed as satisfactory.
- The Flash Report was reviewed by the Construction and Phase 2 Procurement Director and the Procurement and Commercial Director and there were no 'Abnormally Low' Tenders received.
- HS2 require a commitment at Tender for a Parent Company Guarantee to be provided from the ultimate parent of each Tenderer and, where applicable JV member. All Tenders were submitted on this basis.
- The evaluation and moderation of Tenders was carried out virtually in accordance with the HS2 Secure Evaluation Area procedure and controls for remote access.
- The evaluation and moderation were carried out in accordance with Volume 0 of the ITT and the Tender Opening and Evaluation procedure (TOEP) for the Curzon Station ITT.
- Several errors in Tenderer submissions were identified and resolved following clarification. There were no re-submissions of the bids in either the Technical or Commercial Envelopes. All issues raised by Assessors and any points of clarification requested from Tenderers were resolved in accordance with the approved process and minutes taken to record all decisions made.
- The Tenderer qualifications to the terms and conditions were reviewed and any qualifications that were considered material or could impact the commercial evaluation were identified. Commercial evaluation was paused whilst Tenderers were invited to withdraw qualifications in accordance with the process detailed in Volume 0 of the ITT.

Assurance of the ITT Evaluation and Award Recommendation

The following activities and checks for compliance were undertaken by HS2 to support overall confidence in the validity of the Contract Award Recommendation:

- Checks as to whether the Moderation of the evaluated technical question scores has received Reasonable Assurance with no changes to any scores made following Moderation.
- Checks as to whether the Technical Evaluation has been approved by the ITT Technical Lead.
- Checks as to whether the Commercial Evaluation has been approved by the Commercial Lead.
- Checks as to whether the Evaluation of the Behavioural Assessment has been approved by the Senior Collaboration Lead.
- Checks as to whether the Procurement Lead has reviewed the full ITT Evaluation and the Contract Award Recommendation Report.
- Checks as to whether the Contract Award Recommendation Report has been reviewed and endorsed by the BCS 'QUAD' Review Panel consisting of the Procurement & Commercial Director, the HS2 General Counsel and the Stations Client Director. The QUAD noted that an assessment of financial standing using the Financial Viability and Risk Assessment (FVRA) tool was satisfactorily completed at PQP and requested that a reassessment of the financial standing be completed prior to issue of the Stand-Still letters. This re-assessment, based on current financial data provided by both the first and second placed tenderers, was subject to an independent financial evaluation and the HS2 Head of Financial Governance and Treasury approved the evaluation output as being satisfactory.
- Checks as to whether the Contract Award Recommendation Report has been approved by the Stations and Phase 2 Procurement Director and whether a controlled copy of the approved Contract Award Recommendation Report is held in the HS2 Document Management System ('eB').

Other Measures to Support the Resilience of the ITT Evaluation

Other measures to improve resilience and compliance with the declared ITT evaluation process were carried out as follows:

- Improved guidance was issued to assessors to ensure a consistent approach was taken to allocating a final score for a given question from a set of scores for each component of the question. This was shared with Tenderers for purposes of transparency.
- Independent assurance of the TOEP (Tender Opening and Evaluation Procedure) were carried out to ensure compliance with the IFT Volume 0.
- Independent assurance of the Assessor and Moderator training packs was carried out.
- Two sessions of Assessor training were completed by the tender assessors (Group and 1-2-1).
- No consistency checks were carried out by the Technical Lead.
- Separate 'fire walls' were set up between Technical and Commercial evaluation in AWARD.
- Procurement checks on evaluation were confined to process not content.
- All Moderation sessions have detailed minutes.
- All PLOD (Plan of the Day) meetings have detailed minutes.
- Anonymity was preserved in Contract Award Recommendation and Evaluation reports.
- A check of the financial status of the proposed Contractor, as carried out in the original PQQ, was verified prior to Contract Award.

Contract Award

As outlined in **Section 3.1.2**, MDJV were appointed as the Main Works Station Contractor (MWSC) to construct Curzon Station and the surrounding landscape in May 2021. MDJV were awarded the contract after the QPLOD group (Qualifications Plan of the Day) met on four occasions to consider the qualification

status of the three bids and the Award Recommendation was made based on an acceptable position on the terms and conditions of contract subject to any final drafting of points to be identified on engrossment. A Letter of Confirmation was signed by MDJV acknowledging that HS2's understanding of their final offer was correct.

3.1.3 Evidence of demand or market interest

Describe any private sector negotiations or discussions undertaken as part of testing the development or supplier market.

As alluded to in **Section 3.1.2**, HS2 initially adopted a single-stage process to procure the development of Curzon Station and the surrounding landscaping but following a lower-than-anticipated market appetite and feedback from contractors who are delivering comparable sized infrastructure projects elsewhere in Europe HS2 decided to adopt a two-stage approach reduced the risks and enabled greater certainty over cost for both HS2 and the supply chain which attracted more bidders.

3.1.4 Third party services

Detail any third party services that will be used to deliver the project (legal, finance, any other consultancies). Can you show commitment from third party to carbon reduction/offsetting/mitigation?

The project will be delivered by HS2 Ltd as part of the Curzon Station construction and will use their resources and services. MDJV have been contracted to undertake the actual construction of the Curzon Station.

The scheme delivery will need the following:

- Contractor agreement – there is a legal agreement between MDJV and HS2 which is under HS2 Ltd.'s contracting arrangements;
- Funding Agreements - a funding agreement will be required between GBSLEP and BCC;
- Legal Agreement between BCC and HS2 Ltd. is currently being developed collaboratively under the overall commercial principles that HS2 has agreed with the DfT for third party delivery arrangements. This will include overall principles of managing cost, delivery, governance and maintenance; and
- In addition to GBSLEP approval of financial resources, BCC approval will be required to manage the project.

Commitment from third party to carbon reduction/offsetting/mitigation

HS2 have set the carbon footprint reduction targets in regard to the lifecycle of Curzon Station as a 50% carbon reduction from the baseline (over 120 years).

In addition to this, it is the project's ambition to maximise material efficiency in support of generating evidence for BREEAM compliance and the wider approach to delivering sustainable outcomes. Also, throughout the project development and delivery HS2 is committed to reduce/ manage any environmental impacts and will aid in managing associated impacts.

A lifecycle assessment has been undertaken by WSP (the consultancy who designed Curzon Station) which identifies ways in which Curzon Station could achieve the carbon footprint reduction targets above. The reductions achieved are measured as the difference between the baseline carbon footprint, determined at Design Assurance Level (DAL2), and that of the current station design. The lifecycle assessment found

that a 49% reduction can be demonstrated against the baseline through a combination of carbon reduction measures integrated into the design (RIBA Stage 3 design) plus further analysed opportunities to be confirmed during RIBA Stage 4.

Beyond this, the lifecycle assessment identifies measures to be confirmed by the construction partner when they are appointed on the project, plus initiatives to be developed further by HS2. Full adoption of these items would bring the total reduction to 55% against the baseline.

3.2 Contract Management and Risk Allocation (FBC stage only)

3.2.1 Contract management arrangements

Describe contract management, what type of contract is being entered into and why and assurance arrangements. Provide evidence of how the procured contractor/supplier provides value for money.

As outlined above, the project will be delivered by HS2 Ltd as part of the Curzon Station construction and will use their resources and services. MDJV have been contracted to undertake further design development and the actual construction of the Curzon Station. HS2 Ltd is responsible for ensuring MDJV delivers the scheme as designed.

A two-stage collaborative approach has been adopted for the delivery of HS2 Curzon Street Station and the associated enhanced public realm works. This approach has ensured value for money and has facilitated collaborative target setting.

As a part of Stage 1, the MDJV has worked collaboratively with HS2 Ltd verifying the design and schedule of the enhanced public realm works identifying risks, opportunities for value engineering, and have developed a target price for the works. The outcomes from this Stage 1 resulting in value for money are:

- Increased certainty and reduced risk;
- Realistic and affordable Target Price; and
- Positive relationships established ready for delivery.

During Stage 2, the focus will be on MDJV delivering to the finalised Target Price submitted at Stage 1 Gate 4, which will be verified progressively by HS2 Ltd. The intended outcomes from this stage are:

- Works delivered safely, on time and within budget;
- Gain share for efficient delivery; and
- HS2 strategic objectives achieved

BCC, as the applicant of funding for this project, will enter into an agreement with HS2 Ltd regarding the use of this grant funding to ensure the project is delivered as intended, and provides adequate value for money.

3.2.2 Contract milestones

Include contract milestones such as internal or external decisions and approvals and completion dates of project phases.

