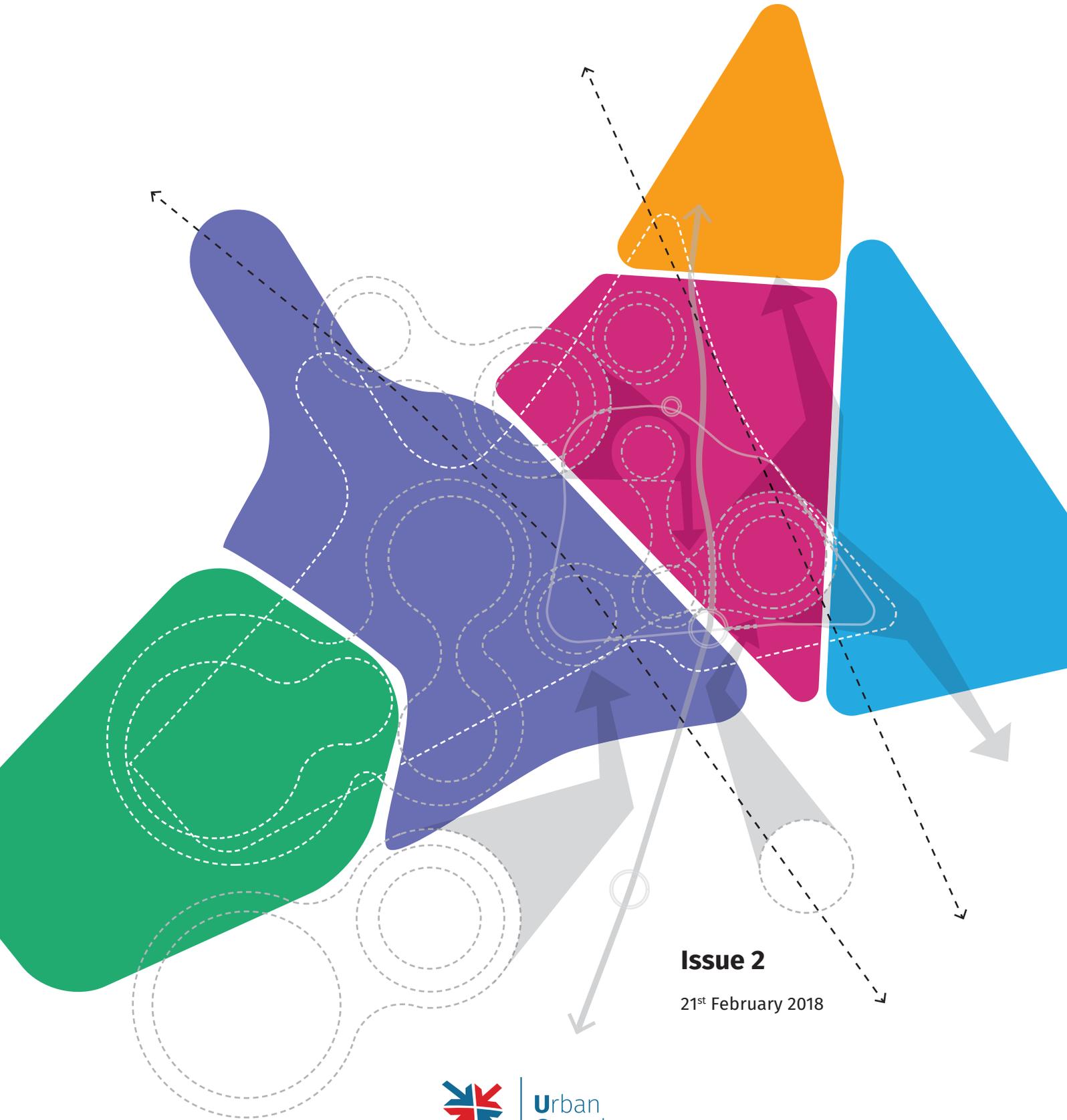


THE HUB

Framework Plan



Issue 2

21st February 2018



Urban
Growth
Company

FOREWORD

The UK Central Hub ('The Hub') in Solihull is one of the country's most strategically important development sites and one of the region's major drivers of economic growth. The ambition is to create a globally-renowned and internationally-connected destination for business, leisure and living, facilitated by the Urban Growth Company (UGC) with wider support from local, regional and central Government.

The UGC is a special-purpose delivery vehicle created to specifically realise the full economic potential of The Hub which already comprises Birmingham Airport, the National Exhibition Centre (NEC), Jaguar Land Rover, Birmingham Business Park and Arden Cross, which will be home to the new HS2 Interchange Station.

The UGC - supported by Solihull Metropolitan Borough Council (SMBC) and the West Midlands Combined Authority (WMCA) - will coordinate and facilitate the infrastructure investment and development at The Hub to create a major engine for economic growth on a regional and national scale.

In March 2017, the UGC published its 20-year vision and plan for The Hub in its 'Growth and Infrastructure Plan'¹. It set out the phased growth ambitions and infrastructure requirements to maximise the opportunity, while also coordinating the growth plans of The Hub's existing stakeholders. In all, it predicts the creation of up to 77,500 jobs, 4,000 homes, 775,000 sqm of commercial space and £4.1bn GVA as a result.

The UGC has since prepared a suite of documents including this Framework Plan, an Infrastructure Investment Appraisal, Value Capture Framework and Strategic Business Case to build the detail behind the ambitious growth strategy.

This Framework Plan establishes a clear vision to deliver sustained growth across The Hub. That includes five clear place making principles to improve accessibility, establish a high quality green and blue network, create sustainable communities, leverage land with temporary uses and innovation, and generate a sense of place.

Not only will this plan guide key stakeholders as they prepare their future development proposals, it will also explore the strategic and site specific infrastructure requirements, as well as the viability and deliverability of development in the context of local market trends. The Framework Plan also provides informal evidence to inform and support SMBC's future policy-making.

"As Chair of the Urban Growth Company, I'm immensely proud of the progress we've made in a short period of time, and this Framework Plan is our latest achievement.

"The Board has been working closely with the UGC's managing director, Huw Rhys Lewis, and the wider UGC team, to develop this plan and other supporting documents, which are absolutely essential to support the ambitious growth proposition at The Hub.

"We're especially pleased that place making principles are at the heart of this vision to create an iconic, yet sustainable, new destination to rival any in the world."

Nick Brown
Chairman, Urban Growth Company



¹ URBAN GROWTH COMPANY. (2017) HUB GROWTH AND INFRASTRUCTURE PLAN AVAILABLE AT: [HTTP://WWW.UGCSOLIHULL.UK/DOWNLOADS/](http://www.ugcsolihull.uk/downloads/)

CONTENTS

FOREWORD	2
CONTENTS	3
TABLE OF FIGURES	4
EXECUTIVE SUMMARY	9
1. INTRODUCTION	13
1.1 PURPOSE AND SCOPE OF THE FRAMEWORK	15
1.2 UK CENTRAL SPATIAL CONTEXT	17
1.3 THE HUB	18
1.4 PLANNING POLICY CONTEXT	21
1.5 MARKET CONTEXT	23
1.6 STAKEHOLDER ENGAGEMENT	27
1.7 HGIP SUMMARY & REQUIRED OUTCOMES	31
2. THE FRAMEWORK	35
2.1 VISION	36
2.2 EXISTING CHALLENGES	40
2.3 THE HUB FRAMEWORK	44
2.4 PLACE MAKING PRINCIPLES	46
2.5 CHARACTER AREAS	60
3. DELIVERY	75
3.1 DELIVERY	77
3.2 GROWTH QUANTUM - CORE DEVELOPMENT AREAS	77
3.3 GROWTH AMBITION - CORE DEVELOPMENT AREAS	79
3.4 INFRASTRUCTURE ANALYSIS - CORE DEVELOPMENT AREAS	88
3.5 GROWTH QUANTUM - POTENTIAL DEVELOPMENT AREA	95
3.6 GROWTH AMBITION	97
3.7 INFRASTRUCTURE ANALYSIS - POTENTIAL DEVELOPMENT AREA	99
3.8 IMPLEMENTATION	100
3.9 GREEN BELT	103
3.10 SUMMARY	104
4. NEXT STEPS	107
4.1 NEXT STEPS	108
IMAGE REFERENCES	111
GLOSSARY	112

THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH THE HUB FRAMEWORK PLAN APPENDICES.

TABLE OF FIGURES

1.	FIGURE 1: HS2 COMBINED TERMINAL - ARTISTIC IMPRESSION	7
	FIGURE 2: THE HUB FRAMEWORK PLAN	8
	FIGURE 3: THE UGC'S ROLE AS AN ENABLER FOR GROWTH AND INFRASTRUCTURE DELIVERY	14
	FIGURE 4: THE HUB IN ITS SPATIAL CONTEXT	16
	FIGURE 5: AERIAL VIEW OF THE HUB AND ITS FIVE ZONES	18
	FIGURE 6: POLICY CONTEXT	20
	FIGURE 7: THE HUB - EXISTING CONSTRAINTS	22
	FIGURE 8: HS2 - ARTISTIC IMPRESSION, IMAGE, HIGH SPEED TWO (HS2) LIMITED	25
	FIGURE 9: STAKEHOLDER MAP	26
	FIGURE 10: M42 AND UTILITIES CORRIDOR BETWEEN THE NEC AND ARDEN CROSS, IMAGE, ARUP	28
	FIGURE 11: DEVELOPMENT DELIVERY AS PER THE UK CENTRAL HGIP	30
	FIGURE 12: SUSTAINABLE PLACES, IMAGE, BIRMINGHAM CITY COUNCIL	32
2.	FIGURE 13: ARDEN CROSS PROPOSED DEVELOPMENT - ARTISTIC IMPRESSION	37
	FIGURE 14: ILLUSTRATION OF HGIP VISION AND FRAMEWORK OBJECTIVES	38
	FIGURE 15: EMPLOYMENT AND LIVING CENTRES LOCATION	40
	FIGURE 16: PERCEIVED HINTERLAND	40
	FIGURE 17: WALKING AND CYCLING ROUTES	41
	FIGURE 18: ROAD CAPACITY CHALLENGES	41
	FIGURE 19: INFRASTRUCTURE CAUSING SEVERANCE	42
	FIGURE 20: DISJOINTED AND UNDERUSED GREEN AND BLUE ASSETS	42
	FIGURE 21: LACK OF FOCAL POINTS	43
	FIGURE 22: CAR DOMINATED ENVIRONMENTS	43
	FIGURE 23: THE HUB FRAMEWORK PLAN	45
	FIGURE 24: PEDESTRIAN AND CYCLING ACCESSIBLE PLACES , IMAGE, THE ACADEMY OF URBANISM	46
	FIGURE 25: HIGH QUALITY GREEN AND BLUE PLACES , IMAGE , THE ACADEMY OF URBANISM	46
	FIGURE 26: WINDMILL STREET PARKLET, PAUL CARSTAIRS, ARUP	47
	FIGURE 27: TEMPORAL LAND USES IMPRESSION, IMAGE, JOCELYN KINGHORN	47
	FIGURE 28: ACTIVE AND DISTINCT PLACES IMPRESSION	47
	FIGURE 29: ACCESSIBILITY CURRENT POSITION	48
	FIGURE 30: PROPOSED PUBLIC TRANSPORT NETWORK	48
	FIGURE 31: SUSTAINABLE ACCESSIBILITY NETWORK	49
	FIGURE 32: ROAD INFRASTRUCTURE CURRENT POSITION	50
	FIGURE 33: PROPOSED ROADS AND INFRASTRUCTURE	50
	FIGURE 34: PROPOSED ROADS AND IMPROVEMENTS IN THE NETWORK	51
	FIGURE 35: OPEN SPACE CURRENT POSITION	52
	FIGURE 36: PROPOSED OPEN SPACE NETWORK	52
	FIGURE 37: INTEGRATED GREEN AND BLUE NETWORK	53
	FIGURE 38: ISOLATED COMMUNITIES CURRENT POSITION	54
	FIGURE 39: PROPOSED SYNERGIES	54
	FIGURE 40: INTEGRATED HEALTHY AND SUSTAINABLE COMMUNITIES	55
	FIGURE 41: TEMPORARY USES AND EARLY SYNERGIES	57
	FIGURE 42: PROPOSED TEMPORARY USES	57
	FIGURE 43: DISENGAGED COMMUNITIES	58
	FIGURE 44: CHARACTER ENHANCEMENTS	58
	FIGURE 45: ACTIVE AND DISTINCT PLACES	59
	FIGURE 46: CHARACTER AREAS - CORE DEVELOPMENT AREAS	61
FIGURE 47: CORE DEVELOPMENT AREA C01	63	
FIGURE 48: CORE DEVELOPMENT AREA C02	65	
FIGURE 49: CORE DEVELOPMENT AREA C03	67	
FIGURE 50: CORE DEVELOPMENT AREA C04	69	
FIGURE 51: CORE DEVELOPMENT AREA C05	71	
FIGURE 52: POTENTIAL DEVELOPMENT AREA P01	73	

3.	FIGURE 53: LOCATION OF LAND USES	76
	FIGURE 54: PREDICTED JOB CREATION OVER TIME	79
	FIGURE 55: AGGREGATE EMPLOYMENT SPACE (OFFICE AND INDUSTRIAL TRAJECTORY (UPPER CASE)	80
	FIGURE 56: AGGREGATE RESIDENTIAL DEVELOPMENT TRAJECTORY OVER THE HUB	81
	FIGURE 57: SOLIHULL HIGH STREET, IMAGE, SOLIHULL MBC	82
	FIGURE 58: JAGUAR LAND ROVER LODE LANE PLANT , IMAGE, JAGUAR LAND ROVER	83
	FIGURE 59: FUTURE HS2 TRACE MAPPED OUT ACROSS ARDEN CROSS DISTRICT, IMAGE, ARUP	84
	FIGURE 60: 'DO MINIMUM' HIGHWAY NETWORK (2026)	89
	FIGURE 61: 'DO SOMETHING' HIGHWAY NETWORK (2041)	90
	FIGURE 62: CORE DEVELOPMENT AREAS INFRASTRUCTURE SPEND BY PHASE AND INFRASTRUCTURE TYPE	92
	FIGURE 63: CORE DEVELOPMENT AREAS INFRASTRUCTURE SPEND BY INFRASTRUCTURE TYPE	93
	FIGURE 64: INFRASTRUCTURE SPEND BY PHASE	94
	FIGURE 65: LOCATION POTENTIAL DEVELOPMENT AREA	95
	FIGURE 66: AGGREGATE EMPLOYMENT SPACE (OFFICE & INDUSTRIAL) UPPER CASE TRAJECTORY ACROSS THE HUB (INCLUDING POTENTIAL DEVELOPMENT AREA) (SOURCE: LAND OWNER MASTERPLANS AND CUSHMAN & WAKEFIELD M42 OFFICE MARKET ANALYSIS)	97
	FIGURE 67: DEVELOPMENT DELIVERY	100
	FIGURE 68: VALUE CAPTURE MODEL SUMMARY	102
	FIGURE 69: HS2 COMBINED TERMINAL - ARTISTIC IMPRESSION	104
4.	FIGURE 70: THE HUB FRAMEWORK AREA	110



The Hub delivers a distinct place with a strong sense of landscapes, and strategic infrastructure to create one



FIGURE 1: HS2 COMBINED TERMINAL - ARTISTIC IMPRESSION

identity; combining growth aspirations, integrated of the best connected destinations in Europe.

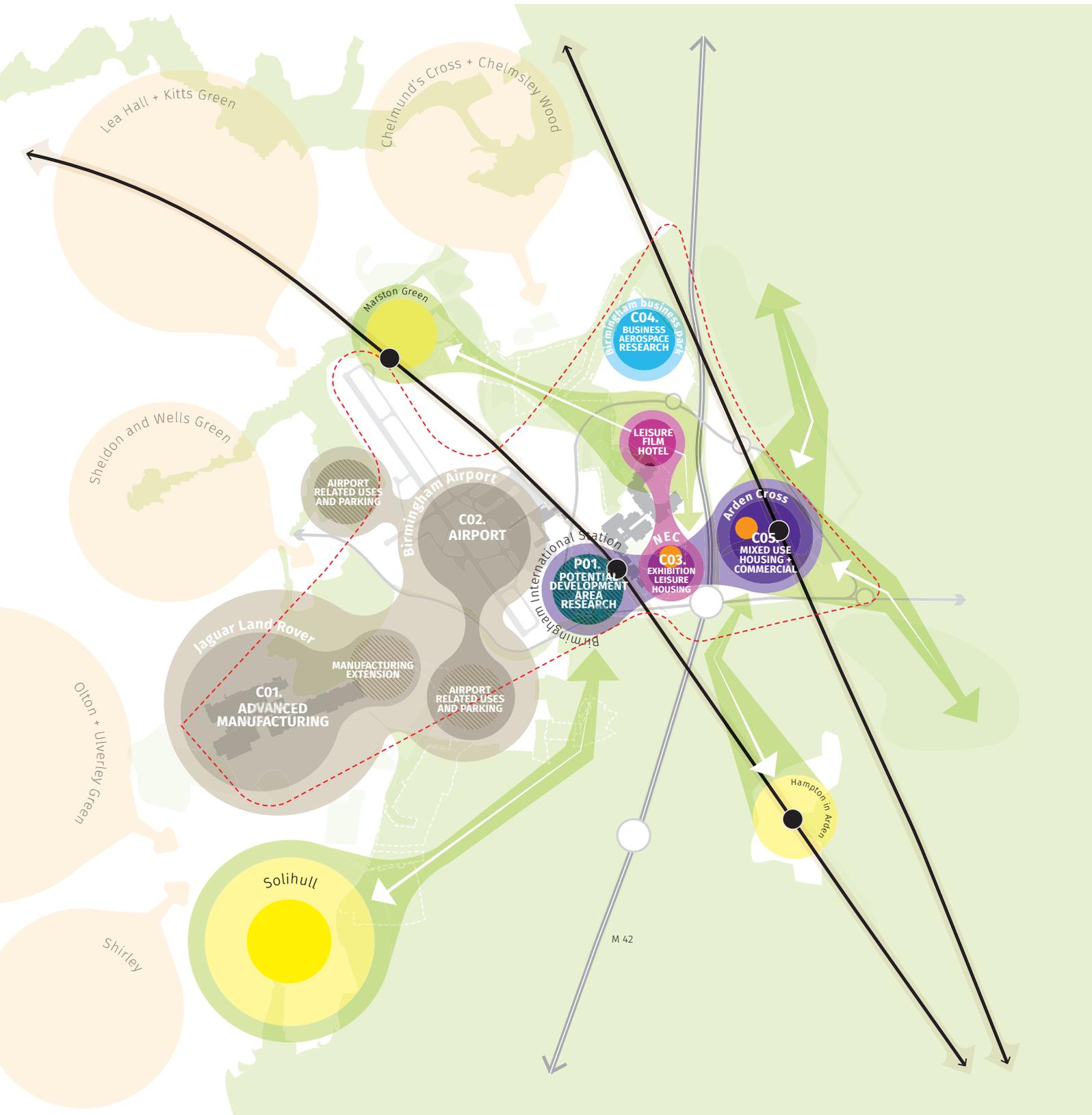


FIGURE 2: THE HUB FRAMEWORK PLAN

EXECUTIVE SUMMARY

The Urban Growth Company (UGC) is a special purpose delivery vehicle, formed by Solihull Metropolitan Borough Council (SMBC), under the auspices of the Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP) and now the recently formed West Midlands Combined Authority (WMCA). It was created specifically to explore and realise the full economic potential of the UK Central Hub in Solihull (The Hub) as part of the wider vision and aspirations for the UK Central area.

SMBC has provided the UGC with the remit to implement a coordinated approach to delivery of infrastructure within The Hub which will inform future spatial outcomes, place making and investment across the UK Central area and which will help inform and relate to the SMBC Local Plan Review (LPR). The Framework will not seek to establish planning policy.

Strategic infrastructure has been identified along with the optimal delivery timescales to compliment the arrival of HS2. The intention is to create significant, but sustainable, growth and a place which will become a key driver of the local and wider Midlands economy, attracting more people and businesses to live and work in the area.

PURPOSE AND SCOPE

To support this aspiration, the UGC has prepared this Framework to coordinate future investment within The Hub, based upon a collective vision and place making principles along with proposals for development on individual sites. Furthermore, The Hub forms an important component of the wider area. The proposals which are set out will also help inform the geography and decision making beyond The Hub area. The Framework is one of a suite of documents related to the UK Central area and builds on the vision and growth strategy established in the UGC's Hub Growth and Infrastructure Plan (HGIP) (UGC, 2017). These documents (referenced in Figure 3) are intended to inform and guide future development to ensure that high quality and sustainable places are delivered in the context of the ambitious economic growth aspirations.

The Framework also establishes the range of infrastructure, market positions and demand required for several developments to be delivered up to (and beyond) 2033. The collective evidence should help inform the current LPR being undertaken by SMBC. The HGIP has been

tested at a high level against known constraints (namely environmental, infrastructure, traffic, economic), emerging infrastructure plans, policy and market analysis.

A critical aspect of the Framework is to combine and align the growth ambitions of all statutory bodies, land owners and sponsors with a clear focus on delivery and infrastructure investment. This will enable the key stakeholders to develop more detailed plans for their own sites, whilst providing a proportionate contribution to the infrastructure costs, to ultimately release the value of their respective sites. The UGC has therefore been working closely with key stakeholders including SMBC, Birmingham City Council (BCC), the WMCA, Arden Cross Consortium, the National Exhibition Centre (NEC), Birmingham Airport, Jaguar Land Rover, Birmingham Business Park, Highways England, relevant utilities companies and HS2 Ltd in developing both the HGIP and this Framework.

A Vision and set of place making principles have been established and agreed with key stakeholders. This will guide future development proposals and establish a collective ambition, to achieve sustainable and high quality forms of development that will change and improve the nature of The Hub over the coming years. The potential for The Hub is immense. The unique nature of the place, the arrival of HS2, the ambitions of key stakeholders within The Hub, and the broader ambitions for UK Central provide the potential to realise a very special, high quality and desirable place with a range of significant economic opportunities. The vision for The Hub promotes a well-connected and coherent development, delivering high quality environmental, social and economic growth which will enable and contribute to required infrastructure. Five key place making principles seek to:

- Improve accessibility;
- Establish a high quality green and blue network;
- Create sustainable, high quality communities;
- Leverage land with temporary uses and innovation; and
- Generate a clear sense of place.

PLANNING CONTEXT

Given the national, regional and local importance of The Hub and the significant opportunity for growth in this location, when developing the Framework, consideration has been given to both national and local policy in order to direct future development (and help inform Local Plan policy).

SMBC is currently undertaking a review of its Local Plan, with the new Local Plan expected to be adopted in 2018, establishing a new planning Framework for the Borough to cover the period to 2033. Two of the key objectives of LPR are to maximise the socio-economic opportunities that will be provided by the arrival of HS2 and to deliver high quality, sustainable development.

Some of the land within and in the vicinity of The Hub is designated as Green Belt. Thus, this Framework considers relevant current Green Belt designations in the context of the required economic growth for The Hub (as set out in the HGIP), the arrival of HS2, and the need to provide sufficient levels of deliverable growth in order to create sustainable places. The case for Green Belt exception is set out in the following text and a full description of methodology for assessing all Development Areas (core and potential), along with the evidence base considered, is included within the appendices to this document. The information includes an assessment of relevant local and national policy; a high level assessment of the core and potential development areas against key physical, policy and environmental criteria; an assessment of the market potential for relevant land uses; and transport and infrastructure requirements.

GROWTH AMBITIONS

The HGIP sets out phased growth ambitions for The Hub up to 2032 and beyond. The HGIP established an initial vision for The Hub and perceived infrastructure requirements to maximise the unique opportunity. It concluded that The Hub has the potential to deliver the following:

- 35,000 – 77,000 full time equivalent (FTE) jobs;
- 22,750 person years of construction employment;
- 775,000 sqm of new commercial and mixed-use floorspace;
- circa. 3,000 homes; and
- £2.1 - £4.4bn in Gross Value Added (GVA).

In order to achieve the higher level of growth (based on the upper development assumptions) and ensure delivery within the first two phases of the HGIP (ten years), a different approach to place making and delivery will be required. There will be opportunities for urban living and close association with new transport and movement facilities, in addition to new economic and leisure development. Accessibility, enhancement and utilisation of the surrounding green infrastructure, and high quality landscaping will help develop a unique and special quality of place.

The future market for all land uses will be substantially different from today due to the transformational change expected from HS2. Therefore, an ambitious baseline assessment of build out rates has been adopted to inform this Framework (aggregating the build out of different land uses across all sites in The Hub). Chapter 3 explores the key contextual assumptions about the market environment for all key land uses (employment, residential, mixed use) in order to achieve the HGIP ambitions.

Given the unique nature of The Hub, and the amount, timing and nature of infrastructure works committed (such as HS2 and additional infrastructure required to support the wider growth ambitions), it will be challenging to deliver significant numbers of new residential developments in the first 5 – 10 years (Phases 1 and 2 of HGIP).

As such, all spatial opportunities will need to be balanced with a thorough consideration of overall sustainability, existing constraints and overall policy objectives. Consideration of development areas would therefore also need to fully consider the issue of any Green Belt designations (i.e. Arden Cross site / Jaguar Land Rover site), in order that a robust argument can be formulated for an exceptional case for development to be made.

INFRASTRUCTURE

A significant amount of infrastructure is required to enable the realisation of the ambitions of The Hub. Primary infrastructure will be the responsibility of various agencies including Highways England (HE), Network Rail (NR), the WMCA and SMBC. The intention of phased development would be to prioritise public transport provision first, in order to make journeys to the area attractive, combined with controlled parking provision.

Secondary infrastructure (schools, transport etc.) will fall under the remit of the WMCA / SMBC and site promoters / developers. The UGC will continue to promote and coordinate the delivery of all required infrastructure.

The network of utilities in The Hub has been developed over many years and comprises a combination of both strategic and local provision. The strategic provision provides routes for utility corridors around the eastern side of Birmingham, whilst the local provision has developed organically to serve the immediate needs of current development.

A range of social and community infrastructure will be required in The Hub, in particular facilities linked to the delivery of new homes and communities. People will require access to education, health and welfare facilities in close proximity to where they are living. In addition, ambulance, fire, policing, open space / leisure and community facilities will also be required to deliver sustainable, quality places.

The transport schemes relevant to the delivery of The Hub relate primarily to highway schemes and public transport provision. There will also be the potential on a more localised level to incorporate specific improvements for walking and cycling (although these are not specific strategic infrastructure requirements in this Framework).

The overall costs of the Infrastructure Investment Appraisal (IIA) schemes total £1.74bn over the life of the UK Central scheme.

DELIVERY

A proportion of the overall development costs can be funded by the direct benefits of infrastructure costs (in land value and property market outputs). However, this will not be comprehensive given the wide range of externalities of infrastructure development and the price differential of a no-infrastructure scenario. The UGC has developed a collaborative working environment with land owners / key stakeholders and led the formulation of The HGIP to ensure delivery of infrastructure and subsequent development.

An IIA and Value Capture Framework has been developed to provide the basis on which land owner and developer unearned increases in value can be 'captured' on an equitable basis by the public sector and be made available for re-investment in ways that are socially beneficial.

Taking the Framework forward, the UGC is firmly committed to enabling the delivery of the appropriate amount of high quality, sustainable development, along with the required infrastructure (in conjunction with other stakeholders) in order to realise the significant economic opportunities that The Hub offers for the regional and national economy.

Developing high quality, sustainable places cannot be achieved by the piecemeal development of individual disconnected sites, nor can it be achieved by bringing forward relatively few homes in comparison to a much larger amount of economic growth. The Hub needs both, in the context of connections to the wider area, the social infrastructure, and facilities to support the growth ambitions. There is a strong case for considering sustainable economic growth, and the quantity of development required to achieve such outcomes.

The UGC will continue its enabling role in coordinating the approach to development and place making, preparing Strategic Business Cases and development infrastructure requirements, along with other core tasks set out within the HGIP.

1.





Introduction

Summary of the context

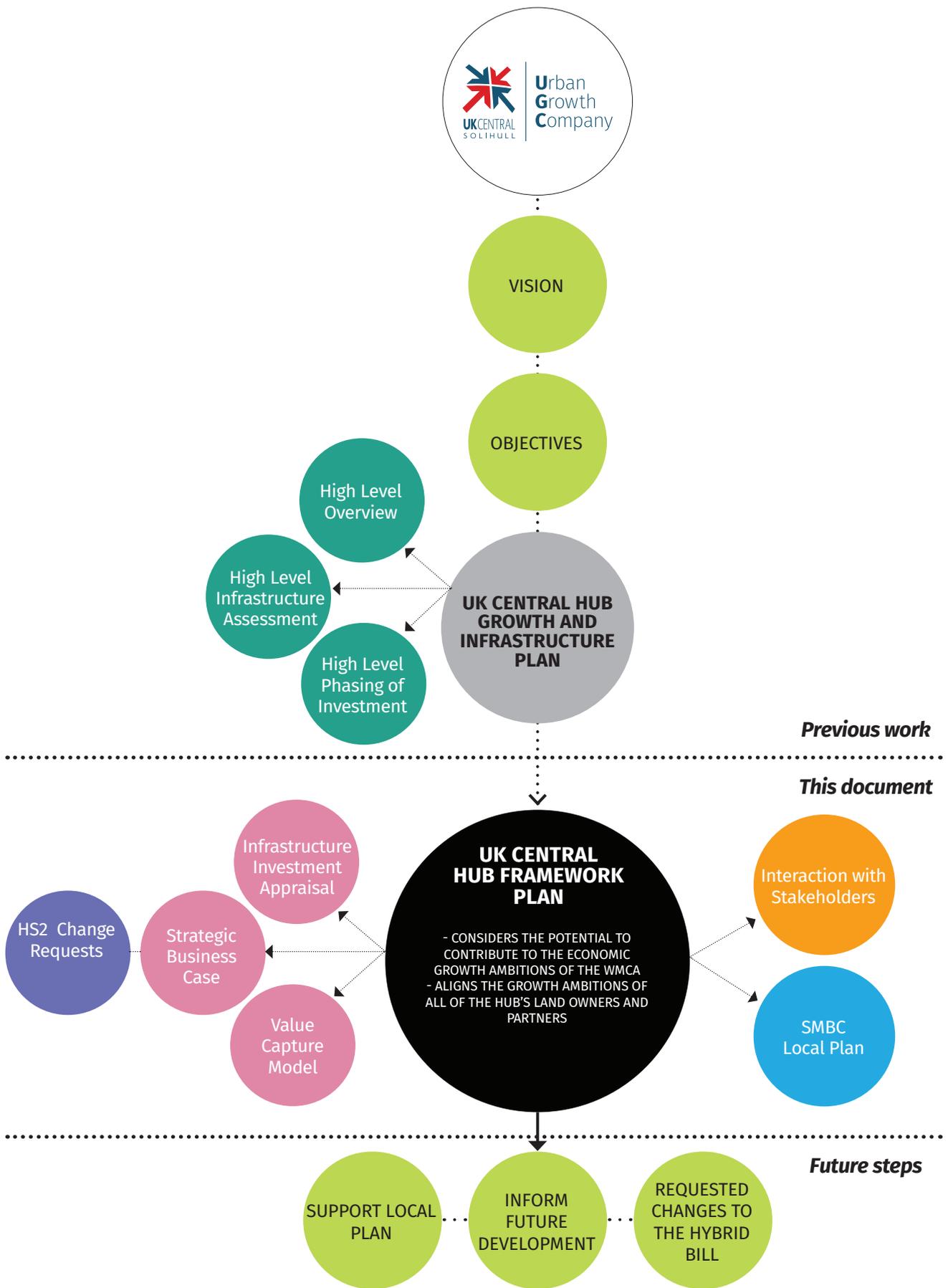


FIGURE 3: THE UGC'S ROLE AS AN ENABLER FOR GROWTH AND INFRASTRUCTURE DELIVERY

1.1 PURPOSE AND SCOPE OF THE FRAMEWORK

The Urban Growth Company (UGC) is a special purpose delivery vehicle created specifically to ensure that the full economic and development potential of the UK Central Hub in Solihull (The Hub), HS2 Interchange Station and related infrastructure are realised.

This Framework forms one of a suite of documents, building upon the high-level vision and growth strategy established in the UGC's Hub Growth and Infrastructure Plan² (HGIP, 2017). This Framework identifies more detailed place making principles, and considers the spatial growth options within The Hub in the context of market trends and infrastructure requirements. It will help guide key stakeholders, including sponsors and land owners, as they develop their future detailed growth plans. The Framework will be recognised as a 'working document' to enable key stakeholders and decision makers to continue to engage and explore the range of more detailed development opportunities available to them.

The Framework has been developed with the following principles, to maximise the opportunity presented by HS2 for The Hub and to deliver an overarching sustainable growth strategy:

- Establish a clear vision and place making principles for delivery of high quality, sustainable development in The Hub;
- Support policy making (Local Plan Review (LPR)- SMBC³); and
- Provide guidance and clarity for future development proposals.

The HGIP has been tested at a high-level against known constraints (namely environmental, infrastructure, traffic, economic), emerging infrastructure plans, policy and market analysis.

The Framework will also provide an informal evidence base to help support SMBC's current review of its Local Plan as it progresses from 'Draft' to 'Submission' stage. The LPR process provides a significant opportunity to establish an appropriate policy framework for future development and investment across the Borough (including The Hub), and provides the opportunity for key stakeholders to influence local policy. This Framework seeks to align the ambitions of all key stakeholders in The Hub and provide a cogent, overall view of how development and infrastructure can be delivered across the Local Plan period.

2. UGC. (2017) UK CENTRAL HUB GROWTH AND INFRASTRUCTURE PLAN [ONLINE] AVAILABLE AT: [HTTP://WWW.UGCSOLIHULL.UK/WP-CONTENT/UPLOADS/2017/02/UK-CENTRAL-HUB-GIP-ISSUE-1_PRINT.PDF](http://www.ugcsolihull.uk/wp-content/uploads/2017/02/UK-CENTRAL-HUB-GIP-ISSUE-1_PRINT.PDF)
3. SMBC. (2017) SOLIHULL LOCAL PLAN REVIEW - DRAFT LOCAL PLAN [ONLINE] AVAILABLE AT: [HTTP://WWW.SOLIHULL.GOV.UK/PORTALS/0/PLANNING/LPR/DRAFT_LOCAL_PLAN_05.12.16.PDF](http://www.solihull.gov.uk/portals/0/planning/lpr/draft_local_plan_05.12.16.pdf)

There are multiple benefits of delivering this range of growth, including:

- The delivery of a significant amount of additional jobs;
- A greater range and choice of new homes for The Hub, Solihull and the wider Housing Market Area (HMA) to support business growth;
- New and unique forms of high quality development;
- The creation of healthy neighbourhoods;
- Joined up green infrastructure; and
- The delivery of strategic infrastructure.

The UGC recognises that the level of investment required to deliver the growth outlined in the HGIP provides the opportunity to deliver more sustainable economic growth and high quality, sustainable places. In addition, it recognises that significant investment within The Hub will offer opportunities to bring forward a larger quantity of development than that which is currently proposed within the draft LPR, and will contribute towards more significant economic growth across the region. This will support the aspirations of the Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP) and the broader aspirations of the West Midlands Combined Authority (WMCA), providing new homes that will also help meet the needs of the wider HMA.

The Framework will therefore explore the strategic and, where relevant, site specific infrastructure requirements of The Hub, and the viability and deliverability of development in the context of local market trends. It explores deliverability across the plan period, but with emphasis on the first ten years of the Local Plan period (phases 1 and 2 of the HGIP).

The Framework is accompanied by a suite of appendix material which provides the evidence base for the document. The appendices include a summary of the local and national policy context, an assessment of the HGIP growth ambitions against key constraints, the market context and infrastructure requirements, and consideration of the temporary land uses which could be accommodated within The Hub.

A series of reference sources have been used to inform the Framework, these are provided within footnotes.

In addition to the Framework, an Infrastructure Investment Appraisal (IIA), a Value Capture Framework and a Strategic Business Case have been produced. These documents are separate to the Framework and are confidential.

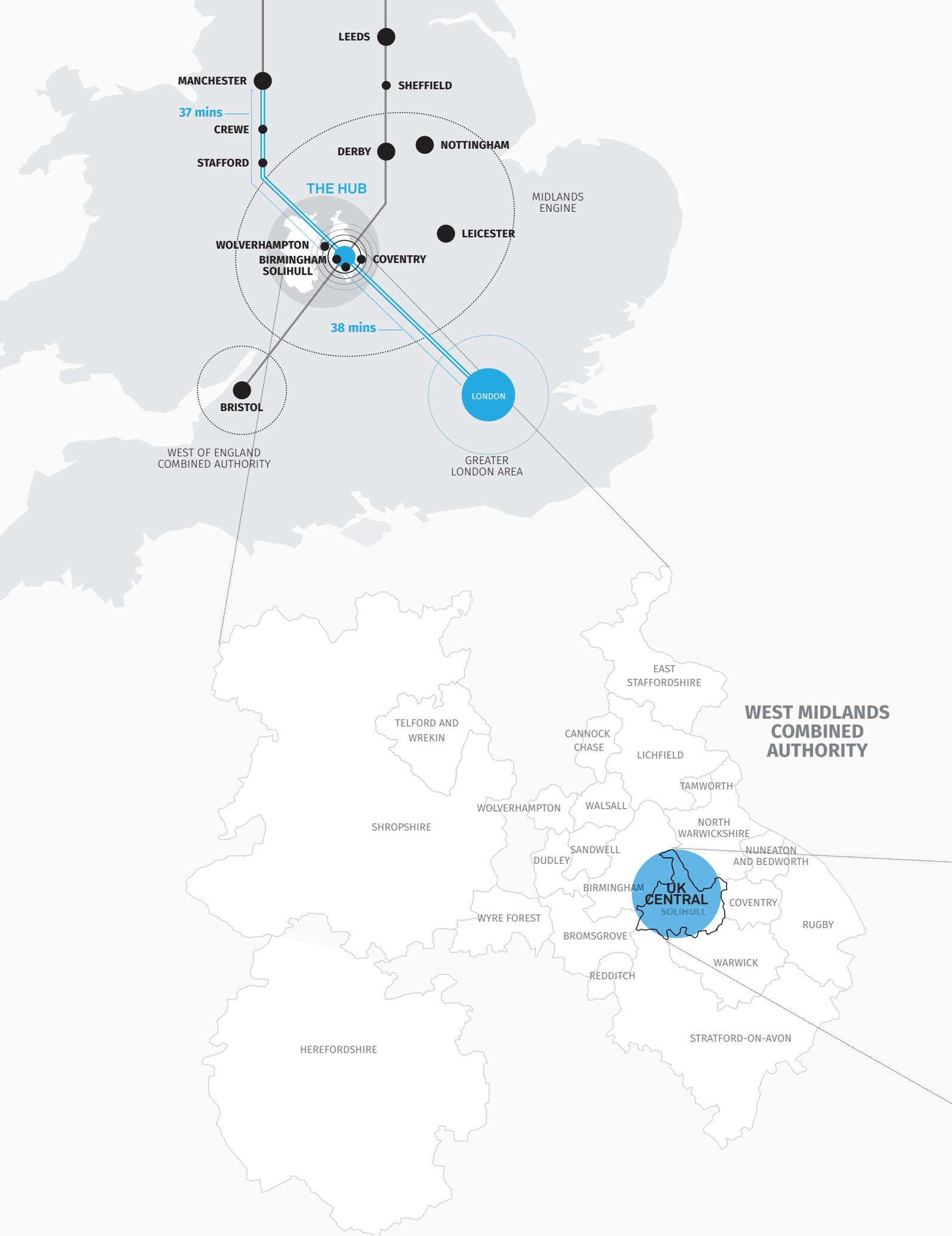


FIGURE 4: THE HUB IN ITS SPATIAL CONTEXT

1.2 UK CENTRAL SPATIAL CONTEXT

The Hub is located at the heart of UK Central within the Borough of Solihull, to the east / north east of the town centre, within the West Midlands region. The SMBC administrative area is bounded by five other local authorities: Birmingham City Council (BCC), Coventry City, Warwick, Stratford-upon-Avon and Bromsgrove Districts, which provides the opportunity for strong functional, economic and political links across the wider area.