Key Contract Milestones of relevance to the Curzon Station Enhanced Public Realm scheme are summarised below:

Curzon Station procurement process

- Confirm funding availability: Completed (August 2019)
- Issue ITT: Completed (March 2020)
- Tender period: Completed (August 2020)
- Tender evaluation: Completed (November 2020)
- ITT recommendation assurance and governance: Completed (March 2021)
- Award delivery contract: Completed (May 2021)
- Stage 1 Target Cost for FBC: Completed (January 2022)

Stage 2: Main station works including Enhanced Urban Realm (EUR)

- Main station design: complete (May 2024)
- Main station construction: complete (February 2029)
- Curzon Square EUR landscaping works: complete (May 2027)
- Paternoster Place EUR works complete (May 2027)
- Curzon Promenade EUR landscaping works: complete (August 2027)
- Completion of all the works and delivery into Service (November 2029)

3.2.3 Risk allocation

*Summarise key risks relating to the management of delivery contract(s) and who has been involved in identifying these risks. Include details on the transfer or sharing of risks with the contractor, risk owners, and mitigation / contingency arrangements (these should be fully detailed in the Risk Register in **Appendix 6**).*

As part of the Stage 1 deliverables, MDJV compiled a risk register which identifies the key risks associated with the construction of the proposed scheme, identifies actions to mitigate these risks, and quantifies the likely costs associated with each risk both pre and post mitigation actions. This risk register is attached to this Business Case as **Appendix E5**.

This risk register shows the primary risks identified at this time but is a live document that will be kept updated as the project progresses.

The key risks around the construction of the Curzon Station Enhanced Public Realm proposals relate to the bridge decking which will be constructed as part of the Paternoster Place element of the scheme where there are risks regarding NR approval, ownership, NR possessions amongst others. An appropriate assessment of risks has been undertaken and an associated allowance for managing these risks allowed for within the scheme costs. Mitigation actions around continued engagement with relevant parties and organisations to establish good working relationships and ensure that each party knows what information and actions are required from them are also being undertaken.

Some of the other wider project risks included in the risk register are:

- Impact of market conditions on the cost and availability of materials resources;
- Site and ground conditions; and
- Delays due to COVID-19.

All the risks within the **Appendix E5** risk register have been allocated an appropriate owner and any risks identified later in the project will be allocated to the most appropriate owner at that time.

3.3 Accountancy Treatment and Service Requirements (FBC stage only)

3.3.1 Assets

Describe long-term future of assets, including approach to a change of circumstances (e.g. organisation / asset changes purpose or ceases trading).

BCC will own the enhanced public realm elements of the scheme outside of the limits of deviation. BCC will also be responsible for the revenue costs associated with the additional maintenance costs for the enhanced public realm. By letting a single contract, the enhanced works will be form part of the main HS2 contract.

BCC could source funding to go towards the maintenance of above elements from Section 106 agreements and Community Infrastructure Levy (CIL) charges relating to future developments linked to the Curzon Station. The overall principles of this are currently being agreed as a part of the discussions related to the legal agreements between BCC and HS2 Limited.

3.3.2 Operational service considerations

Outline any operational service considerations and their sustainability. If there are any personnel implications (including TUPE), then please describe how they will be addressed here.

N/A

4. Financial Case

The purpose of the Financial Case is to demonstrate the affordability and funding of the preferred option, including the support of stakeholders and customers, as required. This should include the capital and revenue costs and the consequential costs of the project.

4.1 Project budget

Insert additional future years into the table; name each contributing funder and add lines as required. GBSLEP allocates funding to be drawn down by projects for specific financial years (April to March) against agreed, eligible and evidenced, defrayed costs.

Include a detailed breakdown of costs that relates to the below project budget as an appendix.

Loans are offered on commercial terms. The rate of interest charged, security and other conditions are determined independently in accordance with investment industry standards, taking into account that the GBSLEP's funding programme's primary objective is to enable or accelerate development of priority projects. The maximum repayment term is three years.

Further information on and the application for development funding is included at Section D.

*Provide a detailed proposed funding profile by populating **Appendix 5**. This will be indicative at OBC and should be finalised at FBC stage.*

	Previous years	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	Future years	Total
Capital funding (£000s) (Outturn)										
Local authority	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other public sector	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Private sector	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Third sector (Debt Finance)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GBSLEP Loan funding requested	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
GBSLEP Grant funding requested	£2,219	£189	£924	£5,347	£5,791	£2,299	£8,692	£3,327	N/A	£28,788
GBSLEP Development funding requested (eligibility applies)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Funding source to be established	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total capital cost	£2,219	£189	£924	£5,347	£5,791	£2,299	£8,692	£3,327	N/A	£28,788
Revenue funding for project delivery (£000s)										
Local authority	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other public sector	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Private sector	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Third sector	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Funding source to be established	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Total revenue cost for delivery	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Revenue consequences for benefit realisation (£000s)										
Local authority	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	£3,751*	£3,751
Other public sector	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Private sector	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Third sector	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total revenue consequences for benefit realisation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	£3,751	£3,751
Total project cost	£2,219	£189	£924	£5,347	£5,791	£2,299	£8,692	£3,327	£3,751	£32,539

*Q3 2021 prices

The project budget spend profile for the Curzon Station Enhanced Public Realm scheme shown in the table above has been based on the most up-to-date project programme (appended to this Business Case as **Appendix E2**) and has been agreed between BCC, HS2 and MDJV. Further details about what costs feed into the project budget and how inflation was accounted for in the project budget spend profile shown in the table above are provided in **Appendix F1**.

In addition, it should be noted that the Curzon Station Enhanced Public Realm scheme is expected to generate additional Business Rate income by enabling key commercialisation investments; improving the values of development located around in proximity to the scheme whilst also increasing the occupancy rates of these developments. Based on these assumptions, it is estimated that an uplift of £47.74 million of additional business rates income would be attributable to the Curzon Station Enhanced Public Realm scheme by 2040.

4.2 Affordability

4.2.1 Options for financing the project

Outline what other means of financing the project have been explored, including which funding sources have been considered / approached and why they were discarded.

Birmingham City Council has reviewed potential alternative funding sources, including CIL and Section 106, and can confirm that none is available to deliver the scheme. The scheme therefore requires capital funding to be allocated from a source of public funding. The extension of the Enterprise Zone to include the Curzon area was approved by Government on the basis that it was used to maximise the impact of HS2, and the vision set out in the Curzon Masterplan.

Given the landowners are likely to benefit when the enhanced public realm is delivered S106/CIL payments will be used to provide the Local Authority match funding for maintenance of the enhanced Curzon Public Realm scheme over the base Curzon Station scheme.

4.2.2 Match funding

Confirm which sources of match funding included in section 4.1 have been secured (attach evidence). For funding that is not yet secure, provide details on the strategy and timeline for securing it.

Birmingham City Council will be providing the maintenance funding for the project, currently estimated at up to £3.75 million. This funding will be allocated from contributions from CIL and Section 106 resources.

4.2.3 Grant versus loan

If capital grant funding is applied for, explain why loan funding is not deemed suitable.

A loan would not be appropriate as there is no way in which the project could make repayments.

4.2.4 Loan arrangements

If loan is applied for, outline the proposed repayment arrangements and timescales.

N/A

4.2.5 Availability of GBSLEP funding

How would the project proceed if GBSLEP funds are not available? Or are available at a reduced level?

Without Enterprise Zone funding the project will not go ahead and only the public realm associated with the base Curzon Station design would proceed. There are no other sources of funding available. A loan would not be appropriate as there is no way in which the project could make repayments.

In the absence of this funding, HS2 Ltd will only be delivering the Hybrid Bill option (Curzon Station Base scheme with no enhanced Public Realm), which will result in abortive design costs, delays to the overall programme and a considerable reputational risks to BCC and HS2 Ltd.

4.3 Due Diligence

4.3.1 Applicant organisation's financial status *(GBSLEP to advise if information is required)*

Provide full accounts for the last three financial years, as well as current financial forecasts.

Due to the relationship between the GBSLEP and BCC with BCC acting as the accountable body for the EZ funding this information is not usually required.

4.3.2 Partners' financial status *(GBSLEP to advise if information is required)*

Provide full accounts for the last three financial years, as well as current financial forecasts.

Due to the relationship between the GBSLEP and BCC with BCC acting as the accountable body for the EZ funding this information is not usually required.

4.3.3 Independent assurance

Outline any independent assurance that will be place for the project, such as gateway or key stage reviews throughout delivery.

BCC is the statutory local authority and its financial status is subject to Government oversight. Financial management of the project will be exercised within the terms of BCC's Financial Control Standards for major Projects (November 2018). These standards have been established to ensure that such projects

are managed by a Project Board through a process of outline and full business cases, regular monitoring of delivery issues and the preparation of Project Highlight reports, and a post-implementation review, together with early warnings of potential problems, a procedure for change requests, and control over the use of contingency sums.

All capital expenditure is also subject to the Council's constitution and financial procedures, including financial regulations, contract standing orders, executive decision-making, and monitoring. The project reports to the Capital Project Board, which has responsibility for the delivery of all projects above £20m or a strategic project under £20m and is chaired by the Leader of the Council. The membership also includes the Chief Executive, S151 Officer and Cabinet Member for Resources. Given the value of the scheme this scheme will be reported to the Capital Project Board.

BCC and HS2 are in the process of developing a funding agreement that will set out the key principles for the responsibility and management for how funding will be managed, including departures, changes, and overruns. HS2 Ltd has indicated that it requires payment in advance of the works being undertaken as per the commercial principles set out by HS2 with the DfT (cost neutral).

BCC will ensure that project assurance is in place to provide independent and impartial confirmation that the project is on track and to confirm that the project is applying relevant practices and procedures and that the business rationale for the scheme remains aligned with the organisational strategy.

4.4 Financial Risks

4.4.1 Cost overruns

Outline the arrangements for any cost overruns in the project. Any grant approved by GBSLEP will be a maximum capped amount and the applicant will be responsible for any expenditure above that amount.