The Hub is a major contributor to the aims of the WMCA - which comprises four member 'types':

- Constituent authorities (Local Authorities with full voting rights);
- Non Constituent authorities (Local Authorities with less voting rights), including pending status;
- Local Enterprise Partnerships (LEPs); and
- Observer Organisations.

The Hub will be one of the best connected areas in both the Midlands and the country. It will provide the ability for people to travel between The Hub, London and Manchester in less than 40 minutes whilst also being well connected to Birmingham, Solihull, Coventry and beyond. This offers a unique potential for economic growth, investment and place making. The array of cultural, environmental and social facilities in the vicinity of The Hub also provides the basis and opportunity to contribute to the overall creation of a unique and sustainable place.

Constituent Local Authorities

- Birmingham City Council
- City of Wolverhampton
- Coventry City Council
- Dudley Metropolitan Borough Council
- Sandwell Metropolitan Borough Council
- Solihull Metropolitan Borough Council
- Walsall Council

Non Constituent Local Authorities

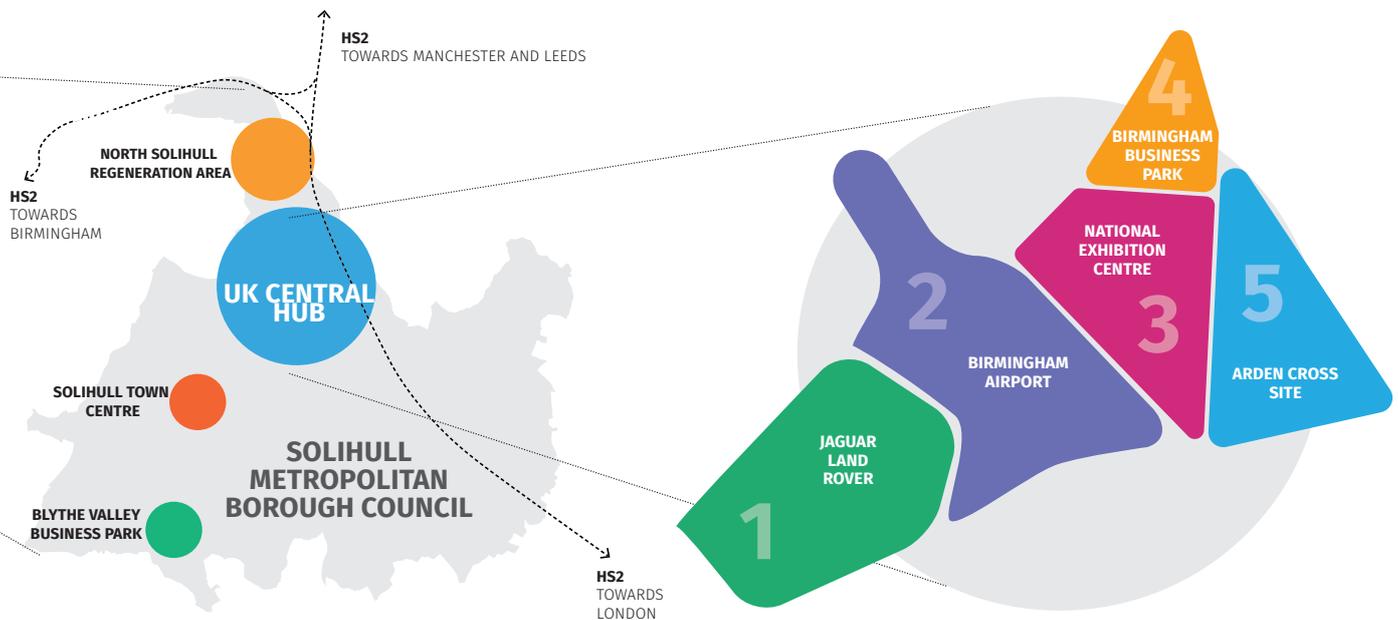
- Cannock Chase District Council
- Nuneaton and Bedworth Borough Council
- Redditch Borough Council
- Tamworth Borough Council
- Telford and Wrekin Borough Council
- North Warwickshire Borough Council (pending)
- Rugby Borough Council (pending)
- Stratford-upon-Avon District Council (pending)
- Shropshire Council (pending)
- Warwickshire County Council (pending)

Local Enterprise Partnerships

- Greater Birmingham and Solihull
- Black Country
- Coventry and Warwickshire

Observer Organisations

- Herefordshire County Council
- The Marches LEP
- West Midlands Fire and Rescue
- West Midlands Police and Crime Commissioner



1.3 THE HUB

The area of The Hub is characterised in part by major operations such as Birmingham Airport, the National Exhibition Centre (NEC), Jaguar Land Rover, Birmingham Business Park and the nearby Birmingham International Station. It is dominated physically and visually by major infrastructure including the M42, other strategic roads, rail lines and surface level parking.

On the periphery of The Hub, to the east, south and in part to the north, is open space designated as Green Belt, with areas to the west, south west and further north which are largely residential. Blythe Valley Park is located south of The Hub.

Whilst Solihull is a relatively affluent and well serviced Borough, North Solihull has experienced higher levels of deprivation and has been the subject of a focused programme of regeneration over a number of years, with the provision of new housing and new schools as part of a series of interventions for continued environmental, economic and social improvement. This part of the Borough is within relatively close proximity to the northern part of The Hub.

The Hub, as part of UK Central, sits at the heart of the country's transportation network with excellent access to the existing road and rail facilities and an international airport. The development of HS2 and provision of the HS2 Interchange Station will add further major infrastructure to the area and is a key opportunity to create and strengthen connections both externally and within The Hub, and to consider how a new commercial / mixed use centre could be accommodated alongside, and as part of, the new HS2 Interchange Station.

There is a range of existing major employers within The Hub, notably Jaguar Land Rover, Birmingham Airport and the NEC. In addition, the Arden Cross Consortium consists of four land owners who seek to create a vibrant and exciting new community on land to the east of the M42, containing at its heart the new HS2 Interchange Station. The combination of these assets provides the basis for significant opportunities for future growth and investment, greater cohesion and connection and the delivery of a vibrant, exciting place that takes advantage of both the collective and individual opportunities on offer.

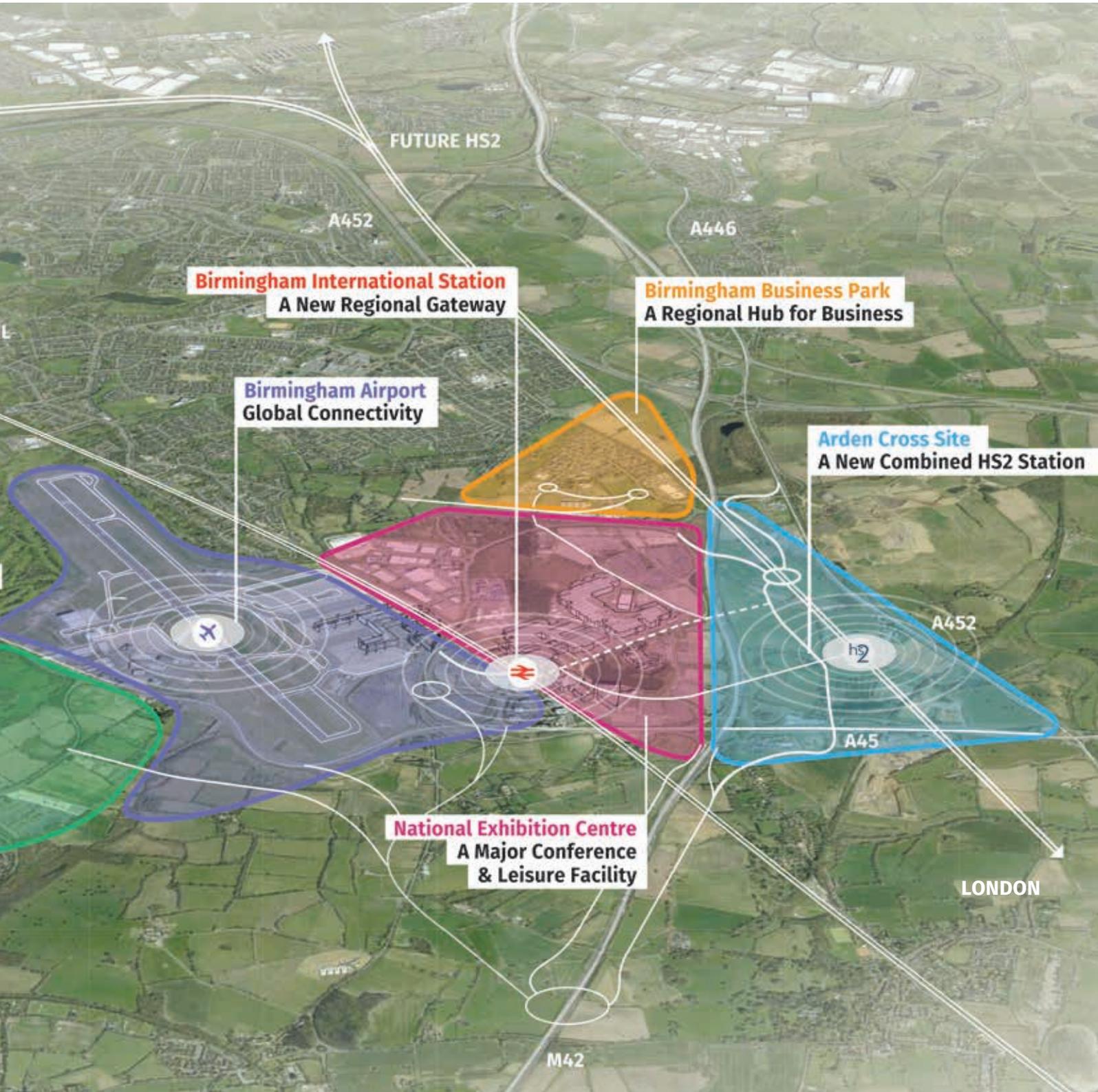
At present, connections (i.e. the choice of movement and transport mode) between the key sites are limited and it is vital that this situation is improved for both existing and future development, providing better links between new homes, jobs and facilities. In order to achieve this, it is also essential that development opportunities that come forward within The Hub consider how best to respond to the vision and place making principles set out within this document.



FIGURE 5: THE STUDY AREA- CORE DEVELOPMENT AREAS

UK CENTRAL HUB, COMPRISING:

- Birmingham Airport
- National Exhibition Centre (NEC)
- Jaguar Land Rover
- Birmingham Business Park
- Arden Cross Triangle Site – the location of the proposed new HS2 interchange station



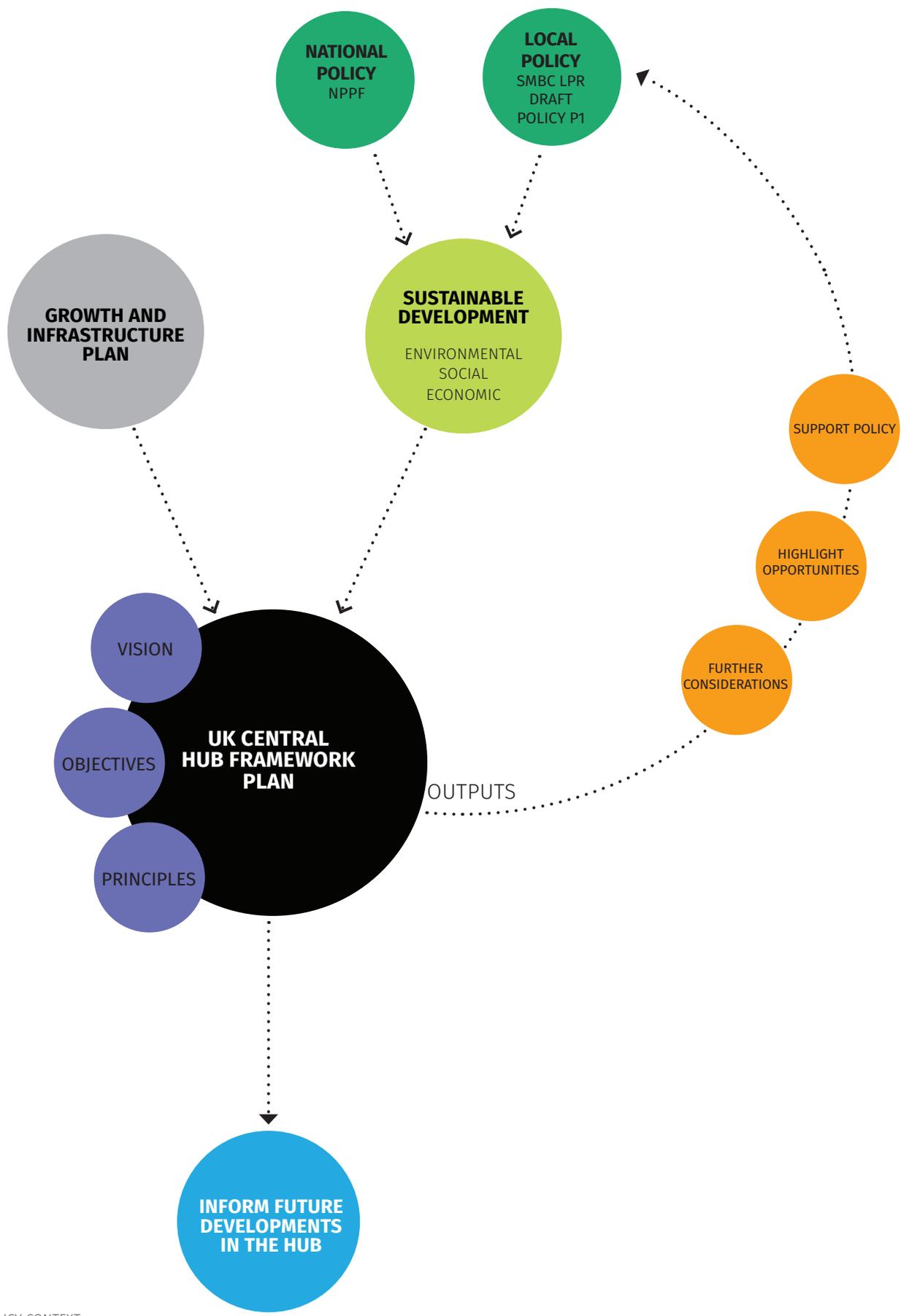


FIGURE 6: POLICY CONTEXT

1.4 PLANNING POLICY CONTEXT

Given the national, regional and local importance of The Hub and the significant opportunity for growth in this location, it is critical that this Framework responds appropriately to both national and local policy in order to guide future development, and to help formulation of Local Plan policy. A full review of national and local policy can be found in Appendix B.

As set out above, SMBC is currently undertaking a review of its Local Plan; the new Local Plan is expected to be adopted in early 2018, establishing a new planning Framework for the Borough to cover the period 2017 to 2033. Two of the key objectives of the Plan are to maximise the socio-economic opportunities that will be provided by the arrival of HS2 and to deliver high quality, sustainable development.

It is also important to align the Framework's growth ambitions with the policy of neighbouring local authorities including BCC, Coventry City Council and North Warwickshire Borough Council. This includes the adopted Birmingham Development Plan (2017), saved policies from the Coventry Development Plan (2001) until the emerging Coventry Local Plan is adopted (Winter 2017); and saved policies from the North Warwickshire Local Plan (2006) and adopted North Warwickshire Local Plan Core Strategy (2014) until the emerging North Warwickshire Local Plan is adopted (Spring / Summer 2018).

The National Planning Policy Framework (NPPF)⁴ establishes the importance of delivering sustainable development to bring about positive growth for current and future generations. It explains that the guiding principles or 'pillars' of sustainability are environmental, economic and social, and that these pillars cannot be tackled in isolation because they are mutually dependent. As such, to achieve sustainable development, economic, social and environmental gains must be jointly sought.

The NPPF also advocates the importance of providing accessible development, high quality social facilities and open space in order to create healthy communities. It also explains the value of providing a balance of land uses to minimise journey lengths for employment, leisure, education and other activities.

Draft Policy P1 of the Consultation Draft LPR requires development proposals within The Hub to contribute to growth, place making, connectivity, infrastructure provision, high quality design and sustainable development. In support of this, the plan proposes to release Green Belt land around the HS2 Interchange Station (within the Arden Cross site) and between Jaguar Land Rover and Birmingham Airport to accommodate future economic growth and investment. Further, SMBC's draft Local Plan recognises that investment in green and blue infrastructure

in The Hub area will also be an important component in the delivery of sustainable development (Chapter 9, Policy P10).

The NPPF establishes 'a duty to cooperate' requiring SMBC to not only plan for the accommodation of its own housing needs over the emerging Local Plan period (up to 2033), but to take a proactive approach to contributing towards the housing and economic needs of the wider HMA.

The UGC considers that The Hub will provide a significant opportunity to do this, offering an approach which aligns with the ambition of the WMCA's Strategic Economic Plan (SEP). The SEP makes specific references to The Hub and the opportunities it provides for economic growth, reinforcing and linking the three cities of the WMCA, and providing a distinctive contribution to the West Midlands as a place in which to live, work and invest.

However, the Housing White Paper⁵ (February 2017) indicates that the Government intends to consult on a new, standard methodology for calculating housing need and seeks to encourage local authorities to plan for housing on this basis. The consultation was launched in September 2017. It should be considered that assessed housing need could fluctuate in the response to the emerging standard methodology.

Notwithstanding the above, much of the land in the vicinity of The Hub is designated as Green Belt. The NPPF attaches great importance to the protection of the Green Belt and establishes that it should only be altered in 'exceptional circumstances', through preparation or review of a Local Plan. More recent guidance can be found in the Housing White Paper which suggests that when undertaking a Green Belt review, local authorities should look first at using any Green Belt land which has been previously developed and / or which surrounds transport hubs. Further, where land is removed from the Green Belt, the impact should be offset by compensatory improvements to the environmental quality or accessibility of the remaining Green Belt.

Thus, whilst it is important to consider the role and purpose of all land designated as Green Belt, there is an opportunity for the local planning authority to consider relevant current Green Belt designations in the context of the required economic growth for The Hub, the arrival of HS2 and the need to provide sufficient levels of deliverable growth in order to deliver economic investment and create sustainable, quality places.

4. DCLG. (2012) The National Planning Policy Framework [online] available at: <https://www.gov.uk/government/publications/national-planning-policy-framework-2>

5. DCLG. (2017) Fixing our broken housing market [online] available at: <https://www.gov.uk/government/publications/fixing-our-broken-housing-market>

KEY:

- Green Belt
- Ancient Woodlands
- Other Woodland
- SSSI
- Waterways
- Mineral Extraction (under way)
- Mineral Extraction (potential)
- Overhead HV Cable Corridor
- High Pressure Oil Pipeline Corridor
- Railway
- Road
- Jaguar Land Rover
- Birmingham Airport
- NEC – National Exhibition Centre
- Birmingham Business Park

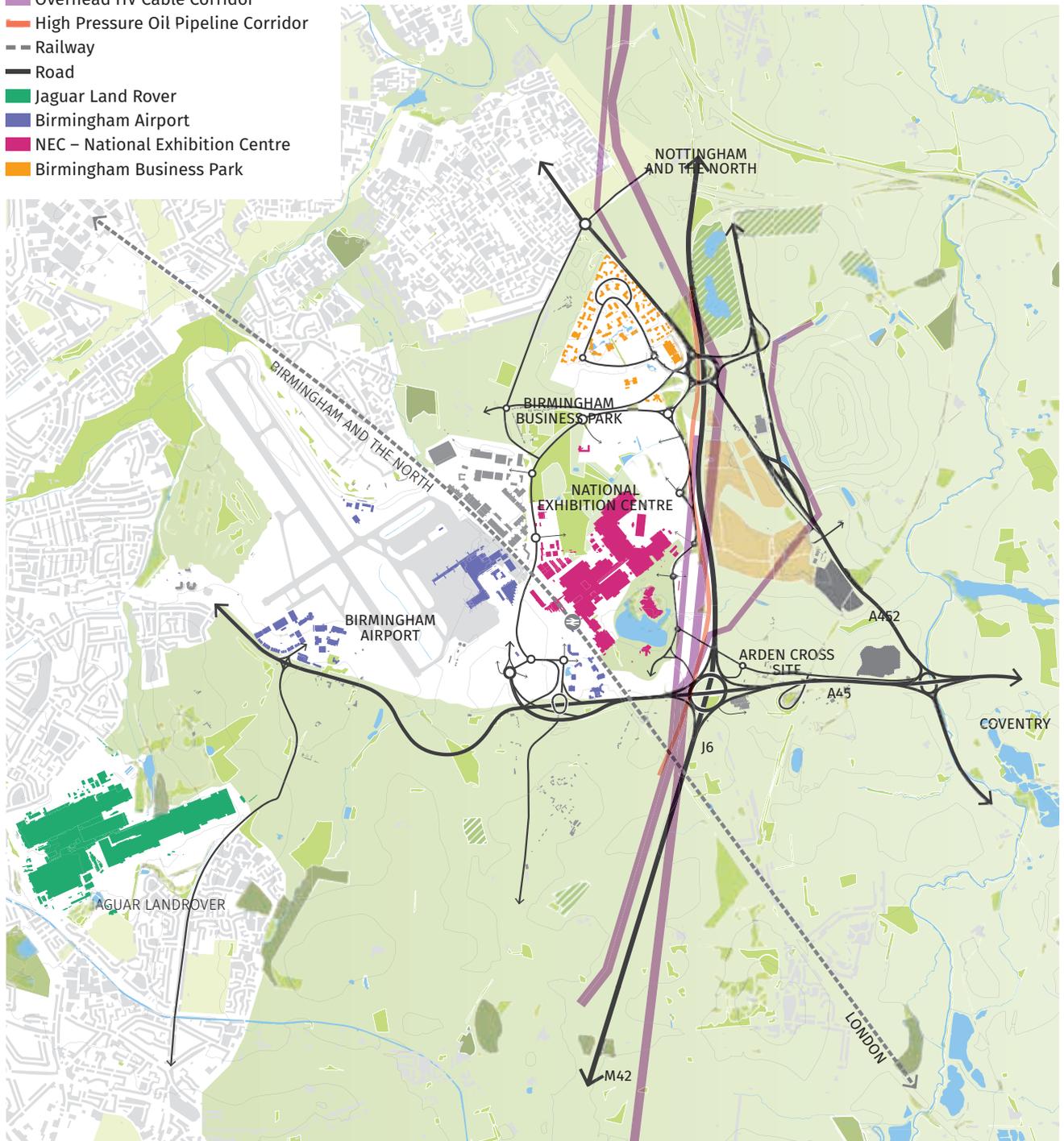


FIGURE 7: THE HUB - EXISTING CONSTRAINTS

1.5 MARKET CONTEXT

It is important that the deliverability of development proposals is measured against local market trends and is informed by the outcomes, which can be summarised as follows.

RETAIL, HOTEL AND LEISURE

Local retail demand is focused in Solihull town centre and out of town retail parks in the vicinity. Solihull is an affluent location with a strong demand profile and major development in the town centre includes the purchase and redevelopment of Mell Square by IM properties and the expansion of Touchwood, with a greater food, beverage and leisure offer. SMBC has developed a town centre masterplan which will provide a blueprint for future investment and development in the town centre over the next twenty years.

Within The Hub, there is a strong leisure offer around the NEC which drives demand, although future development is currently restricted, in part due to infrastructure constraints. There is also potential for some limited expansion of hotel demand linked to the NEC and the airport, given developments at these two locations.

OFFICE

The site lies within the established 'M42 market', which has seen average take up of circa 30,000 sqm of office space over the last five years, and the market has been strong over this period, with a declining vacancy rate. Longer term historic trends have been at a slower rate of delivery with Birmingham Business Park taking some 30 years to reach 100,000 sqm of development (equating to just over 3,000 sqm per annum).

The Birmingham out of town market has subtly repositioned itself in recent years (e.g. through wider provision of amenities to occupiers such as Blythe Valley Park) and this together with the unique opportunity presented by HS2, presents a fundamentally different development context to that of the longer term past.

Traditionally driven by the Information Communications Technology (ICT) and utilities sectors, in recent years automotive, transport and engineering have been increasingly important, and take up in these sectors continues, with Changan Automotive recently consolidating in Birmingham Business Park (including over 100 R&D jobs). This follows Aero Engine Controls, (a subsidiary of Rolls Royce), moving to a purpose built HQ at the Business Park in 2015.

Complementing the role of the City Centre Central Business District (CBD) as the likely continued preferred location for financial and business services, and smaller occupiers generally, there is good scope for large corporate occupiers in the typical sectors outlined (allowing for a "campus" style office offer), which is considered to be the appropriate product for the location.

INDUSTRIAL

Whilst there is around 300,000 sqm of pipeline space, the volume of take up in 2016 was such that the supply of modern units of over 100,000 sqm along the M42 and indeed Birmingham generally is now very low, and there remains significant pent-up demand. The site lies in an existing very strong industrial employment land location, with key occupiers along the M42 corridor including Jaguar Land Rover, BMW, and Sainsbury's. On major development sites take up of up to 15,000 sqm per annum is considered possible, and in the context of the current and long term pipeline supply of land, an industrial allocation at The Hub would be welcomed in the market.

To put the market strength in context, in 2016, there were eight transactions in the area around the M42, transacting in the order of 70,000 sqm. Notable transactions included automotive supplies manufacturer Sertec taking the Silver Bullet unit at Hams Hall (c. 14,000 sqm) soon after completion, DHL taking 10,000 sqm at Chrome 102 just prior to completion, and discount retailer The Works, taking the circa 17,000 sqm Black Velvet unit at Hams Hall.

RESIDENTIAL

The residential market in the Solihull area is very strong which is evidenced by demand on other sites (notably at Blythe Valley Park and the interest by developers which has been confirmed on 'The Green').

Residential developer demand for sites and schemes is strong for Solihull town centre ('city centre' living) and also in the wider Solihull area. The land market in the area is very strong and Solihull is one of the most desirable locations for the volume house builders in the West Midlands, attracted by the high sales value and high rate of sales.

In general, housebuilders are looking at schemes of 30-35 dwellings per hectare (dph), although the development in Dickens Heath is now achieving a density of closer to 40 dph and there is potential for increased densities within urban centres (e.g Solihull Town Centre). Dickens Heath was led by housing and now, some 10-15 years from the commencement of development, apartments are being added to the mix as the location has become more established.

The market for apartments is currently focused on Solihull and Dickens Heath, with very little other provision apart from Birmingham city centre. Birmingham is a swiftly expanding apartment market, with Private Rental Sector (PRS) provision now growing in scale with a large number of schemes with planning consent.

The concept of city centre living is something which has been established only relatively recently with the growth of the retail and leisure offering in the city centre (with schemes such as Grand Central). The reason for many schemes having consent within Birmingham city centre and not yet being developed is primarily based upon the issue of viability (the build cost for taller buildings increases per sqm whilst sales values do not typically increase with height to the same extent).

In developing apartments outside of Birmingham city centre, the quality and the size of units is a key driver. Given the smaller sizes of apartments in the city centre, there could be an opportunity for larger units, with ample parking and leisure facilities, to be attractive in the market.

ECONOMIC CONTEXT

The WMCA area currently provides a substantial economic base with a population of some 4.5 million and employment for 1.9 million people. The aim of the WMCA SEP (to 2030) is to substantially increase the size of the economy while maintaining a high quality of life. Its vision is to make the West Midlands the best region in the UK to do business, along with key objectives in terms of economic growth, employment and skills, accessibility, competitiveness and productivity, new housing, environment, and public services. This would see employment rising to 2.4 million (+500,000 jobs or an increase of some 26.3%).

The ambitions for substantial growth are further supported by the Midlands Engine Strategy which demonstrates the Government's commitment to making the Midlands a powerful engine for economic growth, together with the emerging Industrial Strategy which seeks economic growth and improving living standards. The industrial structure of the West Midlands economy has particular strengths

in a number of important growth sectors, including ICT, logistics, the visitor economy, recreation, and professional services, in addition to the continued major importance of the advanced manufacturing and engineering sector. This supports the view that it can, with support and commitment, achieve its growth ambitions above and beyond baseline economic forecasts.

The area has already achieved an economic renaissance following the great recession at the end of the last decade. The West Midlands has achieved the highest growth rate of any UK City Region and in 2014 / 15 was the leading area for attracting foreign direct investment into the UK.

The Hub proposals are based on the substantial physical and business assets situated on the conurbation fringe to the south-east of Birmingham city centre, which can contribute significantly to the WMCA's growth ambitions (and those of SMBC) with the support of investment in appropriate infrastructure. These include in particular the adjacent assets of:

- Jaguar Land Rover;
- Birmingham Airport;
- the NEC;
- Birmingham Business Park; and
- Arden Cross.

The economic rationale for the achievement of growth ambitions is dependent on key factors – in particular location, production, and a strong and effective catalyst. Each of these is evident within The Hub:

- Location - The Hub is located centrally within England's industrial heartland and already benefits from strong existing connectivity through land and air transport networks with the rest of the UK and overseas (and this will be significantly improved with the arrival of HS2 – see below).
- Land – the identification of significant available land to support growth establishes a clear basis for development to enable the scale of housing and employment that is envisaged, building on the major manufacturing, transport, and conferencing assets that are already located within the area. The proposals recognise the substantial opportunities available as well as the key constraints that need to be addressed.
- Infrastructure – The Hub proposals envisage investment of some £1.74bn in a range of project-enabling and infrastructure costs relating to transport, utilities, social facilities, as well as a staff and skills programme and pre-development requirements.

- Labour – the West Midlands travel-to-work area has a total of some 2.8 million economically active residents with overall strengths in basic qualifications and a pool of unemployed resources (currently standing at 5.7%). Improving skill levels alongside the development of new employment opportunities is a major priority of The Hub.
- Capital – the area has a strong investment market, and, as well as Birmingham being a major financial centre, the property market exhibits strengths in important aspects of both residential and commercial sectors.
- Entrepreneurialism – the West Midlands continues to have strengths in starting new enterprises and in the continued development of existing and established businesses. In addition, the UGC demonstrates the ability of the public sector and wider partners to develop new and innovative approaches to the needs of the local economy.
- Catalyst- HS2 provides an important catalyst that will enable The Hub to be driven forward over the period to 2032 and beyond. The benefits of high speed travel will include improvements in speed and efficiency, benefitting travellers in terms of time savings and in other ways. It will broaden the travel to work area, providing benefits to both workers and employers. It will also expand the visitor catchment and increase business and leisure tourism and visitor spending. More broadly, it will allow cities in the Midlands and the South to develop together into more integrated regions, fostering the development of clustering and agglomeration effects.



FIGURE 8: HS2 - ARTISTIC IMPRESSION, IMAGE, HIGH SPEED TWO (HS2) LIMITED

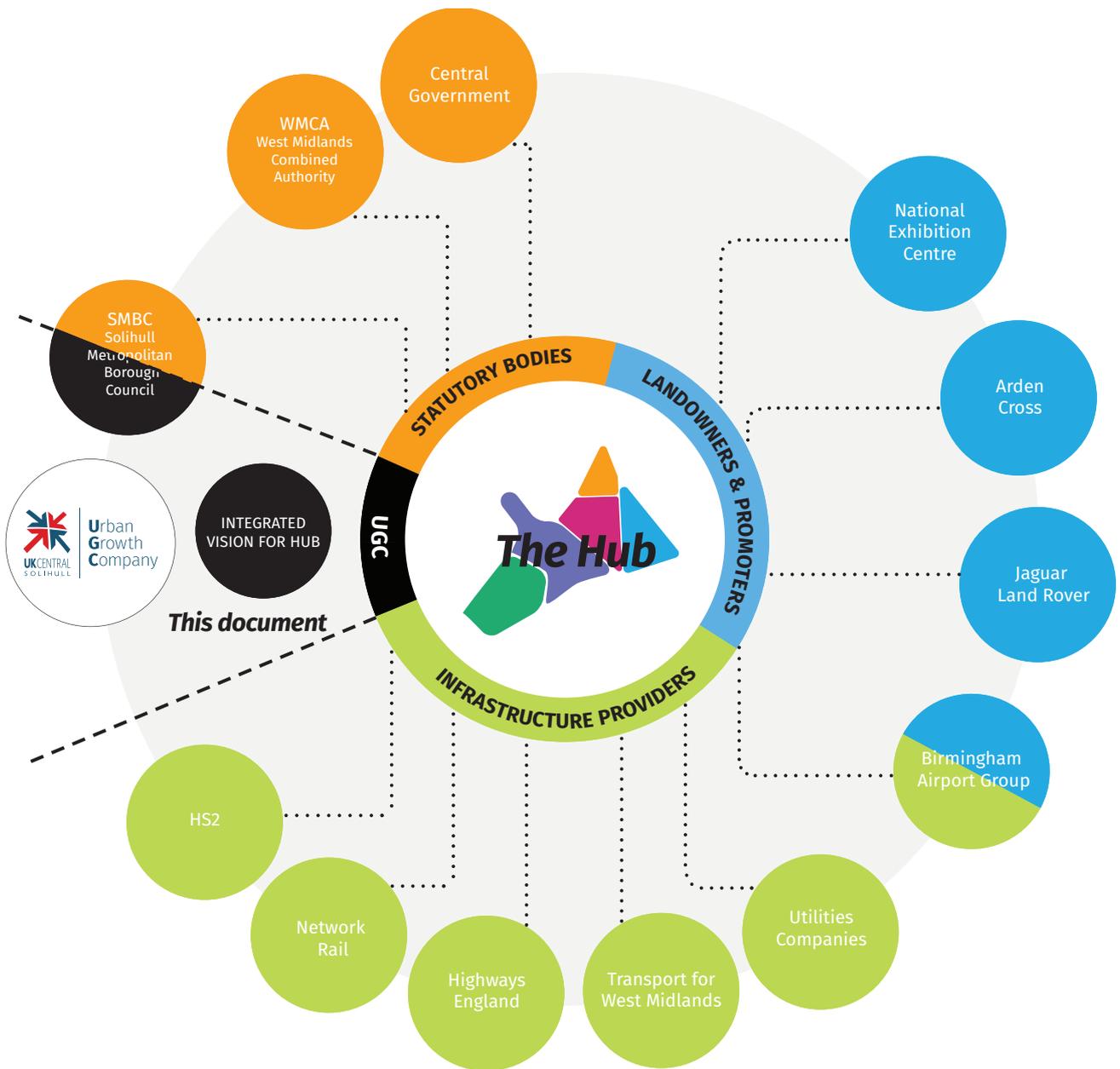


FIGURE 9: STAKEHOLDER MAP

1.6 STAKEHOLDER ENGAGEMENT

The Hub is home to a unique combination of some of the Midlands key economic assets, each of which have their own set of priorities and ambitions for growth. A critical aspect of the Framework is to combine and align the growth ambition of all statutory bodies, land owners and infrastructure providers, with a clear focus on delivery and infrastructure investment. This will enable the key stakeholders to develop more detailed plans for their own sites whilst providing a proportionate contribution to the infrastructure costs to ultimately release the value of their respective sites. In turn, this will lead to the creation of a destination that will attract people and businesses, enabling the UGC's vision for The Hub as a key driver of the local and wider Midlands economy.

The UGC has therefore been working closely with key stakeholders including SMBC, BCC, the WMCA, Arden Cross Consortium, the NEC, Birmingham Airport, Jaguar Land Rover, HE and HS2 in developing both the HGIP and this Framework. The UGC has held a range of meetings and discussions with the key stakeholders to help build a mutual understanding and consensus on the vision and place making principles within this document for the Core Development Area (CDA) and Potential Development Area (PDA). The UGC also sits on the HS2 Growth Board and HS2 Environmental Board, consulting with a wider network of stakeholders including NR and the Warwickshire, Coventry and Solihull Local Nature Partnership Board. Other individual land owners have not been directly engaged on the Framework to date but the UGC will seek to engage with relevant individuals / organisations in 2017 / 2018, including Birmingham Business Park employees.

Below is a list of the key stakeholders and their role in the process, grouped in three categories: Statutory Bodies, Land Owners and Promoters and Infrastructure Providers.

STATUTORY BODIES

SMBC

As the local planning authority for the Borough of Solihull, the Council is responsible for ensuring that it has an up to date adopted Local Plan for its administrative area to inform future development and meet needs across the Borough (and beyond, where relevant). It is also responsible for making decisions on all planning applications submitted for its consideration. The Council is also the authority for the local road network.

WMCA

The WMCA is a new statutory body comprised of 18 local authorities and three LEPs across the West Midlands region. The WMCA seeks to deliver strategic functions across the region and has established the scale of its ambition and proposals through a devolution agreement with the UK government. These include ambitious targets to create more than half a million jobs by 2030 and generate an additional £7bn GVA⁶. The WMCA recognises that the UK Central area offers significant growth opportunities.

LAND OWNERS AND PROMOTERS

ARDEN CROSS CONSORTIUM

Arden Cross is being delivered by a consortium of four land owners (BCC, SMBC, Packington Estate and Coleshill Estate). The prominent 140 ha site is located east of the M42 and bounded by the A45, A452 (to the south and east) and provides a unique opportunity to maximise economic and social benefits.

The Consortium's proposals seek to develop a vibrant, exciting and bustling community combining high quality residential, commercial, retail and leisure development⁷. The site will house the new HS2 Interchange Station and will have excellent access to the M42, M40 and M6 motorways.

NEC GROUP

Currently the NEC hosts around 2 million visitors at more than 600 events per year⁸. The NEC Group aspires to maintain a competitive position in the global market for hosting major events and intends to widen its product offer to encompass a wider range of major leisure and entertainment uses.

The NEC Group and BCC is preparing a high level masterplan for the NEC site responding to known current market demand for leisure related land uses and forecast demand based on research and the ambitions of The Hub. Other land uses such as residential could also be included within the proposals.

6. WMCA. (2016) Strategic Economic Plan [online] available at: <https://www.wmca.org.uk/media/1382/full-sep-document.pdf>

7. Arden Cross Consortium (unknown) Arden Cross [online] available at: <http://ardencross.com/the-opportunity/arden-cross/>

8. NEC. (unknown) Bringing Live to Life [online] available at: https://www.necgroup.co.uk/media/1594/nec_group_conference_and_live.pdf



FIGURE 10: M42 AND UTILITIES CORRIDOR BETWEEN THE NEC AND ARDEN CROSS, IMAGE, ARUP

BCC

BCC owns land at / around the NEC and is working jointly with the NEC Group to formulate a high level masterplan for the future development of the site.

BIRMINGHAM AIRPORT LIMITED (BAL)

Birmingham Airport, one of the UK's busiest airports, plays a key role in the success of both the Midlands and the national economy. It currently deals with circa 12 million passengers per annum (mppa)⁹, a 14.3% increase in passenger numbers over the past 12 months. The airport expects the overall number of passengers to continue to increase in the coming years and therefore faces pressure to deliver increased airport infrastructure and capacity.

In response to this pressure, BAL has provisionally indicated (approved by BAL board on 5 July 2017) that it requires a new terminal building, and passive provision has been allowed for this in growth proposals. A new terminal building and redevelopment of the current single (extended) runway would be able to accommodate up to 30 mppa.

The Midlands is the UK's industrial heart for engineering, science and technology employment. BAL seeks to maximise this potential at the site to support a national and regional need by increasing capacity within the existing assets and seeking alternative options for future growth within The Hub. There is a potential for expansion of the airport terminal to enable and contribute to future growth.

JAGUAR LAND ROVER

Jaguar Land Rover is one of the Midlands' and UK's most important businesses and a key driver of economic prosperity and productivity, as an advanced manufacturing firm developing leading technologies.

Jaguar Land Rover is also one of the biggest local and national employers, creating both direct and indirect jobs. The Lode Lane facility in Solihull currently provides around 7,300 jobs and is set to increase to more than 9,000 following substantial new investment in the plant¹⁰. Jaguar Land Rover's ambition for the Solihull facility is to continue to significantly enhance manufacturing capability, including construction of a new Logistics Operation Centre.

INFRASTRUCTURE PROVIDERS

HIGHWAYS ENGLAND

HE is responsible for operating, maintaining and improving the region's motorways and major A roads ('Strategic Road Network'), including the M42 and A45 serving The Hub. Between 2015 and 2020 Highways England has committed to invest £15.2bn in the national Strategic Road Network¹¹. This includes an upgrade of Junction 6 of the M42 (near Birmingham Airport) which will be delivered by 2023¹² to support access to the airport and in preparation for the new HS2 Interchange Station.

HS2

A Connectivity Package of funding totalling £1.257bn has been identified alongside the HS2 delivery¹³. This funding is intended to support the delivery of connections by other modes, especially public transport modes, to the HS2 station.

TRANSPORT FOR THE WEST MIDLANDS (TFWM)

TFWM is currently investigating the delivery of two key schemes that will be of benefit to The Hub and HS2 connectivity. The East Birmingham and Solihull Metro scheme would extend Birmingham's existing tram network out to the HS2 Interchange Station and Solihull. The Sprint scheme provides a series of high frequency express bus services between key locations along the A45 corridor into Birmingham, and will serve both Solihull and the HS2 Interchange Station. Both of these schemes will enhance local connectivity around The Hub area and to adjoining settlement areas.

UTILITIES COMPANIES

The utilities companies have a range of strategic and local networks across The Hub area. They will need to be involved in both the provision of additional capacity to serve The Hub developments, and also in the diversion or protection of their assets to maintain service and maximise the growth opportunity. Discussions have been held with each of the utility providers (Western Power Distribution, National Grid, Severn Trent Water and Openreach) at this early stage, recognising that lead times to delivery of infrastructure can be extensive.

9. Birmingham Post. (2017) Birmingham Airport passes 12m passenger mark [online] available at: <http://www.birminghampost.co.uk/business/business-news/birmingham-airport-passes-12m-passenger-12913062>

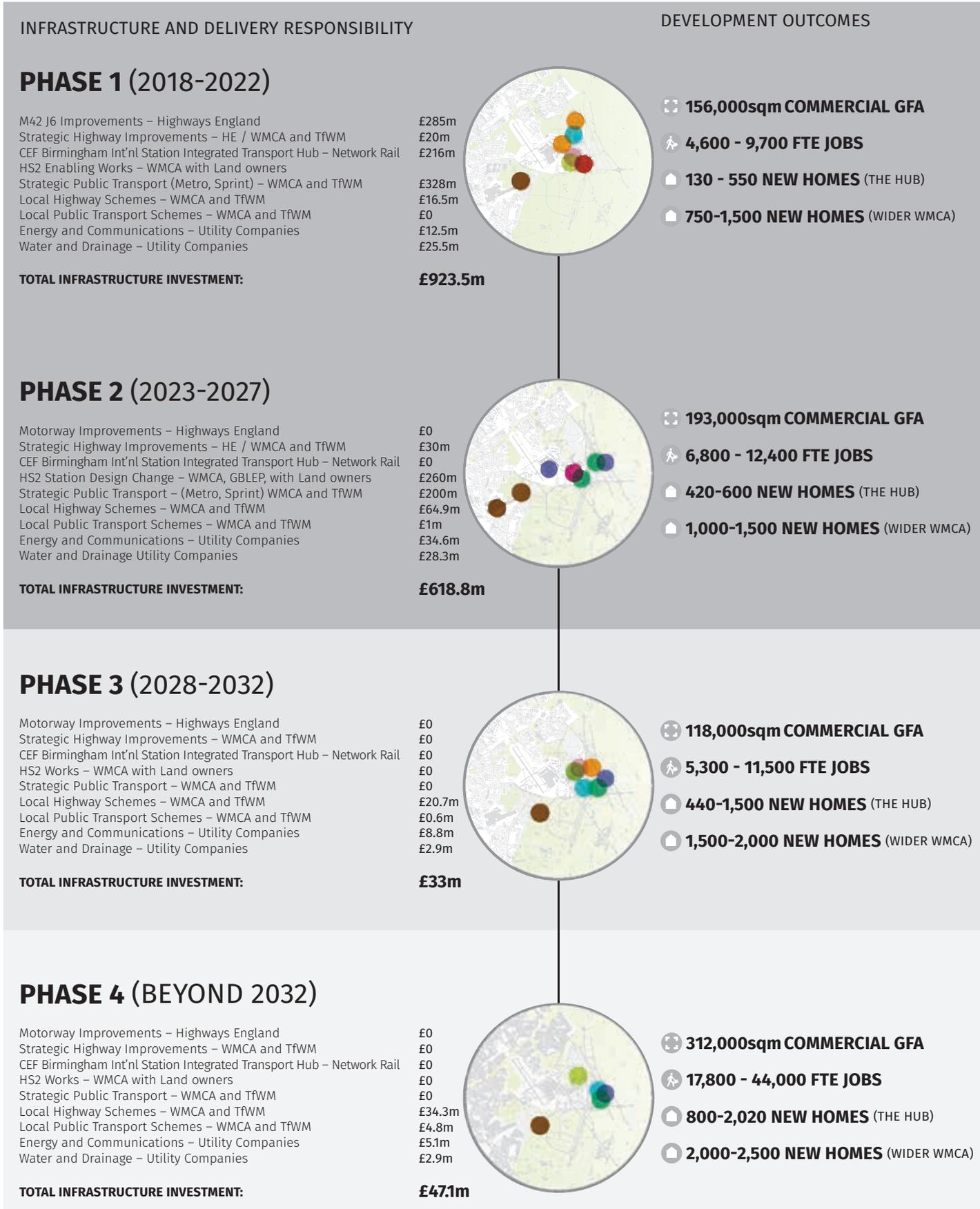
10. Information provided by Jaguar Land Rover

11. Highways England. (2015) Road Investment Strategy for 2015 / 16-2019 / 20 Road Period [online] available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/408514/ris-for-2015-16-road-period-web-version.pdf

12. Highways England (unknown) M42 Junction 6 Improvement [online] available at: <http://www.highways.gov.uk/roads/road-projects/m42-junction-6-improvement/?latest>

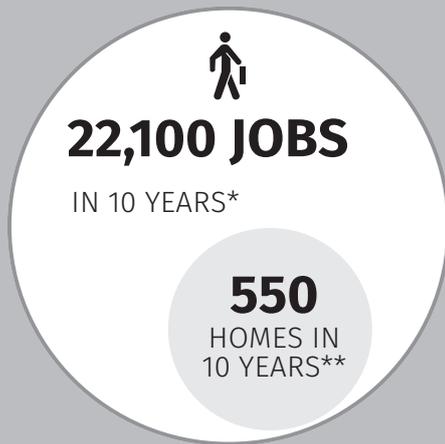
13. WMCA Transport Delivery Committee (2017) 'Item 16b :HS2 Connectivity Package', meeting 6 March 2017, WMCA Transport Delivery Committee

1.7 HGIP SUMMARY AND REQUIRED OUTCOMES



Note: The cost figures shown in Figure 11 were last updated in March 2017.

FIGURE 11: DEVELOPMENT DELIVERY AS PER THE UK CENTRAL HUB GROWTH AND INFRASTRUCTURE PLAN



* Cumulative of Phase 1 and Phase 2 upper projection within Hub area as per HGIP
 **Cumulative of Phase 1 and Phase 2 lower projection within Hub area as per HGIP

GROWTH AND INFRASTRUCTURE PLAN SUMMARY

The HGIP Issue 1 was launched in March 2017 and sets out the UGC's phased growth ambitions for The Hub up to 2032 and beyond. The Plan established an initial vision for The Hub and perceived infrastructure requirements to maximise the unique opportunity posed by The Hub. It concluded that The Hub has the potential to deliver the following by 2032:

- 35,000 – 77,000 Full Time Equivalent (FTE) jobs;
- 22,750 person years of construction employment;
- 775,000sqm of new commercial and mixed-use floorspace;
- 2050 - 2650 homes; and
- £2.1- £4.4bn in GVA.

A STEP FORWARD

The UGC has continued to work closely with key stakeholders to progress the ambitions of the HGIP as reflected within this Framework. This has included:

- Establishing and aligning the growth ambitions of all key stakeholders;
- Developing the initial vision and establishing place making principles including integration of component schemes and green and blue infrastructure;
- Undertaking market analysis and testing the deliverability of the infrastructure upgrades required to support the growth ambitions;
- Additional feasibility work, including transport and movement assessment; and
- Engaging with SMBC to ensure alignment of the Framework growth plans with the emerging LPR.

NB. The cost figures shown in Figure 11 were last updated in March 2017.

THE IMPORTANCE OF CREATING SUSTAINABLE PLACES

As established by both national and local policy it is crucial that The Hub delivers sustainable, high quality places which are truly reflective of the 'three pillars' of sustainable development - environmental, economic and social. These 'pillars' should not be tackled in isolation because they are mutually dependent.

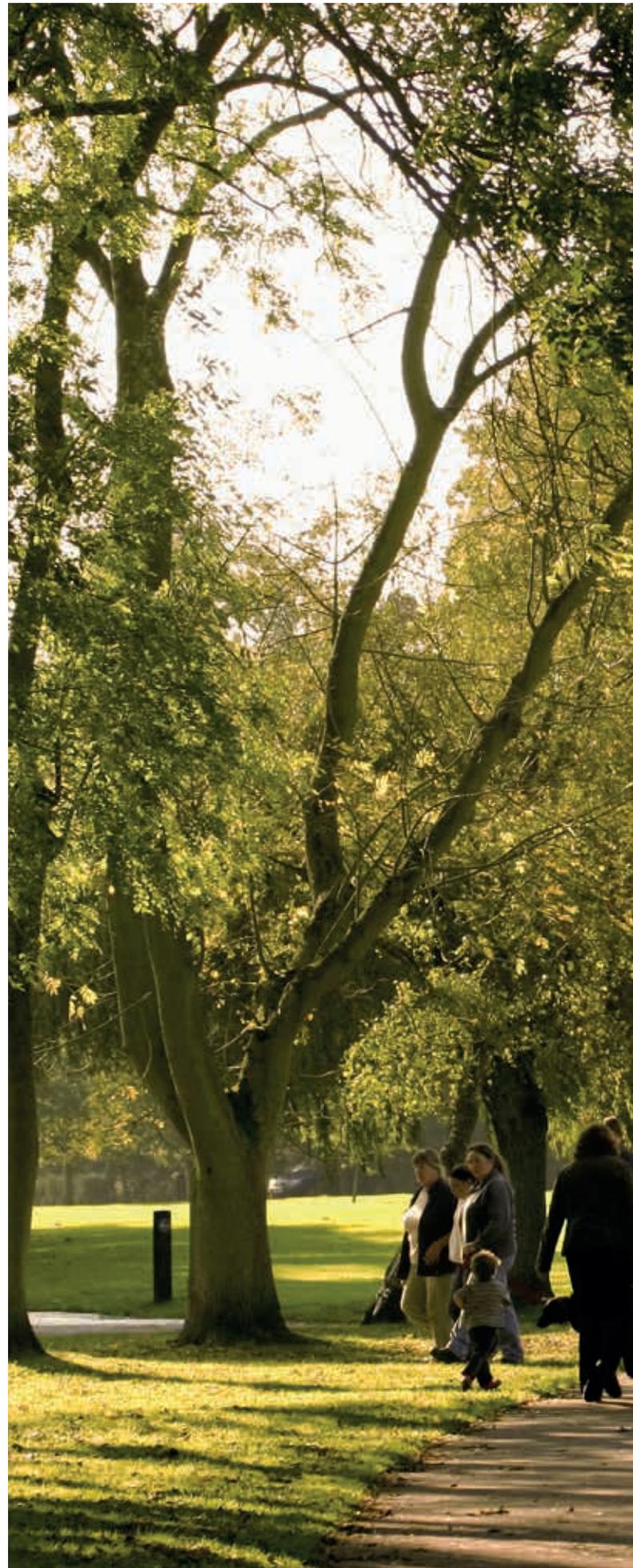
The UGC recognises that The Hub provides a unique opportunity to deliver sustainable places which promote positive growth, a strong and competitive economy, improved connectivity and provide a wide choice of high quality homes, services, facilities and green infrastructure. It considers that establishing improved strategic infrastructure and generating functional synergies between land uses will be crucial to delivering this vision.

The UGC's vision and place making principles (described in full in Chapter 2) respond to these challenges and opportunities in order to deliver a unique and contemporary place, providing opportunities to live, work and play in an enhanced and sustainable environment.

The Hub is a key opportunity to accommodate substantial economic and housing growth within the West Midlands in a sustainable way to benefit the UK Central area, region and the UK as a whole. In particular, the arrival of HS2 will offer the focus for the proposed high density, mixed-use development around the Interchange Station. This will enable the close integration of employment and housing uses, providing important improvements in sustainability at the local level as well as on a wider basis.

The UGC recognises the importance of providing a proportionate number of new homes in close proximity to the increased number of job opportunities posed by The Hub. This approach will offer reduced travel to work times, encourage greater use of sustainable modes of transport and reduce reliance on private cars. In addition, it will ensure that existing and future employers have access to an increased and sufficient local labour pool.

Large scale development, such as that posed by The Hub, offers a viable solution in that the level of transport and social infrastructure required to deliver the ambitions of The Hub as a whole has the potential to support the delivery of additional homes and communities.



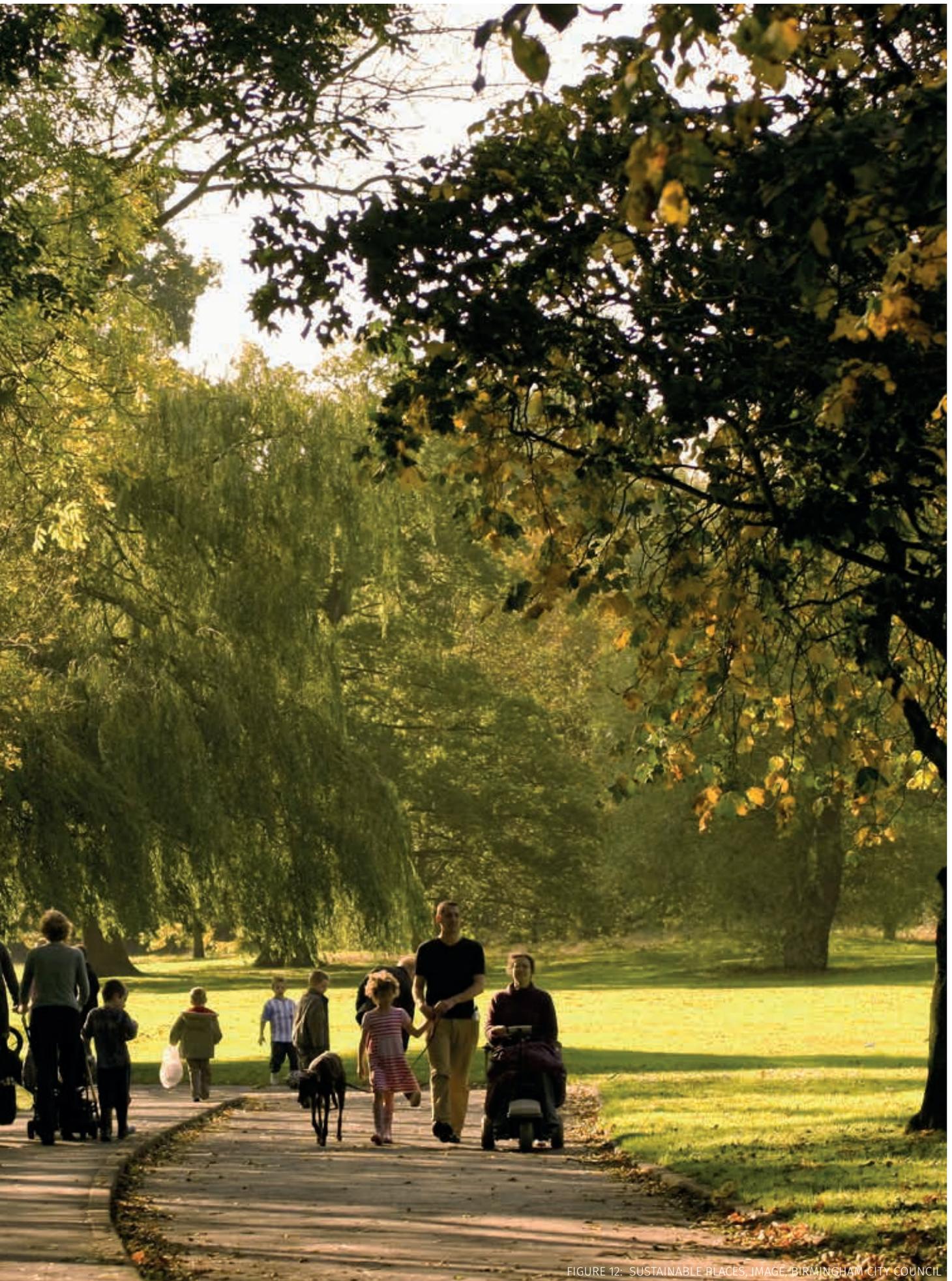
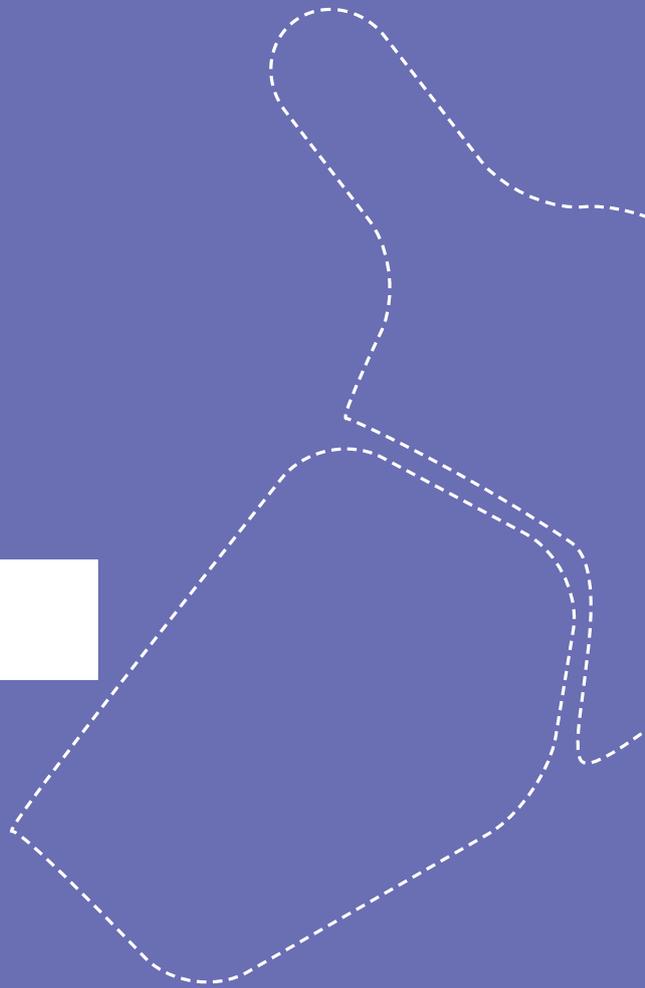
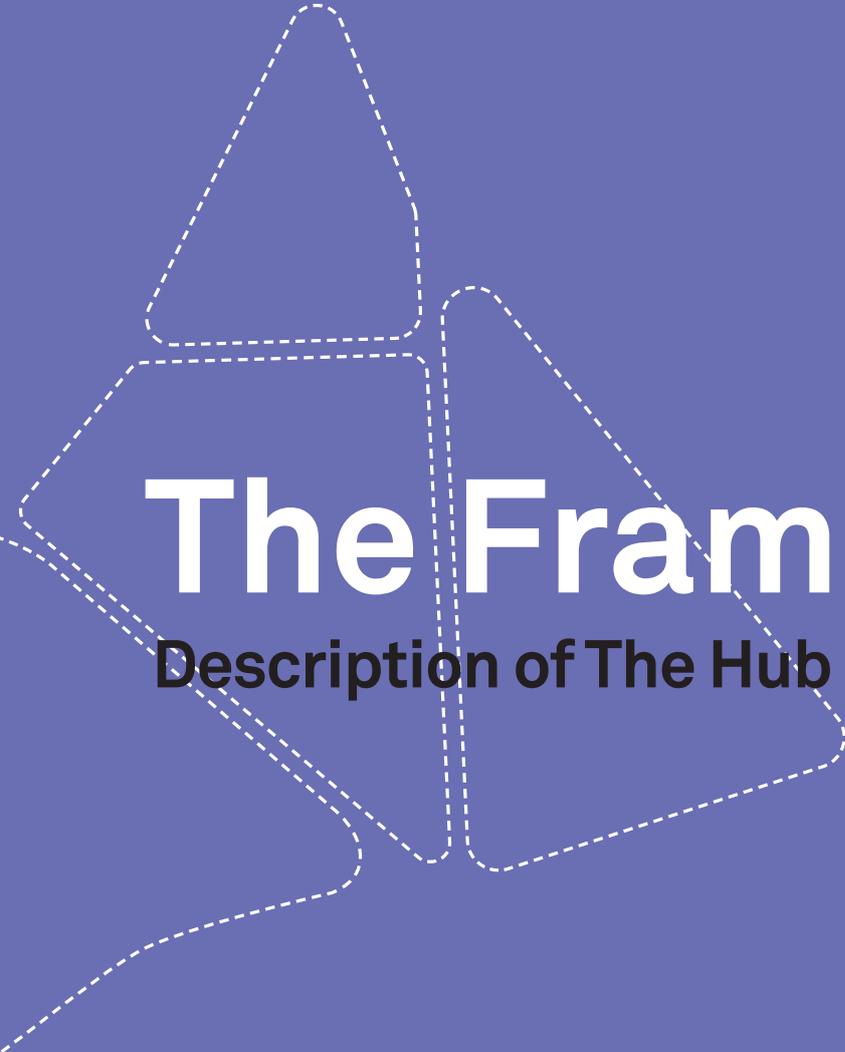


FIGURE 12: SUSTAINABLE PLACES, IMAGE, BIRMINGHAM CITY COUNCIL

2.





The Framework

Description of The Hub Framework Plan

2.1 VISION



The Hub will be globally renowned as the one of the best connected destinations for business, leisure and living in Europe, and a major engine for growth in the UK.



FIGURE 13: ARDEN CROSS PROPOSED DEVELOPMENT - ARTISTIC IMPRESSION

HUB GROWTH INFRASTRUCTURE PLAN (HGIP) VISION

The overall vision for The Hub is established in the HGIP.

The Hub will become globally renowned as the best connected business, leisure and entertainment destination in Europe and become a major driver of the UK economy. It will be a unique and contemporary place, providing opportunities to live, work and play in an enhanced and sustainable environment. Transport and movement will be key to its success and the new and improved facilities on offer will be second to none.

HUB FRAMEWORK OBJECTIVES

For The Hub Framework, the vision has been translated in collaboration with key stakeholders into seven objectives:

- 01. Delivering a major engine for economic growth, productivity and global competitiveness.**
Leveraging significant public investment in infrastructure together with forthcoming private investment and development of the existing assets of the location, context and continued thriving businesses will create a major engine for growing the UK economy.
- 02. Maximising connectivity and transport systems – local, regional and global.**
The existing connectivity by road, rail and air will be strengthened by the arrival of high speed rail, significant improvements to local and regional transport networks and future airport expansion. Maximising this connectivity will put The Hub in reach of 35m people in the UK within two hours travel time and place it at equal distance between London and Manchester (less than 40 minutes – HS2).

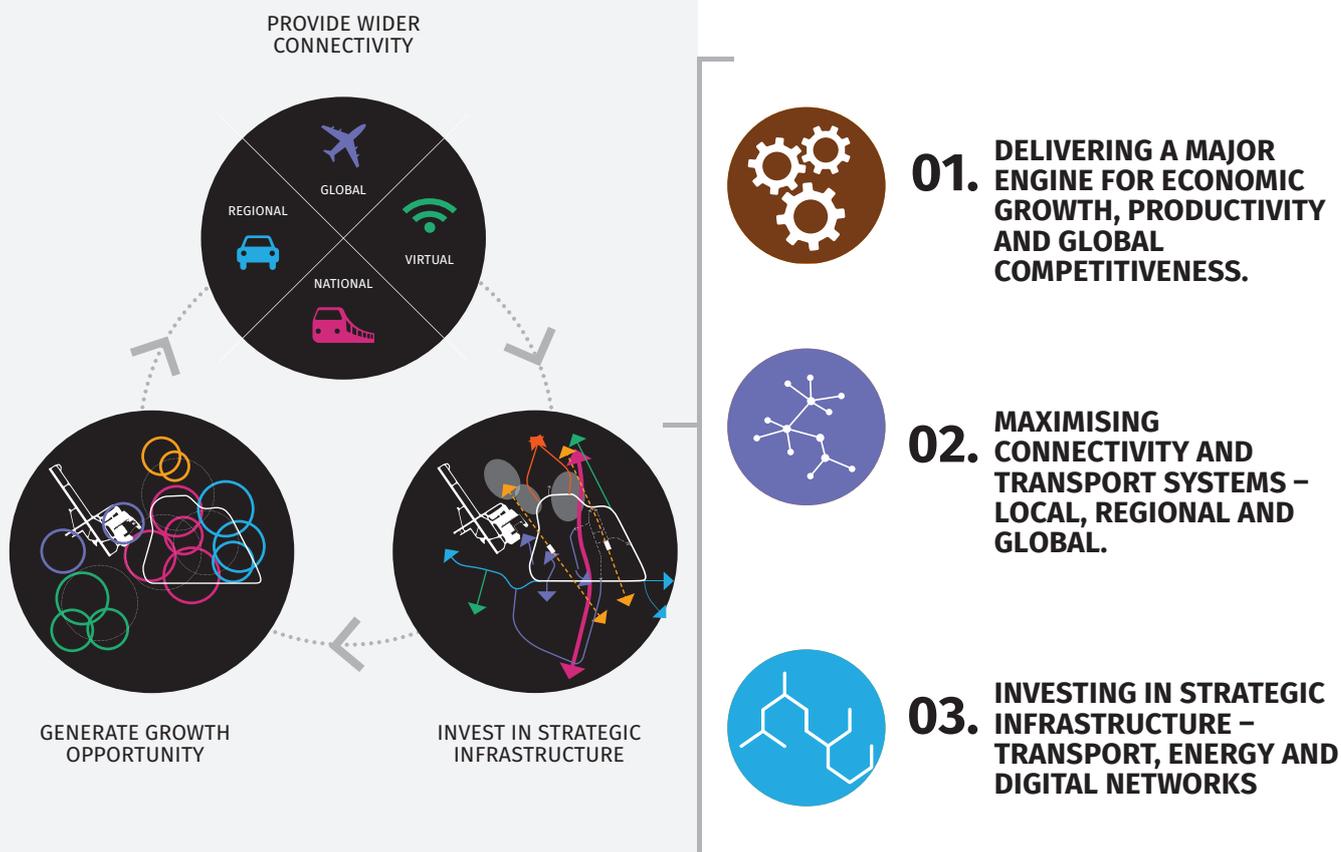


FIGURE 14: ILLUSTRATION OF HGIP VISION AND FRAMEWORK OBJECTIVES

03. Investing in strategic infrastructure – transport, energy, power and digital networks.

Investing in strategic infrastructure will provide the transport and energy networks and the digital infrastructure required to unlock the tremendous growth potential of The Hub.

04. Integrating landscapes and creating high quality green and blue infrastructure - combining growth aspirations with enhanced natural assets.

Balancing the land take required to achieve sustainable growth with the need to enhance the quality and accessibility of the existing natural assets, including the sensitive areas of Green Belt, is key to developing a thriving and sustainable Hub with a unique and distinctive character.

05. Creating distinct and unique places and a strong sense of identity.

Working with the diverse nature of land uses, activities and landscapes in The Hub allows the creation of recognisable places with a unique character. Together with creating a sense of arrival around the transport interchanges, there is opportunity to establish distinct character and identity of specific areas to attract businesses, investment and create communities.

06. Building sustainable communities with appropriate and unique forms of housing and community facilities.

Creating development opportunities which will contain suitable economic, environmental and social components in order to enable choice, opportunities for living, working and recreation within The Hub and thus build more sustainable and healthy communities.

07. Generating functional synergies between uses, skills and communities.

Encouraging a diversity of functions and uses as well as attracting varied skills which are accessible to employers in order to create a multi sector growth area that can sustain the long term growth aspirations of The Hub whilst meeting individual needs.



04. INTEGRATING LANDSCAPES AND CREATING HIGH QUALITY GREEN AND BLUE INFRASTRUCTURE - COMBINING GROWTH ASPIRATIONS WITH ENHANCED NATURAL ASSETS



07. GENERATING FUNCTIONAL SYNERGIES BETWEEN USES, SKILLS AND COMMUNITIES.



05. CREATING DISTINCT AND UNIQUE PLACES AND A STRONG SENSE OF IDENTITY.



06. BUILDING SUSTAINABLE COMMUNITIES WITH APPROPRIATE AND UNIQUE FORMS OF HOUSING AND COMMUNITY FACILITIES.

2.2 EXISTING CHALLENGES

Currently, The Hub area is characterised by a number of diverse sites, economic and environmental assets that are more or less isolated from each other.

This is exacerbated further by major transport and infrastructure corridors such as the M42 and the West Coast Mainline (WCML).

Partly, as a result, different land owners and key stakeholders in the area have drawn up unilateral development plans (or masterplans) in isolation of each other. While responding to the individual site needs and

aspirations, there was no compelling reason to fully reflect each other's aspirations. However, the result of this would be less coherent, with significant inefficiencies and some challenges to implementation.

The HGIP published in March 2017, provided a key step in setting a holistic and coherent vision for the delivery of key infrastructure projects and places within The Hub.

Hence, eight existing challenges have been identified that The Hub Framework will need to address in order to deliver the vision and objectives:

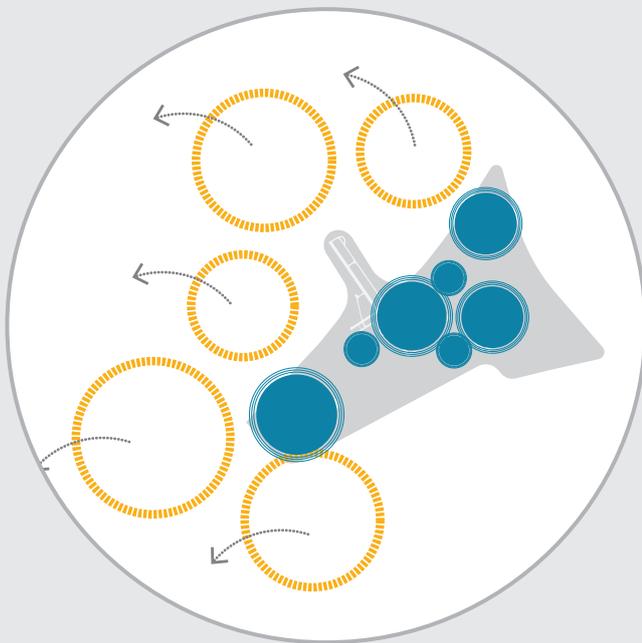


FIGURE 15: EMPLOYMENT AND LIVING CENTRES LOCATION



FIGURE 16: PERCEIVED HINTERLAND

01. SEPARATION BETWEEN EMPLOYMENT AND LIVING CENTRES

- Residential communities at the periphery of The Hub
- Major employment sites within The Hub
- Limited functional interaction.

02. HINTERLAND SPACE

- Underused green space with airport facility as a physical barriers that separate The Hub from its surroundings.
- These ill-defined spaces form a hinterland that could be better activated.

KEY:
● Employment centres
○ Residential communities
▲ The Hub Area

KEY:
▨ Hinterland
▲ The Hub Area

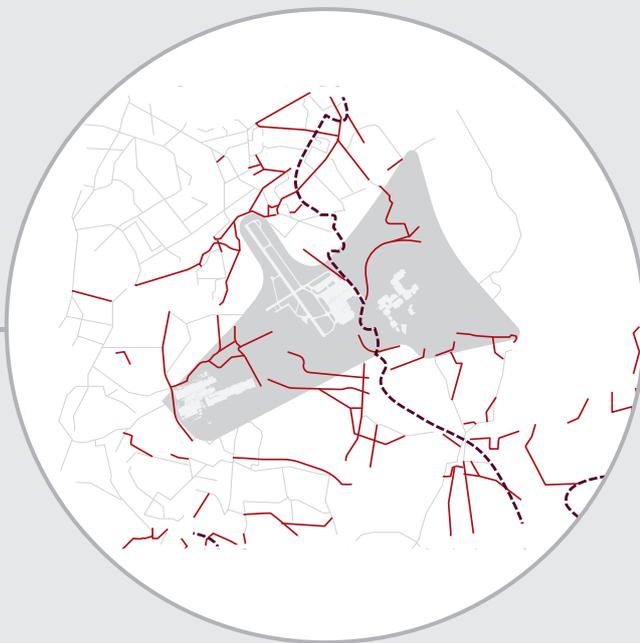


FIGURE 17: WALKING AND CYCLING ROUTES

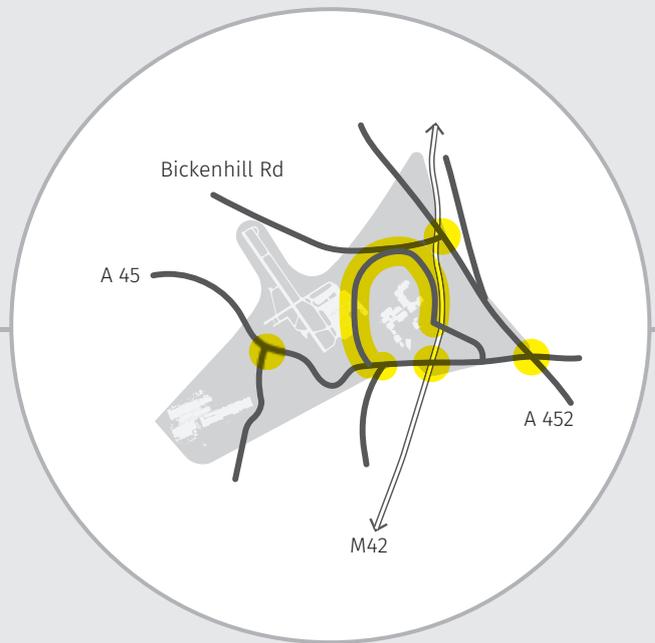


FIGURE 18: ROAD CAPACITY CHALLENGES

03. LACK OF CONTINUOUS WALKING AND CYCLING ROUTES

- Varied quality of existing walking and cycling routes
- Limited connection between The Hub and surrounding communities (i.e. wider UK Central area)
- Nonexistent strong internal east-west / north-south linkage, poor walking / cycling network linking major transport hubs and developments within The Hub.