HS2's procurement process for Curzon Station is set up so that the design and costs of the construction of the station is verified with MDJV during Stage 1 of the two-stage process. As a part of Stage 1, MDJV have worked collaboratively with HS2 Ltd to verify the design, and schedule, with the aim to identify risks, opportunities for value engineering and to develop a target price. The project costs presented in this Business Case are based on the Target Price for construction costs provided by MDJV at Stage 1 Gate 3 and are robustly supported by a suitable allowance for risk assessed using a well-informed risk register (**Appendix E5**).

During Stage 2, the focus will be on MDJV delivering to the Target Price submitted in Stage 1, which will be verified progressively by HS2 Ltd. At this stage it is reasonable to state that any unlikely cost overruns can be accommodated with value engineering ensuring that the overall scheme is delivered within budgets and offers the same value for money as per the Full Business Case.

4.4.2 State Aid

State how the project complies with State Aid regulations without contravening the State Aid legislation. Outline what advice (e.g. legal advice) has been received to confirm that any grant funding approved does not amount to unlawful State Aid.

Any project activity GBSLEP funds must meet public sector financial rules and comply with the rules governing State aid. Grants found to be in contravention of State Aid rules must be repaid with interest, so it is in your interest to ensure that any project you bring forward for consideration complies with these regulations.

The project takes a 'no aid' position based on the delivery of a scheme providing public goods which will not benefit selective undertakings or distort or threaten to distort competition. In addition, it can be considered to be non-economic in relation to the Commission's guidance on the notion of State aid. As such, the project complies with State Aid regulations.

5. Management Case

The purpose of the Management Case is to demonstrate that the preferred option is capable of being delivered successfully, in accordance with recognised best practice. It tests project planning, the governance structure, risk management, communications and stakeholder management, benefits realisation and monitoring and evaluation. The Management Case should be over halfway complete at OBC stage; at FBC, in addition to updating all questions the Monitoring and Evaluation plan and processes need to be finalised.

5.1 Project Planning

5.1.1 Project development and statutory requirements (SOBC and OBC stage only)

List the key project development milestones, including local authority consents or statutory approvals needed for the project to proceed. Indicate which have been obtained and the timeline for obtaining the rest. Add / delete lines as appropriate. Confirm what LA/CA governance needs to be factored into the decision making.

Description	Planned / actual date	Provide Details
Design Assurance Level 1 & 2 (Concept design)	September 2018	Detailed in the Landscape & Public Realm - DAL 02 Design Report ref. 1SN04-WSPLS-REP-NS08-000001 (CO1) document.
Design Assurance Level 3 (Feasibility & Preliminary Design)	September 2018	Detailed in the Landscape & Public Realm - DAL 03 Design Report ref. 1SN04-WSPLS-REP-NS08-000001 (CO2) document.
Design Assurance Level 4 & 5 (Detailed design)	December 2018	Detailed in the Landscape & Public Realm - DAL 05 BCC Funded Public Realm Outline Specification ref. 1SN04-WSP-CR-SPE-NS08-000001 (CO1) and the Landscape and Public Realm - DAL 05 BCC Funded Public Realm Landscape and Public Realm 1SN04-WSP-CR-REP-NS08-000020 reports.
Network Rail Consent Form 001	September 2019	An initial desktop report which assessed the impact the that the enhanced public realm works at Paternoster Place would likely have on Network Rail's infrastructure which was reviewed and signed-off by Network Rail providing an 'approval in principle' for the works.
Environmental appraisal	Completed	As part of HS2 Hybrid Bill process
Planning application	06/04/2020	Planning application for enhanced public realm works submitted.
Statutory approvals/planning permission	28/07/2020	Planning application for enhanced public realm works approved.
Consultations with key stakeholders	Ongoing	The HS2 Strategic Board has been created for the West Midlands to bring together senior representatives from relevant organisations including Local Authorities and Local Enterprise Partnerships, to set the strategic agenda for HS2. A series of working groups are taking place under the Strategic Board. The Stakeholder Management Plan for 1DB03 – Curzon Street Station (Document no:

		1DB03-MDS-SE-PLN-NS08-000001), which is appended to this Business Case as Appendix M1 , provides further details for how stakeholders will be involved and managed in the development of Curzon Station going forward.
Network Rail consents	31/05/2023 to 15/01/2025	A circa 20 month period has been allowed for in the Curzon Station Enhanced Urban Realm's project programme to secure the relevant necessary Network Rail consents for the Paternoster Place element of the project.
Internal or external funder strategic/outline business case	18/07/2019	OBC approved by GBSLEP board
Internal or external funder full business case with benefit-cost ratio or established value for money case	February 2022	This business case for funding for this scheme to be approved by Programme Delivery Board.
Quotes for work to be undertaken/ Works Contractor Appointed	May 2021	Mace Dragados appointed as the MSWC. 2 stage process. Currently approaching end of Stage 1 Stage 1: Detailed design and Target Cost complete
Compulsory Purchase Order powers		Granted in HS2 Act of Parliament
Major statutory instruments (e.g. Transport and Works Act Orders, Side Road Orders, Development Consent Orders)		Granted in HS2 Act of Parliament
Known environmental impacts (e.g. SSSIs, Heritage sites, Ancient Monuments)	Completed	As part of HS2 Hybrid Bill process
Equality Impact assessment		Forms part of HS2 process

5.1.2 Project delivery plan

At SOBC, OBC, outline project delivery plan; at FBC, append a detailed programme and summarise key milestones here (add lines as appropriate).

A simplified and an extensive project programme which cover all the works associated with the construction of Curzon Station (including the works associated with the Curzon Station Enhanced Public Realm scheme) are presented in **Appendix E2**. Please note that the Curzon Square element of the Curzon Station Enhanced Public Realm scheme is named as "Eastside City Park (EUR)" on the project programme.

Key milestones of relevance to the Curzon Station Enhanced Public Realm scheme are summarised below:

Task	Start Date	Completion Date
Stage 1 Target Cost for FBC completed	June 2021	January 2022
Main station design	June 2022	May 2024
Main station construction	January 2025	February 2029
Curzon Square Enhanced Urban Realm (EUR) landscaping	January 2027	May 2027
Paternoster Place EUR design	April 2022	May 2027
Curzon Promenade EUR landscaping	January 2027	August 2027

Completion of all the works and delivery into Service		November 2029
5.1.3 Critical path		
<p><i>Outline the key review and go / no-go decision points and what would happen at each point.</i></p> <p>The following key review and go / no-go decision points are form the critical path of the Curzon Station Enhanced Public Realm scheme:</p> <ul style="list-style-type: none"> • Birmingham City Council to approve FBC and expenditure on public realm works following approval of grant by GBSLEP. • Between the end of Stage 1 and the start of Stage 2 of the Curzon Station procurement process— The Curzon Station building works contract between HS2 Ltd and MDJV contains a break clause allowing both parties to exercise their right to walk away from the project if they so wished at completion of Stage 1 but prior to Stage 2 of the procurement process (which is detailed in Section 3.1.2 of this FBC). Activating this clause would have programme and cost impacts for the enhanced public realm project as a new station building contractor would have to be appointed. However, it has been deemed that the processes in place to facilitate the close partnership working between HS2 Ltd and MDJV means that it is unlikely that either party will activate this clause. • Review dates will be included in the contractual agreement between BCC and HS2 Ltd based on project milestones such as the at the end of detailed design. 		

5.2 Organisation

5.2.1 Track record

Outline your organisation's and the identified project team's track record of delivering similar projects. Include skills / experience of key staff involved in the project.

BCC have experience of successfully supporting the delivery of a wide range of major regeneration, redevelopment and public realm projects of a similar scale and value across the City including in a City Centre context such as Arena Central, Snow Hill, Centenary Square and Axis. In all cases the City Council has provided expertise in supporting services including compulsory purchase, planning, urban design, and transportation. This experience has provided evidence of what has worked in the past in order to provide the most appropriate context for development of the proposed project. In addition, HS2 Ltd has been established to deliver the HS2 rail line and stations. The workforce are experienced professionals with extensive track records of delivering rail infrastructure, including public realm works.

Also, as mentioned in **Section 3.1.1**, Mace and Dragados (who have been contracted to build Curzon Station) have a strong track record delivering some of the world's most complex and exciting infrastructure projects, including the refurbishment of Birmingham New Street, Battersea Power Station (phase 2) and work on delivering the Spanish high speed rail network, including the major new Madrid Atocha and Barcelona Sants stations. They are also working together in a separate joint venture delivering HS2's London terminus at Euston. Of particular relevance for the works involved in constructing the Curzon Station Enhanced Public Realm scheme, Mace have successfully delivered hard and soft landscaping public realm works surrounding major developments such as the Television Centre in Wood Lane, London; University College London (UCL) East in Stratford, London; and Greenwich Peninsula as well as having experience of overseeing the foundation and beam/deck installation for bridge decks that crossed-over and were next to live railway.

5.2.2 Use of external consultants

List key consultants (individuals and organisations) involved and outline their track record.

HS2 appointed a design consortium who were responsible for designing the Curzon Station including Curzon Enhanced Public Realm proposals. This design consortium consisted of:

- WSP: design and transport;
- Grimshaw: architecture; and
- Glenn Howells: architecture.