KEY:
 — Cycle and Walking Trails
 — Defined Cycle and Walking Routes
 - - Undefined Cycle and Walking Routes
 ▲ The Hub Area

04. CAPACITY CHALLENGES AND ACCESSIBILITY

- Existing road network and some junctions are at capacity
- Monofunctional land uses with inadequate split of traffic modes
- Land use expansion has overtaken the capacity of the existing road network.

KEY:
 ● Key congestion areas
 — Major roads
 ▲ The Hub Area

EXISTING CHALLENGES (CONTINUED)

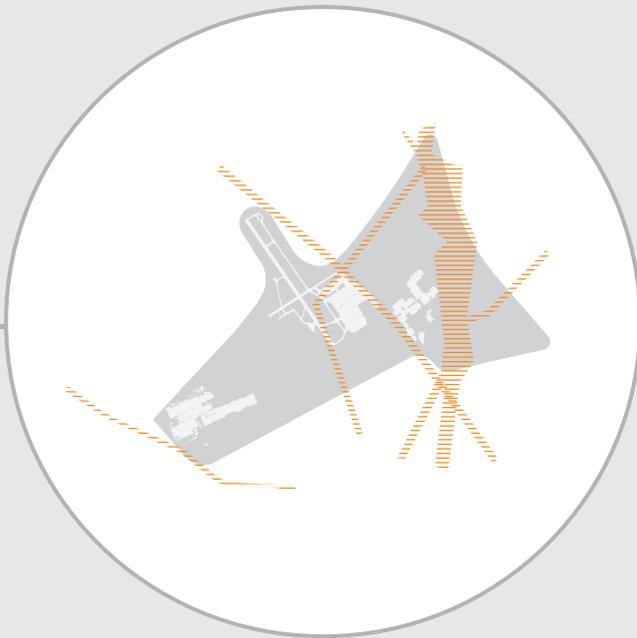


FIGURE 19: INFRASTRUCTURE CAUSING SEVERANCE

05. SEVERANCE BY MAJOR INFRASTRUCTURE

- Major utilities corridors dissect The Hub
- They cause severance and provide little other functionality
- Existing shortfall in capacity, further infrastructure / utilities upgrades are required to facilitate growth aspirations; additional space will be required to accommodate upgrades.

KEY:

- ▨ Major infrastructure / utilities corridor
- ▲ The Hub Area



FIGURE 20: GREEN AND BLUE ASSETS

06. DISJOINTED AND UNDERUSED GREEN AND BLUE ASSETS

- Green and blue assets are not well connected
- The Hub acts as a barrier between residential communities and access to Green Belt
- Lack of accessible public amenity and open space within The Hub
- Access to watercourses within The Hub is limited.

KEY:

- Well used green asset
- Underused green asset
- Blue asset
- ▨ Green Belt
- ▲ The Hub Area



FIGURE 21: LACK OF FOCAL POINTS

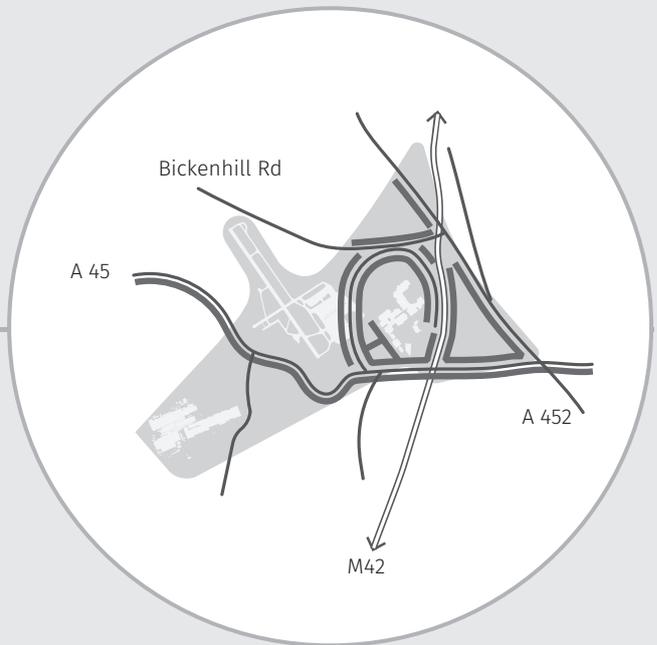


FIGURE 22: CAR DOMINATED ENVIRONMENTS

07. NO CLEAR FOCAL POINTS AND ISOLATED HUB

- Limited number of well-defined character areas and lack of clear focal points
- Some well-connected places have mono-functional use as transport interchanges
- Lack of hierarchy of places.

KEY:
 The Hub Area

08. CAR DOMINATED ENVIRONMENTS

- Roads engineered towards prioritising the use of private cars
- Road network can cause severance between The Hub and surrounding areas
- No walkable environments
- No rationalised Hub wide parking strategy.

KEY:
 Roads with car dominated character
 The Hub Area

2.3 THE HUB FRAMEWORK

THE CONNECTED HUB – AN ENGINE FOR GROWTH

Based on the HGIP, The Hub Framework sets out the vision for The Hub as a well-connected and coherent development area, delivering environmental, social and economic growth. It describes how to maximise its growth potential and support its aspirations by creating a new destination to live, work and play. The Hub Framework has 3 key components around 6 development sites:

At the core are three complementary transport and leisure functions:

- Connected mixed use development around Arden Cross, HS2 and the National Exhibition Centre (NEC);
- Future opportunities at Birmingham International Station; and
- Related leisure, entertainment and tourism development between the NEC and new development to the north.

This, in turn links up three core commercial development areas:

- The established Advanced Manufacturing campus of Jaguar Land Rover;
- Birmingham Airport to the west; and
- Enhanced commercial development at Birmingham Business Park linked to future uses around the station in the new International Quarter Potential Development Area (P01).

The Framework combines green corridors with a clear movement network to create better connectivity between the eight areas and their overall context.

It is proposed that temporary land uses are used to innovate ahead of and in parallel to physical development to set out a clear path for delivering one of the UK's most exciting development opportunities.

In the following sections the Framework sets out place making principles and Character Areas, and provides guidance for future detailed masterplans within five of the six development areas.

The Framework includes the Core Development Areas (CDA) which are already within The Hub area in the Consultation Draft Local Plan. In addition, there is potential for a new commercial led development around Birmingham International Station which can also contribute to the vision and place making principles for The Hub and the wider UK Central area.

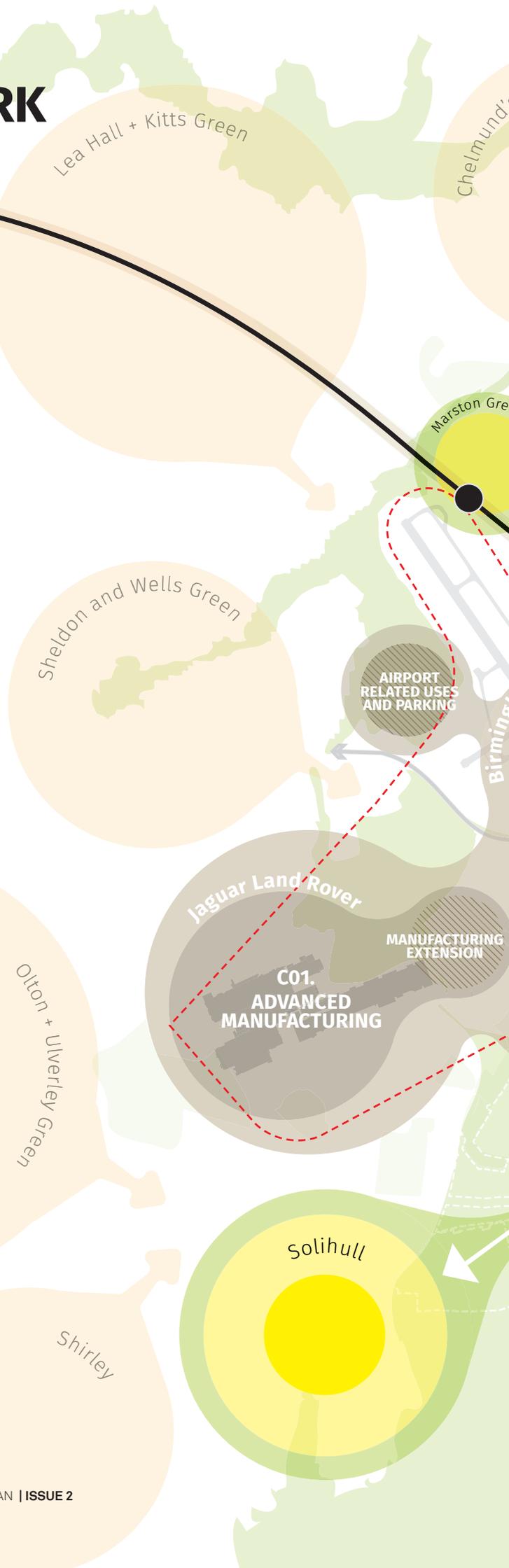




FIGURE 23: THE HUB FRAMEWORK PLAN

2.4 PLACE MAKING PRINCIPLES

To deliver the vision and its objectives, and to address the key challenges, The Hub Framework is based on five key place making principles. These are based on the three design principles set out in the HGIP. The place making principles have been developed in collaboration with land owners and other key stakeholders and statutory bodies.

They have been designed to inspire a common approach towards development in The Hub, whilst deliberately providing flexibility.

Following these place making principles will create a common thread that binds the areas together to create a more coherent and better integrated Hub. They will enable individual land owners and promoters to develop their own ideas and concepts in response to specific aspirations, objectives and business needs whilst contributing to the overarching vision for The Hub.

The five overarching place making principles are set out below and described in more detail on the following pages. A sense of place will be generated by diversifying land uses and leveraging open space provision to create vibrant and active places with a strong identity and sense of place, consisting of defined areas of distinctive character.



01. IMPROVE ACCESSIBILITY

Encouraging walking, cycling and the use of public transport while providing the necessary road capacity.

Improvements to accessibility by creating better connected environments whilst promoting walking, cycling and use of public transport, contributing to resolving capacity and congestion related issues on the roads network, whilst encouraging healthier lifestyles.



FIGURE 24: PEDESTRIAN AND CYCLING ACCESSIBLE PLACES, IMAGE, THE ACADEMY OF URBANISM



02. ESTABLISH A HIGH QUALITY GREEN AND BLUE NETWORK

Optimising access to the natural assets of The Hub, balancing urban and natural landscapes.

Create a high quality green and blue network by linking the existing spaces and underused assets into a coherent, accessible green and blue network which connects communities, and supports and enhances the proposed cycling and walking routes.



FIGURE 25: HIGH QUALITY GREEN AND BLUE PLACES, IMAGE, THE ACADEMY OF URBANISM



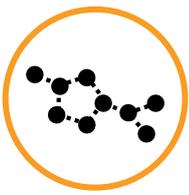
03. CREATE SUSTAINABLE COMMUNITIES

With high quality living and working environments and active spaces.

Create sustainable communities by achieving significant growth and scale of development that balances economic, environmental and social aspects, uses and facilities.



FIGURE 26: WINDMILL STREET PARKLET (C) PAUL CARSTAIRS ARUP



04. LEVERAGING LAND WITH TEMPORARY USES AND INNOVATION

By encouraging incubation, temporary landscapes and cooperation.

Embrace innovation and temporary land uses by testing new ideas and utilising temporary land uses as part of an early delivery and place making strategy, enabling The Hub to become a centre for innovation and excitement.



FIGURE 27: TEMPORARY LAND USES IMPRESSION, IMAGE, JOCELYN KINGHORN



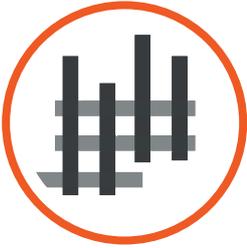
05. GENERATE SENSE OF PLACE

Through distinction and diverse identities for people to live, work and visit.

Places with a strong identity and sense of place, consisting of defined areas of distinctive character.



FIGURE 28: ACTIVE AND DISTINCT PLACES IMPRESSION

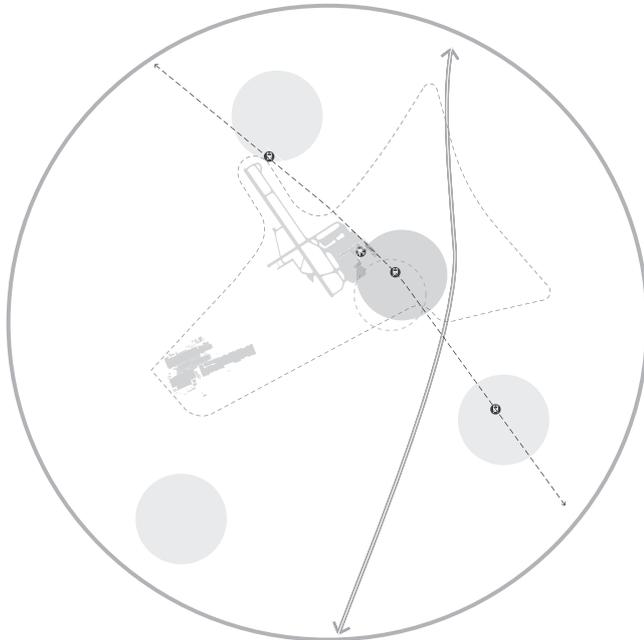


01. IMPROVE ACCESSIBILITY

WALKING, CYCLING AND PUBLIC TRANSPORT

CURRENT POSITION

- At present, potentially walkable neighbourhoods are isolated from each other
- There are a limited number of quality pedestrian and cycling connections between communities
- There is an opportunity to introduce frequent and reliable public transport to connect neighbourhoods (i.e. Automated People Mover (APM), Sprint, Metro)
- There is an opportunity to deliver a mix of uses and a scale of development that will enable the formation of sustainable communities and neighbourhoods.

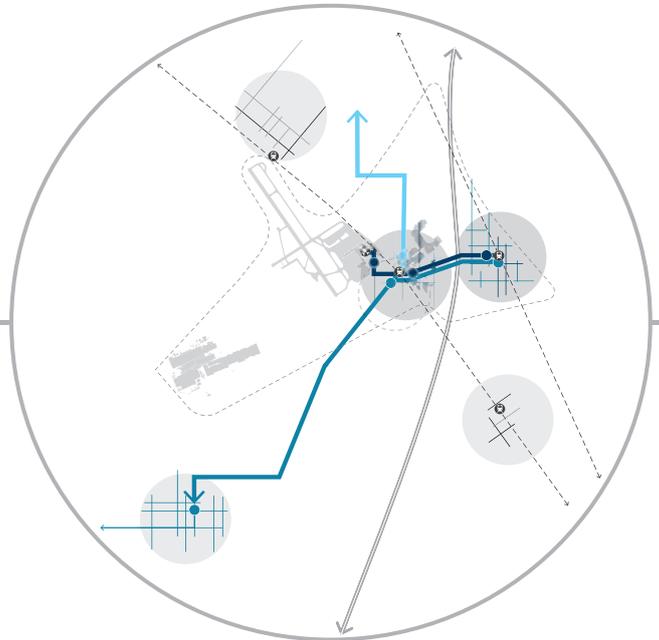


**CURRENT POSITION:
ISOLATED WALKABLE
NEIGHBOURHOODS**

FIGURE 29: ACCESSIBILITY CURRENT POSITION

PROPOSALS

- Add high quality cycling routes by filling gaps in the cycle network, improving existing routes and utilising new crossings / routes where possible
- Create wider connectivity by better linking existing and future communities with each other and to the surrounding landscapes with an attractive cycle network (i.e. Hampton in Arden with Marston Green and Solihull)
- Provide enhanced facilities at transport interchanges and key employment sites.



**PROPOSAL:
PUBLIC TRANSPORT IMPROVEMENTS* TO
CONNECT WALKABLE NEIGHBOURHOODS**

FIGURE 30: PROPOSED PUBLIC TRANSPORT NETWORK



OUTCOMES

- Establish a walking and cycling network that is well-integrated with public transport
- Encourage localised alternative modes of transport, reducing carbon emissions and ambient pollution
- Improve the accessibility of wider green infrastructure (including Green Belt)
- Foster healthier lifestyles and communities (i.e. walkable neighbourhoods, safer streets).

*Route alignment for public transport improvements indicative, based on information available at the time of writing. Subject to confirmation and coordination with TfWM.



- KEY:**
- Existing communities
 - Core Development Area
 - ⊙ Potential Development Area*
 - Pedestrian-path / Cycle highways***
 - ⋯ Regional Cycle / pedestrian-path***
 - Sprint routes - Bus*
 - Metro routes*
 - APM - Automated People Mover**
 - 800m approx. 10 mins walking distance
 - - Railway
 - Green Belt
 - 🏠 The Hub Area

**OUTCOMES:
A WELL INTEGRATED WALKING, CYCLING AND
PUBLIC TRANSPORT NETWORK**

FIGURE 31: SUSTAINABLE ACCESSIBILITY NETWORK

*Route alignment for Sprint and Metro indicative, based on information available at the time of writing. Subject to confirmation by and coordination with TfWM.
 **Route alignment for APM indicative, based on information available at the time of writing. Subject to confirmation by and coordination with HS2, NEC and airport.
 ***Number and locations of pedestrian / cycling connections across the M42 affecting the HS2 Hybrid Bill are aligned with the requests made to HS2 to amend their Hybrid Bill Scheme in order to enable future delivery.

01. IMPROVE ACCESSIBILITY (CONTINUED)

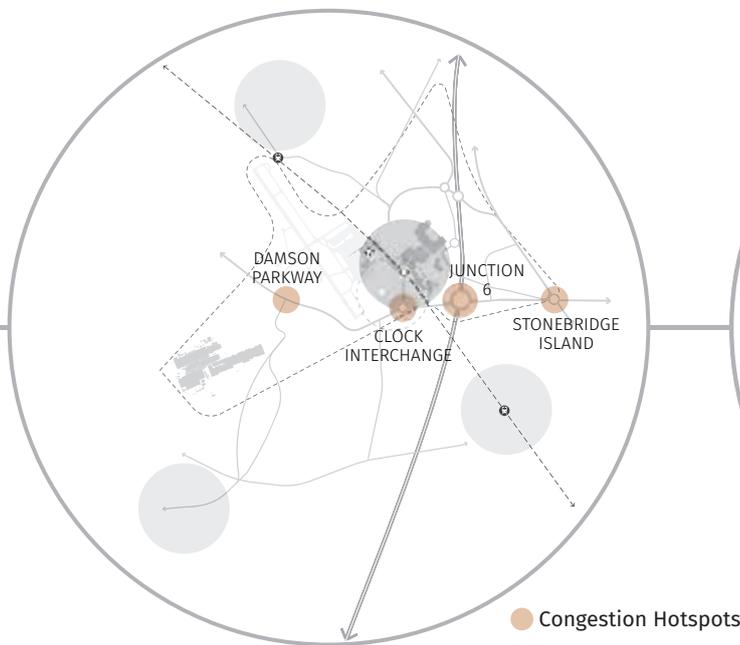
VEHICULAR CONNECTIVITY

CURRENT POSITION

- Key areas of congestion requiring upgrades of the existing road network and introduction of new road connections / highway improvements
- Poor connections within The Hub
- Lack of a clear structure
- Junction capacity at peak times.

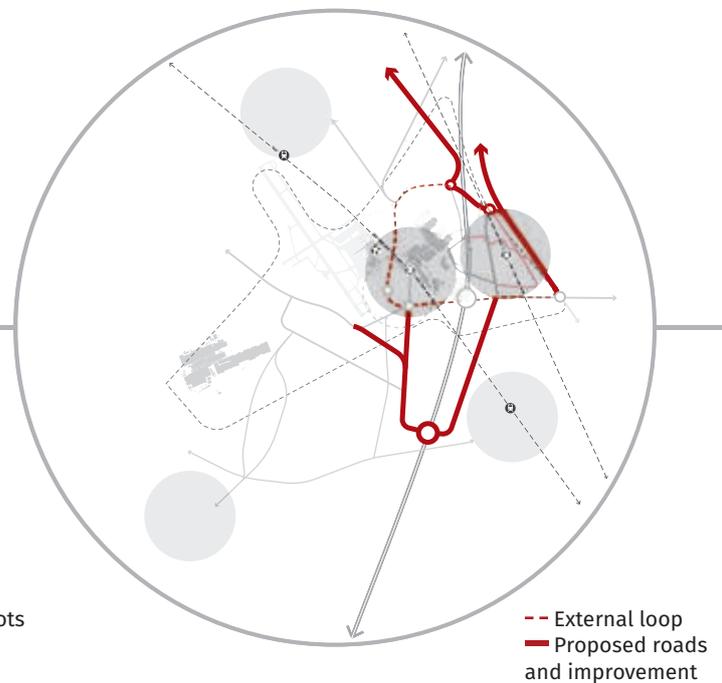
PROPOSALS

- Create an 'external loop' to cater for Hub through traffic and improve local and regional links
- Create a clear hierarchy of streets
- Create a more pedestrian focused internal network of streets
- Create well-connected and permeable new developments.



**CURRENT POSITION:
ISOLATED STRUCTURE**

FIGURE 32: ROAD INFRASTRUCTURE CURRENT POSITION



**PROPOSAL:
REINFORCED NETWORK**

FIGURE 33: PROPOSED ROADS AND IMPROVEMENTS



OUTCOMES

Together, these measures will help create a well connected and highly permeable Hub which prioritises alternative modes of transport and encourages a more sustainable, future orientated approach to transport and accessibility.

The street hierarchy will enable better understanding of place, respond positively to related forms of buildings and improve surveillance of streets and public realm.



KEY:

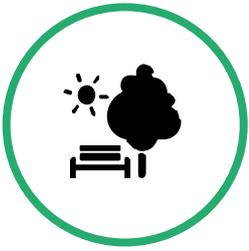
- Existing communities
- Core Development Area
- Primary roads*
- Secondary roads*
- Tertiary roads*
- Improved roads
- Illustrative new roads layout
- Congestion Hotspots
- - Railway
- Green Belt
- 🏠 The Hub Area

**OUTCOME:
IMPROVED VEHICULAR MOVEMENT
NETWORK**

FIGURE 34: PROPOSED ROADS AND IMPROVEMENTS IN THE NETWORK

NB alignment connecting to J6 is indicative

* Number and locations of connections across the M42 affecting the HS2 Hybrid Bill are aligned with the requests made to HS2 to amend their Hybrid Bill Scheme in order to enable future delivery.



02. ESTABLISH A HIGH QUALITY GREEN AND BLUE NETWORK

CURRENT POSITION

- The existing open spaces and watercourses are not well connected
- Other existing assets such as Alcott or Damson Woodlands are underused and poorly integrated with the surrounding sites
- The Hub area acts as a barrier between residential communities and access to the wider green infrastructure and Green Belt
- There is limited access to high quality public realm within The Hub, including green and blue infrastructure.

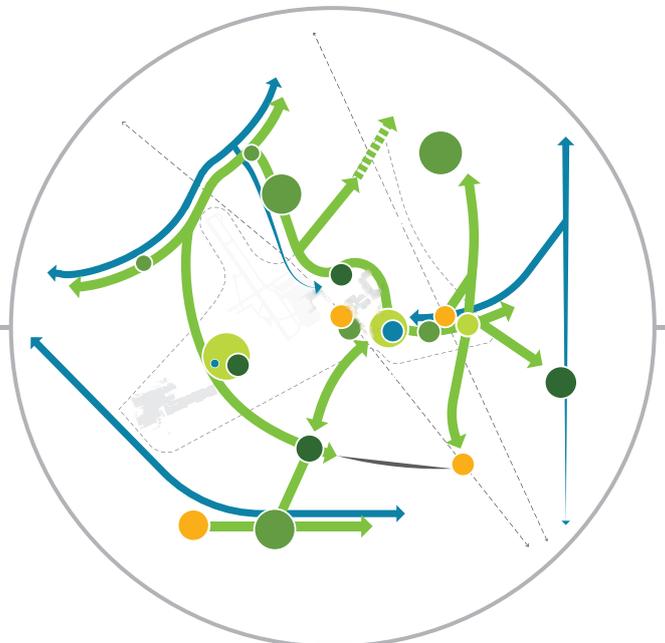
PROPOSALS

- Connect open spaces and watercourses with green corridors by enhancing existing linkages and creating new connections aligned with the proposed movement system
- Corridors can be varied in character and level of access. They can include ecological and biodiversity corridors.



**CURRENT POSITION:
ISOLATED
OPEN SPACES**

FIGURE 35: OPEN SPACE CURRENT POSITION



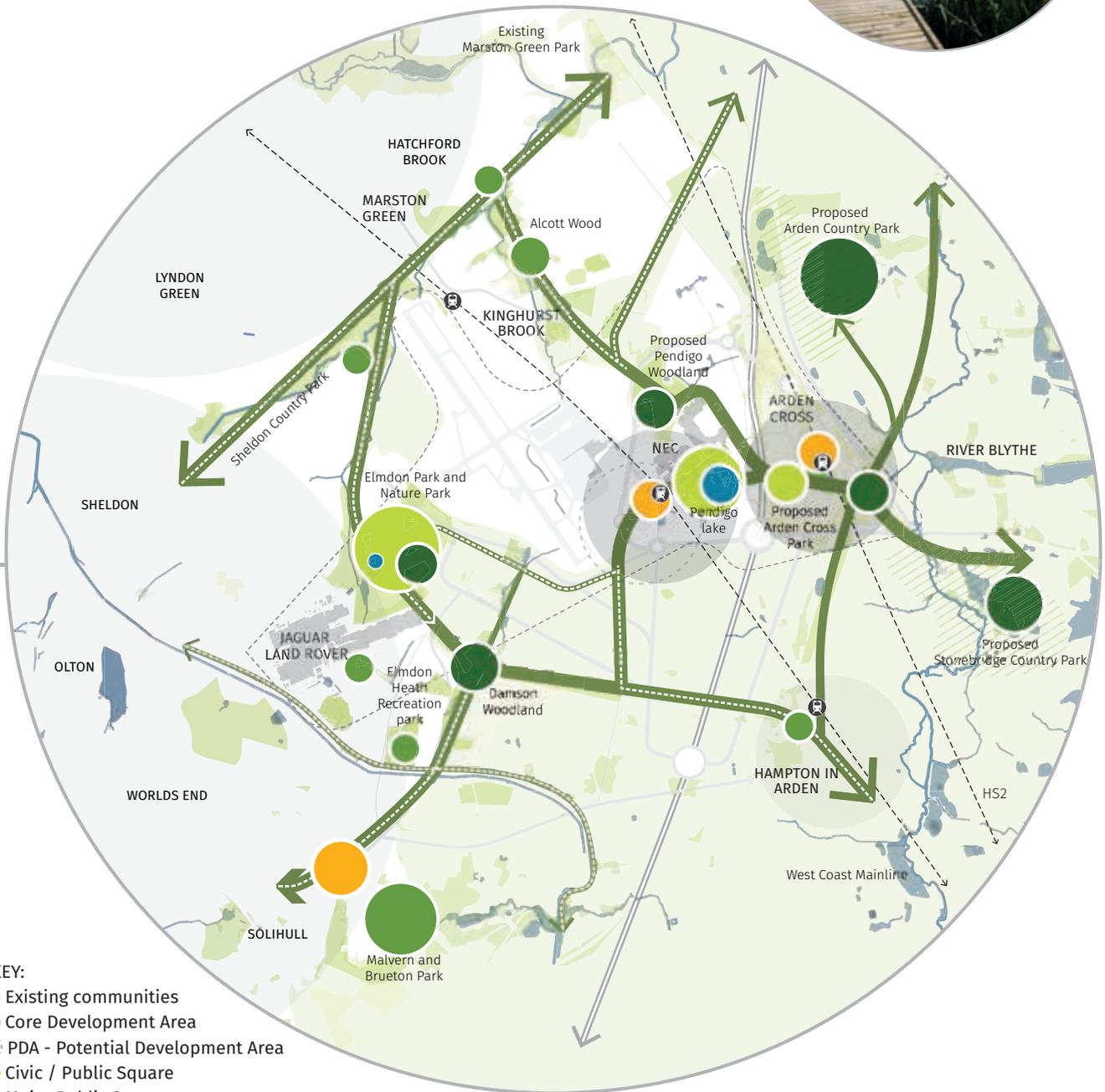
**PROPOSAL:
CREATE GREEN
AND BLUE CORRIDORS**

FIGURE 36: PROPOSED OPEN SPACE NETWORK



OUTCOMES

- Create a diverse network of green and blue infrastructure and natural environments that support walking and cycling connections, taking into account site sensitivity
- Integrate new development with the surrounding landscape
- Strengthen the distinct character of Solihull and its surrounds as a town with a strong relationship to the landscape
- Improve access to underused spaces and to the Green Belt to compensate for loss of any Green Belt to development
- Provide enhanced amenities to both existing and future communities
- Encourage the use of natural landscapes for leisure and recreation to foster healthier lifestyles.



- KEY:**
- Existing communities
 - Core Development Area
 - PDA - Potential Development Area
 - Civic / Public Square
 - Major Public Space
 - Proposed / Improved Green Asset
 - Existing Green Asset
 - Existing Blue asset
 - Green Belt
 - Railway
 - Proposed Green Corridor
 - Existing Green Corridor*
 - ⊕ The Hub Area

**OUTCOME:
AN INTEGRATED GREEN AND BLUE
NETWORK**

FIGURE 37: INTEGRATED GREEN AND BLUE NETWORK

*Includes existing public footpaths which could be enhanced to become a green corridor



03. CREATE SUSTAINABLE COMMUNITIES

CURRENT POSITION

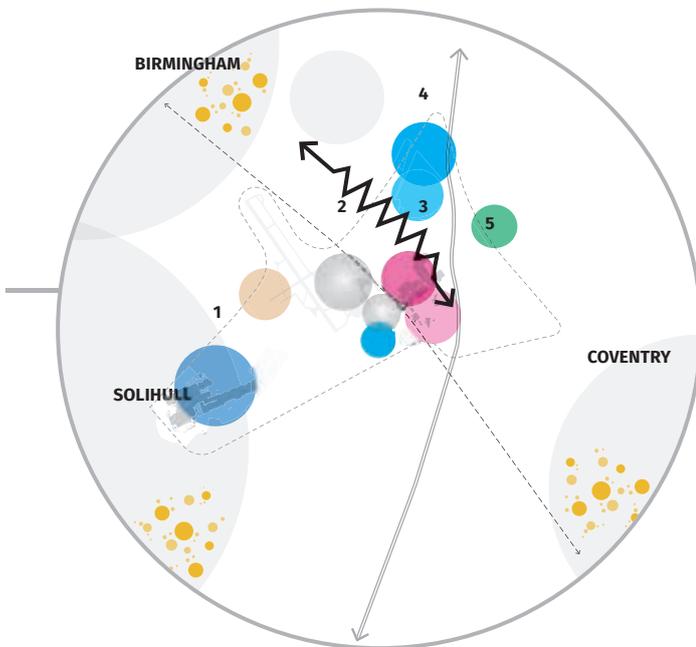
At present, developments within The Hub operate largely independently of each other with limited synergy and connectivity. There is a limited range of predominant uses within The Hub which are not sufficient to support and provide a sustainable community.

The lack of residential uses means that there is little opportunity for more sustainable travel and movement within The Hub and little generation of broader use and activity (i.e. the link between home, work and recreation).

PROPOSALS

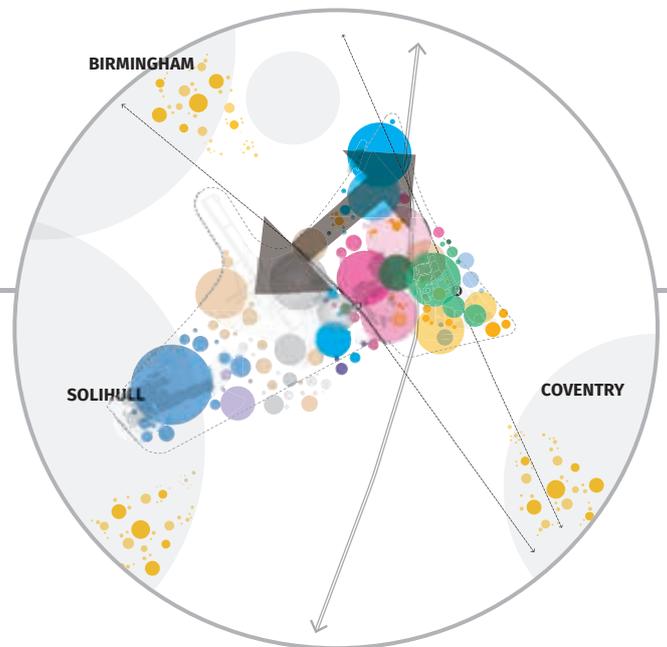
There is potential to create a pattern of land uses and development that is more multifunctional and diverse. The Framework creates the potential to introduce additional uses such as start up spaces, recreation, entertainment and potential knowledge and education facilities.

This provides the opportunity to encourage more functional connections between The Hub areas. Further, connecting The Hub with the wider context and considering the introduction of significant residential and economic development along with related social infrastructure will deliver a key stepping stone towards creating sustainable communities.



**CURRENT POSITION:
ISOLATED
COMMUNITIES**

FIGURE 38: ISOLATED COMMUNITIES CURRENT POSITION



**PROPOSAL:
ENCOURAGE
SYNERGIES**

FIGURE 39: PROPOSED SYNERGIES

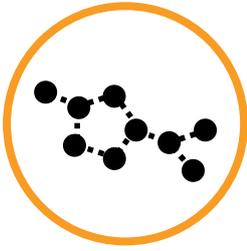
OUTCOMES

A genuinely more mixed use and well-connected Hub would help to achieve more balanced, flourishing and beneficial economic and environmental growth. It will enable the delivery of well-connected, mixed use, sustainable communities with high quality living, working and natural environments, greater levels of economic opportunity and new social and cultural facilities.

The delivery of an appropriate scale of development is important in order to provide sufficient numbers of people to support new services and the provision of social

infrastructure, and to avoid creating pockets of isolated single use development.

Providing residential growth in proximity to new jobs will also help to balance transport movements and the reliance upon the private car to access jobs within The Hub.



04. EMBRACE TEMPORARY USES AND INNOVATION

CURRENT POSITION

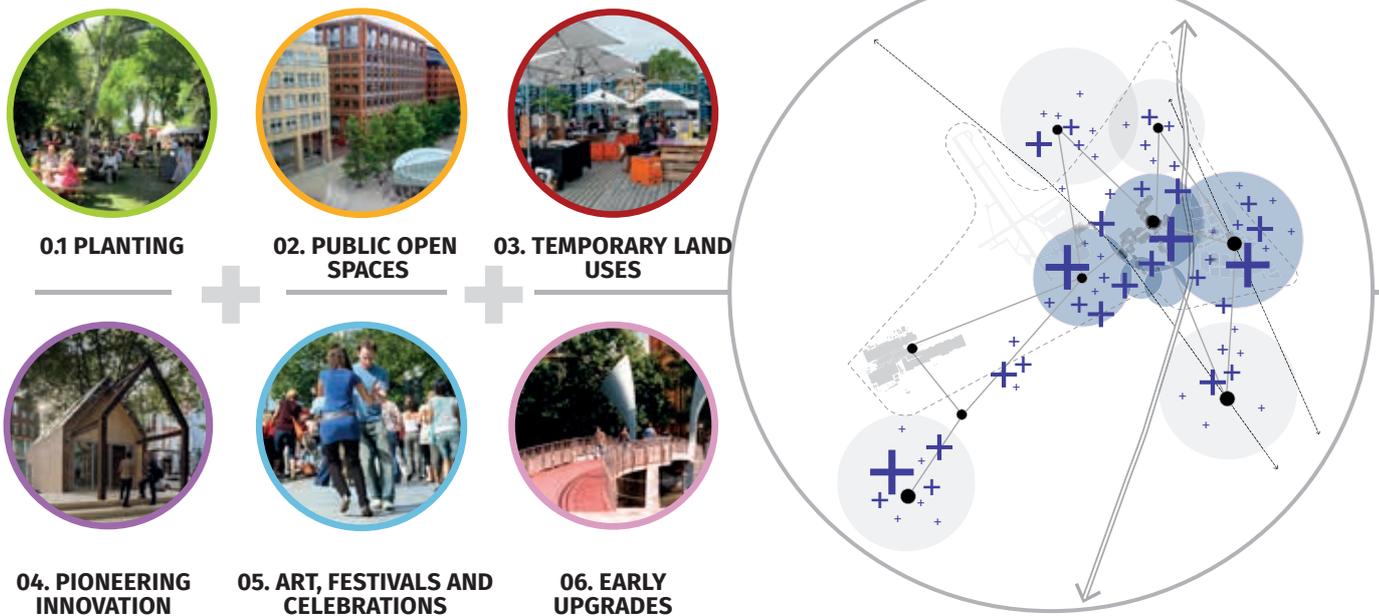
The Hub will develop and evolve in the coming years. Its success and ability to attract investment over time will be influenced by the perception of and quality of the early projects that are delivered.

The plans for specific projects in the NEC, around Jaguar Land Rover or in the Birmingham Business Park, are well advanced and are moving towards implementation. At present they are developing in isolation, however they could be complemented by a range of temporary (and permanent) measures. These can become important stepping stones towards the delivery of The Hub Framework as well as attracting people, business and investment to the area.

PROPOSALS

Land owners and stakeholders are encouraged to consider a range of temporary and permanent measures. Ideas for temporary uses are explored further in Appendix A.

In accordance with the vision and addressing the broader challenges, these measures could deliver four key outcomes:



PROPOSAL: ENCOURAGE EARLY USES TO LEVERAGE LAND AND ATTRACTIVENESS / QUALITY

FIGURE 41: TEMPORARY USES AND EARLY SYNERGIES

OUTCOMES

- Help to establish a strong identity and brand for The Hub as a coherent place which helps promote the area to business and visitors as well as current occupiers and future residents
- Set the context for future development early on and provide a sense of place and completeness at each development phase
- Explore the potential of new technologies, techniques and innovation to transform the way The Hub is built, operated and used as well as testing the market for a more diverse range of land uses
- Create a vibrancy and buzz around The Hub that places it firmly on the map and in the minds of people as the place to be for residential, economic and cultural opportunities.



KEY:

- Existing communities
- Core Development Area
- PDA - Potential Development Area
- Temporary public open spaces
- Permanent public open spaces
- Key open spaces
- Key anchoring open spaces
- Possible areas for temporary land use intervention
- Possible area for new construction method trails
- Green Belt

**OUTCOME:
EMBRACE TEMPORARY USES
AND INNOVATION**

FIGURE 42: PROPOSED TEMPORARY USES

- Possible areas for art, festival and celebration activities
- The Hub Area
- Planting along key routes
- Planting along rail and road corridors
- Key routes supported by open space
- Early routes upgrade
- Early public spaces upgrade
- Strategic bridge locations
- Possible area for digital interventions



05. GENERATE A SENSE OF PLACE

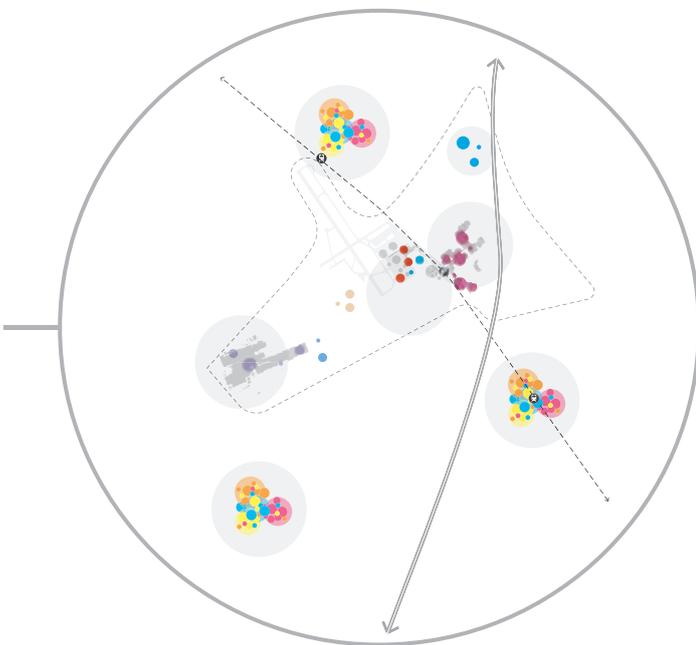
CURRENT POSITION

At present there is a limited sense of arrival and the overall sense of place is poorly demonstrated. Existing sites have been shaped by their specific needs and offer a singular response to their own challenges.

As a whole, The Hub area lacks a clear identity and distinct character.

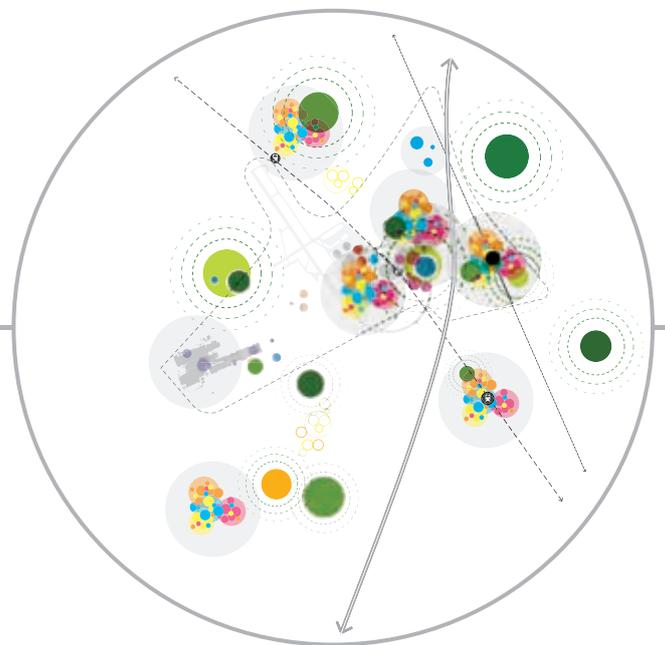
PROPOSALS

It will be important to define The Hub as more than a collection of segregated, individual developments and to develop a real sense of place for each of the constituent development and character areas. A recognition of existing and potential uses, hierarchy of movement and streets, land uses and potential built forms will all contribute to defining a specific character and identity. A consistent approach to streets, planting and public realm will help to unify character areas.



**CURRENT POSITION:
DISENGAGED
COMMUNITIES**

FIGURE 43: DISENGAGED COMMUNITIES



**PROPOSAL:
ENCOURAGE CHARACTER
AND DISTINCTION**

FIGURE 44: CHARACTER ENHANCEMENT



OUTCOMES

- The creation of inter-related, well connected and distinct character areas will be key to providing a real sense of place and distinction. The mix of land uses will be important in achieving this, as well as in creating development that clearly orientates itself towards public realm and open spaces
- Combining a clear open space structure with the movement network, and aligning it with centres of activity will help create a series of distinct, active and diverse places
- Active streets and public realms with passive surveillance, that are connected, will contribute towards their use and develop a greater sense of safety and security.

2.5 CHARACTER AREAS

The Hub has six development areas – five core areas and one potential development area. Each will have a distinct character and identity, shaped by location, predominant land use and aspirations for future development. Each will play an important role in contributing towards the overall vision of making The Hub an exciting destination for people to live, work and visit, building on the success of key sites to date but also providing new and exciting forms of development.

CORE DEVELOPMENT AREAS

The five CDAs currently reflect the major land holdings within The Hub. Each has formulated a vision and most have set out a clear path for development in the early development phases of The Hub. Their character and how they relate to the wider Hub is shown in more detail.

POTENTIAL DEVELOPMENT AREA

In addition to the five core areas, the Framework has identified an area of significant growth potential that could merit further consideration (dependent upon a range of factors, including deliverability of appropriate types of development within the CDAs, scale of development required, trajectory of delivery).

This area can also contribute significantly to the delivery of The Hub vision as it has the potential to complement the Framework and its five place making principles and to improve overall connectivity within The Hub.

The following section explores the development potential of each development area.

C01. Jaguar Land Rover Manufacturing Campus



C02. International Gateway



C03. Pendigo Quarter



C04. Birmingham Business Park



C05. Arden Cross District



P01. International Quarter



BIRMINGHAM

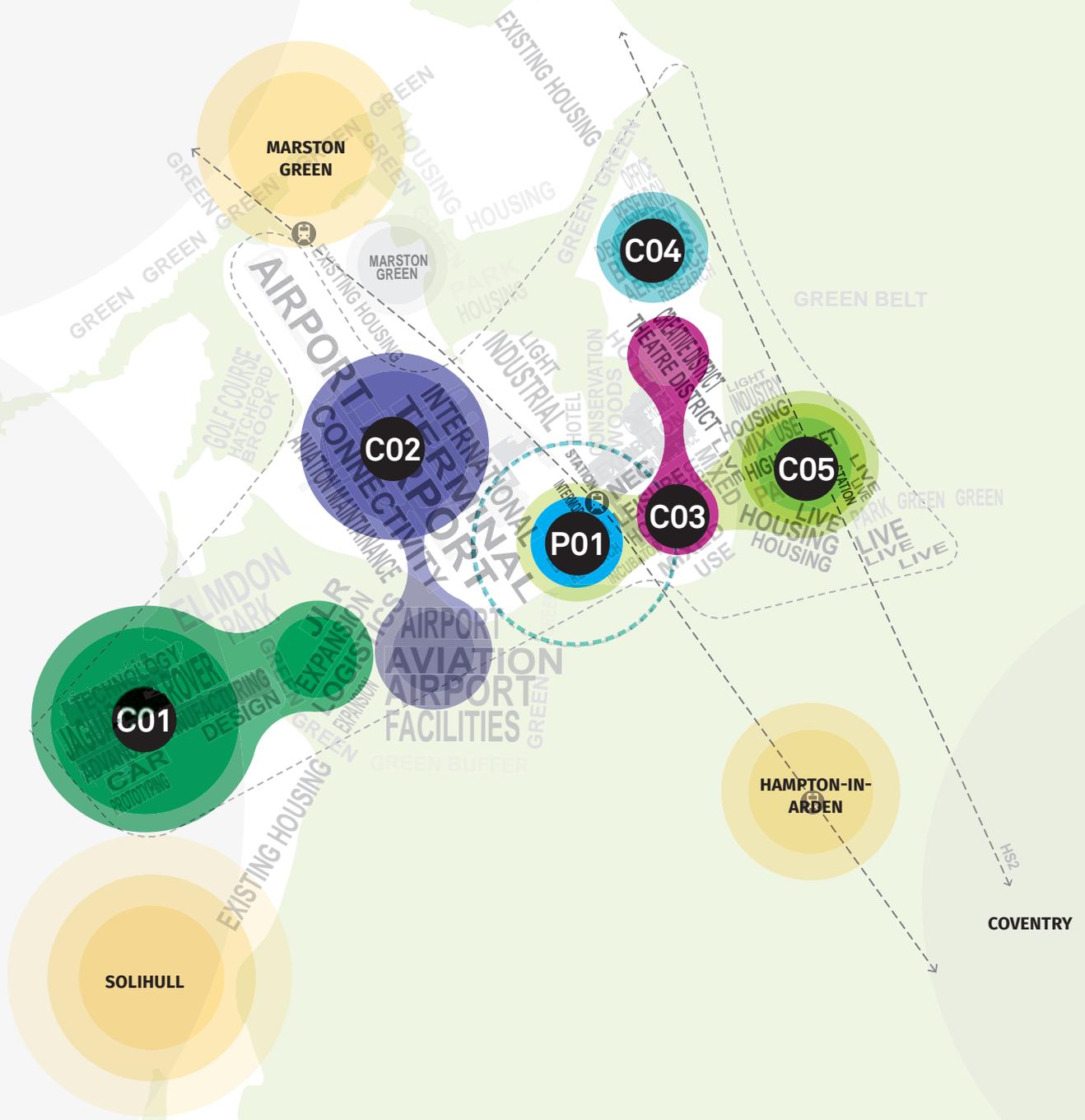
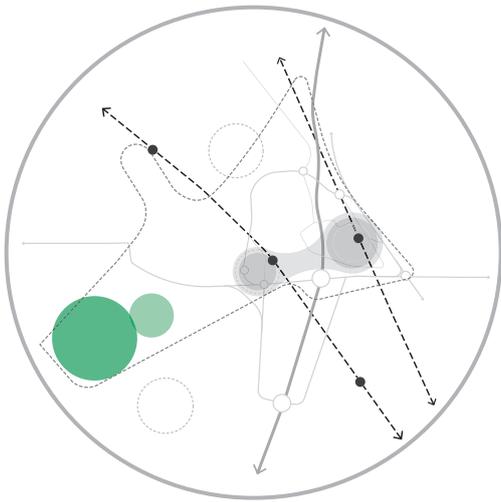


FIGURE 46: CHARACTER AREAS - CORE DEVELOPMENT AREAS



C01. JAGUAR LAND ROVER MANUFACTURING CAMPUS

KEY POINTS

- The area is characterised by advanced manufacturing / employment uses with typical large scale industrial buildings within the wider green setting of Solihull.
- The area is bounded by Elmdon Park to the north and well established residential areas to the north west, the west and south (e.g. Olton, Sheldon and Shirley etc). Directly to the east is land currently designated as Green Belt.
- The area is important for manufacturing and includes one of the key employers in the Midlands and national economy, Jaguar Land Rover.
- Road connections via the M42 are good, however congestion on the A45 at the junction with the Damson Parkway has been identified as an issue.
- Modernisation and expansion of the existing plant will require careful planning and could include consideration of future expansion into the Green Belt.
- Public access is largely restricted to existing public rights of way (PRoW), nature reserves and parks in the area.

FUTURE DEVELOPMENT

The area will continue to be characterised by large industrial buildings and manufacturing facilities required for the expansion and modernisation of existing operations. There is an opportunity to better integrate the existing green and blue assets and enhance the overall landscape setting to reinforce the character of this area.

An enhanced landscape and ecological mitigation strategy along the existing pedestrian and cycling route between Elmdon Park and Damson Parkway could improve wider connections between the Park, the nearby woodland area with its watercourse and the Green Belt. Further ecological mitigation corridors across the expansion site should also be considered.

These can take the form of wildlife and biodiversity corridors, be integrated within buildings and create visual connections without requiring direct public access. Together, they would form a stronger green and blue network while providing enhanced amenity for both

existing and future communities. Furthermore, they can help to provide a stronger identity to the new facilities / development within an enhanced landscape setting.

The enhanced green network will support improved cycling and walking connections and the proposed route for the Sprint will be a significant upgrade to public transport connectivity.

Improvements to the junction between the A45 and Damson Parkway and a new link to the proposed junction 6 of M42 will improve highway capacity and vehicular traffic flows to and from the site. Furthermore, the realignment of Damson Parkway will help to rationalise the site layout and help to improve legibility of the site. The potential inclusion of a direct railway connection to the West Coast Main Line will contribute to reduce congestion in the wider Hub area.

Temporary and permanent planting schemes, and early implantation of green corridors should be considered to improve the linkages between the site, The Hub and the existing communities.

KEY MOVES

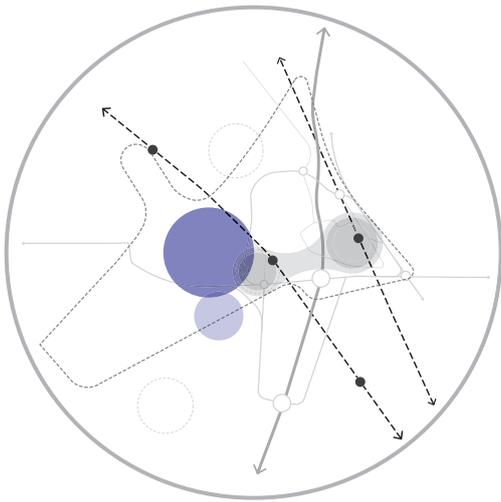
1. Potential to improve the existing public route by creating an enhanced green corridor from Elmdon Park extending to Hampton Coppice.
2. Potential to improve accessibility to Hampton Coppice and upgrade to become a north south link between Grand Union Canal and the A45.
3. Potential to create a “no public access” biodiversity corridor, connecting Elmdon Park with Hampton Coppice.
4. Potential to improve cycle and walking connections to Elmdon Park from the A45 with supporting planting parallel to the road.
5. Strengthen green corridor between Elmdon Park and Sheldon Country Park by upgrading cycling and walking routes with new planting.
6. Potential upgrade to Grand Union Canal and integration with the Green and Blue Network with improved access to the tow path.



SPATIAL FRAMEWORK

FIGURE 47: CORE DEVELOPMENT AREA C01

- KEY:
- Station
 - Light Industrial
 - Industrial
 - Residential
 - Light Industrial use extension
 - Vista corridor without public access
 - Green corridor with potential access
 - Green corridor without public access
 - Railway
 - Green Belt
 - The Hub Area



C02. INTERNATIONAL GATEWAY

KEY POINTS

- The area will be characterised by its large scale buildings for airport related uses as well as a limited amount of office / hotel space.
- It also has the large expanse of 'unbuilt' areas used for parking and airport operations.
- The amount of publicly accessible green space / amenity land is very limited with most accessible areas linked to public access dominated by hard surfacing.
- Currently, the airport handles about 12m passengers per annum and it is expected that overall passenger numbers will continue to grow.
- The recent runway extension will accommodate some of the expected growth, but in time there will be a requirement for the construction of a new terminal building.
- The location of a new terminal building is currently under review and could have a significant impact on The Hub overall.
- In the interim, the airport wants to expand south of the A45 (into land it currently owns) with airport related development / land uses.
- Congestion at junction 6 and on the A45 can cause severe problems with access to the airport.

FUTURE DEVELOPMENT

The airport is likely to need expansion to cater for growing passenger numbers and a potentially growing maintenance business. Depending on where a new terminal is located, the departure gates could be subject to significant realignment. This will involve continued optimisation of land and might limit the opportunity to introduce other uses / development.

Improved public transport connections are likely to encourage more passengers to arrive by alternative modes of transport. The proposed APM will provide

excellent connections between the airport and the future urban district around the new HS2 Interchange Station - International Quarter.

At the same time, the suggested improvements to junction 6 on the M42, as well as to several junctions on the A45, will help ease congestion in the area and support better vehicular access to the airport. There is the opportunity to enhance the quality of the existing green infrastructure within the airport site through improved / additional planting and increasing the number of green spaces which are accessible to the public. The airport could be better integrated with the green and blue network and thus play a more active role in biodiversity provision (this would not include the provision of any areas of open water).

Temporary land uses could be considered to test diversification. For example, there could be a market for flexible workspace in close proximity to the station and airport.

KEY MOVES

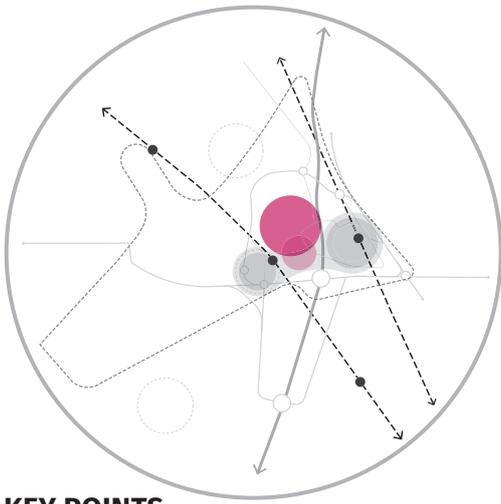
1. Potential to create a green corridor and an improved pedestrian and cycling connection to the airport forecourt.
2. Potential to create a direct link between Birmingham International Station and the airport.
3. Potential to improve pedestrian and cycling connections across the A45, linking to green corridor.
4. Extend green corridor to the Hampton Coppice.
5. Potential to improve cycle and walking connection along A45 with supporting planting.
6. Strengthen green corridor between Elmdon Park and Sheldon Park by upgrading cycling and walking routes around the airport perimeter with additional planting.



- KEY:**
- Station
 - Airport
 - Airport land use extension
 - Vista corridor without public access
 - Green corridor with potential access
 - Green corridor without public access
 - Railway
 - Green Belt
 - The Hub Area

SPATIAL FRAMEWORK

FIGURE 48: CORE DEVELOPMENT AREA C02



C03. PENDIGO QUARTER

KEY POINTS

- The area is characterised by the large scale buildings of the NEC, complemented by hotel and leisure facilities and large, attractive areas of green space.
- The green spaces are diverse, ranging from a large open space centred on Pendigo Lake in the south, to areas of woodland and parkland in the north of the area.
- The NEC is the UK's premier entertainment and conferencing venue. To remain competitive and responsive in an evolving global market, it is planning to develop its offer by adding a wide range of major leisure and entertainment uses to increase the attractiveness of its offer and footfall and create additional dwell time.
- The recent opening of Resorts World, with its casino, hotel and retail outlets, was a first key milestone towards further development and diversification.
- Planning permission has been granted for a Heat and Energy station adjacent to the M42, providing heat and power for the NEC and the Genting Arena.
- As part of Birmingham's bid to host the 2022 Commonwealth games, the NEC could potentially host a number of events, such as boxing, gymnastics and judo.
- Congestion at Junction 6 on the M42 and the A45 can be challenging when events at the NEC coincide with periods of peak demand at Birmingham Airport.
- To maximise the improved connectivity between the new HS2 Interchange and Birmingham International Stations, the NEC should provide a clear hierarchy of movement and improved connectivity between new development and neighbouring districts.

FUTURE DEVELOPMENT

The NEC is developing its own masterplan, which will include an expansion of the existing conference facilities as well as other leisure and cultural uses, including hotel, food and drink, film studios and theatre world, and new residential and office facilities.

The type, scale and form of development should be complementary to other developments in the area, in particular to Arden Cross and the International Quarter. A temporary use strategy can start to develop an early sense of place.

Improved public transport connections should be complemented by more high quality walking and cycling connections to both Birmingham International and the HS2 Interchange station. Early delivery of bridges across the M42 and the existing railway corridor would support this aspiration. They would allow the new district to play an important role in linking existing communities to the west, north and south, and with the Green Belt land to the east beyond Arden Cross.

The proposed improvements to Junction 6 along with the wider road improvements in the area will improve vehicular capacity and the ability to access the NEC.

The existing open spaces and green assets could be enhanced and made more accessible as part of the improvements to pedestrian and cycling connectivity. Permanent planting could be used strategically to make those key areas and the routes between them more attractive. This would link them to a wider network of green and blue open spaces and create a more coherent system of movement, biodiversity and amenity.

The proposed inclusion of residential and commercial uses in this area will help to provide activity in addition to that related to events.

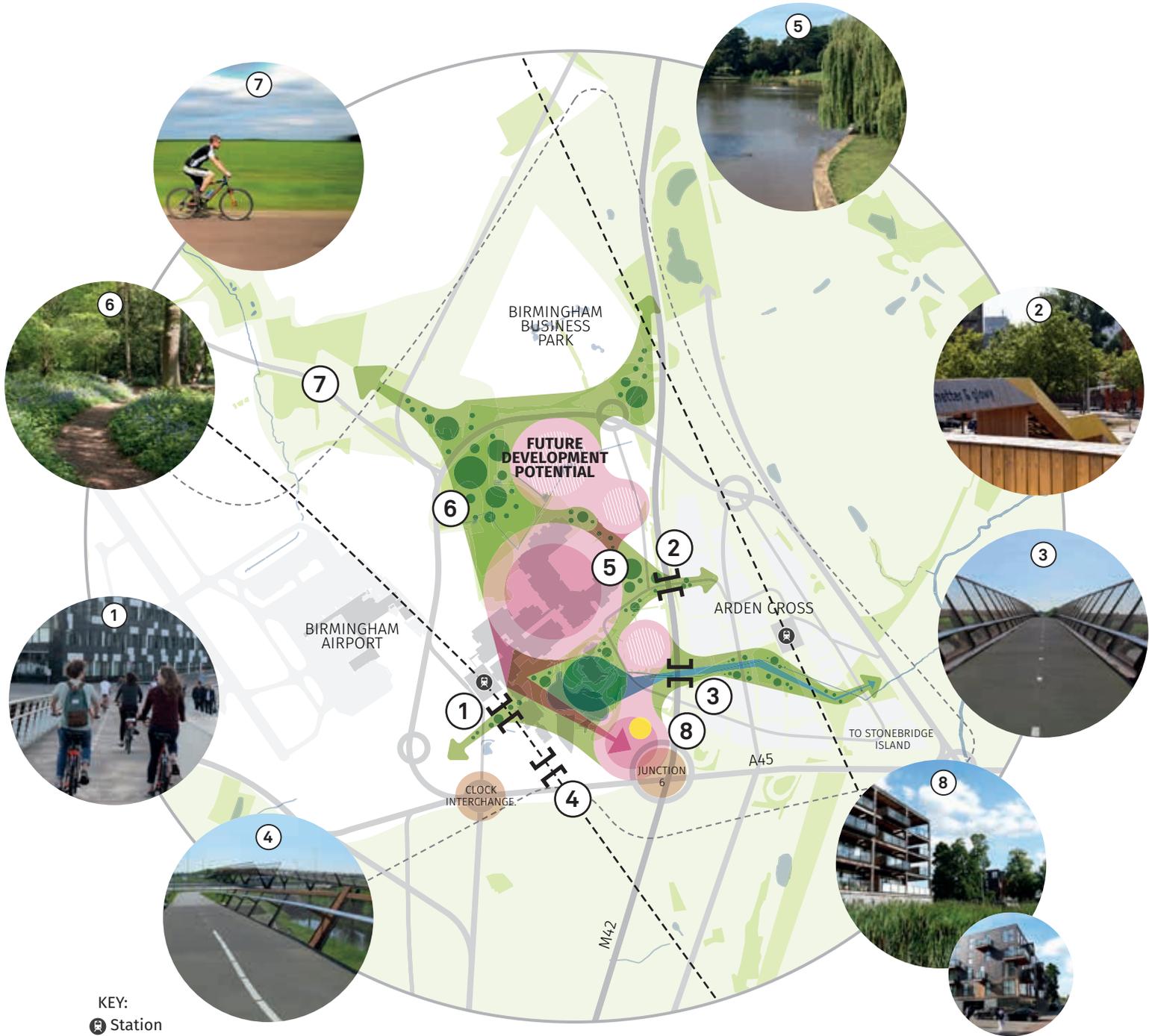
Given the focus on conferences, entertainment and leisure and the amount of existing surface parking, the area is ideally placed to consider a range of temporary land uses while undergoing transformation in addition to hosting festivals and events.

KEY MOVES

1. Create a new pedestrian and cycling link to new station forecourt aligned with the APM.
2. Create new bridge across the M42 with cycling and walking connections, linking to Arden Cross.
3. Potential to reinforce the green and blue connection under the M42. Potential to use the structure of the APM to provide a pedestrian and cycling connection across the M42.
4. Potential new bridge connection across railway for Metro / Sprint, walking and cycling.
5. Potential for enhanced green corridor linking Pendigo

Lake to Bickenhill Plantations.

6. Potential to increase access to Bickenhill Plantation.
7. Potential to create walking and cycling connection between Bickenhill Plantations and Marston Green Park.
8. Delivery of new residential development.

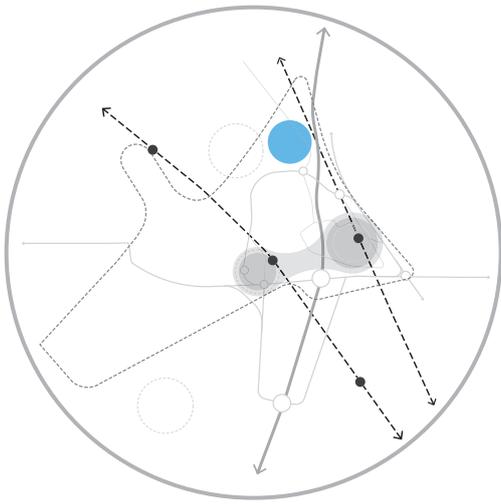


KEY:

- Station
- Hotel / Leisure
- Residential
- Hotel and Leisure land use extension
- Vista corridor without public access
- Green corridor with potential access
- Green corridor without public access
- Railway
- Green Belt
- The Hub Area

SPATIAL FRAMEWORK

FIGURE 49: CORE DEVELOPMENT AREA C03



C04. BIRMINGHAM BUSINESS PARK (BBP)

KEY POINTS

- The area is characterised by 2-3 storey office / commercial buildings in an attractive and well maintained mature landscape setting. It is bounded by Green Belt to the west, north and east and has limited physical connectivity other than main access roads.
- Birmingham Business Park provides high quality and flexible business space for around 100 companies from a range of sectors, including Aero Engine Controls.
- Its success results from its high quality environment, its location on the highway network and access to a well-educated and highly skilled population.
- Whilst the park is serviced by public transport, it is a very car orientated environment with a significant amount of surface parking and there is currently only one entry road point.
- Congestion on Junction 6 of the M42 can cause problems which is further exacerbated by similar congestion on the primary roads leading from the motorway to the business park.
- There are currently several vacant plots with the potential for future expansion and development within the site.

FUTURE DEVELOPMENT

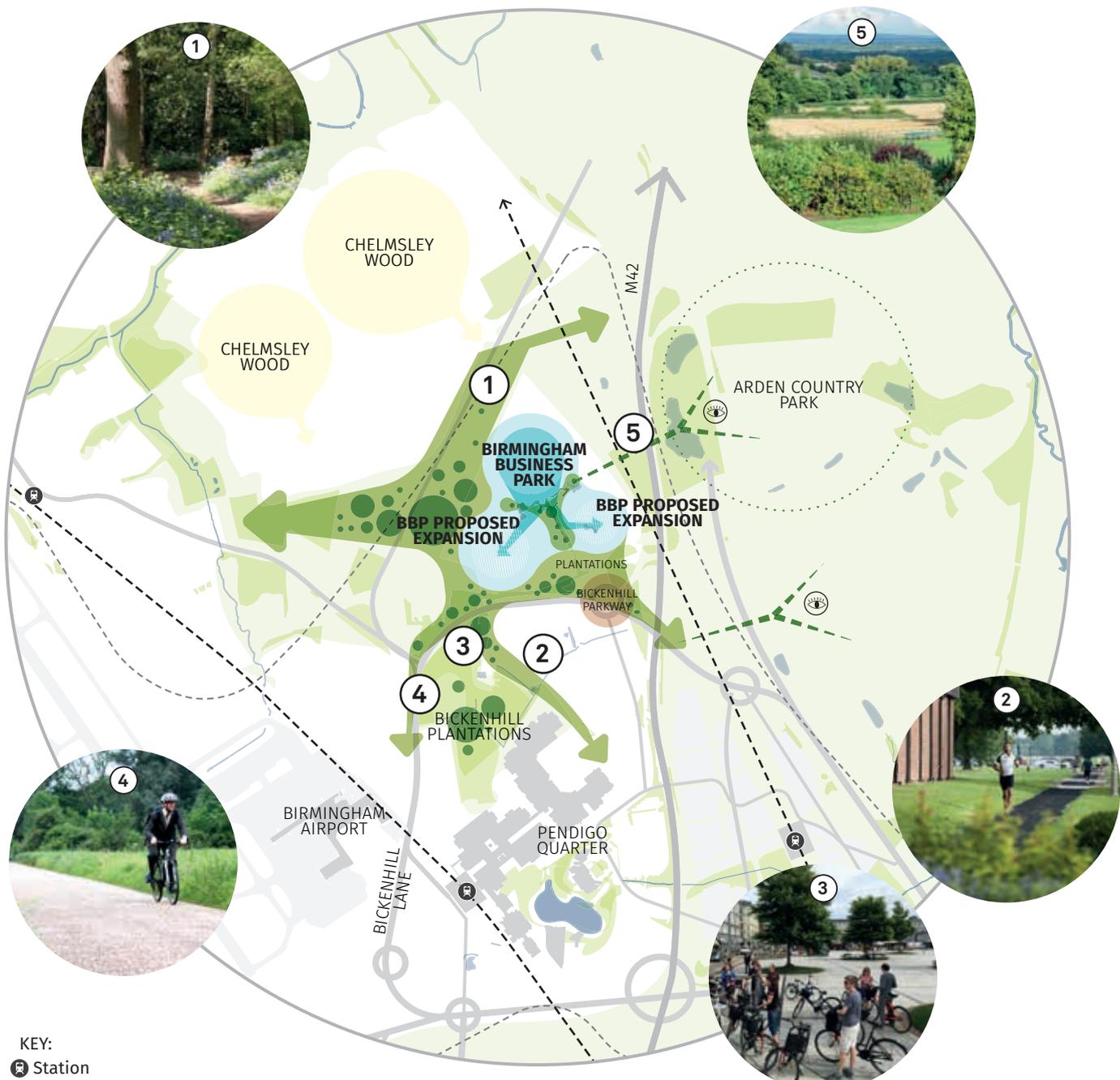
Two planning applications for additional car parking have recently been approved by Solihull Metropolitan Borough Council (SMBC). There is the possibility that the proposed Metro and / or Sprint service will be running through the business park, significantly improving public transport access. This could help to develop the business park and potentially attract more occupants.

There is potential to improve access to the business park as part of the reconfiguration of the roundabout on the A446 for HS2. A second access from the B44438 could be created and the pedestrian link to North Solihull could be strengthened.

Improved connections to new areas of development could be explored, along with the link between living and working through more sustainable modes of travel.

KEY MOVES

1. Potential to enhance existing green corridor with planting and by providing improved access.
2. Potential to improve cycling and walking connection to new green corridor along Bickenhill Parkway (B4438) and into Pendigo Quarter.
3. Potential to upgrade pedestrian and cycle paths along Bickenhill Parkway (B4428).
4. Potential to increase access to Bickenhill Plantations.

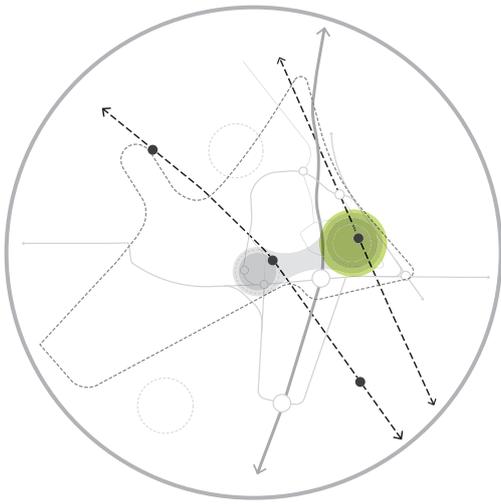


KEY:

- Station
- Commercial and Research
- Commercial and Research land use extension
- Vista corridor without public access
- Green corridor with potential access
- Green corridor without public access
- Railway
- Green Belt
- The Hub Area

SPATIAL FRAMEWORK

FIGURE 50: CORE DEVELOPMENT AREA C04



C05. ARDEN CROSS DISTRICT

KEY POINTS

- The site at present is predominantly agricultural land with few buildings and is designated as Green Belt. Hollywell Brook runs from west to east through the site, connecting Pendigo Lake to the River Blythe.
- It is bounded by the M42 to the west, the A452 to the East and the A45 to the south.
- Mineral extraction is taking place in the south east of the area and land to the middle of the area has been subject to previous landfill.
- There are overhead high voltage cable corridors cutting across the site and then running along the western edge.
- The proposed HS2 Interchange Station will be located at the heart of the area with the line running north / south through the site.

FUTURE DEVELOPMENT

The arrival of HS2 combined with existing excellent road connectivity makes this one of the areas with the most promising development potential. It will become a mixed use urban district with a diverse range of development including new residential units, commercial buildings, retail, hotel and light industrial uses. It will integrate the new HS2 Interchange Station and its associated facilities with the wider public realm, landscape and the new mixed use development on site.

The type, scale and form of development should be complementary to other developments in the area, in particular in Pendigo Quarter and International Quarter, delivering a cohesive sense of place through employing a temporary use strategy.

Two central parklands around Hollywell Brook, either side of the HS2 line, will be key in defining the character of this area. While dense and urban in character (particularly around the new Interchange), it will provide direct access to the open spaces and visual and physical connections to the surrounding landscape.

Access and parking requirements are located to the north east of the site. The mixed use / commercial focus is to the north west while the areas with residential focus are located partly around the new HS2 Interchange Station and south of Hollywell Brook. The development has the potential to become a destination in its own right, complementing the existing and proposed offer in the wider Hub area.

KEY MOVES

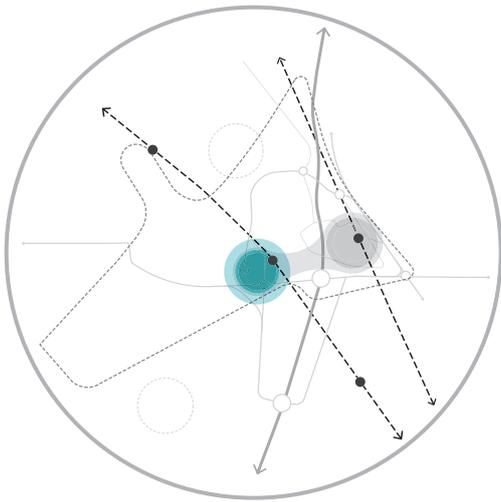
1. Create new bridge across the M42 with pedestrian and cycle connections, connecting to Arden Cross District.
2. Potential to reinforce the green and blue connection under the M42.
3. Potential to use the structure of the APM to provide a pedestrian and cycling connection across the M42.
4. New public open space at the heart of the proposed development.
5. Potential to upgrade existing connection under the A452 linking to the proposed Arden Country Park.
6. Potential for new cycling and walking connection to the south east, into proposed Stonebridge Country Park.
7. Potential to create walking and cycling connection between Hampton in Arden and Arden Cross along the disused railway line.
8. Delivery of a vibrant mixed use community.



- KEY:**
- Station
 - Retail
 - Mixed use (including housing)
 - Mixed use land use extension
 - Vista corridor without public access
 - Green corridor with potential access
 - Green corridor without public access
 - Railway
 - Green Belt
 - The Hub Area

SPATIAL FRAMEWORK

FIGURE 51: CORE DEVELOPMENT AREA C05



P01. INTERNATIONAL QUARTER

KEY POINTS

- The area is dominated by Birmingham International Station with both surface and multi storey car parking.
- There is no clear sense of arrival in the context of the broader Hub area and whilst it is the current transport gateway to The Hub, it is a place that lacks character, legibility and orientation with the majority of the surrounding developments.
- Trinity Business Park is in close proximity and is comprised of two to three storey buildings with poorly defined spaces between.
- Significant investment is planned to upgrade the existing station and create a much enhanced interchange with future Metro and Sprint services.
- Regular train services run to Birmingham city centre with a journey time of circa 10-15 minutes.

FUTURE DEVELOPMENT

With the upgrade of Birmingham International Station in combination with the proposed Sprint and Metro services, there is significant opportunity to develop a new commercial led district around the station. Given its proximity to both the airport and the railway station, the new quarter could accommodate a mix of uses, including commercial office, retail, hotel and research.

The type, scale and form of development should be complementary to other developments in the area, in particular to Pendigo Quarter and Arden Cross, delivering a cohesive sense of place through employing a temporary use strategy.

Current proposals for the station upgrade propose the creation of a station plaza which could be surrounded by 6-8 storey buildings and linked to a public realm network with a series of open spaces. There is potential for this central district to become one of the key development opportunities of The Hub.

If successful, it is likely that adjacent areas such as Trinity Business Park would also transform over time.

KEY MOVES

1. Create a new plaza in front of Birmingham International Station as a gateway to The Hub with vibrant retail usage.
2. Create a new pedestrian and cycle link to Pendigo Lake aligned with the APM.
3. Potential to improve pedestrian and cycle connection across the A45, linking to green corridor.
4. Potential new bridge connection across railway for Metro / Sprint, pedestrian and cycling.
5. Delivery of mixed use development.



- KEY:**
- Station
 - Commercial
 - Retail
 - Mixed use
 - Land use extension
 - Vista corridor without public access
 - Green corridor with potential access
 - Green corridor without public access
 - Railway
 - Green Belt
 - The Hub Area

SPATIAL FRAMEWORK

FIGURE 52: POTENTIAL DEVELOPMENT AREA P01

3.