These are experienced companies who have completed many projects of a similar nature.

In addition, the companies Mace and Dragados (MDJV) formed a joint venture to work with HS2 Ltd in two stages to work with HS2's design consortium of Consultants to finalise the detailed design and then build Curzon Station (including the enhanced public realm proposals). As previously outlined, both Mace and Dragados have relevant experience of delivering similar projects and are also working together in a separate joint venture delivering HS2's London terminus at Euston.

5.2.3 Succession arrangements

Outline the arrangements in place to ensure continuity of resource and retention of organisational memory including project record management approach.

HS2 Ltd will enter into maintenance arrangements with the appropriate station or commercial operator depending on the commercial arrangements at the time. BCC will provide a commuted sum to go towards this maintenance arrangement. Construction records will be stored in accordance with HS2 Ltd's retention policy.

Both HS2 and BCC as well established organisation where knowledge transfer and talent retention are fully embedded within the key objectives of the respective organisations. Succession planning, talent retention and learning and development of staff is at the core of their organisational ethos.

5.3 Governance

5.3.1 Project management

Outline the proposed project management structure including roles and responsibilities.

Project management will continue to be managed in accordance with BCC's methodology and will be tailored to meet corporate governance and project management policies and standards.

The BCC Project Group/Team will:

- provide guidance and direction to the project to ensure that the project remains within scope and delivers the required outputs and project benefits within the agreed budget and schedule;
- monitor the development of solutions and proposals at all stages to ensure they meet the organisation's needs and progress towards targets;
- evaluate the impact of solutions and proposals on the Council and stakeholders; and
- ensure risks are being tracked and mitigated as effectively as possible.

Key roles and responsibilities have been established as follows:

- SRO – Ian MacLeod - Director of Planning, Transport and Sustainability
- Operational Sponsor – Simon Delahunty-Forrest
- Project Executive – James Betjemann, Head of EZ and Curzon Delivery

- Project Manager – Hannah Willetts, Project Delivery Manager
- Technical advice – Michael Scheepers (legal) and Charlie Short (Procurement)

The Project Manager (Hannah Willetts) will:

- ensure that the project produces the required products within the specified tolerances of time, cost, quality, scope, risk, and benefits.
- be responsible for the project producing a result capable of achieving the benefits defined in the Business Case.
- be responsible for finalising service contracts and issuing instructions and receiving highlight reports from all service providers and team managers.
- make reports to external funders as required.
- coordinate the interface, communication, and information exchange expeditiously between different teams and organisations involved in the delivery of the project.
- provide regular reports to the Project Board to keep senior management routinely informed of project status and all developments that impact on the project success.

HS2 Ltd has also established a Core Team to work with the BCC Team to deliver the agreed Enhanced Public Realm project. This Team is working with BCC to draft a legally binding arrangement to deliver the project. HS2 Ltd is establishing a Negotiation Support Group, which assist its Core Negotiating Team.

The arrangements demonstrate appropriate resourcing through internal and external sources with the appropriate skills and capacity. A Project Delivery Plan will be developed to guide implementation of the project, including timescales and milestones.

5.3.2 Project governance

Provide details on the proposed project governance and assurance, including:

- *decision levels;*
- *escalation arrangements;*
- *project board composition and terms of reference; and*
- *project board members' relevant experience (if not included at 5.2.1).*

HS2 Ltd Project Governance

The project will be delivered by HS2 Ltd in accordance with their governance structure, as shown in **Appendix M2**. This shows the following five levels of governance:

- Shareholders;
- Board;
- Corporate;
- Programme; and
- Project.

Each level has a defined role, delegated authority, and escalation protocols. The project board members have been appointed by Government to oversee the delivery of HS2.

As the Curzon Station Enhanced Public Realm project will be delivered as part of the wider Curzon Street station project, it will require governance oversight from the HS2 Ltd Executive Committee, Board and Shareholders to meet the procurement and financial management requirements.

BCC Project Governance

The project will be monitored by BCC, as funding applicant, in accordance with their governance procedures. The overall governance is led by the EZ and Curzon Project Delivery Board which exists to provide strategic direction and make decisions in the best interests of the project (subject to BCC and GBSLEP assurance requirements); review and approve all products/documentation; monitor benefit realisation and risks and report to the Corporate Leadership Team.

The Project Board for the Curzon Enhanced Public Realm project is the Enterprise Zone and Curzon Project Delivery Board, which comprises the following individuals and will oversee day to day management of the project:

- Phil Edwards – Assistant Director, Transport Connectivity
- James Betjemann – Head of EZ and Curzon Delivery
- Alison Jarrett – Assistant Director, Finance
- Ian Harris – Finance Manager
- Jane Smith – EZ Programme Manager
- Simon Garrad – Head of Project Delivery
- Rachel Telfer - Transport Planning and Investment Manager

In addition, the project will report on a monthly basis to the BCC Capital Board, which oversees the delivery of all major BCC projects and comprises of;

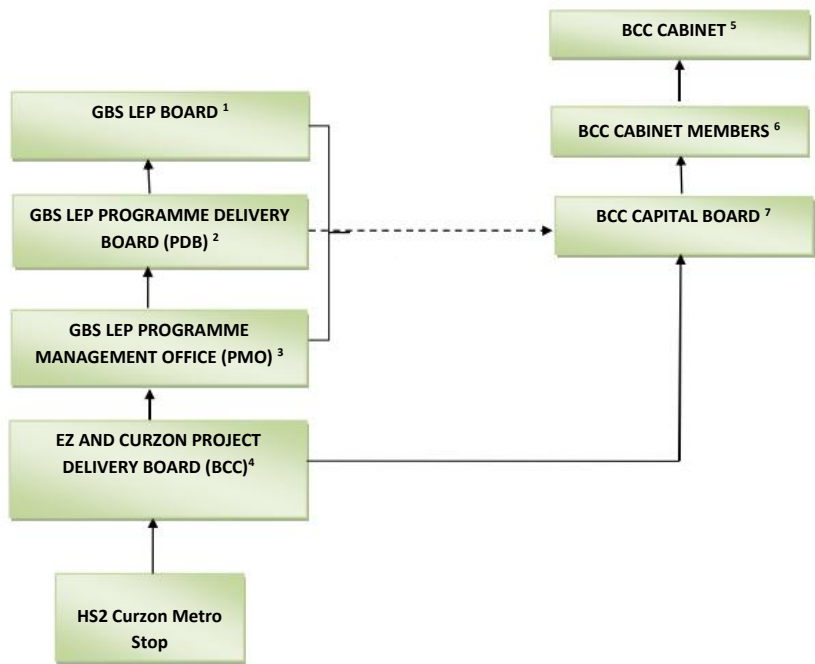
- Leader - BCC
- Cabinet Member, – BCC Finance and Resources
- Chief Executive – BCC
- Section 151 Officer - BCC

5.3.3 Change management

Outline the proposed change management strategy for the project, including escalation procedures and thresholds.

Figure 14 below shows how the project delivery board reports through the GBSLEP board to the BCC Cabinet providing overall governance responsibility.

BCC and GBSLEP Approvals and Reporting



¹ GBSLEP Board – approve projects above £10m
² PDB – approve projects between £3m and £10m, with delegated approval to GBS LEP Director for projects up to £3m
³ PMO – assure and monitor projects
⁴ EZCPDB – objective of the Delivery Board is to monitor and oversee the development and delivery of EZ and Curzon business cases and projects managed by the Inclusive Growth Directorate.
⁵ BCC Cabinet – approve projects above £1m
⁶ BCC Cabinet Members – approve projects between £200,000 and £1m
⁷ BCC Capital Board – approve and monitor projects above £20m.

Figure 14: BCC and GBSLEP Approvals and Reporting

Initial change management and escalation will be between the contractor and HS2 Ltd through the agreed structure set out in the procurement process. Changes to scope or cost will be referred to the EZ and Curzon Project Delivery Board and then follow the process as set out in **Figure 14**.

Additionally the principles of any change management will be included within the legal agreements between BCC and HS2 Limited.

5.4 Stakeholder Management

5.4.1 Stakeholder engagement

Outline how the stakeholders will be involved and managed. Append a stakeholder management plan if available.

The HS2 Regional Enterprise Board has been created for the West Midlands to bring together senior representatives from relevant organisations including Local Authorities and Local Enterprise Partnerships, to set the strategic agenda for HS2. The ultimate aim is to maximise the benefits of HS2 for Birmingham and the wider West Midlands. Beneath this group sits a Programme Coordination group who have responsibility for taking forward the agenda set by the Strategic Board. A series of further working groups sit beneath this group focussed on the following:

- The Birmingham Curzon Street Station;
- The Interchange Station;
- The Washwood Heath Depot and East Birmingham;
- Business relocation and mitigation;
- Jobs and skills;

- Transport connectivity; and
- Construction period.

Members of these working groups include representatives from HS2 Ltd, City Council Officers, Network Rail, Centro, other Local Authorities and Local Enterprise Partnerships.

The Curzon Station working group (CWSG) exists to:

- Work collaboratively and share good practice across organisations to develop a joined-up approach to delivery of the Curzon programme;
- Contribute to the delivery of Curzon Investment Plan;
- Identify risks and ensure that appropriate measures are in place to mitigate those risks;
- Monitor progress against key milestones, identify issues affecting delivery and jointly find solutions to improve programme delivery;
- Share information on work programmes in a timely manner and on a regular basis; and
- Jointly promote and support each member organisation's communications activity to raise awareness of the Curzon Programme.

The CWSG will be chaired on an alternating basis by a representative from either BCC or HS2 Ltd. and membership will comprise of representatives from the following organisations:

- BCC Planning and Regeneration;
- BCC Transportation;
- HS2 Ltd;
- HS2 Growth Partnership;
- West Midlands Combined Authority;
- Midland Metro Alliance;
- Transport for the West Midlands;
- Canals and River Trust;
- Laing Murphy Joint Venture;
- Historic England; and
- Birmingham City University.

The Stakeholder Management Plan for 1DB03 – Curzon Street Station (Document no: 1DB03-MDS-SE-PLN-NS08-000001), which is appended to this Business Case as **Appendix M1**, provides further details for how stakeholders will be involved and managed in the development of Curzon Station going forward.

5.4.2 Partnership arrangements

Outline key roles and responsibilities of all partner organisations in the project, where not covered in commercial case or above.

As discussed above, the project will be delivered as a partnership between:

- Birmingham City Council, as the applicant;
- HS2 Ltd, responsible for delivery of Curzon Station, including the scheme; and
- MDJV will be responsible for the construction of Curzon Station, including the scheme.

5.4.3 Communications and marketing plan

At OBC, outline your proposed approach to project communications and marketing. At FBC, append a full communications plan and summarise it here.

BCC has developed a Marketing and Promotion Strategy to raise the profile for the Enterprise Zone that will enable the City to compete nationally and internationally. It is aligned to the City Council's Capital Investment Strategy which sets out a framework for targeting investment and as such will act as a key delivery mechanism, alongside other interventions such as the emerging Business and Skills Support Programme.

The Marketing and Promotion Strategy is focused on a proactive and co-ordinated approach to investment promotion, that will enable the Enterprise Zone to:

- identify and assess credible investment opportunities;
- promote investment opportunities to key overseas markets;
- support investors and facilitate investment deals in the EZ;
- increase levels of economic growth and good quality development across the EZ; and
- be proactive in engaging and targeting potential investors.

This will ensure that the investment benefits of the Curzon Enhanced Public Realm project are maximised.

In addition, have appointed a stakeholder lead as part of their works constructing Curzon Station who, amongst other things, will be responsible for Community Engagement & Communications. This stakeholder lead will head a team that will be responsible for overseeing engagement across different Curzon Station stakeholders and coordinating regular meetings of representatives from across internal project teams (refer to **Appendix M1** for further details).

5.5 Monitoring and evaluation

At OBC, outline the proposed approach to project monitoring and evaluation. At FBC, append a detailed plan for monitoring and evaluating project outputs and outcomes, including assigned responsibilities and budgeted costs. Note the GBSLEP will be collecting monitoring information until at least March 2025.

A draft Monitoring and Evaluation plan is included as **Appendix M3**.

This recommends the monitoring of seven items, which will allow the evaluation of the benefits of the scheme:

- Completion of construction and progress against programme;
- Feedback from active travel mode users;
- Quantity of development forecast to be built in the relevant Enterprise Zone (EZ) sites surrounding Curzon Station;
- Feedback from local businesses;
- Rental values of commercial and residential properties surrounding Curzon Station;
- Area of developable land at the current site of the Taboo Cinema; and
- Expenditure against budget.

Regular financial reviews, which compares the total spend on the project to the forecast spend, will be carried out by the Project Manager, with a financial schedule completed and submitted to the Project Board on a monthly basis. A final review will be undertaken at the close of the project. Similarly, progress on outputs and outcomes (which include the forecast benefits of the scheme) will also be reported to the Board. An evaluation report will be prepared 12 and 60 months after the completion of the enhanced public realm works.

5.6 Risk management

*Append a fully assessed Risk Register to include RAG rating, risk owner, mitigation and contingency arrangements (minimum requirements in template at in **Appendix 6**).*

Further guidance on risk management is provided in the HMT Orange Book, available at <https://www.gov.uk/government/publications/orange-book>.

Risks to construction and programme will be managed by HS2 Ltd and MDJV in accordance with HS2 Ltd.'s policies and processes.

Risks to funding, completion and delivery will be managed by BCC (who will appoint a dedicated risk manager), working with HS2 Ltd and MDJV as appropriate. Responsibility for construction of the project lies with HS2 Ltd.

A Risk Register is included as **Appendix E5**.

C. Declarations

C1. Document Confidentiality Statement

Please confirm whether any information in this Business Case is commercially sensitive and considered exempt from release under Section 41 of the Freedom of Information Act 2000. If so, please provide details.

C2. Declarations

Has any director/partner ever been disqualified from being a company director under the Company Directors Disqualification Act (1986) or ever been the proprietor, partner or director of a business that has been subject to an investigation (completed, current or pending) undertaken under the Companies, Financial Services or Banking Acts?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Has any director/partner ever been bankrupt or subject to an arrangement with creditors or ever been the proprietor, partner or director of a business subject to any formal insolvency procedure such as receivership, liquidation, or administration, or subject to an arrangement with its creditors	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Has any director/partner ever been the proprietor, partner or director of a business that has been requested to repay a grant under any government scheme?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

If the answer is “yes” to any of these questions please give details on a separate document of the person(s) and business(es) and details of the circumstances. This does not necessarily affect your chances of being awarded GBSLEP funding.

C3. Senior Responsible Owner Declaration

As Senior Responsible Owner for [PROJECT NAME] I hereby submit this request for [FUND NAME] allocation on behalf of [NAME OF APPLICANT ORGANISATION] and confirm that I have the necessary authority to do so.

In making this application, I agree that the information provided by me in this application is to the best of my knowledge correct. I understand that if I give information that is incorrect or incomplete, funding may be withheld or reclaimed and action taken against me. Any expenditure defrayed in advance of project approval is at risk of not being reimbursed and all spend must be compliant with the Grant Conditions and State Aid requirements.

I understand that this application does not form or imply any agreement to provide funding.

I am content for information supplied here to be stored electronically, shared with the GBSLEP Independent Technical Evaluator, and other parties who may be involved in considering the business case to allow enquiries on this application enabling the GBSLEP to satisfy themselves of its completeness and accuracy.

I understand that a copy of the main Business Case document will be made available on the GBSLEP website. The Business Case supporting appendices will not be uploaded onto the website. Redactions to the main Business Case document will only be acceptable where they fall within a category for exemption. *Where scheme promoters consider information to fall within the categories for exemption,*

they should provide a separate version of the main Business Case document, which highlights the proposed Business Case redactions.

I understand that any offer may be publicised by means of a press release giving brief details of the project and the grant amount.

Name: Rebecca Hellard	Signed:
Position: Interim Chief Finance Officer	
Date:	

C4. Section 151 Officer / Chief Financial Officer (or equivalent) Declaration

As Section 151 Officer (or Chief Financial Officer) for [PROJECT NAME] I hereby agree that this request for [FUND NAME] allocation on behalf of [NAME OF APPLICANT ORGANISATION] is financially compliant and confirm that I have the necessary authority to do so.

I declare that the project cost estimates quoted in this application are accurate to the best of my knowledge and that [NAME OF APPLICANT ORGANISATION]:

- has allocated sufficient budget to deliver this project on the basis of its proposed funding contribution;
- has undertaken a risk assessment which identifies all substantial project risks known at the time of Business Case submission and this is included within the cost estimate;
- accepts responsibility for meeting any costs over and above the GBSLEP contribution requested, including potential cost overruns and the underwriting of any funding contributions expected from third parties;
- accepts responsibility for meeting any ongoing revenue requirements in relation to the project;
- accepts that no further increase in GBSLEP funding will be considered beyond the maximum contribution requested;
- confirms that the authority has the necessary governance / assurance arrangements in place and the project has met our assurance guidelines; and
- funding is compliant with central government guidance; and
- confirms that the procurement strategy for the project is legally compliant and is likely to achieve the best value for money outcome.

Name: Rebecca Hellard	Signed:
Position: Interim Chief Finance Officer	
Date:	

D. Development Costs

Only complete this section if you wish to apply for a funding contribution towards the development costs of this project. The application for a funding contribution towards development costs will only be progressed if the OBC is assessed to meet the required criteria to proceed through to FBC. Applications are assessed on a risk basis and typically provided to public sector organisations only.

If the project is unsuccessful with its application for funding, the development funding will be required to be repaid.

Total Development Costs for this project (<i>up to and including FBC submission</i>)	
GBSLEP funds contribution sought towards the Total Development Costs	<i>Typically, up to 10% of the total GBSLEP funding requested</i>

Please describe and provide a financial breakdown of the Development Work to be undertaken.
Please include specifically what the GBSLEP funds will be used for, key milestones towards the production of the FBC, and governance arrangements, including any local gateway processes, change control and risk management for the delivery of the FBC.

N/A

Full Business Case submission date

By signing below, you certify that the above information is true and accurate.