Delivery

Informing policy

3.1 DELIVERY

Delivery of the proposed economic growth within The Hub will contribute significantly to the West Midlands Combined Authority (WMCA) Growth Strategy (i.e. that contained within the Strategic Economic Plan (SEP)) and the local and national economies. In addition it will help deliver the aspirations of the draft Solihull Metropolitan Borough Council (SMBC) Local Plan Review (LPR), helping to meet local and wider needs, such as housing and new job opportunities alongside new infrastructure and facilities.

The potential to create new forms and scale of development that are ambitious, innovative, high in quality, multi use and which can support the delivery of required infrastructure will provide the basis for the development of sustainable communities. In conjunction to this Framework, separate appraisals and analysis have been commissioned by the Urban Growth Company (UGC) in order to inform the deliverability of the growth ambitions set out within the Hub Growth and Infrastructure Plan (HGIP). These include transport modelling, an Infrastructure Investment

Appraisal (IIA), market analysis / viability and a business case / Value Capture Model.

This section of the Framework considers the potential growth quantum, ambitions, infrastructure and costs for the Core Development Areas (CDAs) and then subsequently adopts the same approach for the Potential Development Area (PDA). Some of the evidence and commentary will be common to both scenarios.

Appendix material is provided to show more detailed evidence to support the summaries in this chapter. This includes an assessment of the growth ambitions against key environmental, physical and policy constraints (Appendix C-C3), market potential to accommodate relevant land uses (Appendix D), and an assessment of transport and infrastructure requirements (Appendix E and F).

3.2 GROWTH QUANTUM - CORE DEVELOPMENT AREAS

The land uses proposed for each phase are set out in the HGIP and a summary is provided in Chapter 1 of this document. The broad locations of the land uses are shown in Figure 53.

To achieve the level of spatial growth desired at The Hub, a mix of land uses has been reviewed and tested, and the assumptions in Table 1 have been applied for land use quantum in the market analysis, transport assessment and infrastructure appraisal.

The policies contained within the Consultation Draft LPR seek to secure sustainable economic growth to create jobs and prosperity and take advantage of the unique opportunity to maximise the economic and social benefits of the HS2 Interchange Station. They aim to develop strong,

vibrant and healthy communities in responding to the housing needs of the Borough and the wider Housing Market Area (HMA), with new development focused in the most accessible locations. A review of local policy can be found in Appendix B.

There is a requirement for SMBC to meet the needs for future growth within the Borough (e.g. housing, jobs, infrastructure etc) but also to contribute towards the wider HMA need for additional homes. In doing so, the draft policies of the SMBC LPR establish the requirements for the provision of sustainable development and patterns of movement, embracing the opportunities for economic growth and investment while protecting and enhancing the natural environment. The Hub provides significant opportunities and is fundamental to realising these policy aspirations.

		CUMULATIVE TRAJECTORIES			
SITE	LAND USE	BY 2023	BY 2028	BY 2033	BY 2047
C01. Jaguar Land Rover Manufacturing Campus	Employment - Office (sqm)	4,000	4,000	4,000	4,000
	Employment - Industrial (sqm)	92,900	142,309	163,718	304,000
	Residential (Dwelling)	-	-	-	-
	Mixed Use* (sqm)	-	-	-	-
	Hotel (sqm)	-	-	-	-
C02. International Gateway (Airport)	Employment - Office (sqm)				
	Employment - Industrial (sqm)				
	Residential (Dwelling)				
	Mixed Use* (sqm)				
	Hotel (sqm)				
C03. Pendigo Quarter (NEC)	Employment - Office (sqm)	9,787	55,700	55,700	55,700
	Employment - Industrial (sqm)	-	-	-	-
	Residential (Dwelling)	130	550	550	550
	Mixed Use* (sqm)	27,330	79,400	79,400	79,400
	Hotel (sqm)	7,900	18,100	18,100	18,100
C04. Birmingham Business Park	Employment - Office (sqm)	14,100	14,100	14,100	14,100
	Employment - Industrial (sqm)	-	-	-	-
	Residential (Dwelling)	-	-	-	-
	Mixed Use* (sqm)	-	-	-	-
	Hotel (sqm)	-	-	-	-
C05. Arden Cross District	Employment - Office (sqm)	-	18,000	56,838	182,745
	Employment - Industrial (sqm)	-	17,000	62,000	83,176
	Residential (Dwelling)	-	-	445	2,482
	Mixed Use* (sqm)	-	784	13,773	38,000
	Hotel (sqm)	-	-	-	-
Total	Employment - Office (sqm)	27,887	91,800	130,638	256,545
	Employment - Industrial (sqm)	92,900	159,309	225,718	387,176
	Residential (Dwelling)	130	550	995	3,032
	Mixed Use* (sqm)	27,330	80,184	93,173	117,400
	Hotel (sqm)	7,900	18,100	18,100	18,100
Commercial Development Areas		156,017	349,393	467,629	779,221

*Mixed use for example- retail, leisure etc.

TABLE 1: LAND USE TRAJECTORY TABLE BY CHARACTER AREA

3.3

GROWTH AMBITION - CORE DEVELOPMENT AREAS

MARKET ANALYSIS

The future market for various land uses will be different from today due to the transformational change expected from HS2. Therefore, an ambitious baseline assessment of build out rates has been adopted on a macro level assessment to inform this Framework (aggregating the build out of different land uses across all sites in The Hub). Set out below are the key contextual assumptions about the market environment for all key land uses (employment, residential, mixed use) in order to achieve the HGIP ambitions. The evidence base used to inform this assessment is provided in Appendix D.

EMPLOYMENT

Significant office and industrial development is envisaged as part of the growth ambitions for the CDAs of The Hub at the National Exhibition Centre (NEC), Jaguar Land Rover, Birmingham Business Park and the Arden Cross triangle site.

An assessment of The Hub’s development potential indicates that, overall, some 35,000 direct Full Time Equivalent (FTE) jobs could be created. As shown in Figure 54 below, this could potentially increase to 77,000 FTE jobs once the effect on the sub-regional supply chain and wider investment opportunities are accounted for.

OFFICES

The local market (referred to as the M42 Market) is Birmingham’s principal out-of-town office area. The two ends of the M42 Corridor Market are anchored by Birmingham Business Park (the original and largest scheme) and Blythe Valley Park (the pre-eminent scheme in the market), but also includes Solihull town centre. The majority of the market is located within the Metropolitan

Borough of Solihull, not the City of Birmingham. The M42 Corridor has a total office stock of approximately 470,000 sqm and office market take up has totalled circa 30,000 sqm per annum over the last 5 years (see the commentary in Appendix D).

The Hub is at the geographical centre of this market and will benefit from the strengths of the location for office occupiers (on the east side of Birmingham orientated towards London), and from having prime rents which sit 30% lower than Birmingham city centre. The already planned development in the area indicates that the development of new office stock can be viable and recent take up provides evidence of the existence of an established demand profile.

This take up rate does not take into account the potential impact of the new HS2 Interchange Station which will increase the attractiveness of this location to occupiers. The office market offer will need to differentiate and complement what is available in both Birmingham city centre and the London market.

Clearly, the price differential will be attractive but there will also be an emphasis on the wider land use offer in The Hub, allowing occupiers to bring together the spectrum of complementary elements of their operation in one integrated location (this especially applies to the automotive and engineering sectors). The future Hub environment could also be attractive to businesses as there is likely to be a provision of space, accessibility and security that is not always possible in city centre locations, whilst benefiting from the pool of graduate and post graduate skilled labour that the West Midlands offers.

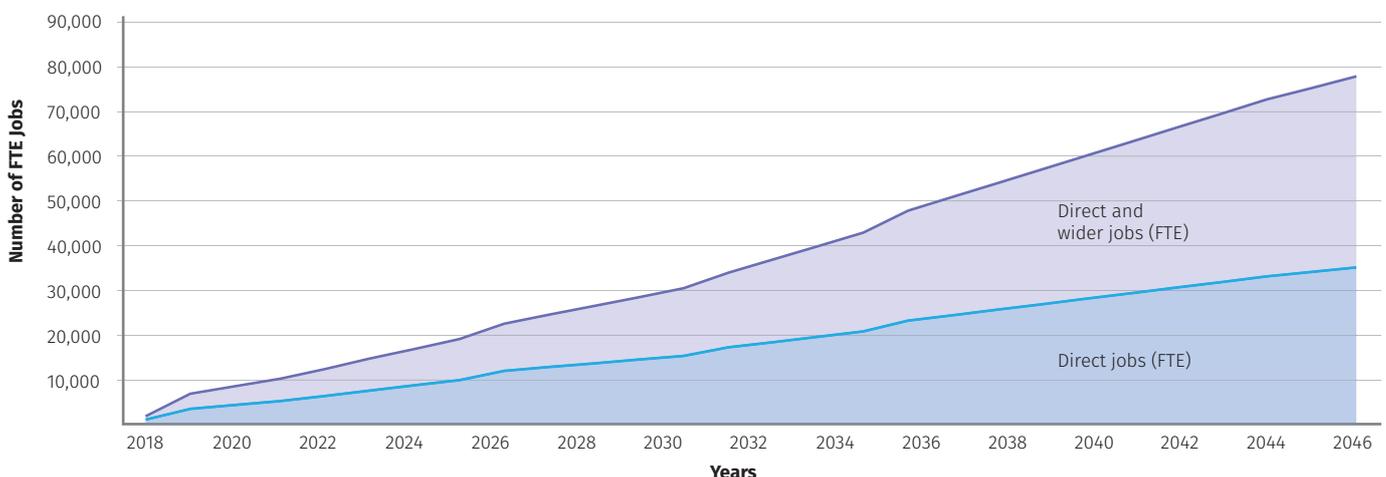


FIGURE 54: PREDICTED JOB CREATION OVER TIME

INDUSTRIAL

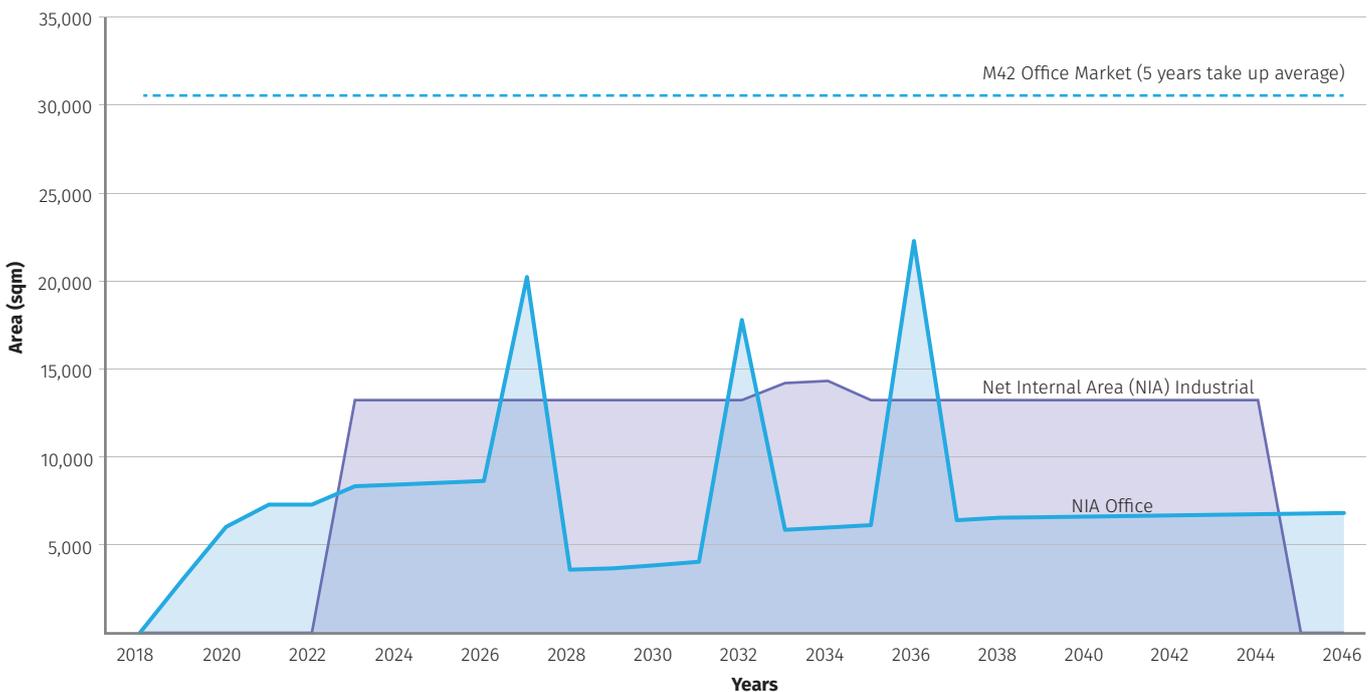
Whilst it is not possible at this stage to identify the precise occupational sectors, the flexibility enabled by the size of the schemes at the Arden Cross triangle site and the NEC sites gives The Hub the ability to accommodate specific requirements, and from that to create clusters of users from related sectors (such as health, defence, product innovation) in a unique environment.

Figure 55 illustrates the potential development trajectory across The Hub area. In relation to the office trajectory, this is based on the assumptions that:

- Annual development is below the 5 year take up average of the M42 market, accounting for the majority of market take up being secondary office space and that there is likely to be other competing office supply pipeline within the M42 market over this period.
- Early (and gradually growing) delivery at the NEC site prior to the opening of the HS2 Interchange Station.
- Major developments in 3 stages on the Arden Cross triangle site (a major development on opening of the station of up to 20,000 sqm and two further peaks in development rates after circa five and ten years of HS2 opening). These peaks are reliant on major pre-lets which act as a catalyst for further market take up.

Industrial demand is strong in the M42 area with a number of schemes in the pipeline and an established demand profile. It is projected that for research and development and light industrial uses, a consistent take up of up to 15,000 sqm per annum is possible (assuming market acceptable development parameters). There is currently circa 300,000 sqm of pipeline industrial space in the M42 market area. The overall pipeline in the HGIP (to be delivered over circa 20 years and excluding the Logistics Operations Centre) is approximately 300,000 sqm which is considered to be deliverable.

The Consultation Draft LPR supports the development of office, retail and leisure uses which should be directed to locations in town centres and other established locations including Birmingham Airport, Birmingham Business Park and the NEC. Policy P1 (and other related policies) supports the future aspirations of Birmingham Airport, the NEC, Arden Cross Consortium, Birmingham Business Park and Jaguar Land Rover in a holistic, well-connected way, together with the development of the HS2 Interchange Station.



* employment trajectory generated by industrial figures exclude Logistic Operations Centre proposed by Jaguar Land Rover

FIGURE 55: AGGREGATE EMPLOYMENT SPACE (OFFICE & INDUSTRIAL) TRAJECTORY (UPPER CASE)

RESIDENTIAL

Residential development is assumed in the CCAs at the NEC and the Arden Cross triangle site. The scale of housing within the HGIP is significant, but the lower threshold is considered to be deliverable based on there being a clear strategy for putting infrastructure in place, and a realisation of the potential public sector market interventions required in order to promote apartment led development in later development phases (post 2028).

Residential developer demand is strong for Solihull town centre ('city centre' living) and also in the wider Solihull area. Solihull is one of the most desirable locations for volume house builders in the West Midlands. House builders are looking at schemes of 30-35 dwellings per hectare (dph) in general although the development in Dickens Heath is now achieving a density of closer to 40 dph.

The land market in the area is very strong with volume house builders keen to have a growing share. The area is also attracting a broader breadth of developers such as a development company which specialises in the construction of sustainable and 'high end' volume dwellings.

Currently, suburban residential development of an average of 40dph is considered viable and deliverable (there is likely to be a range of different densities). Apartment development at the NEC is also considered to be viable and deliverable subject to strong linkages being created to Birmingham International Station and on site amenities (see the commentary in Appendix D). Mixed tenure (housing

/ apartments) at the Arden Cross triangle site is considered viable and deliverable in the longer term if sufficient investment is made in public realm, infrastructure and if there are early stage commercial uses on the site (see the commentary in Appendix D).

Figure 56 illustrates the potential residential trajectories for The Hub. The lag in 2027-2028 is relative to other supporting uses being established at the Arden Cross triangle site following the opening of the HS2 Interchange Station. The blue line represents the trajectory for the CDAs.

Existing market dynamics in the vicinity of The Hub have some divergence with the type of units which are envisaged in the HGIP as noted in Appendix D. Most notably this relates to the growth in the apartment market in the Arden Cross area. This may require some market interventions in later phases (2028 onwards) at Arden Cross.

There is significant developer interest in the area and whilst standard housing development would be their preference in today's market, there are large scale developers who see the potential for higher density development in this location within a large scale scheme. Early stage public realm and infrastructure to support achievable values are deemed to be critical.

The draft LPR sets out a number of objectives for UK Central but does not refer to densities, recognising that the proposals will be site specific as they rely on HS2.

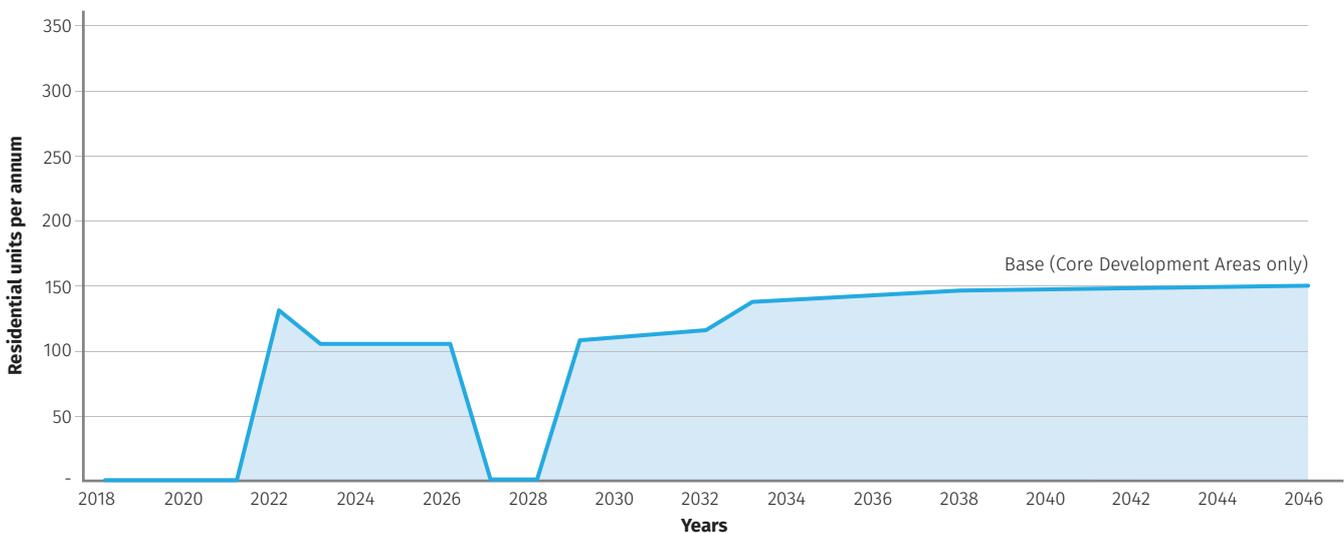


FIGURE 56: AGGREGATE RESIDENTIAL DEVELOPMENT TRAJECTORY OVER THE HUB

RETAIL AND LEISURE

The level of retail capacity identified in Solihull Borough and Birmingham (within Council assessments) extends over the period to 2026 only and amounts to over 150,000 sqm gross comparison goods floor space (see commentary in Appendix D). This figure takes into account commitments only (not planned schemes), while there is potentially further expenditure based capacity available from nearby Tamworth and Coventry. This compares with the 87,479 sqm gross of gross mixed use floor space anticipated at the NEC and Arden Cross triangle sites by the end of HGIP Phase 2 (2027). Only a proportion of the mixed use floor space proposed is assumed to be retail (small shops), or even comparison goods floor space. A substantial amount will be dedicated to residential and commercial uses, or potentially different forms of retailing such as brand pavilions. There is likely to be a difference in focus between the two sites:

- The NEC has a strong brand and business model which may be able to attract unusual occupiers (for example a film studio) within this mixed use definition. The extent to which there is comparison / convenience retail at this location is not currently defined. The mixed use provision is likely to be a 'destination' as is the existing NEC business.
- The Arden Cross triangle site mixed use floor space is not envisaged to be a 'destination' in itself but to support and enable residential and commercial floorspace in this location. It is assumed it will come forward gradually, correlated to the development of the office and residential space.

Where there is sufficient expenditure based capacity / demand within the wider catchment to support new retail development, it would have lesser impacts on existing centres and stores than if the available capacity is insufficient to support it.

The capacity figures set out above (potentially in excess of 150,000 sqm gross comparison goods floor space by 2026) indicate that there is substantial headroom for new retail development catchment, including the proposals for The Hub.

However, a principal restriction on the proposed scale of new retail development at the NEC and Arden Cross triangle sites would be the type and nature of the retail floor space, because this will determine the degree to which it competes with (and therefore impacts) nearby centres and stores.

The Hub proposals comprise a significant 'critical mass' of residential and commercial uses which, on their own, would have the potential to generate substantial expenditure-based capacity and sustain a magnitude of retail development. The Hub would also attract significant visitor numbers from further afield (linked into the HS2 Interchange Station) and this would translate into additional expenditure-based capacity to support new retail development. Further commentary is provided in Appendix D.



FIGURE 57: SOLIHULL HIGH STREET, IMAGE, SOLIHULL MBC

CORE SITE AMBITIONS

JAGUAR LAND ROVER MANUFACTURING CAMPUS

Jaguar Land Rover has recently obtained planning permission for its Logistics Operations Centre of circa 100,000 sqm. The vision for the remaining elements of the site and adjacent areas (not all owned by Jaguar Land Rover) is for circa 210,000 sqm of industrial space.

The extent of the additional space which is to be required for direct occupation by the Jaguar Land Rover business is not clear at this stage, although some of this space may be utilised as a third party occupied advanced manufacturing park.

Jaguar Land Rover control much of the land on which the proposed developments will sit, whilst other land is controlled by third parties. Given that the existing land is largely Green Belt, the critical question for deliverability is whether it is reasonable to remove the designation from this land.

Industrial demand in this location is strong, and based on the trajectories assumed in Table 3 below we consider that

industrial development in this location will be viable and deliverable.

Whilst Jaguar Land Rover may directly develop assets for their own use it is likely that the existing land owner will seek a development partner to bring forward other parcels of development as and when market demand can be evidenced. A scheme on the site should be able to fund standard site servicing and infrastructure costs relating to access roads etc. We consider that such a scheme will also (through Community Infrastructure Levy (CIL) / Section 106 or other contribution mechanisms) be able to partly fund the upgrading of sub-regional infrastructure to link it into The Hub area.

PROPOSED LAND USE PHASING

- | |
|---|
| 0-5 Years; |
| • 4,000 sqm gross internal area (GIA) offices |
| • 92,900 sqm GIA industrial |
| 5-10 Years: |
| • 50,000 sqm GIA industrial |

TABLE 2: JAGUAR LAND ROVER CAMPUS - PROPOSED LAND USE PHASING

SITE	LAND USE	CUMULATIVE TRAJECTORIES			
		BY 2023	BY 2028	BY 2033	BY 2047
C01. Jaguar Land Rover Manufacturing Campus	Employment - Office (sqm)	4,000	4,000	4,000	4,000
	Employment - Industrial (sqm)	92,900	142,309	163,718	304,000
	Residential (Dwelling)	-	-	-	-
	Mixed Use* (sqm)	-	-	-	-
	Hotel (sqm)	-	-	-	-

TABLE 3: JAGUAR LAND ROVER CAMPUS - LAND USE PHASING REFLECTED IN THE HUB FRAMEWORK DEVELOPMENT PHASING



FIGURE 58: JAGUAR LAND ROVER LODGE LANE PLANT, IMAGE, JAGUAR LAND ROVER

ARDEN CROSS DISTRICT

The Arden Cross Consortium represents land owners who control the land which sits within the triangle between the M42, A452 and the A45. The new HS2 Interchange Station is located in the middle of the triangle with the new rail line running north south through it.

The existing land owners are parties who have owned the land for a number of years and have leased it for primary land uses (agricultural and mineral extraction) as opposed to established property developers. Until the advent of the HS2 Interchange Station proposals, the land has been typically considered as core Green Belt land. The severance of and impact upon the Green Belt by the HS2 line, its enclosure by the M42 and the construction of the proposed HS2 Interchange Station have led to the exploration of the potential for significant development of the land (and thus its removal from Green Belt).

Masterplans for the site have been developed by the UGC (and previously SMBC) and the Arden Cross Consortium which are principally focused on a significant scale of residential development and a commercial office offer. The scale and type of development envisaged is such that a third party development partner with the relevant funding capability and expertise is likely to be required in order to bring forward a scheme over a long period. This could partner with existing land owners and / or the public sector in its role as the funder of upfront infrastructure

to link the Arden Cross triangle site into The Hub and the wider West Midlands market.

The viability and deliverability of the masterplan and the major constraints which the site faces prior to development include:

- Existing mineral extraction on site which should be complete prior to the opening of the HS2 Interchange Station. The phasing of the completion of extraction will need to be managed to ensure it does not constrain the development of the site.
- Office demand in the area, which is subject to the developer creating the right environment for occupiers, should be viable and deliverable. As set out in Appendix D, office development of this scale will require and benefit from a mixture of the following:
 - Significant campus relocations to pump prime development.
 - Certainty for occupiers through: a unified ownership / delivery strategy for the development site, evidence and demonstration of early infrastructure investment, and sustained and consistent marketing and branding of The Hub area as a place.
 - Potential direct public sector development.



FIGURE 59: FUTURE HS2 TRACE MAPPED OUT ACROSS ARDEN CROSS DISTRICT, IMAGE, ARUP

- The vision for residential development on the site is for a range of different densities, with houses but also some medium to high density apartments. Apartments are not a proven use in the local market currently and will require careful design (to ensure that build costs are economical) and potential market interventions to support emerging uses in this location e.g. Private Rental Sector (PRS) housing. It is critical that early stage public realm works and a compelling mix of uses are brought forward to support long term residential viability by ensuring that this is an attractive location for residents. Designs and environmental solutions will also need to minimise the road noise impacts on the west and south of the development. Further commentary is provided in Appendix D.

A future scheme on the site will be able to fund standard site servicing and infrastructure costs relating to access roads etc. A scheme should also (through CIL / Section 106 or other contributions mechanism) be able to partly fund the upgrading of sub-regional infrastructure to link it into The Hub area.

Compared to the other constituent parts of The Hub, the development of the Arden Cross triangle site (at the scale and mix envisaged) is more heavily reliant on the significant upgrade of sub-regional infrastructure and the creation of an ‘outward looking’ HS2 Interchange Station which has a more urban aspect than the standard ‘parkway’ station envisaged in the HS2 Hybrid Bill. The relative contribution that the proposed scheme can make towards the costs incurred in amending the station design and linked infrastructure into The Hub is very low.

PROPOSED DEVELOPMENT LAND USE PHASING

0-5 Years;
• No development
5-10 Years:
• 18,000 sqm gross internal area (GIA) Offices.
• 17,000 sqm GIA Industrial.
• Initial minimal retail and leisure, ancillary to the employment space.
• Potential hotel delivery.
• Whilst the base assessment includes no residential development within this period, there may be some potential (dependent on the availability of land as the HS2 line and station is built) for residential uses in the later stages of this period (2026 / 2027).

TABLE 4: ARDEN CROSS DISTRICT - PROPOSED LAND USE PHASING

SITE	LAND USE	CUMULATIVE TRAJECTORIES			
		BY 2023	BY 2028	BY 2033	BY 2047
C05. Arden Cross District	Employment - Office (sqm)	-	18,000	56,838	182,745
	Employment - Industrial (sqm)	-	17,000	62,000	83,176
	Residential (Dwelling)	-	-	445	2,482
	Mixed Use* (sqm)	-	784	13,773	38,000
	Hotel (sqm)	-	-	-	-

TABLE 5: ARDEN CROSS DISTRICT - LAND USE PHASING REFLECTED IN THE HUB FRAMEWORK DEVELOPMENT PHASING

*Mixed use for example - retail, leisure etc.

PENDIGO QUARTER (NEC)

The NEC has an emerging masterplan for the development of their site. This masterplan is in multiple phases and includes significant office, residential and mixed use development as well as non-standard development such as film studios.

The NEC business and Birmingham City Council (BCC) collectively fully control the land on which the proposed developments will sit and to this extent, a delivery platform is in place with land owners who can either directly deliver or seek partners to deliver individual aspects of the proposed masterplan. A major constraint which the NEC will need to address is the rationalisation of their existing car parking provision.

The viability and deliverability of the masterplan (in part) is dependent on the NEC's ability to attract specialist anchor tenants (e.g. for the film studios) whilst there is evidence of demand in the locality for other elements:

- Office demand in the area is subject to the developer creating the right environment for occupiers; it should be viable and deliverable.
- The large quantum of mixed use space is currently undefined. There are limitations / restrictions on potential retail development on the site, but the deliverability of other mixed use development will be determined by drawing occupier demand to this location. Given the infrastructure provision and existing anchor uses in The Hub, the site has a number of the ingredients required to attract mixed use occupiers subject to the specific concept.
- Hotel provision is already well established in the area and with the proposed growth in transport amenities, housing and employment uses in the area, this should be viable.

- We understand that the NEC has discussed the opportunity for film studio use of northern parts of the site with operators in the past. This would be a significant investment in a specialist (and largely non-tradeable) use and may involve some elements of cross subsidisation / public sector support to enable delivery.
- The vision for residential development on the site is medium density housing. The southern elements of the site have the ability to link into the existing commercial facilities and to form a platform for viable residential delivery. As per the proposed apartment development at the Arden Cross triangle site, this is not a proven use in the local market currently and will require careful design (to ensure that build costs are economical) and potential market interventions to support emerging uses in this location e.g. Private Rental Sector housing. Further commentary is provided in Appendix D.

A scheme on the site should be able to fund standard site servicing and infrastructure costs relating to access roads etc. Such a scheme will also (through CIL / Section 106 or other contributions mechanism) be able to partly fund the upgrading of sub-regional infrastructure to improve the links within The Hub area.

BIRMINGHAM BUSINESS PARK

There is an extant planning permission for office development of circa 14,100 sqm on the site. This is an established business location with a record of ongoing development at points within the market cycle where it can be viably delivered.

SITE	LAND USE	CUMULATIVE TRAJECTORIES			
		BY 2023	BY 2028	BY 2033	BY 2047
C03. Pendigo Quarter (NEC)	Employment - Office (sqm)	9,787	55,700	55,700	55,700
	Employment - Industrial (sqm)	-	-	-	-
	Residential (Dwelling)	130	550	550	550
	Mixed Use* (sqm)	27,330	79,400	79,400	79,400
	Hotel (sqm)	7,900	18,100	18,100	18,100

TABLE 6: PENDIGO QUARTER (NEC) - LAND USE PHASING REFLECTED IN THE HUB FRAMEWORK DEVELOPMENT PHASING

*Mixed use for example - retail, leisure etc.

PROPOSED DEVELOPMENT LAND USE PHASING

- 0-5 Years;
- 14,100 sqm GIA offices.

- 5-10 Years:
- No additional development.

PROPOSED DEVELOPMENT LAND USE PHASING

- 0-5 Years;
- 4,600 sqm GIA offices.
 - 27,300 sqm GIA mixed use.
 - Hotel.
 - Film studios.
 - Up to 550 residential units.

- 5-10 Years:
- 56,000 sqm GIA offices.
 - 52,000 sqm GIA mixed use.
 - Hotel.
 - Up to 420 residential units.

TABLE 7: BIRMINGHAM BUSINESS PARK - PROPOSED LAND USE

TABLE 9: PENDIGO QUARTER (NEC) - PROPOSED LAND USE PHASING

SITE	LAND USE	CUMULATIVE TRAJECTORIES			
		BY 2023	BY 2028	BY 2033	BY 2047
C04. Birmingham Business Park	Employment - Office (sqm)	14,100	14,100	14,100	14,100
	Employment - Industrial (sqm)	-	-	-	-
	Residential (Dwelling)	-	-	-	-
	Mixed Use* (sqm)	-	-	-	-
	Hotel (sqm)	-	-	-	-

TABLE 8: BIRMINGHAM BUSINESS PARK - LAND USE PHASING REFLECTED IN THE HUB FRAMEWORK DEVELOPMENT PHASING

*Mixed use for example - retail, leisure etc.

3.4 INFRASTRUCTURE ANALYSIS - CORE DEVELOPMENT AREAS

A significant amount of infrastructure is required to enable the realisation of the ambitions of The Hub. Primary infrastructure will be the responsibility of various agencies including Highways England (HE), Network Rail (NR), the WMCA and SMBC. The intention of phased development would be to prioritise public transport provision first, in order to make journeys to the area attractive, combined with vehicular access and controlled parking provision.

Secondary infrastructure (schools, transport, utilities etc.) will fall under the remit of the WMCA / SMBC along with developers and utility companies. The UGC will continue to promote and coordinate the delivery of all required infrastructure.

Table 10 sets out categories of costs assessed for infrastructure needed to support the growth requirements set out in the HGIP. The full list of infrastructure schemes is set out in a separate and confidential IIA. The IIA is summarised in Appendix F.

The next section summarises the Transport and Movement Analysis which in turn informed the IIA in the section that follows.

TRANSPORT AND MOVEMENT ANALYSIS

The transport schemes relevant to the delivery of The Hub relate primarily to highway schemes and public transport provision. There would also be the potential on a more localised level to incorporate specific improvements for walking and cycling (although these are not costed as specific strategic infrastructure requirements in this Framework).

An analysis of the impact of the proposed development upon the highway network has been undertaken utilising a number of VISSIM models in the vicinity of the Arden Cross triangle site. The analysis assesses the impact of development in The Hub area on the strategic and local road network (See Appendix E for full details).

The modelling work has been limited to AM peak hour. Ideally, and as more detailed spatial strategies are formulated, further analysis may be required to include detailed junction analysis and testing of the network using PM peak flows.

The highway layouts and mitigation proposals are high level and indicative in nature, which suggests that there is scope and flexibility in the form of a range of further mitigation measures to be considered on individual sites. For references to 2041 or 2047, scenarios assume this to mean Phase 4 of the HGIP from 2033 onwards.

TYPE OF INFRASTRUCTURE	PHASE 1	PHASE 2	PHASE 3	PHASE 4	CUMULATIVE
Strategic highway improvements	£326,400	£4,840	£14,610	£0	
UK Central distribution highway schemes	£2,600	£44,300	£17,200	£0	
Local highway schemes	£30,199	£106,985	£43,180	£34,607	
Strategic public transport	£395,842	£106,532	£200,000	£0	
Local public transport schemes	£160,000	£2,000	£2,000	£2,000	
Strategic utilities	£47,220	£18,617	£7,261	£4,362	
Local utilities	£12,722	£46,255	£750	£26,138	
Local social and community	£0	£53,418	£5,181	£24,642	
TOTALS:	£974,983	£382,948	£290,182	£91,749	£1,739,862

TABLE 10: CORE DEVELOPMENT AREAS INFRASTRUCTURE REQUIREMENTS (FIGURES X £1,000)

N.B THE HGIP ISSUE 1 (MARCH 2017) INCLUDED AN ALLOWANCE OF £260M FOR CONNECTIVITY AND CHANGES PROPOSED TO THE HS2 STATION. WITHIN THE IIA THESE COSTS WERE DISAGGREGATED INTO INDIVIDUAL INFRASTRUCTURE ELEMENTS, AND THESE COSTS ARE THEREFORE INCLUDED IN THE TABLE ABOVE.

2026 DO NOTHING

As part of the 2026 Do Nothing (2026 DN) scenario, the following highway improvements are assumed to be provided:

- HE proposals to widen the M42 to five lanes in both directions between Junction 5 and Junction 7, reducing to four lanes through the junctions;
- A new Motorway Service Area (MSA) which could require a new motorway junction;
- A dual carriageway link is provided between the M42 MSA junction and Clock Roundabout, with a northbound merge link provided onto the Airport Way flyover and give-way priority access to Bickenhill village located midway along the new dual carriageway link;

- The segregated left turns forming the HE M42 Junction 6 improvements are included; and
- The HS2 Hybrid Bill highway improvements along the A452 corridor (including changes to Stonebridge Roundabout) are incorporated. HE are currently consulting on three possible options for improving the capacity of M42 Junction 6. For the purposes of this study it has been assumed that Option 1 (in HGIP) will be pursued.