Should your application for Development Costs be granted, you agree that the GBSLEP funding will be defrayed to you on the following conditions:

- The GBSLEP funds will be defrayed as an interest-free, repayable grant. The funding will be defrayed as capital and should only be used for expenditure that can be capitalised.
- The funding will be defrayed from your projected total capital allocation to your project.
- Upon full approval, the balance of the total capital allocation to your scheme will be defrayed in accordance with the processes described in the GBSLEP Assurance Framework, i.e. quarterly in arrears on production of actual expenditure.
- After your submission of the FBC, should approval for the project not be granted, you will return all previously received funding towards Development Costs to GBSLEP in full.
- You will include GBSLEP in the process for any decisions to be made regarding the scope, cost or timeframe for this project.
- You will provide regular update reports to GBSLEP on progress with the development of the FBC for the project, commencing from the date you sign this letter and at a frequency to be agreed.

Sign:	Sign:
Name: Ian MacLeod	Name: Rebecca Hellard
Position: Director of Planning, Transport and Sustainability	Position: Director of Council Management
Date:	Date:
Senior Responsible Owner	Chief Financial Officer (or equivalent)

E. Appendices

List of Appendices

I. Reference

- A. Definitions and acronyms
- B. Additional resources

II. Templates Included with this Document

1. Options Appraisal – Critical Success Factors
2. Options Appraisal – Longlist of Options
3. Options Appraisal – Cost Benefit Analysis (CBA) of Shortlist Options

III. Templates Available on Request

4. Profile of Forecast Outputs and Outcomes
5. Proposed Funding Profile
6. Risk Register

IV. Further Appendices as applicable for the Business Case

- Logic Model
- Project map 1 (location)
- Project map 2 (site plan)
- Feasibility studies
- Relevant organisational strategic documents
- Industry-relevant stage reports and plans
- Environmental Impact Assessment
- Distributional impact appraisal
- Confirmation of match funding (conditional or full)
- Statement of financial viability
- Detailed cost plans
- Consultation reports
- Project programme
- Communications plan
- Monitoring & Evaluation plan
- Organisation organogram
- Project organogram
- Procurement contract (at FBC)
- Letters of support / Memoranda of Understanding from project stakeholders

Appendix A – Definitions and acronyms

BCR	Benefit - Cost Ratio
BEIS	Department for Business, Energy and Industrial Strategy
Benefits	Positive economic, social and environmental impacts expected to be realised as a result of the project being delivered. This is in addition to what is considered business as usual
CBA	Cost - Benefit Analysis
Delivery Plan	A detailed, typically sector specific, plan to support the delivery of the GBSLEP Strategic Economic Plan
DfE	Department for Education
DfT	Department for Transport
EoI	Expression of Interest
FBC	Full Business Case
GBSLEP SEP	GBSLEP Strategic Economic Plan
GVA	Gross Value Added
HMT	Her Majesty's Treasury
LIS	Local Industrial Strategy
MHCLG	Ministry for Housing, Communities and Local Government
NPV	Net Present Value
OBC	Outline Business Case
Optimism Bias	The proven tendency for appraisers to be too optimistic about project costs, duration and benefits delivery, which require adjustments to correct for
Outcomes	<p>Direct outcomes are the short- and intermediate-term effects or changes that occur or will occur as a direct result of the project activity.</p> <p>An indirect outcome is the intermediate to long-term effect or changes of a project, i.e. the longer term consequence of the project. They may be expected to follow the project activity, but cannot be guaranteed due to a range of factors.</p>
Outputs	Outputs are usually pre-defined (e.g. a target) and can be accurately measured (e.g. a number). Outputs are sometimes referred to as deliverables – they are the direct, immediate-term, quantifiable results associated with a project.
QRA	Quantitative Risk Assessment
SOBC	Strategic Outline Business Case
SRO	Senior Responsible Owner
WebTag	DfT's Transport Appraisal Guidance that provides information on the role of transport modelling and appraisal

Appendix B – Resources

Accounting for the Effects of Climate Change Supplementary Green Book Guidance

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/934339/Accounting for the Effects Of Climate Change - Supplementary Green Book ..pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/934339/Accounting_for_the_Effects_Of_Climate_Change_-_Supplementary_Green_Book_..pdf)

GBSLEP Strategic Economic Plan

<https://gbslep.co.uk/resources/reports/strategic-economic-plan-2016-30>

GBSLEP Assurance Framework

<https://gbslep.co.uk/resources/reports/assurance-framework>

GBSLEP Towns and Local Centres Framework

<https://gbslep.co.uk/what-we-do/place/develop-thriving-towns-local-centres>

Investing in Culture: Enhancing Opportunities across the GBSLEP Region

<https://gbslep.co.uk/cultural-investments>

West Midlands Local Industrial Strategy

<https://www.wmca.org.uk/what-we-do/industrial-strategy/>

HM Treasury Green Book: Central Government Guidance on Appraisal and Evaluation

<https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government>

HM Treasury Green Book: Guide to Developing the Project Business Case

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/749086/Project Business Case 2018.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/749086/Project_Business_Case_2018.pdf)

Department for Communities and Local Government: Appraisal Guide

<https://www.gov.uk/government/publications/department-for-communities-and-local-government-appraisal-guide>

Department for Transport: Transport analysis guidance

<https://www.gov.uk/guidance/transport-analysis-guidance-webtag>

HM Treasury Magenta Book: Guidance for Evaluation

<https://www.gov.uk/government/publications/the-magenta-book>

HM Treasury Orange Book: Management of Risk – Principles and Concepts

<https://www.gov.uk/government/publications/orange-book>

Management of Risk in Government: Framework

<https://www.gov.uk/government/publications/management-of-risk-in-government-framework>

Appendix 1: Options appraisal - Critical Success Factors

Key Critical Success Factors	Description
Strategic fit and meets business needs	How well the option: <ul style="list-style-type: none"> • achieves the identified objectives to maximise an opportunity or resolve an issue • meets the agreed spending objectives, related business needs and service requirements • provides holistic fit and synergy with other strategies, programmes and projects
Potential Value for Money	How well the option: <ul style="list-style-type: none"> • optimises value (social, economic and environmental), in terms of the potential costs, benefits and risks
Supplier capacity and capability	How well the option: <ul style="list-style-type: none"> • matches the ability of potential suppliers to deliver the required services • appeals to the supply side
Potential affordability	How well the option: <ul style="list-style-type: none"> • can be financed from available funds • aligns with sourcing constraints
Potential achievability	How well the option: <ul style="list-style-type: none"> • is likely to be delivered given an organisation's ability to respond to the changes required • matches the level of available skills required for successful delivery

Source:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/685903/The_Green_Book.pdf

Appendix 2: Options appraisal - longlist of options

What ways and options have been considered for delivering the objectives? <i>Briefly outline the different ways forward and options to address the problem / opportunity.</i>	
Reference Case (mandatory) <i>(the position in terms of required outcomes and benefits that would occur if the project did not proceed)</i>	Description In the absence of investment, no enhancement works will be supported, and the 'base' HS2 scheme will be delivered.
	Main Advantages Would likely be deliverable/ achievable.
	Main disadvantages Does not fit with the strategic vision and policy objectives.
	Conclusions The 'base' HS2 scheme is not expected to provide a comprehensive public realm environment.
CP2 – Ecology & Sculpture Park	Description Includes the introduction of an urban ecological park along Curzon Promenade with opportunities for permanent / temporary sculpture integration.
	Main Advantages Creates a very intuitive situation for passengers accessing and egressing the station by providing more routes than other options for passenger dispersal in a more pleasant environment. A variety of pedestrian and shared pedestrian/cycle routes are incorporated in the design with paths designed to accommodate bicycle use. This aligns well with the BCC Masterplan description of Curzon Promenade that envisaged Curzon Promenade providing intuitive pedestrian routing enabling effective passenger dispersal which will enhance passenger experience.
	Main disadvantages Reduced area of planting and fewer amenity uses compared to CP3 and CP4 mean that this option is less likely to achieve BREEAM Excellent.
	Conclusions CP2 was deemed to provide the most intuitive pedestrian routing and access to and from Curzon Station whilst providing a secure and flexible environment. CP2 was taken forward to the shortlist of options.
CP3 – Active Terraced Garden	Description Includes the introduction of a series of terraced garden spaces along Curzon Promenade providing a variety of experiences.
	Main Advantages Further environmental, health, amenity and sustainability benefits compared to the other options as CP3 includes the provision of a greater array of Public Realm uses including children play areas and table tennis. Better more direct cycle routes which brings users closer to Curzon Station included in CP3.
	Main disadvantages Emergency and maintenance vehicle access routing included in CP3 was considered to be less convenient than CP2 & CP4 and there is no public vehicle access proposed. The roadway width within Option CP3 was not considered to be optimal. Regarding maintenance and servicing arrangements, CP3 was deemed to be more difficult to access and maintain than the other options. There is also a risk of there being conflict between pedestrians and cyclists on the cycle routes designed in CP3.
	Conclusions Not chosen to be taken forward.