2026 DO MINIMUM

As part of the 2026 Do Minimum (2026 DM) scenario, the following highway improvements are assumed to be provided in addition to those shown for the 2026 DN scenario:

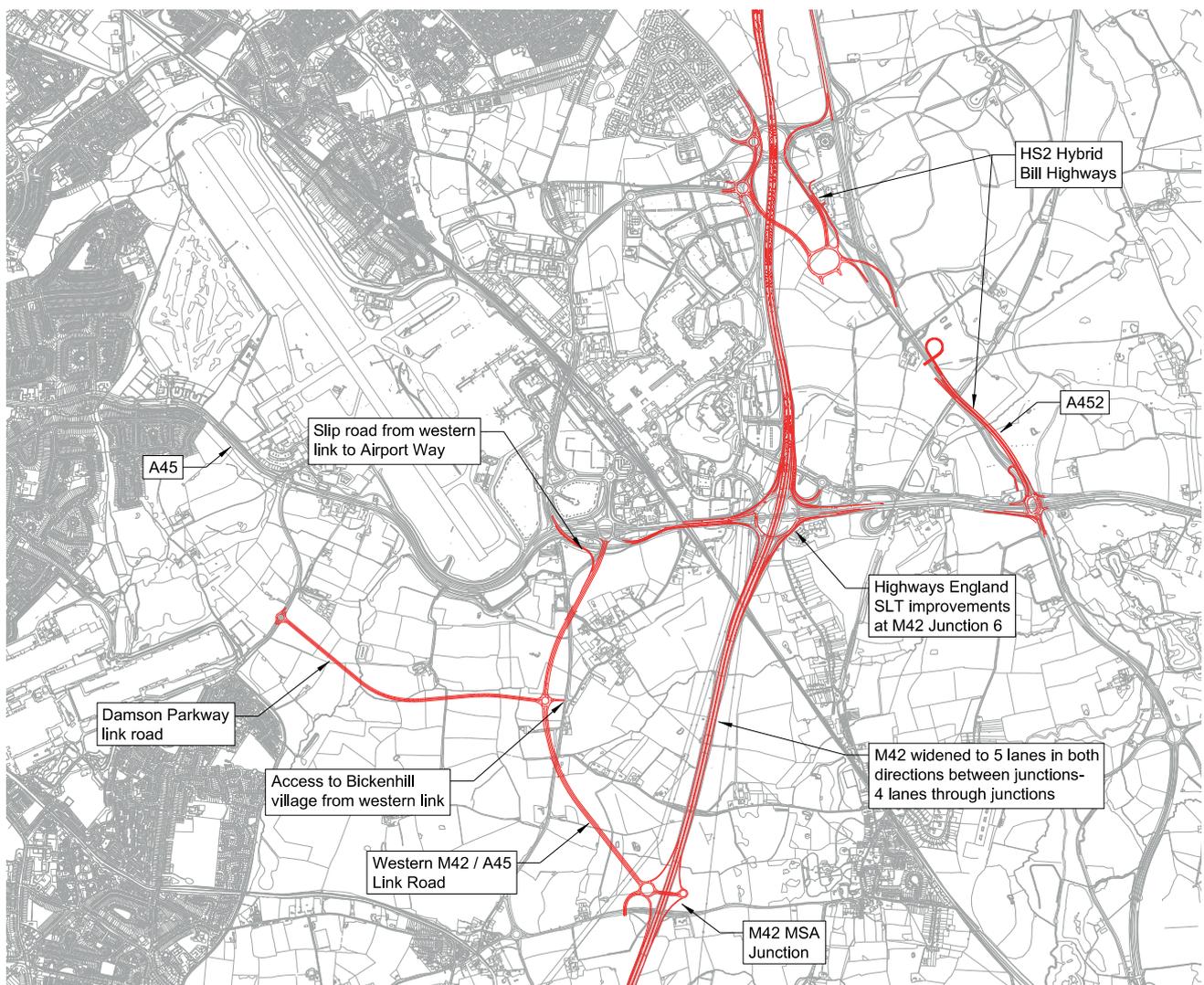


FIGURE 60: 'DO MINIMUM' HIGHWAY NETWORK (2026)

- A dual carriageway link is provided between Damson Parkway and the proposed western link between the MSA junction and Clock Roundabout, with a four arm roundabout giving access to Bickenhill village; and
- Conversion of the existing bus lanes along Bickenhill Parkway to general traffic lanes.

The highway proposals as detailed are shown in Figure 60.

2041 DO MINIMUM

As part of the 2041 Do Minimum (2041 DM) scenario, the following highway improvements are assumed to be provided in addition to those shown for the 2026 Do Minimum scenario:

- A dual carriageway link is provided between the M42 MSA junction and the UK Central Arden Cross triangle site, to the east of the M42; and
- Grade separation of the A45 / Damson Parkway junction.

2041 DO SOMETHING

As part of the 2041 Do Something (2041 DS) scenario, the following highway improvements are proposed in addition to those shown for the 2041 Do Minimum scenario:

- Segregated left turn lanes are incorporated at the proposed M42 MSA junction, with an underpass link running between the northbound M42 offslip and the northbound side of the western link running towards the A45 (W);
- A segregated left turn lane is provided on the dual-carriageway link from the MSA at the roundabout junction with Damson Parkway link road;
- A westbound-only link road is provided from the dual-carriageway link from the MSA junction onto the A45;
- Improvements to Clock Roundabout are shown including signalisation, bridge widening to increase the circulatory carriageway width, a segregated left turn from the westbound approach to the roundabout into the MSA link road, and widened approach lanes;

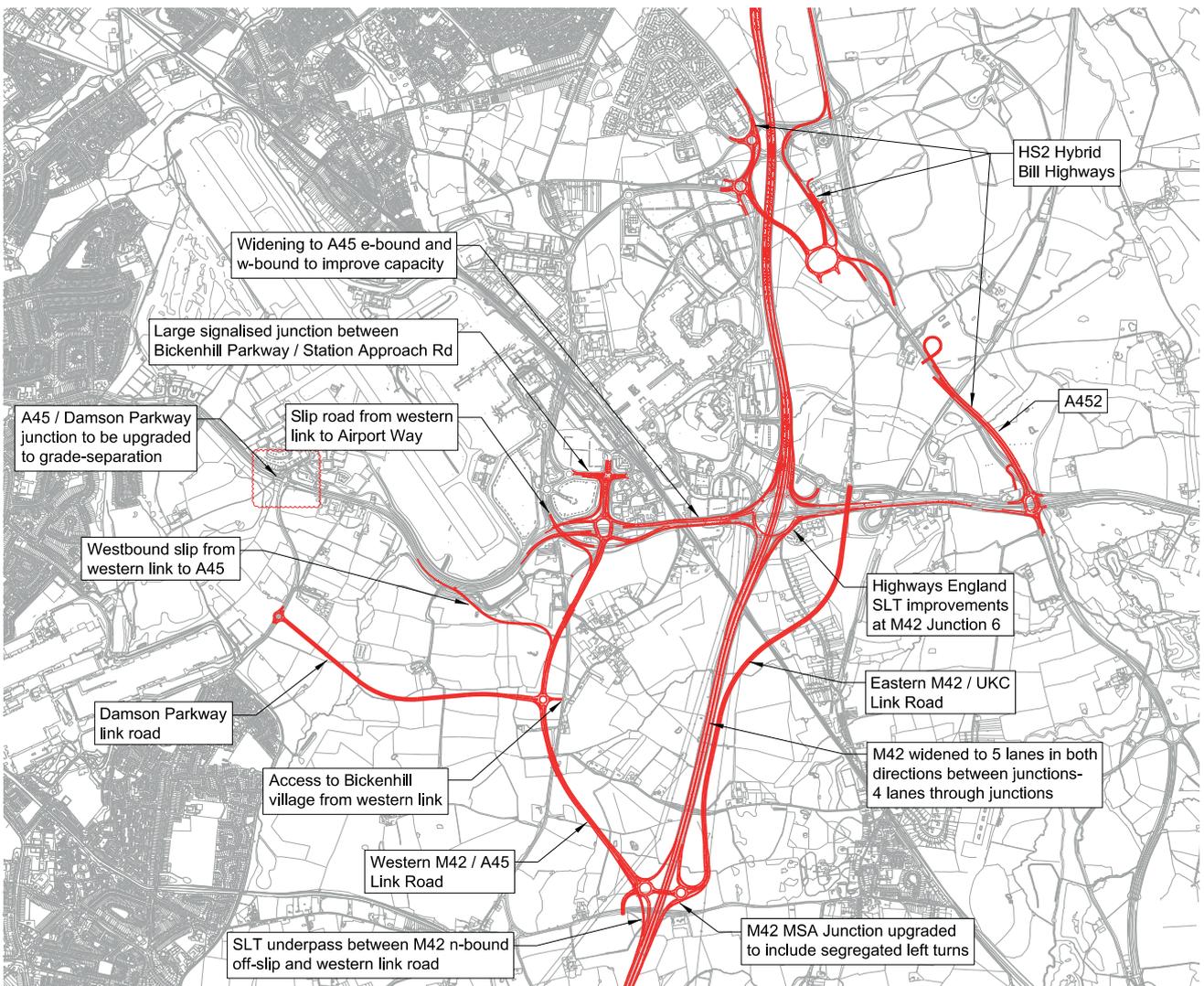


FIGURE 61: 'DO SOMETHING' HIGHWAY NETWORK (2041)

NB alignment connecting to J6 is indicative

- A signalised junction is created at Bickenhill Lane / Station Approach Road junction including widening of approaches and segregated left turn lanes where appropriate;
- A widened carriageway and bridge deck is provided along the A45 westbound between M42 Junction 6 and Clock Roundabout, to mitigate potential merge / weave issues; and
- A widened carriageway and bridge deck is provided along the A45 eastbound between Clock Roundabout and M42 Junction 6 to mitigate potential merge / weave issues.

The highway proposals as detailed are shown in Figure 61.

INFRASTRUCTURE INVESTMENT APPRAISAL

The IIA supports the Framework and considers the overall infrastructure requirements in more detail. This appraisal was based around an updated study of previous work to identify the scope, phasing and costs of the infrastructure that would be required to support growth in The Hub.

The Hub will need to be supported by:

- Transport infrastructure – both in terms of upgrades to highways and public transport infrastructure;
- Utilities infrastructure – in terms of strategic upgrades to supply side infrastructure, strategic distribution requirements across The Hub and diversions to maximise development potential; and
- Social and community infrastructure – to ensure that there is adequate provision for education, social interaction and to support new and existing communities.

To understand the infrastructure requirements that arise from growth, a series of approaches have been adopted. This depends on the type of infrastructure, who is responsible for it and how their particular regulatory framework may operate, and the level of work that they, or others, had undertaken to derive the scope and cost of infrastructure. With some of the infrastructure providers, their schemes are either at a preliminary stage or being considered for the first time.

To overcome this limitation, service providers were provided with information showing the location and quantum of potential growth (CDAs and PDAs). Based on this information the service providers then advised what requirements they considered they would have in order to meet this level of planned growth. This consultation was intended to provide a transparent and realistic approach to the appraisal.

Therefore, the information has been collated from a range of sources, and by reference to experience at other similar types of schemes. The derivation includes information from:

- The earlier preliminary work from August 2015;
- Meetings and discussions with promoters of key transport infrastructure schemes;
- Meetings and discussions with the utility companies in the area;
- Information from the Ebbsfleet Utilities and Infrastructure Study; and
- Comparison with cost databases and information from publically available, and the consultant team's own sources.

Table 10 provides the infrastructure requirements for The Hub (CDAs).

TRANSPORT - HIGHWAYS

Proposals have been developed for strategic highway provision, area-wide distribution and local highways to serve individual sites and public transport investment.

The strategic highway improvements primarily serve the wider area and therefore make provision both for background growth, HS2 related traffic and development schemes. These schemes are being promoted by national or regional public sector bodies, and are mostly geared around the delivery of HS2. The costs of these schemes have typically been provided by the relevant promoting authority.

Area-wide distribution schemes provide connectivity into the key sites within The Hub, and need to be provided alongside these developments to allow growth to take place.

They comprise junction and link improvements close to sites, suitably designed to provide the capacity needed for further development.

LOCAL HIGHWAY SCHEMES

Local highway schemes are typically located within development areas and provide connectivity into and across the sites for new development between varying land uses and purposes. The potential to link additional development sites, a wider range of land uses and the provision of physical and social infrastructure will enable the creation of more sustainable forms of development and help build meaningful connections between residential and employment uses amongst other things.

STRATEGIC PUBLIC TRANSPORT

At a similar level to the strategic highways, there is a need for regionally focused public transport provision to be made that will provide connectivity into, out of, and within The Hub.

These schemes are being promoted by regional public sector bodies, and most have an aspiration to connect existing urban areas to the new development around The Hub. This will improve wider connectivity and access to new homes, jobs and services along with the existing and new infrastructure and facilities.

LOCAL PUBLIC TRANSPORT SCHEMES

Local public transport provision allows for bus routes and facilities to be made within the development sites across The Hub. This primarily permits more sustainable travel between different land uses across The Hub, provides choice in the mode of transportation and also for connections to be made to longer distance travel (by HS2 and classic rail modes) and from Birmingham Airport. This provision would often be made / facilitated as part of the site developer's transport provision.

STRATEGIC UTILITIES

Strategic upgrades to the utility networks are likely to be required to allow the capacity to be made available at the outset for development sites to come forward. This is of critical importance to delivery, as the lead times to procurement of new sub-stations, treatment works and strategic mains and cables can be considerable, and would impact on deliverability unless planned sufficiently in advance of need.

These elements of infrastructure reinforcements may well be outside of The Hub area or outside of particular sites, but will be required to deliver supplies to developments.

Although these may well ultimately be the responsibility of the utility providers to plan and implement, experience suggests that intervention may be necessary to make lead times fit with the ambitious growth programme.

Service providers have advised what they consider may be necessary, at an overview level, based on information showing the location and quantum of jobs and housing growth.

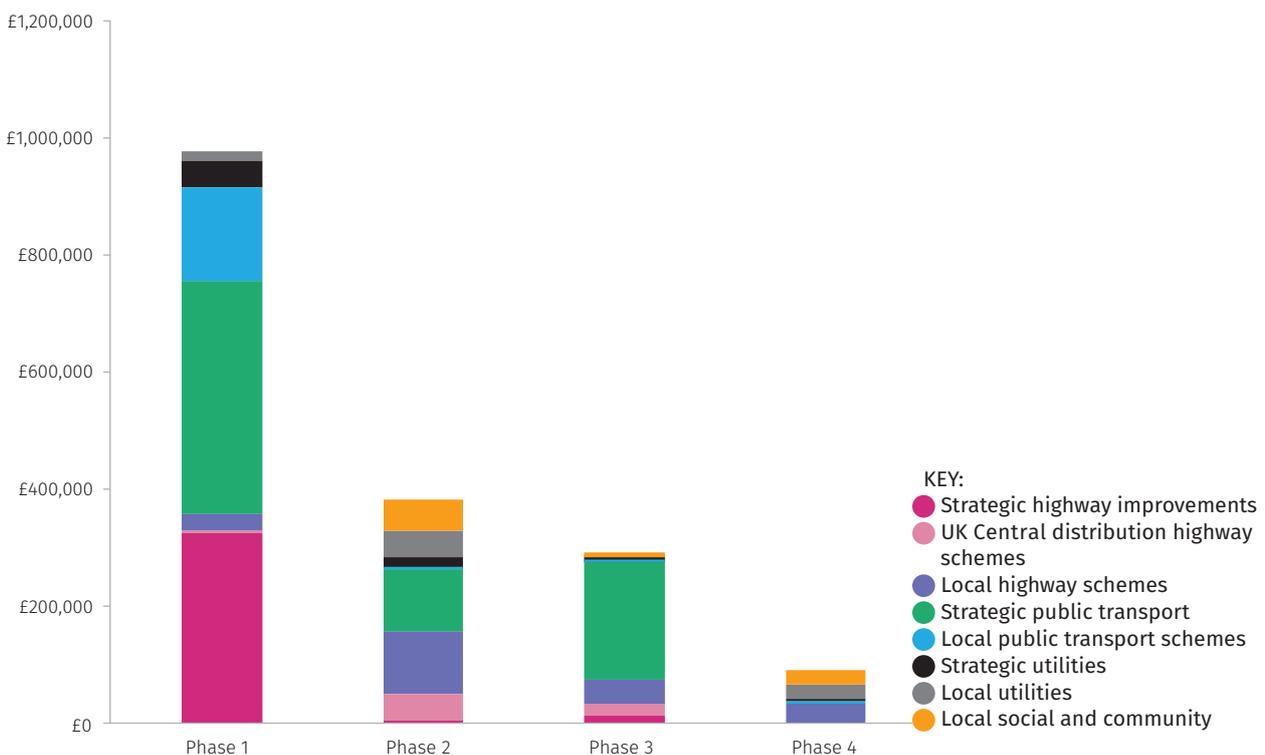


FIGURE 62: CORE DEVELOPMENT AREAS INFRASTRUCTURE SPEND BY PHASE AND INFRASTRUCTURE TYPE

LOCAL UTILITIES

These elements are the distribution networks that sit within The Hub sites. The provision of pipes, cables and other plant across The Hub sites needs to be accommodated in appropriate corridors and reservations. There may also be a need to consider the pump priming of utilities infrastructure, so that it is delivered ahead of need.

The network of utilities in the UK Central area has been developed over many years and comprises a combination of both strategic and local provision. The strategic provision provides routes for utility corridors around the eastern side of Birmingham whilst the local provision has developed organically to serve the immediate needs of the current development.

Whilst there are some committed upgrades to supply in the area (primarily electricity in relation to development sites on the periphery of The Hub and some gas diversion related to HS2), there are currently no other planned upgrades specific to The Hub.

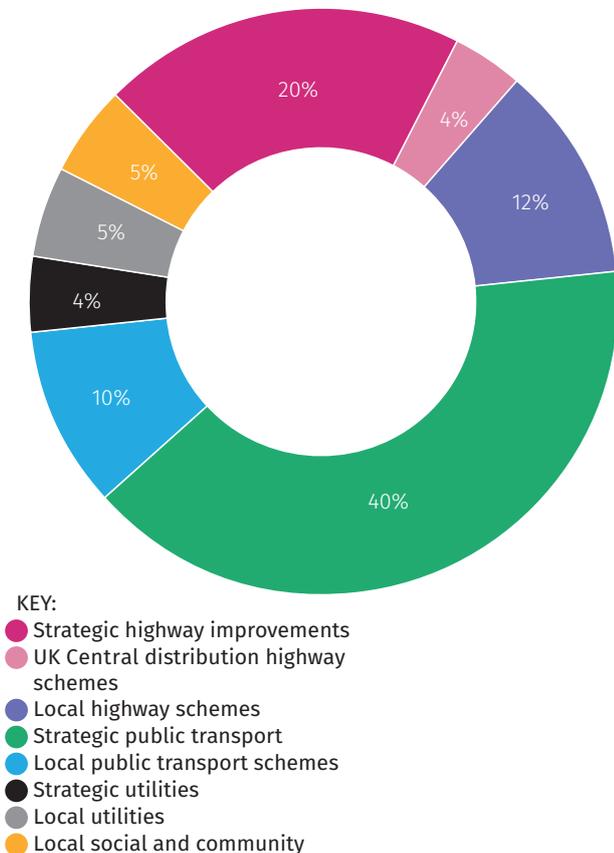


FIGURE 63: CORE DEVELOPMENT AREAS INFRASTRUCTURE SPEND BY INFRASTRUCTURE TYPE

Specific information for the UK Central sites won't be available until there are clearer details of proposals at each site, and so for the purposes of the Framework, information has been collated from a range of sources, and by reference to experience at other similar types of schemes.

LOCAL SOCIAL AND COMMUNITY

Social and community infrastructure relates to the provision of facilities that create a more balanced community, enabling suitable access to a required range of facilities. They include land uses such as education, health, leisure, community, emergency services, and green infrastructure / open space. Although they are relevant to all types of land use, they are most easily associated with residential development (but also can be relevant to employment led development, subject to particular and relevant factors).

Therefore, for the purposes of this study, the quantum of social infrastructure that is required is related primarily to the residential elements of development. The phasing of its delivery and the apportionment of the cost of it is made pro rata to the proportions of housing that are provided across the various sites within The Hub.

Figure 62 identifies the amount and type of infrastructure required by phase of the HGIP. The requirement for strategic infrastructure within Phase 1 is clearly most significant.

New school places have been calculated on the basis of 25 primary school places and 19 secondary school places per 100 dwellings. Hence, this derives an education demand in Phase 2 and 3 (HGIP) for a new 2 form entry (2FE) primary school and a financial contribution towards expansion of an existing secondary school (subject to existing location / capacity / ability to extend etc). Build costs for new GP surgeries have been assumed to be covered by NHS funding. However, there is some potential to explore location as part of a wider community hub (which could also provide provision for community use, and local policing).

The rate of delivery of social infrastructure is based on a steady provision typical of such sites elsewhere and upon the wider principles and policy requirements of building high quality, sustainable communities.

COST SUMMARY

The overall costs of the IIA schemes total £1.74 bn over the life of The Hub scheme. This is split into each of the phases in Figure 64 below (see Appendix F for further details).

This sum is therefore the total investment sum that is required to deliver the infrastructure that would be needed to deliver The Hub schemes as they are envisaged (but excluding the PDAs at this stage).

BREAKDOWN OF COSTS

The individual projects identified as being necessary to deliver growth in The Hub have been categorised into a series of types related to transport, utilities and social and community land uses. Within these categories, the schemes are subdivided into those that are of strategic importance to the wider area and the UK Central developments, those that are of significance to The Hub generally and those that are more locally related to individual schemes. These divisions are set out in Table 10.

The greatest costs, by some margin, relate to the strategic highway improvements and strategic public transport schemes. These include provisions such as the M42 Junction 6a scheme, and the connecting link roads on the eastern and western sides, the provision of a grade separated junction on the A45 at the junction with Damson Parkway, provision of an Automated People Mover (APM) between the railway stations, support for the East Birmingham to Solihull Metro scheme and Sprint bus service.

Most of these schemes will need to be funded from the public purse, but developer contributions through Section 106, Section 278 and CIL would be expected to contribute to the local requirements and the provision of strategic infrastructure on a proportional basis (ie. to mitigate for the impact of development and enable development to be acceptable in policy terms).

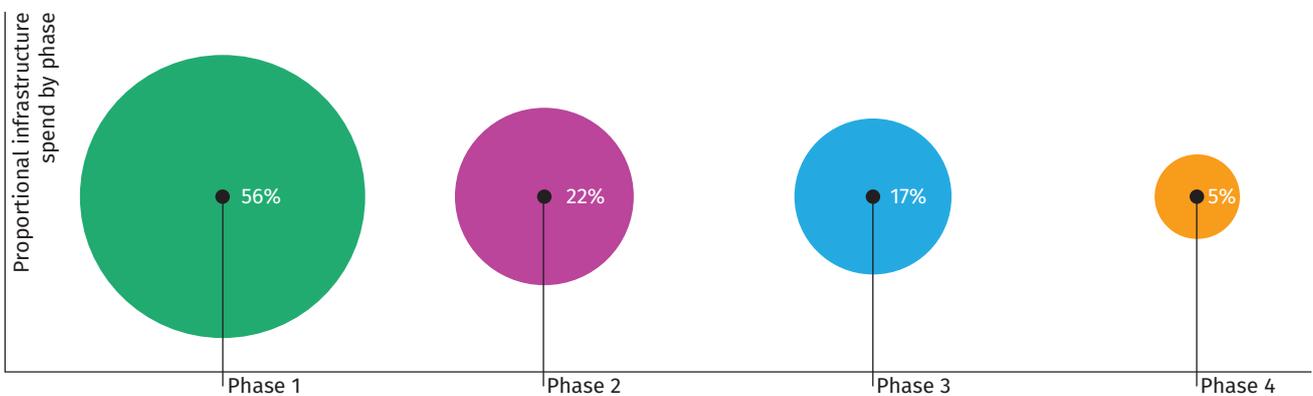


FIGURE 64: INFRASTRUCTURE SPEND BY PHASE

3.5 GROWTH QUANTUM - POTENTIAL DEVELOPMENT AREA

In addition to the CDAs set out in Chapter 3.3, the UGC has considered a further area that has the potential to help achieve the level of spatial growth required at The Hub (as established by the HGIP), enabling the potential for additional delivery of growth within the draft SMBC LPR period. The Potential Development Area (PDA) has been added to the previous diagram of land uses, as shown in Figure 65 below.

Table 11 provides a summary of the anticipated quantum of development proposed, including both CDAs and PDAs to meet the HGIP growth ambitions.

It has been selected because of its potential to contribute to the vision and place making principles of this Framework, its accessibility and proximity to existing and proposed public transport facilities and also its potential to contribute positively to the draft policies of the SMBC LPR (e.g. Policy P1).

KEY:

- Existing Centre
- Existing Communities

CORE DEVELOPMENT AREAS:

- Manufacturing - Light industrial
- Airport Related Uses
- Exhibition (Leisure, Hotel + Residential)
- Mixed use Development + Residential
- Commercial - Business

POTENTIAL DEVELOPMENT AREA:

- Commercial, Research and Innovation

- C01. Jaguar Land Rover Manufacturing Campus
- C02. International Gateway (Airport)
- C03. Pendigo Quarter (NEC)
- C04. Birmingham Business Park
- C05. Arden Cross District
- P01. International Quarter

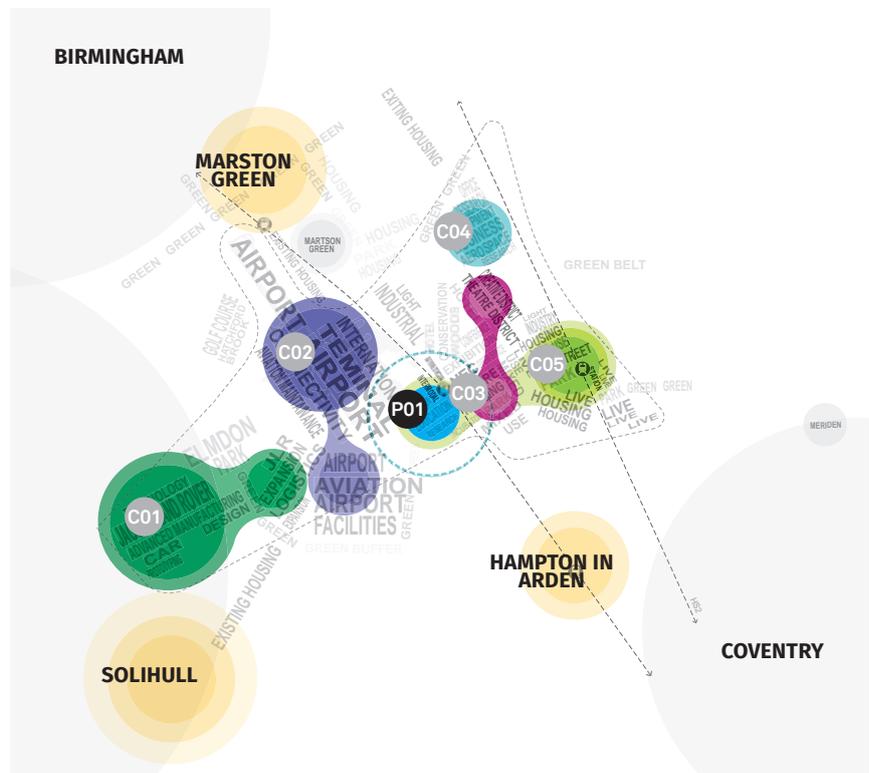


FIGURE 65: LOCATION OF PDA

SITE	LAND USE	CUMULATIVE TRAJECTORIES			
		BY 2023	BY 2028	BY 2033	BY 2047
C01. JAGUAR LAND ROVER MANUFACTURING CAMPUS	Employment - Office (sqm)	4,000	4,000	4,000	4,000
	Employment - Industrial (sqm)	92,900	142,309	163,718	304,000
	Residential (Dwelling)	-	-	-	-
	Mixed Use* (sqm)	-	-	-	-
	Hotel (sqm)	-	-	-	-
C02. INTERNATIONAL GATEWAY (AIRPORT)	Employment - Office (sqm)				
	Employment - Industrial (sqm)				
	Residential (Dwelling)				
	Mixed Use* (sqm)				
	Hotel (sqm)				
C03. PENDIGO QUARTER (NEC)	Employment - Office (sqm)	9,787	55,700	55,700	55,700
	Employment - Industrial (sqm)	-	-	-	-
	Residential (Dwelling)	130	550	550	550
	Mixed Use* (sqm)	27,330	79,400	79,400	79,400
	Hotel (sqm)	7,900	18,100	18,100	18,100
C04. BIRMINGHAM BUSINESS PARK	Employment - Office (sqm)	14,100	14,100	14,100	14,100
	Employment - Industrial (sqm)	-	-	-	-
	Residential (Dwelling)	-	-	-	-
	Mixed Use* (sqm)	-	-	-	-
	Hotel (sqm)	-	-	-	-
C05. ARDEN CROSS DISTRICT	Employment - Office (sqm)	-	18,000	56,838	182,745
	Employment - Industrial (sqm)	-	17,000	62,000	83,176
	Residential (Dwelling)	-	-	445	2,482
	Mixed Use* (sqm)	-	784	13,773	38,000
	Hotel (sqm)	-	-	-	-
P01. INTERNATIONAL QUARTER	Employment - Office (sqm)	-	61,740	123,480	246,960
	Employment - Industrial (sqm)	-	-	-	-
	Residential (Dwelling)	-	-	-	-
	Mixed Use* (sqm)	-	1,960	3,920	3,920
	Hotel (sqm)	-	14,700	29,400	29,400
TOTAL	EMPLOYMENT - OFFICE (SQM)	27,887	153,540	254,118	503,505
	EMPLOYMENT - INDUSTRIAL (SQM)	92,900	159,309	225,718	387,176
	RESIDENTIAL (DWELLING)	130	550	995	3,032
	MIXED USE* (SQM)	27,330	82,144	97,093	121,320
	HOTEL (SQM)	7,900	32,800	47,500	47,500
COMMERCIAL DEVELOPMENT AREA		156,017	427,793	624,429	1,059,501

*Mixed use for example - retail, leisure etc.

TABLE 11: LAND USE QUANTUM INCLUDING PDA (SOURCE: Land owner masterplans)

3.6 GROWTH AMBITION

In addition to the earlier market analysis, the following PDA provides a further opportunity for sustainable growth in order to achieve the range of development set out in the HGIP and the vision and place making principles of this Framework.

EMPLOYMENT - OFFICES AND INDUSTRIAL

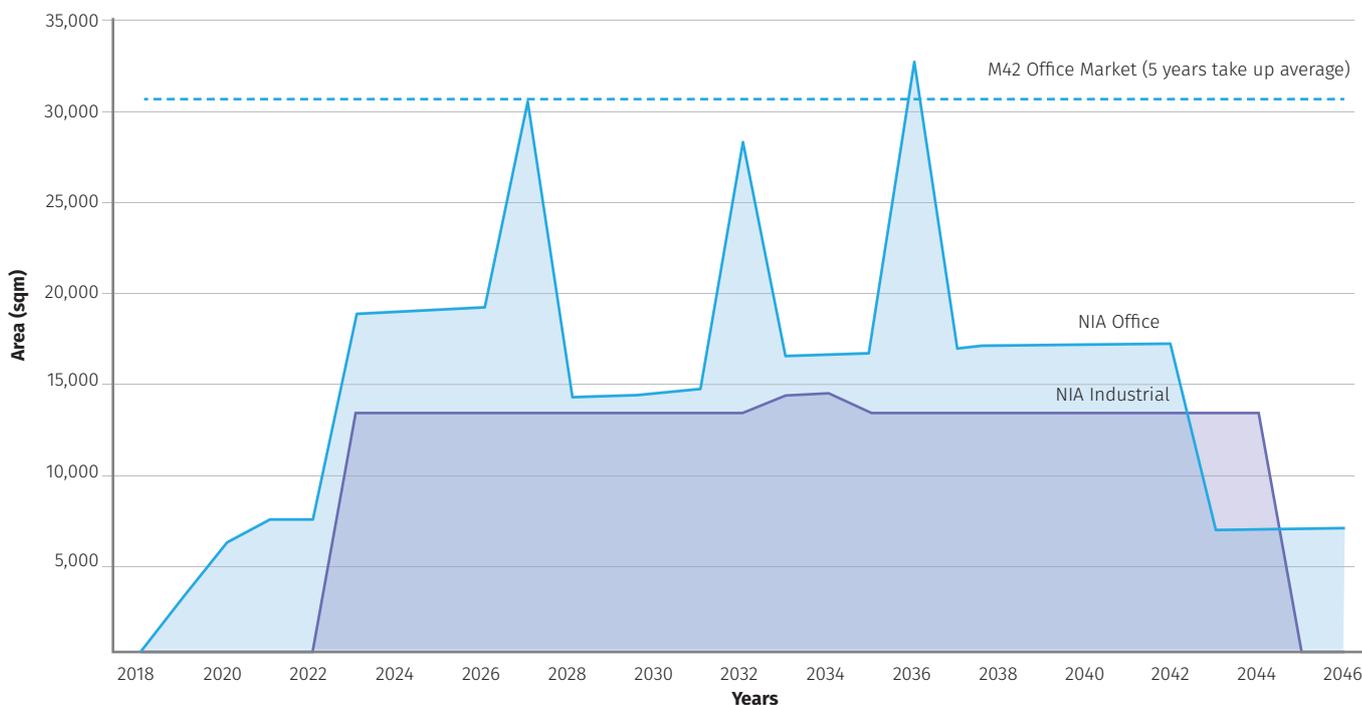
The scale of employment space within the CDAs allows for significant office and industrial floor space. The potential delivery of additional space to this fits within the ambitions of the UGC, allows for additional growth and the maximisation of economic benefits. Delivering more employment space at scale is likely to require:

- Significant increase in demand within the 'M42 corridor';
- Additional sector foci in order to deepen the level of demand within The Hub area;
- A strategy which differentiates the growth ambition space from the type of employment space already set to be promoted on the CDAs; and
- Phased delivery which corresponds to the wider development trajectories within The Hub area.

POTENTIAL DEVELOPMENT AREA P01 – INTERNATIONAL QUARTER

The International Quarter PDA is for circa 286,000 sqm Gross External Area (GEA) of commercial, hotel, research and retail space on the land adjacent (on the western side) to Birmingham International Station. This is a well-connected site with potential for employment uses to be developed. In terms of existing amenities and connecting infrastructure, the site already has a number of these 'building blocks' within the existing railway station, commercial services offer and the amenities adjacent within the NEC. This should allow for development at a relatively early stage in comparison to other areas.

The key viability issue to overcome will be the relatively high existing use value of the site. It is currently used as surface car parking for Birmingham International Station and the NEC. For office land values to sit above this value, there will need to be strong rental and investment demand and / or a car parking consolidation strategy for the wider area. The scale of the potential development (along with wider developments in The Hub) is such that a minimum development period of circa 20 years is likely to be required.



* employment trajectory generated by industrial figures exclude Logistic Operations Centre proposed by Jaguar Land Rover

FIGURE 66: AGGREGATE EMPLOYMENT SPACE (OFFICE & INDUSTRIAL) UPPER CASE TRAJECTORY ACROSS THE HUB (INCLUDING PDA) (SOURCE: LAND OWNER MASTERPLANS AND CUSHMAN & WAKEFIELD M42 OFFICE MARKET ANALYSIS)

RESIDENTIAL

In order to achieve the number of residential units in the upper case of the figures published in the HGIP, a greater number of new homes will be required on sites within CDAs as well as ensuring that links to wider development sites within the UK Central area are achieved.

To achieve the overall upper case of the HGIP ambitions for residential quantum the following assumptions apply:

- Increased market interventions would be required (as set out in Appendix D) by policy makers and key stakeholders such as the UGC to promote additional apartment living at an early stage i.e. within the first 10 years of the development pre 2028.
- An element of residential demand will occur from the development of employment space within The Hub. The ability to achieve a direct link will come down to factors such as the quality of links within The Hub area, quality of environment, social infrastructure and pricing.
- Demand will increase from the wider WMCA housing market area.
- Out commuting from this area is expected – enabled by the services available from Birmingham Interchange Station:
 - The current Birmingham International Station is already a hub for commuters into the capital and the proposed HS2 Interchange Station will expand the numbers of those looking to do so. The vision of a step change in the local infrastructure in the area will also encourage more local commuters e.g. through the future provision of Sprint services through this location.
 - It is likely that those who commute from here to London are doing so to benefit from the lower house prices and the high quality of schooling in the area. Furthermore, they are likely to commute for an enhanced quality of life, enabling access to the rural environment while still being within commuting distance of London. This is in line with the expansion of the current residential demand for large executive houses, and also increasingly apartments within the suburban area which are more affordable at £130 - £170,000 for a two bedroom apartment.
 - This area provides an opportunity in a similar way to Kettering and Corby for residential development to provide family housing for those who wish to work in London and to have larger family houses but who are unable to afford London prices.

At present, it is considered that there could be a significant gap between the potential number of new jobs and the number of new homes that might be delivered in The Hub in the LPR plan period and beyond (with particular emphasis on the first two phases / first 10 years). However, the increased number of new jobs can also be linked to development opportunities within the wider UK Central area. To deliver the appropriate amount of development necessary to achieve the vision and policy objectives for The Hub, it is relevant to also explore how additional homes might be delivered in this period. In addition, it is relevant to consider how additional homes might contribute to an increase in the development quantum to ensure an appropriate scale of development is achieved (e.g. the correlation between the number of new jobs, the number of new homes, the provision of infrastructure and the development of sustainable places).

Given the unique nature of The Hub and the amount, timing and nature of infrastructure works committed (such as HS2 and additional infrastructure required to support the wider growth ambitions) it is unlikely that the amount of new residential development delivered in the first 5 – 10 years (Phases 1 and 2 of HGIP) will achieve the upper part of the ranges set out in the document (and similarly thereafter). That is unless there are opportunities to provide additional forms of residential development that could also contribute positively to the required sustainable outcomes as part of the overall development of The Hub (and thus respond positively to draft Policy P1, LPR).

Such additional spatial opportunities would, of course, need to be balanced with a thorough consideration of overall sustainability, existing constraints and overall policy objectives.

There are wider opportunities within the UK Central area and such additional spatial opportunities would need to be considered in the light of overall sustainability, the need to provide / ensure meaningful connections, proximity to employment opportunities, choice in modes of transport, and access to facilities, services and open space. The potential for development of the Arden Cross triangle site provides opportunities to consider a range of development types and forms, along with the delivery of high quality sustainable communities and urban living.

Sustainable development and support for significant physical and social infrastructure requires a strong synergy between the scale and mix of land uses, and the scale and timing of relevant infrastructure delivery. Because of the national and regional importance of The Hub, there will be a requirement for both strategic infrastructure which helps deliver the wider economic growth ambitions, and more localised infrastructure which meets the growth needs of The Hub.

3.7 INFRASTRUCTURE ANALYSIS - POTENTIAL DEVELOPMENT AREA

The PDA creates the potential for an additional pool of developments that could contribute to the overall infrastructure requirement. Of course, in addition to the range of infrastructure set out above, some of this infrastructure is specifically linked to this development, i.e. utility connections. Hence the apportionment needs to be adjusted to take account of the effects that this development would have.

It should be noted that this assessment doesn't make an apportionment of strategic highway and bridge schemes to the PDA area. This is because no additional strategic highways infrastructure is necessarily required to serve this area. Thus the IIA assumes that additional strategic highways infrastructure would be provided in any event by the CDAs. It would be worthwhile to investigate further, if this or indeed other sites came forward, as it is likely that a pro rata allowance could be made.