CP4 – Sports, Fitness & Play	Description Includes the introduction of a series of terraced active garden spaces along Curzon Promenade providing a variety of sport, fitness and play experiences.
	Main Advantages CP4 creates an area for recreation with sport, fitness and play features which will lead to increased wellbeing and community benefits. The tree planting and enhanced landscape scheme planned as part of CP4 will improve visual character and aesthetics surrounding the station.
	Main disadvantages Option CP4 was deemed to result in slightly more onerous construction complexity than the other options with considerable additional civil engineering works and landscape public realm work required in the construction of CP4. In addition, it was highlighted that the provision of potential; pavilions, follies, play area, water features, terracing or kiosks within option CP4 would probably require increased maintenance and security/warden. All of these things mean that CP4 is the most expensive option for Curzon Promenade. The large amount of physical infrastructure included as part of CP4 was deemed to offer less flexibility to design development than options CP2 & CP3 and result in higher health and safety risk, particularly the introduction of open water features. In addition, the cycle routes designed as part of CP4 were deemed to be less convenient than CP2 & CP3.
	Conclusions Not chosen to be taken forward.
CS2 – Formal Tree Grove	Description Includes the introduction of formal tree groves in Curzon Square and along Curzon Street.
	Main Advantages There are less risks involved with the construction of CS2 than the construction of CS3 and CS4 and less maintenance required once operational. CS2 also allows for potential future commercial development.
	Main disadvantages The lack of a water attenuation canal along Curzon Street in CS2 fails to mitigate potential SW flood volumes which makes the option less resilient to climate change. CS2 also has the least positive impact on biodiversity out of all the options.
	Conclusions To be taken forward for further development.
CS3 – Garden Square	Description Includes the introduction of Curzon Square ornamental gardens and a water attenuation canal along Curzon Street.
	Main Advantages The inclusion of a water attenuation canal along Curzon Street as part of CS3 leads to the following advantages over CS2: <ul style="list-style-type: none"> • Sustainable management of surface water; • Responds well to BCC Design Brief; • Contributes to activation and character of space; • Brings movement and nature into the gardens; • Forms a positive frontage to potential future development; • Further biodiversity benefits; and • Greater contribution to criteria required to achieve BREEAM Excellent. In addition, the inclusion of ornamental gardens in CS3 provides a strong sense of place and assists wayfinding in the local area as well as providing areas for recreational and community activities which have wellbeing and socio-economic benefits.

	<p>Main disadvantages</p> <p>The inclusion of a water attenuation canal along Curzon Street as part of CS3 reduces the land available for potential future commercial development which does not align with the BCC Masterplan. In addition, its inclusion in CS3 causes additional construction complexities, results in more challenging maintenance and higher health and safety risks.</p> <p>Conclusions</p> <p>CS3 to be taken forward for further consideration.</p>
CS4 – Multi-functional Garden Square	<p>Description</p> <p>Includes the introduction of Curzon Square ornamental gardens which accommodates vehicle parking and a water attenuation canal along Curzon Street which is bigger than the water attenuation feature designed in CS3.</p>
	<p>Main Advantages</p> <p>CS4 brings about the same improvement and includes all the allowances under CS3 but with further key improvements including the increased capacity of the water attenuation canal along Curzon Street, additional amenity space and ecological measures, plus disabled parking provision beside the old station building. This provides greater contribution to criteria required to achieve BREEAM Excellent.</p>
	<p>Main disadvantages</p> <p>CS4 brings about the same disadvantages as CS3 but the increased capacity of the water attenuation canal along Curzon Street as part of CS4 increases the severity of the disadvantages associated with building the attenuation canal (which are listed as part of the “main disadvantages” of CS3 and makes it the most expensive option to build.</p>
	<p>Conclusions</p> <p>CS4 to be taken forward for further consideration.</p>
CaS2	<p>Description</p> <p>Includes the introduction of a multi-use area of hardstanding; tennis courts; and a multi-use games area.</p>
	<p>Main Advantages</p> <p>Cas2 is the cheapest option out of all the long-list options for Canal Side.</p>
	<p>Main disadvantages</p> <p>CaS2 was assessed to deliver the least amount of benefits out of all the long-list options for Canal Side.</p>
	<p>Conclusions</p> <p>Not chosen to be taken forward.</p>
CaS3	<p>Description</p> <p>Includes the introduction of public art; additional seating; information totems; an enhanced multi program plaza with enhanced lighting; improved canalside ramped access; tennis courts; lighting of a Victorian listed bridge façade; and an enhanced Multi-use Games area, Urban Sports & Play.</p>
	<p>Main Advantages</p> <p>Provides an enhanced setting which will encourage future development along the canal and to the north of the viaduct. The multi-use games area will attract more people to the area, increase amenity, inclusivity and wellbeing benefits compared to CaS2 as well as increase the opportunity and customer numbers for businesses in the area. Improves facilities and connections for active mode travel through the introduction of a cycle hub, information totems, enhanced lighting, and improved vegetation planting along pedestrian routes.</p>
	<p>Main disadvantages</p> <p>CaS 3 is a more complex scheme than CaS2 and therefore greater amounts of disruption and longer periods of isolation may be expected during construction. Inclusion of hard landscaped</p>

	<p>urban play area will increase material use in construction and excavation is likely to be required for the urban play area, creating more waste.</p> <p>Conclusions Not chosen to be taken forward.</p>
CaS4	<p>Description Includes the introduction of electrical and water services for the Market Plaza; enhanced lighting capable of digital art exhibitions; improved canalside ramped and step access; tennis courts; an enhanced archaeological turntable; lighting of a Victorian listed bridge façade; and an enhanced Multi-use Games area, Urban Sports & Play.</p> <p>Main Advantages CaS4 has the same advantages of CaS3 as well as further enhancing access to the canal by providing improved ramped and stepped access and water and electrical service provisions beneath the viaduct. This will further encourage future development on the canal and under the viaduct and generally enhances the environment.</p> <p>Main disadvantages CaS4 is the most expensive option and even more complex to construct than CaS3 meaning greater amounts of disruption and longer periods of isolation may be expected during construction.</p> <p>Conclusions CaS4 provides the most facilities and connections to adjacent areas and has therefore been taken forward to the shortlist of options.</p>
PP2 – Stepped Terracing & Ramp	<p>Description Proposal to step the southern edge of Station Square with the introduction of a ramp along edge of terrace.</p> <p>Main Advantages The introduction of a ramp along the edge of the terrace provides a cycle connection between Moor St and Bordesley St and accommodates additional volume of pedestrian footfall as well as better accommodating disabled users. The steps to the southern edge of Station Square provide an improved visual and physical connection between Digbeth and Station Square and enhances the SuDS of the station. PP2 is the cheapest option, and all proposed work fall within the LOD and would have no impact on the Taboo Cinema site.</p> <p>Main disadvantages PP2 does not bridge over the Rugby Birmingham Stafford (RBS) railway line and therefore does not improve desire lines between Digbeth and Station Square, providing the same difficulties for pedestrians and cyclists to access areas east and west of Curzon Street station as the base scheme. In addition, PP2 includes less green space than the base option and provides a reduced area of usable Public Space.</p> <p>Conclusions Omitted from initial long-list sift because only options that bridge over the RBS railway line at Paternoster Row, as suggested in the Birmingham Curzon HS2: Masterplan for Growth, were considered.</p>
PP3 – Small Corner Chamfer	<p>Description Small chamfer to corner Park Street Bridge circa 3m.</p> <p>Main Advantages PP3 bridges over the RBS railway line at Paternoster Row which provides a partially improved direct physical connection from Bordesley St to Paternoster steps. The removal of the sharp corner at Paternoster Row will slightly improve users' feelings of security, the visual landscape of the station and the ability of the station to accommodate the likely increase in pedestrian flow between Station Square and Digbeth. Out of all the options which were assessed in the long-list option sift and include a corner chamfer, options PP3 and PP4 were deemed to have the least impact on existing NR infrastructure and option PP3 is the cheapest option which includes a corner chamfer.</p>

	<p>Main disadvantages</p> <p>Construction of PP3 could impact NR signalling and Overhead Line Equipment (OHLE) infrastructure due to the modification to Park Street bridge and, if delivered as part of the wider Curzon Station build, could impact on the station's construction programme.</p> <p>Conclusions</p> <p>To be taken forward for further consideration.</p>
PP4 – Medium Chamfer	<p>Description</p> <p>Medium chamfer to corner Park Street Bridge circa 5m.</p>
	<p>Main Advantages</p> <p>Same advantages as PP3 but the advantages are slightly heightened due to the increased size of the corner chamfer.</p>
	<p>Main disadvantages</p> <p>The same disadvantages as PP3, but slightly more pronounced, as well as costing more than PP3 due to the increased size of the corner chamfer.</p>
	<p>Conclusions</p> <p>To be taken forward for further consideration.</p>
PP5 – Large Corner Chamfer	<p>Description</p> <p>Large chamfer to corner Park Street Bridge requires amendment to NR signal assets.</p>
	<p>Main Advantages</p> <p>PP5 provides a direct physical connection from Bordesley St to Paternoster steps. Despite being the most expensive option out of the options which include a corner chamfer, PP5 is still relatively low cost compared to other options.</p>
	<p>Main disadvantages</p> <p>The same disadvantages as PP4, but more pronounced, as well as costing more than PP4 due to the increased size of the corner chamfer. In addition, construction works may encroach on the Taboo cinema meaning a CPO may be required.</p>
	<p>Conclusions</p> <p>To be taken forward for further development.</p> <p>The long-list option appraisal concluded that whilst it is understood that PP5 was the aspirational design for the bridge widening, it is recognised that the option may need to be simplified to either the PP4 or PP3 due to impact on existing NR infrastructure and the Taboo Cinema.</p>
PP6 – Large Corner Chamfer with Void	<p>Description</p> <p>Large chamfer to corner Park Street Bridge requires amendment to NR signal assets with the introduction of a void across RBS railway line.</p>
	<p>Main Advantages</p> <p>Same advantages as PP5 as well as being cheaper than PP5 but more expensive than PP4.</p>
	<p>Main disadvantages</p> <p>Same disadvantages as PP5 as well as providing less space to accommodate the forecast increase in footfall around the station than PP5. Some additional operational health and safety issues are also caused by the introduction of a void across the RBS railway line.</p>
	<p>Conclusions</p> <p>Not chosen to be taken forward.</p>
PP7 – Bridge Link with Steps	<p>Description</p> <p>New pedestrian bridge between the corner of Shaw's Passage and B4114 Park Street and Moor Street Queensway at the corner of the Birmingham Moor Street Station building.</p>
	<p>Main Advantages</p>