The PDA lies central to the main Hub area and is commercially led. This means that there is relatively little demand for significant additional highway and bridge infrastructure – indeed there is no additional requirement over and above the infrastructure that is ultimately provided for the wider Hub area.

However, the IIA has considered the impact of the PDA in the event that it is included in the overall Hub development and moreover, that it is delivered as early as possible. Thus the assumption is that it would be delivered within the Local Plan period (to 2026).

Although the total infrastructure costs for delivery of The Hub, with and without the PDA, remain the same (as shown in Table 12 below) delivery of the PDA requires additional infrastructure investment in Phase 2, and less in Phase 3.

TYPE OF INFRASTRUCTURE	PHASE 1	PHASE 2	PHASE 3	PHASE 4	CUMULATIVE
Strategic highway improvements	£326,400	£4,840	£14,610	£0	
UK Central distribution highway schemes	£2,600	£61,500	£0	£0	
Local highway schemes	£30,199	£107,785	£42,380	£34,607	
Strategic public transport	£395,842	£106,532	£200,000	£0	
Local public transport schemes	£160,000	£2,000	£2,000	£2,000	
Strategic utilities	£47,220	£18,617	£7,261	£4,362	
Local utilities	£12,722	£46,255	£750	£26,138	
Local social and community	£0	£53,418	£5,181	£24,642	
TOTALS:	£974,983	£400,948	£272,182	£91,749	£1,739,862

TABLE 12: FULL SITE INFRASTRUCTURE REQUIREMENTS INCLUDING PDAS (FIGURES X 1000)

N.B THE HGIP ISSUE 1 (MARCH 2017) INCLUDED AN ALLOWANCE OF £260M FOR CONNECTIVITY AND CHANGES PROPOSED TO THE HS2 STATION. WITHIN THE IIA THESE COSTS WERE DISAGGREGATED INTO INDIVIDUAL INFRASTRUCTURE ELEMENTS, AND THESE COSTS ARE THEREFORE INCLUDED IN THE TABLE ABOVE.

3.8 IMPLEMENTATION

The timeline shown in Figure 67 gives an overview of the proposed phasing of the development across The Hub. The direct benefits (in land value and property market terms) of the infrastructure upgrade within the Hub are significant. However value capture from the benefitting development projects can only fund a proportion of the overall costs. This is partly due to the significant wider benefits of the infrastructure investment required, as well as the sites having some potential for development if the infrastructure upgrade is not delivered.

The UGC has developed a collaborative working environment with land owners / key stakeholders within The Hub and led the formulation of the HGIP in order to ensure delivery of infrastructure and subsequent development.

Appropriate delivery arrangements will be entered into with land owners in respect of individual opportunity sites regarding infrastructure and subsequent development and delivery of economic activity. Depending on the nature of each site and the proposed development potential, and in accordance with the value capture model, this may involve

a range of relevant approaches – from legal agreements for the repayment of apportioned infrastructure costs through to formal Joint Venture (JV) arrangements under which the UGC would share the risks and potential rewards with private sector owners. Each of these arrangements will need to be considered and negotiated on an individual basis.

In addition, delivery of key partner asset opportunities is envisaged by way of:

- HS2 – delivery of the HS2 Interchange Station and rail infrastructure by HS2 Ltd.
- Jaguar Land Rover , Birmingham Airport, NEC, and Birmingham Business Park – expansion and growth opportunities will be delivered by their respective ownership companies.
- Arden Cross Consortium– the opportunity will be delivered by a consortium of four land owners including BCC, the Packington Estate, Coleshill Estate, and SMBC, working with the UGC, HS2 Ltd and others.
- NR, HE, SMBC, and the utility companies will be engaged in provision of on-site and off-site infrastructure in collaboration with the UGC and land owners.

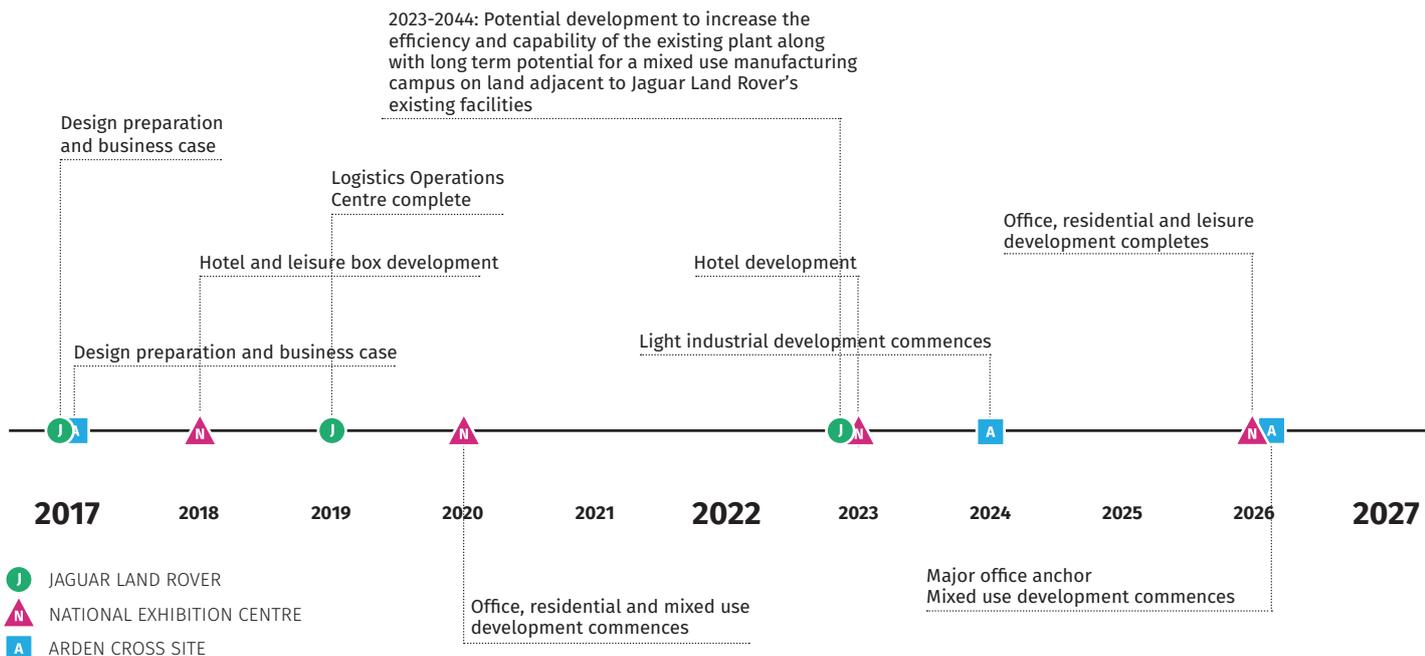
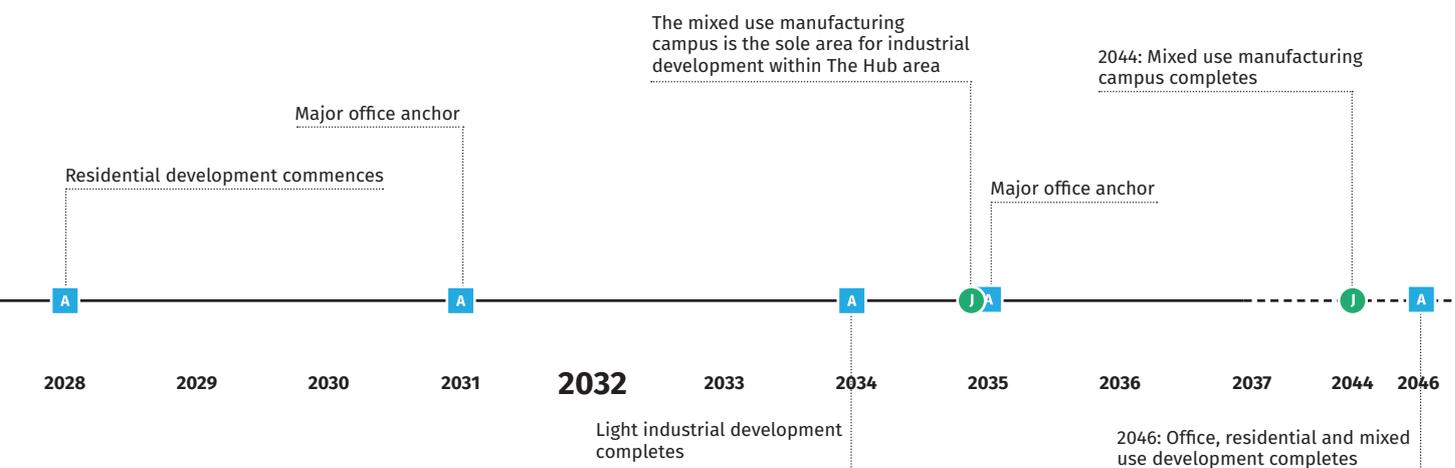


FIGURE 67: DEVELOPMENT DELIVERY

An IIA and Value Capture Framework (summarised in Figure 68) has been developed to provide the basis on which land owner and developer unearned increases in value can be ‘captured’ on an equitable basis by the public sector and be made available for re-investment in ways that are socially beneficial. There is no one favoured mechanism, with a ‘tool kit’ of appropriate approaches proposed including:

- Commercial mechanism – including use of public sector assets, ransom strips, ground rents, legal agreements, and public-private partnership and JV arrangements;
- Planning and highway legislation mechanism – including Section 106, CIL, and Section 278 contributions;
- Voluntary business contributions – such as through Business Improvement Districts;
- User charges; and
- Fiscal arrangements - including the use and application of existing or a new / amended mechanism.

The appropriate mechanism to enable the cost of advanced infrastructure provision to be recouped and additional contributions for the common good will be determined on a scheme-by-scheme basis through collaboration and agreement.



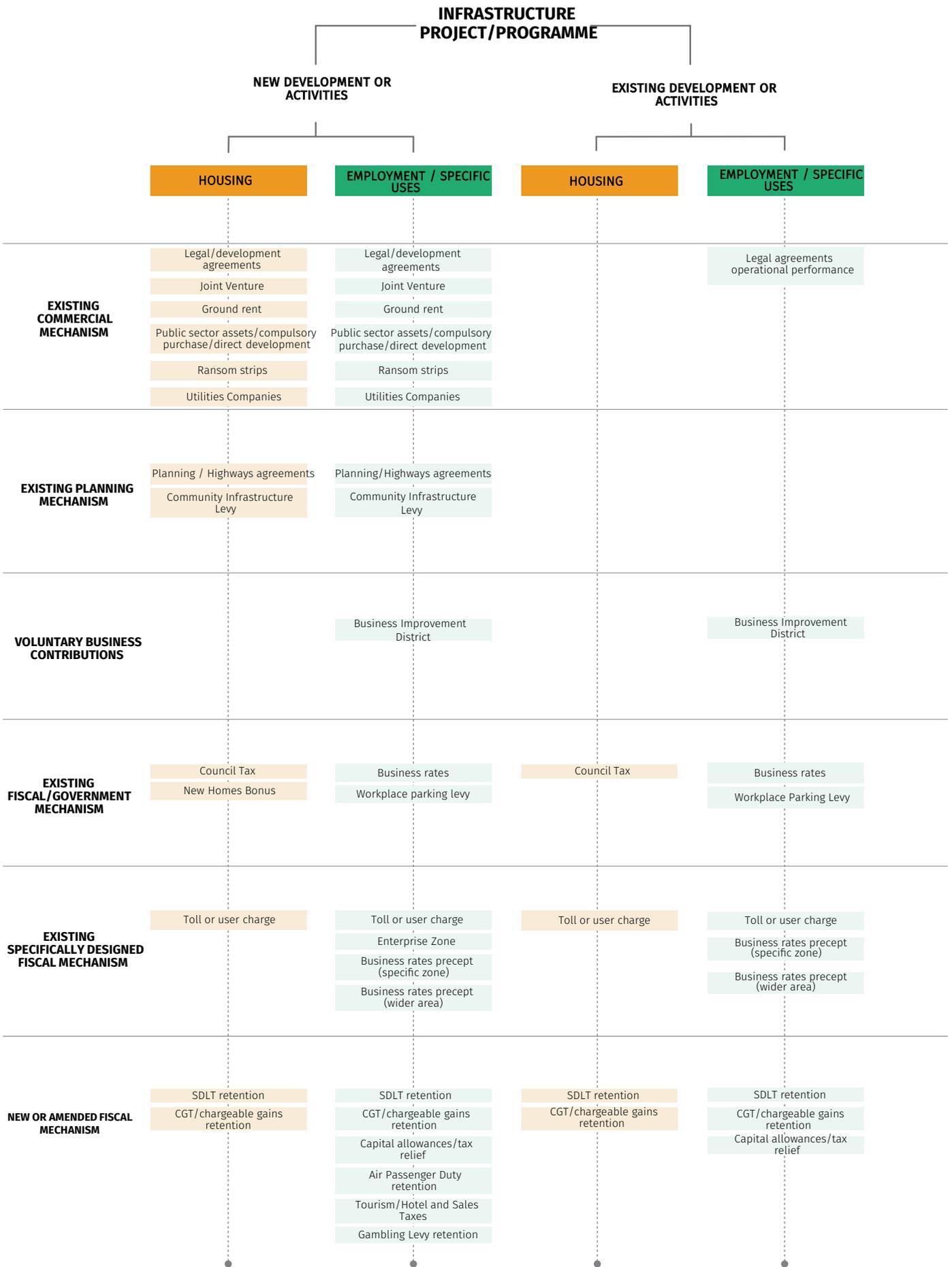


FIGURE 68: VALUE CAPTURE MODEL SUMMARY

3.9 GREEN BELT

CORE DEVELOPMENT AREAS

The Hub provides a significant opportunity to contribute to the sustainable economic growth of the Borough and the region. To achieve this and to develop truly sustainable places, both housing and employment growth will be required (along with necessary physical and social infrastructure and amenities). There will be a requirement for sufficient development capacity within The Hub to enable an appropriate trajectory and delivery stream of development and to provide choice for future investors alongside certainty for existing stakeholders.

In the draft LPR SMBC propose to remove land adjacent to Jaguar Land Rover and at Arden Cross from the Green Belt under very special circumstances. SMBC propose that such very special circumstances exist because the land only performs moderately in the SMBC Green Belt Assessment and because it provides the following opportunities, which are endorsed by the UGC:

- To maximise the economic growth and job creation potential of The Hub;
- Promote economic growth in accordance with the National Planning Policy Framework (NPPF);
- Improve connectivity with North Solihull - an area of persistently high unemployment;
- Address the needs of key economic assets significant to the local and regional economy;
- Provide strong defensible Green Belt boundaries;
- Allow Jaguar Land Rover to continue to grow to support the local and regional economy and remain competitive;
- Provide the only suitable alternative location to meet Jaguar Land Rover's needs for continuous growth;
- Provide opportunities for key supply chain businesses to locate in proximity to the Jaguar Land Rover plant to minimise transport delays; and
- Compliment existing committed developments in the Green Belt such as the Jaguar Land Rover despatch facility.



FIGURE 69: HS2 COMBINED TERMINAL - ARTISTIC IMPRESSION

3.10 SUMMARY

The UGC is firmly committed to enabling the delivery of the appropriate amount of high quality sustainable development, along with the required infrastructure (in conjunction with other key stakeholders), in order to realise the significant economic opportunities that The Hub offers for the wider Midlands and national economies.

Developing sustainable places cannot be achieved by the piecemeal development of individual disconnected sites, nor can it be achieved by bringing forward relatively few homes in comparison to a much larger amount of economic growth. The Hub needs both the social infrastructure and the facilities to support the wider growth ambitions, thus there is a strong case for considering both sustainable economic growth and the quantity of development required to achieve such sustainable outcomes.

The UGC recognises the significant opportunity for the Framework to help inform and guide emerging policy whilst providing clarity on vision, design principles and infrastructure for all stakeholders as they progress development proposals for their individual sites. Policy P1 of SMBC's draft Local Plan (November 2016) seeks to address the following objectives and challenges:

- Reduce inequality;
- Meet housing need across the Borough and where possible, assist with accommodating the HMA wide shortfall;
- Sustain the attractiveness of the Borough for people who live, work and invest in Solihull;
- Secure sustainable economic growth;
- Increase accessibility and encourage sustainable travel; and
- Maximise the economic and social benefits of the HS2 rail link and interchange.

The Framework responds directly to these criteria (as shown in chapter 2), to ensure that the objectives and challenges can be met. However, in order to fully realise the criteria (and in accordance with the ranges of development set out within the HGIP), it is suggested that more than

1000 new homes (the figure currently allocated for The Hub in the SMBC draft LPR) will need to be delivered within The Hub over the plan period (up to 2033) and beyond. Also, it will be fundamental to ensure that there is meaningful delivery within the early phases of the plan period (5 – 10 years), particularly if land being proposed for development is located within the Green Belt.

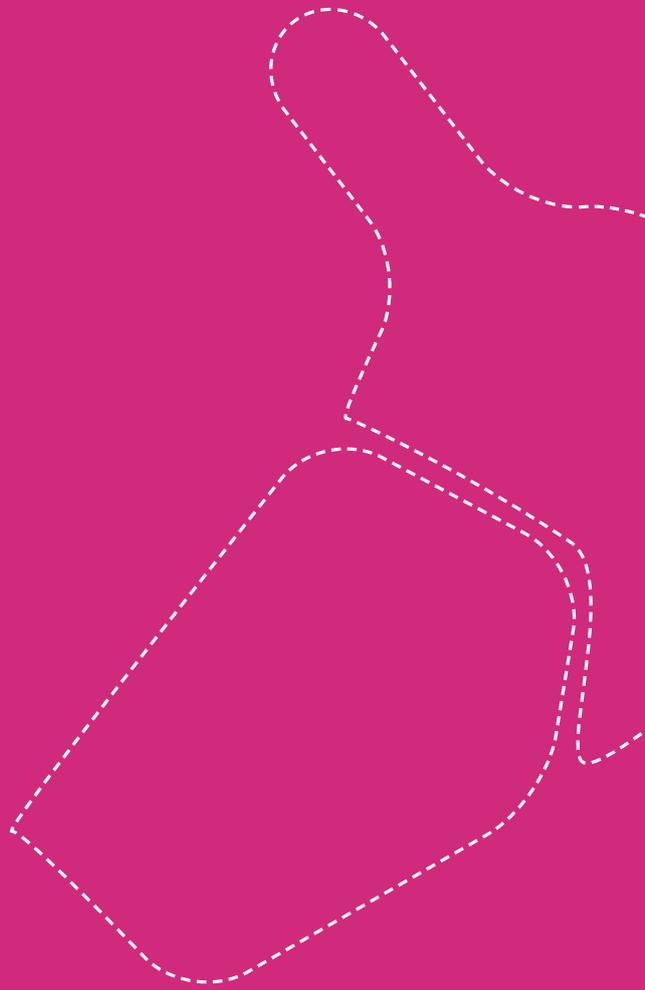
A shortfall in the delivery of new homes (including within The Hub) would have implications for achieving the overall vision and place making principles (chapter 2, above). In addition, it would have implications for achieving the aspirations of the draft policy, securing sustainable economic growth, increasing accessibility and meeting the housing need of the Borough whilst also contributing to the HMA wide shortfall.

In light of this, the Framework establishes the potential delivery trajectory for the CDAs to help ensure that an appropriate scale of development can be delivered. This approach would support delivery of additional homes within the first 5-10 years of the plan period (Phases 1 and 2 of the HGIP) and therefore accord with not only Policy P1 but the wider ambitions of the draft Local Plan as well as the WMCA's ambition for significant economic growth across the region.

In this context, the UGC considers that there is a strong case for exception warranting release of both of the Green Belt sites contained within the Consultation Draft LPR (CDAs).

An appropriate and robust evidence base will be required to support the case for removal from the Green Belt in the context of their sustainability and deliverability, which will require full consideration as part of the ongoing statutory plan making process. This Framework provides a high level assessment of the proposals against a range of relevant evidence including: national and local policy, environmental and physical constraints, market demand, deliverability and infrastructure requirements.

4.





Next Steps

4.1 NEXT STEPS

This Framework forms one of a series of related reports all of which support the case for the delivery of the ambitious levels of growth required to make The Hub a future success. It is essential that further work with key stakeholders is undertaken in order to continue to build certainty, clarity and consensus on the most appropriate strategies for development and delivery.

In parallel, Solihull Metropolitan Borough Council (SMBC) is continuing to progress the Local Plan Review (LPR). The intention is for the proposals and supporting evidence put forward in this document to help inform this process in a constructive and collaborative way. The document and its findings will be shared and discussed with SMBC and will provide part of any future submission of evidence at submission draft stage of the Local Plan.

The process of formulating detailed masterplans for individual sites will also require greater collaboration with key stakeholders and by its nature will be an iterative process. The Urban Growth Company (UGC) will aim to continue to work collaboratively on this Framework in 2017 and 2018 to provide the basis and context to guide and coordinate development and investment plans across The Hub area, whilst allowing for suitable flexibility and change. The formulation of more detailed masterplans by individual site owners will also help influence and refine the high level proposals put forward in the document.

There is a requirement for significant investment in new infrastructure to enable the levels of growth established in the HGIP to come to fruition. This document will help inform decision making on the required investment and programming of strategic infrastructure for The Hub. The UGC will continue in its enabling role in coordinating the approach to development and place making along with preparation of Strategic Business Cases and development infrastructure requirements, in addition to other core tasks set out within the Hub Growth and Infrastructure Plan (HGIP).

FURTHER EVIDENCE

The preliminary nature of the evidence gathered to date on potential infrastructure costs means that there is a requirement for further detailed work to be undertaken over the next year to start to fix the infrastructure that will be required, when it has to be in place and the costs. Market analysis should be undertaken to test the ability to deliver the infrastructure upgrades required to support the development trajectories, particularly prior to 2026. It should also set out the building blocks of likely occupier demand.

Inevitably there are myriad detailed issues that will need to be addressed as The Hub scheme is progressed, but they can be considered as a series of key headline issues that should be investigated as next steps:

HS2 INTERACTIONS

Assumptions have been made regarding the way that the HS2 Connectivity Package funds will be utilised, and their availability. This needs to be confirmed to establish where additional funding is needed to deliver the infrastructure requirements outlined in this Framework.

The need for the current Hybrid Bill scheme for HS2 to be amended will have to be resolved to allow the growth proposals to come forward. There needs to be confirmation of which schemes will be constructed alongside the HS2 build, and how these will be funded.

HIGHWAYS SCHEMES

The traffic modelling that has been undertaken has been limited to the busier morning peak period, and to a limited range of future scenarios. More refined modelling, undertaken once there is greater certainty regarding the land use mix and programme of each development area, may change the sequence or scope of highway mitigation schemes that are required.

In addition, some schemes would be better combined, as this would provide an overall cost saving, but this has not been allowed for at this stage as agreements to collaborate are not in place. These should be pursued and agreed as soon as practicable. This is especially the case for the M42 J6a scheme.

PUBLIC TRANSPORT SCHEMES

The strategic public transport schemes, such as the East Birmingham to Solihull Metro and Sprint proposals, are subject to their own business cases, and while their delivery is not yet certain, they create considerable economic opportunities for the areas they serve. The linkage to The Hub, with its growth potential, is likely to create a considerable economic imperative. However, this is not quantified at this time, and so the schemes are not secure in terms of their delivery. This should be addressed as soon as practicable to give certainty to the context of The Hub schemes. It is recognised that Highways Networks, route alignments for Sprint and Metro and the HS2 scheme are subject to further development. Implementation of the Framework aspirations will require continued engagement and coordination with Transport for West Midlands (TfWM), the West Midlands Combined Authority (WMCA), SMBC, Highways England (HE) and HS2.

UTILITY PROVISION

The utility providers have only commenced considering The Hub scheme in its entirety in recent months. However, preliminary discussions and initial work by the service providers has made it clear that considerable reinforcement and protection work will be required to deliver growth.

Under normal circumstances the service providers would include these works in their asset management plans – but this would only tend to occur as developments gain consent and come forward. Experience elsewhere suggests that early intervention by an appropriate authority to coordinate the early planning, procurement and delivery of strategic utilities facilities will be vital to achieving the programme for delivery of The Hub.

A further round of investigation, based on a more refined (although not necessarily final) schedule of land uses and programme for delivery should be considered with the service providers, and a strategy developed to ensure that provision can be made ahead of need. This may need intervention by other authorities, and development of appropriate forward funding and recovery mechanisms to ensure that it can be delivered.

SOCIAL AND COMMUNITY USES

These facilities are typically the domain of the developer to provide, under policies and requirements of the local authority and other stakeholders. The current costs of this provision across The Hub are considerable and this is likely to impact on development viability.

Further work should be undertaken to seek to reach agreement and a defined position on how viability issues will be addressed and the extent to which there is flexibility in the way that facilities are provided.

UGC ENABLING ROLE

In parallel to the completion of robust evidence bases the UGC will also need to develop its capacity to support delivery in terms of programme management and also:

Core Tasks:

- Issue this Framework to SMBC and promote the case for inclusion of the Framework's growth plans within the emerging Local Plan (discussions with SMBC's Planning department are ongoing);
- Issue this Framework to the WMCA and seek endorsement and an undertaking to meet funding requirements;

- Prepare strategic and specific business cases to support funding applications to both Government and WMCA ('Outline Business Case' will be submitted in November 2017);
- Develop a Utilities Strategy (including proposal for a Multi-Utilities Service Company (MUSCo)) to define a clear delivery plan for the infrastructure required to achieve the planned programme. The strategy will be a catalyst to drive economies of scale and collaborative working between stakeholders to plan for delivery ahead of need (the Utilities Strategy work will commence in October 2017);
- Undertake valuation of current land / property assets in The Hub (an independent assessor has been appointed);
- Undertake a car parking strategy review. The UGC will need to coordinate a deliverable strategy that is likely to require mechanisms for timing of land value capture (the procurement of specialists is underway);
- Develop an integrated action plan for each component of The Hub;
- Publication of the Value Capture Framework and Tool Kit and agree its application to The Hub;
- Develop and implement benefit realisation plans to maximise the net additional impacts of the schemes;
- Undertake review with HE and TfWM regarding the impact of construction traffic of all the various development proposals and HS2 implementation, and develop a mitigation plan to minimise impact on local infrastructure and communities (the UGC have set up the Interchange Infrastructure Coordination Board); and
- Progress with marketing of future investment opportunities.

Enabling Tasks:

- Continue to work with and adopt a collaborative approach with other key stakeholders;
- Work with Local Enterprise Partnerships (LEPs) outside of The Hub to improve the growth and infrastructure opportunities;
- Convene a regular group of representatives from the incumbent utility companies to create a focal point towards delivery; and
- Provide support to Government and the WMCA to safeguard implementation of development following infrastructure investment.

WMCA / MAYOR ASKS

The WMCA has secured approval through a devolution agreement with Government for all regional / local infrastructure investment and funding to support HS2 changes. The UGC seeks to work with them to realise the ambitions for The Hub and ensure early utility safeguarding and timely support for business case approvals and funding support for the UGC.

GOVERNMENT ASKS

In producing the HGIP and this Framework it is clear that there is a need for the following Governmental support to deliver this growth ambition for The Hub:

- HS2 – Modify current station design (including car parks ponds etc.) from Parkway to proposed business case design to support development aspirations of the plan;
- Road investment strategy – Ensure HE deliver M42 J6 option 1 as per published programme (2021);
- Utilities – support the negotiation of a Utilities Strategy with providers and regulators (National Infrastructure Commission) to ensure timely delivery of essential services to development plots;
- Rail investment – funding through NR to deliver a

multi-modal interchange at Birmingham International Station;

- Aviation – a supportive regional airports growth policy;
- DCLG Secretary of State timely approval for Solihull Local Plan;
- To facilitate and coordinate the wider ‘picture’ of regional and national infrastructure and transport planning; and
- Value Capture – support the implementation of the Value Capture Framework and Tool Kit enabling the WMCA to capture value uplift to support local infrastructure funding.

LAND OWNERS ASKS

It will be important to:

- Ensure funding and shareholder approvals are gained to support and fund development and expansion; and
- Note the role that this value capture model will have on infrastructure costs recovery.

It is recognised that highways networks, and route alignments for Sprint, Metro, and HS2 schemes are subject to further development. To enable implementation of the Framework aspirations will require continued engagement and coordination with TfWM, WMCA, SMBC, HE and HS2.



FIGURE 70: THE HUB FRAMEWORK AREA

IMAGE REFERENCES

01.	HS2 COMBINED TERMINAL - ARTISTIC IMPRESSION © ARUP.....	7
	HS2 ARTISTIC IMPRESSION © HIGH SPEED TWO (HS2) LIMITED	25
	M42 AND UTILITIES CORRIDOR BETWEEN THE NEC AND ARDEN CROSS © ARUP.....	28
	SUSTAINABLE PLACES © BIRMINGHAM CITY COUNCIL.....	33
02.	ARDEN CROSS PROPOSED DEVELOPMENT - ARTISTIC IMPRESSION © GRIMSHAW	37
	PEDESTRIAN AND CYCLING ACCESSIBLE PLACES © CC, THE ACADEMY OF URBANISM.....	46
	HIGH QUALITY GREEN AND BLUE PLACES © CC, THE ACADEMY OF URBANISM.....	46
	WINDMILL STREET PARKLET © PAUL CARSTAIRS ARUP.....	47
	PALLET PAVILION CHRISTCHURCH © CC JOCELYN KINGHORN	47
	ACTIVE AND DISTINCT PLACES IMPRESSION © GIRLINTHEMIDWEST CC XOCHI.....	47
	LONDON © CC LA CITTA VITA	48
	SUSTAINABLE PLACES © BIRMINGHAM CITY COUNCIL.....	48
	CAMBRIDGE © CC THE ACADEMY OF URBANISM	49
	M42 © SOLIHULL METROPOLITAN BOROUGH COUNCIL	50
	LONDON © CC THE ACADEMY OF URBANISM.....	50
	M42 © SOLIHULL METROPOLITAN BOROUGH COUNCIL	51
	ACCORDIA © CC THE ACADEMY OF URBANISM	52
	HAMMARBY © CC LA CITTA VITA	53
	WINDMILL STREET PARKLET © PAUL CARSTAIRS ARUP	54
	KINGS CROSS & ST MARTIN © ROLANDWONG.....	54
	SAN SEBASTIAN © CC THE ACADEMY OF URBANISM	55
	LONDON © CC LA CITTA VITA.....	56
	PEROSBRIDGE BRISTOL © ARUP.....	56
	BIRMINGHAM ARTSFEST © PETEASHTON	56
	BRINDLEY PLACE © CC THE ACADEMY OF URBANISM.....	56
	PALLET PAVILION CHRISTCHURCH © CC JOCELYN KINGHORN	56
	LONDON © CC COFFEE-FARM	57
	PALLET PAVILION CHRISTCHURCH © CC JOCELYN KINGHORN	57
	LONDON © CC LA CITTA VITA 10	57
	PEXELS-PHOTO-439818 © MARK DALTON	58
	QUEEN ELIZABETH OLYMPIC PARK STRATFORD © THOMAS GRAHAM ARUP.....	58
	ACTIVE AND DISTINCT PLACES IMPRESSION © GIRLINTHEMIDWEST CC XOCHI.....	59
	JAGUAR LAND ROVER MANUFACTURING CAMPUS © JAGUAR LAND ROVER	60
	BHX © CRAIG HOLMES.....	60
	NEC PEDIGO LAKE © CC ELLIOT BROWN FLICKR.....	60
	BIRMINGHAM BUSINESS PARK © UGC.....	60
	ARDEN CROSS ARTISTS IMPRESSION © GRIMSHAW.....	60
	INTERNATIONAL QUARTER ARTISTS IMPRESSION © GRIMSHAW	60
	UK LANDSCAPE © CC TEJVAN PETTINGER	63
	BRUSSELS © CC LA CITTA VITA.....	63
	CHESHIRE LANDSCAPE © CREATIVE COMMONS	63
	EASTSIDE CITY PARK BIRMINGHAM © CRAIG HOLMES	63
	COPENHAGEN © CC THE ACADEMY OF URBANISM.....	65
	ALLAHABAD-TO-DELHI © CREATIVE COMMONS.....	65
	UK LANDSCAPE © CC JOEY	65
	LONDON © CC THE ACADEMY OF URBANISM.....	65
	CYKELSLANGEN COPENHAGEN © RASMUS HJORTSHOJ@ARCHELLO	65
	ACCORDIA © CC THE ACADEMY OF URBANISM.....	67
	EUROPEAN ROADS © CC KICK PRUIJSBRUG	67
	LUCHTSINGEL © CC HAN SANTING.....	67
	MALMO © CC THE ACADEMY OF URBANISM	67
	EUROPEAN ROADS © CC KICK PRUIJSBRUG	67
	ACCORDIA © CC THE ACADEMY OF URBANISM.....	67
	CHESHIRE LANDSCAPE © CREATIVE COMMONS	69
	MALMO © CC THE ACADEMY OF URBANISM	69
	UK LANDSCAPE © CC TEJVAN PETTINGER	69
CYKELSLANGEN COPENHAGEN © RASMUS HJORTSHOJ@ARCHELLO	71	
HAMMARBY © CC LA CITTA VITA	71	
COPENHAGEN © CC THOMAS ROUSING	71	
ATHLETES VILLAGE VOGT ©	71	
@GEOGRAPHY.ORG MOD	71	
JOGGING © CC CHRIS GOLDBERG.....	71	
ARDEN CROSS ARTISTS IMPRESSION © GRIMSHAW.....	71	
LUCHTSINGEL © CC HAAIJK.....	73	
HAMMARBY © CC LA CITTA VITA	73	
KINGS CROSS & ST MARTIN © ROLAND WONG	73	
INTERNATIONAL QUARTER ARTISTS IMPRESSION © GRIMSHAW	73	
CYKELSLANGEN COPENHAGEN © RASMUS HJORTSHOJ ARCHELLO.....	73	
03.	A LOOK UP HIGH STREET IN SOLIHULL © ELLIOT BROWN	82
	JAGUAR THE ENGINE MANUFACTURING CENTRE © JAGUAR LAND ROVER.....	83
	ARDEN CROSS SITE WITH FUTURE HS2 ALIGNMENT ACROSS THE SITE © ARUP	84
	HS2 COMBINED TERMINAL - ARTISTIC IMPRESSION © GRIMSHAW	105
04.	THE HUB FRAMEWORK AREA © ARUP	110

GLOSSARY

APM	–	AUTOMATED PEOPLE MOVER
AQMAS	–	AIR QUALITY MANAGEMENT AREAS
ATC	–	AUTOMATIC TRAFFIC COUNT
BAL	–	BIRMINGHAM AIRPORT LIMITED
BAP	–	UK BIODIVERSITY ACTION PLAN
BCC	–	BIRMINGHAM CITY COUNCIL
C&W	–	CUSHMAN AND WAKEFIELD
CBD	–	CENTRAL BUSINESS DISTRICT
CEF	–	CONNECTING EUROPE FACILITY
CGT	–	CAPITAL GAINS TAX
CIL	–	COMMUNITY INFRASTRUCTURE LEVY
CPO	–	COMPULSORY PURCHASE ORDER
DOC	–	DESIGNER OUTLET CENTRE
DCLG	–	DEPARTMENT FOR COMMUNITIES AND LOCAL GOVERNMENT
DEFRA	–	DEPARTMENT FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS
DOC	–	DESIGNER OUTLET CENTRE
DPH	–	DWELLINGS PER HECTARE
EA	–	ENVIRONMENT AGENCY
FTE	–	FULL-TIME EQUIVALENT
GBSLEP	–	GREATER BIRMINGHAM AND SOLIHULL LOCAL ENTERPRISE PARTNERSHIP
GEA	–	GROSS EXTERNAL AREA
GIA	–	GROSS INTERNAL AREA
GVA	–	GROSS VALUE ADDED
HCA	–	HOMES AND COMMUNITIES AGENCY
HE	–	HIGHWAYS ENGLAND
HGIP	–	HUB GROWTH AND INFRASTRUCTURE PLAN
HMA	–	HOUSING MARKET AREA
HS2	–	HIGH SPEED TWO
ICT	–	INFORMATION COMMUNICATIONS TECHNOLOGY
IIA	–	INFRASTRUCTURE INVESTMENT APPRAISAL
JV	–	JOINT VENTURE
LBAP	–	LOCAL BIODIVERSITY ACTION PLAN
LEP	–	LOCAL ENTERPRISE PARTNERSHIP
LPR	–	LOCAL PLAN REVIEW
MPPA	–	MILLION PASSENGERS PER ANNUM
MSA	–	MOTORWAY SERVICE AREA
MUSCO	–	MULTI-UTILITIES SERVICE COMPANY
NCA	–	NATIONAL CHARACTER AREA
NEC	–	NATIONAL EXHIBITION CENTRE
NIA	–	NET INTERNAL AREA
NO2	–	NITROGEN DIOXIDE
NPPF	–	NATIONAL PLANNING POLICY FRAMEWORK
NPPG	–	NATIONAL PLANNING POLICY GUIDANCE

NR	-	NETWORK RAIL
OAN	-	OBJECTIVELY ASSESSED NEED
PBA	-	PETER BRETT ASSOCIATES
PDA	-	POTENTIAL DEVELOPMENT AREA
PROW	-	PUBLIC RIGHT OF WAY
PRS	-	PRIVATE RENTAL SECTOR
RAG	-	RED, AMBER AND GREEN
RIS	-	ROAD INVESTMENT STRATEGY
SDLT	-	STAMP DUTY LAND TAX
SEP	-	STRATEGIC ECONOMIC PLAN
SHELAA	-	STRATEGIC HOUSING AND ECONOMIC LAND AVAILABILITY ASSESSMENT
SLT	-	SEGREGATED LEFT TURNS
SMBC	-	SOLIHULL METROPOLITAN BOROUGH COUNCIL
SME	-	SMALL AND MEDIUM ENTERPRISES
SQM	-	SQUARE METRE
SSSI	-	SITE OF SPECIAL SCIENTIFIC INTEREST
TfWM	-	TRANSPORT FOR WEST MIDLANDS
UGC	-	URBAN GROWTH COMPANY
WCML	-	WEST COAST MAIN LINE
WFD	-	WATER FRAMEWORK DIRECTIVE
WMCA	-	WEST MIDLANDS COMBINED AUTHORITY



www.ugcsolihull.uk