	<p>Improves the visual and physical pedestrian connection between the City Core and Digbeth, addressing the likely future increase of pedestrian flow from Birmingham City Centre to Digbeth as Digbeth becomes more developed.</p> <p>Main disadvantages</p> <p>PP7 does not provide a direct desire line and accommodate for increased pedestrian flow between the entrance to Curzon Station in Station Square and Digbeth. Construction of PP7 would be more complex and have more associated issues than the construction of the corner chamfer options. It would also require access to a significant area of the triangular site which accommodates the Taboo Cinema and would require a CPO. The installation of the bridge would limit potential future development of the triangular site which accommodates the Taboo Cinema and access to the northern boundary of Moor St Station as well as posing maintenance, drainage, and disability access issues. PP7 would also cost more to build than many of the other options.</p> <p>Conclusions</p> <p>Omitted from the initial long-list sift because only options that bridge over the RBS railway line at Paternoster Row to provide direct physical connections between Digbeth and Curzon Station were considered; as suggested in the Birmingham Curzon HS2: Masterplan for Growth.</p>
<p>PP8 – Enhanced Bridge Link with Steps</p>	<p>Description</p> <p>New pedestrian bridge between the corner of Shaw's Passage and B4114 Park Street and Moor Street Queensway at the corner of the Birmingham Moor Street Station building. The section of the new pedestrian bridge at the corner of the Birmingham Moor Street Station building is wider than the bridge included in PP7 and includes tree planting on the widened section.</p> <p>Main Advantages</p> <p>Improves the visual and physical pedestrian connection between the City Core and Digbeth over PP7 due to widened section of at the corner of the Birmingham Moor Street Station building, addressing the likely future increase of pedestrian flow from Birmingham City Centre to Digbeth as Digbeth becomes more developed. PP8 also includes additional tree planting.</p> <p>Main disadvantages</p> <p>Same disadvantages as PP7.</p> <p>Conclusions</p> <p>Omitted from the initial long-list sift because only options that bridge over the RBS railway line at Paternoster Row to provide direct physical connections between Digbeth and Curzon Station were considered; as suggested in the Birmingham Curzon HS2: Masterplan for Growth.</p>
<p>PP9 – Comprehensive Redevelopment of Site</p>	<p>Description</p> <p>A comprehensive rebuild over the RBS railway line with new public realm.</p> <p>Main Advantages</p> <p>PP9 would provide strong physical and visual connections between both Bordesley Street and Shaw's Passage and Station Square dramatically improving the quality of public realm and the ability to accommodate additional footfall of pedestrians. PP9 includes the largest green landscaped area and the most planted trees out of all of the options which has environmental, community, and socio-economic benefits. PP9 also provides the largest amount of usable public space.</p> <p>Main disadvantages</p> <p>PP9 is likely to involve the most extensive construction works out of all of the Paternoster Place and would require access to the whole of the triangular site where the Taboo cinema is currently located which would require a CPO and would prevent any future development of the triangular site. Due to its size and scale, PP9 is also likely to require the most maintenance and upkeep out of all of the options and is the most expensive option. It may also take focus away from Station Square as the key gateway to the station.</p> <p>Conclusions</p>

	Not chosen to be taken forward.
PP10 – Expanded Landscape to Bordesley Street and Park Street	Description Expanded landscape and highways design for Park Street and Bordesley Street. It is assumed PP10 can be implemented alongside any of Options PP1 to PP9, and as such is not considered to be a standalone option in terms of the long-list option sift.
	Main Advantages PP10 improves a wider area of landscape surrounding Curzon Station than Options PP1 to PP9 enhancing station user experience. PP10 narrows the carriageway, with associated traffic calming measures, on Bordesley Street, outside Millennium Centre, and on Park Street as far as Shaw's Passage which would benefit pedestrians and cyclists accessing Curzon Street station. PP10 also shows greater definition of the service egress, aligning the carriageway with an exit route along Bordesley Street, as well as using contrasting surfacing to clearly differentiate between the public and service areas.
	Main disadvantages Would be an additional cost and require additional construction.
	Conclusions Omitted from initial long-list sift as agreed at the "SDSC2162 - Lot 4 Phase One Stations Design Services Contract Curzon Street" Meeting held on Friday 3 rd August 2018 between 13:00 and 16:00 in the Boardroom at Glen Howell Architects, 321 Bradford Street, Birmingham, B5 6ET.
PP11 – Further Expanded Landscape (Bordesley Street up to the junction with Allison Street)	Description Same as PP10 but with landscape and highway design extended to cover all of Bordesley Street up to the junction with Allison Street. It is assumed PP11 can be implemented alongside any of Options PP1 to PP9, and, as such, is not considered to be a standalone option in terms of the long-list option sift.
	Main Advantages Same advantages as PP10. The inclusion of a potential off-road cycleway on Bordesley Street would further enhance the environment for cyclists accessing and egressing Curzon Station.
	Main disadvantages Same disadvantages as PP10.
	Conclusions Omitted from initial long-list sift as agreed at the "SDSC2162 - Lot 4 Phase One Stations Design Services Contract Curzon Street" Meeting held on Friday 3 rd August 2018 between 13:00 and 16:00 in the Boardroom at Glen Howell Architects, 321 Bradford Street, Birmingham, B5 6ET.
PP12 – Further Expanded Landscape (B4114 Park Street under Moor Street viaduct)	Description Same as PP11 but with landscape and highway design extended to cover a section of B4114 Park Street under Moor Street viaduct. It is assumed PP12 can be implemented alongside any of Options PP1 to PP9, and, as such, is not considered to be a standalone option in terms of the long-list option sift.
	Main Advantages Same advantages as PP11. The inclusion of additional taxi ranks on B4114 Park Street will create a safer and healthier environment for all station users as they will help reduce the potential for vehicle queuing and conflicts on Park Street as taxis will have more formalised places to stop.
	Main disadvantages Same disadvantages as PP11 as well as the fact that some proposed road alterations along Bordesley Street fall outside the LOD.
	Conclusions

Omitted from initial long-list sift as agreed at the "SDSC2162 - Lot 4 Phase One Stations Design Services Contract Curzon Street" Meeting held on Friday 3 rd August 2018 between 13:00 and 16:00 in the Boardroom at Glen Howell Architects, 321 Bradford Street, Birmingham, B5 6ET.

Appendix 3: Options appraisal - cost-benefit analysis (CBA) of shortlisted options²⁷

	Option 2	Option 3	Option 4
Brief description of the option	Curzon Promenade and Curzon Square	Paternoster (medium corner chamfer), Curzon Promenade and Curzon Square	Paternoster (large corner chamfer), Curzon Promenade and Curzon Square
<i>Capital costs (excluding VAT)</i>	£11,785,756	£25,695,419	£23,436,979
<i>Revenue costs</i>	£1,405,000	£1,405,000	£1,405,000
Total costs	£13,190,756	£27,100,419	£24,841,979
Discounted costs (Present Value of Costs) (1)	£10,599,169	£22,241,549	£20,243,986
Significant unmonetisable costs	None		
<i>Benefit A: Land value uplift</i>	£8,450,600	£37,587,690	£14,501,886
<i>Benefit B: Amenity benefits</i>	£2,342,445	£2,866,661	£2,866,661
<i>Benefit C: Distributional benefits</i>	£4,317,218	£16,181,740	£6,947,419
Total benefits	£15,110,263	£56,636,091	£24,315,965
Discounted benefits (Present Value of Benefits) (2)	£10,608,207.59	£39,101,183	16,963,651.12
Significant unmonetisable benefits	Active travel mode, Agglomeration, Wage premium, Amenity, Regeneration benefits, image benefits, community health and wellbeing, tourism benefits and labour supply. The benefits are expected to be greatest under Option 3, reflecting the scale of intervention and associated transformation achieved.		
Net Present Value (=2-1)	£9,039	£16,859,634	-£3,280,335
Benefit-cost ratio (=2/1)	0.71	1.26	0.60

²⁷ The information in Appendix 3 has been sourced from the Economic Case of the “Birmingham Curzon – Enhanced Public Realm OBC” (appended to this FBC as **Appendix E7**) and the associated Economic Appraisal model that formed the appendix to the OBC (appended to this FBC as **Appendix E8** - OBC Economic Model).