FUTURE OF CITIES

MY/CITY

BIRMINGHAM

CUSHMAN & WAKEFIELD

For most of recorded history, the city has served as the beating heart of civilisation, and the engine room of human advancement. Our economies, our infrastructure, our communities and our real estate are all built on the foundation of our cities; so much so that it is difficult to conceive otherwise. However, the past couple of years has laid bare undercurrents that threaten this foundation and offer new opportunities. These could have significant implications for society and for real estate in the future.

By mapping out the certainties of automation, economy, population, virtualisation, and environmental changes, we are able to analyse their impacts on our cities. This process has enabled us to develop four distinct scenarios that delve into the potential outcomes of urbanisation and de-urbanisation.

MyCity considers how these global megatrends will drive change at the local level; and creates a vision for what it means for our real estate and our communities, with deep consideration for the past of these cities.

MyCity unpacks Cushman & Wakefield's vision for the future of six UK cities: LONDON, BIRMINGHAM, BRISTOL, MANCHESTER, LEEDS and EDINBURGH, and analyses how they are positioned to manage the challenges and opportunities ahead.

Our local experts and research leads have teamed up to present a clear vision for each city in 2040, as well as outline series of call to actions for investors, developers, occupiers and local authorities in order to maximise the success of each city.

WELCOME TO BIRMINGHAM 2040

OUR FUTURE VISION OF BIRMINGHAM

01 HS2 TO SUSTAIN CONTINUED GROWTH OF THE KNOWLEDGE ECONOMY

Leading to growth of the life sciences and health sectors, with the new campus formed around Curzon Street being a major driver of innovation.

02 HS2 TO ACT AS A CATALYST FOR INVESTMENT AND DEVELOPMENT

Birmingham Smithfield will provide some of the best leisure, office and city living the country has seen delivered.

03 REDEPLOYMENT OF MAJOR OFFICE OCCUPIERS FROM LONDON

Birmingham's reduced cost base with operating expenses some 40% below London equivalents, alongside the vibrancy and sustainability of the city, make it an attractive draw.

04 THE CITY TO LEAD THE WAY IN A PILOT TO DE-PRIVATISE PUBLIC TRANSPORT

The number of cars in the city centre to be greatly reduced, leading to the repurposing of several car parks and roads – including the A38, serving as a park and cycleway.

05 NATURAL CAPITAL TO SIGNIFICANTLY ENHANCE WIDER CITY

Through delivery of the ambitious Park Birmingham plan. The city's plan to enhance its natural capital will include significant investment into the river and canal system and a network of linked green spaces, as well as a new park in Smithfield which complements the landscaped A38.

06 CYCLING TO BECOME THE FASTEST AND SAFEST FORM OF TRAVEL

Pursuing a similar strategy to that of Copenhagen, Birmingham seeks to be the busiest cycling city in the UK outside of London.

07 NEW CONCEPTS IN LEISURE AND HEALTH

Attracting younger demographics into the city centre, appealing to their pursuit of an active and health-conscious lifestyle that focuses on wellbeing.

08 SIGNIFICANT INVESTMENT AND INNOVATION AROUND SOLIHULL'S ARDEN CROSS

A European centre of excellence for hydrogen engine development, will lead to high value jobs in the automotive and engineering sectors.

09 REPLANNING OF LAST MILE LOGISTICS

There will be driverless delivery bots deliver on behalf of all of the major supermarkets from their co-located, semi-automated food picking and packing warehouses.

10 DIGITISATION EMBRACED ACROSS THE CITY

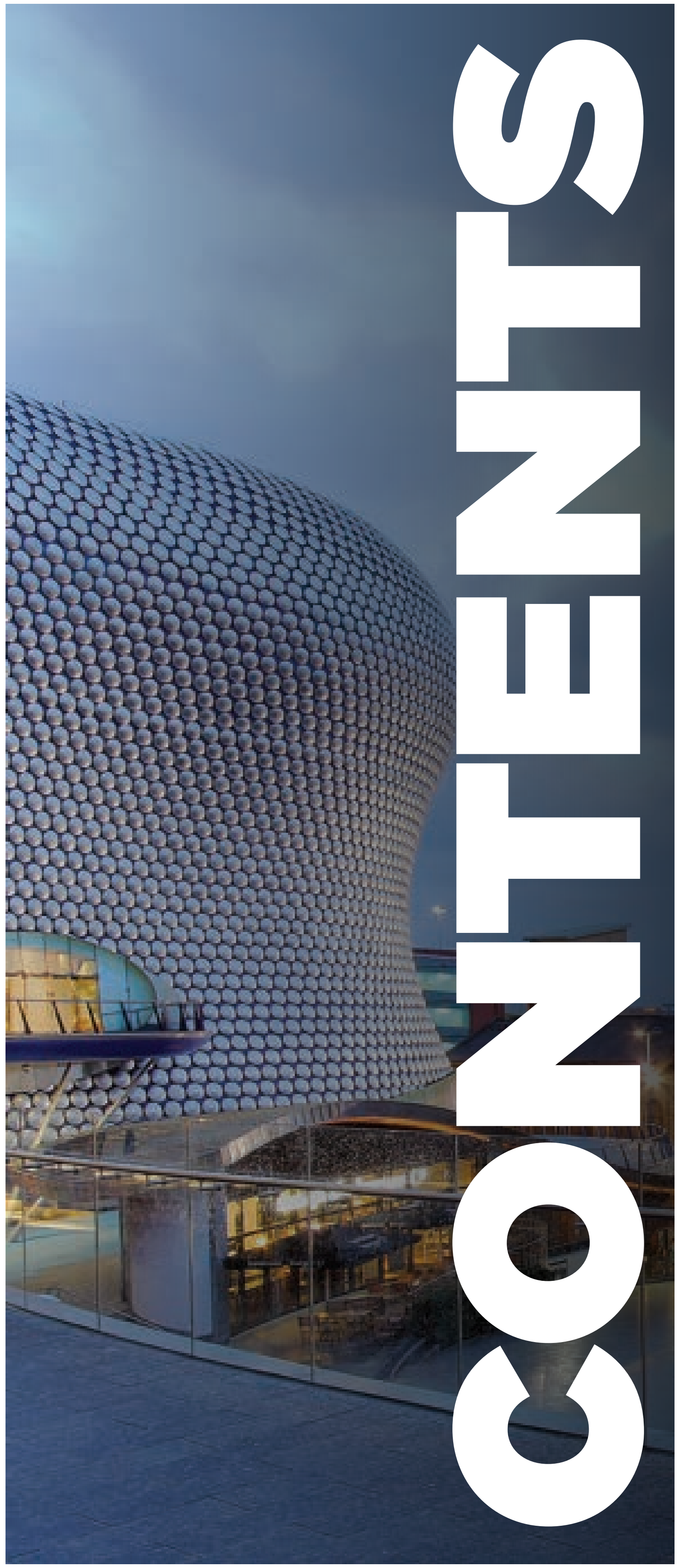
ICC being a flagship of this having been repurposed into a national tourist destination focused on digital play.

11 BRINDLEYPLACE: BIRMINGHAM'S FIRST SUSTAINABLE CO-LIVING NEIGHBOURHOOD

Many of the buildings will be repurposed and retrofitted, with a with large number of young key workers, PhD students, researchers and professionals forming a strong and vibrant city neighbourhood.

12 PRESSURE ON HOUSING LAND WILL CONTINUE TO PROVE PROBLEMATIC

The government is to step up to tackle the issue by working with a joint delivery entity that brings together the key public and private bodies to scale-up the supply of sustainable homes.



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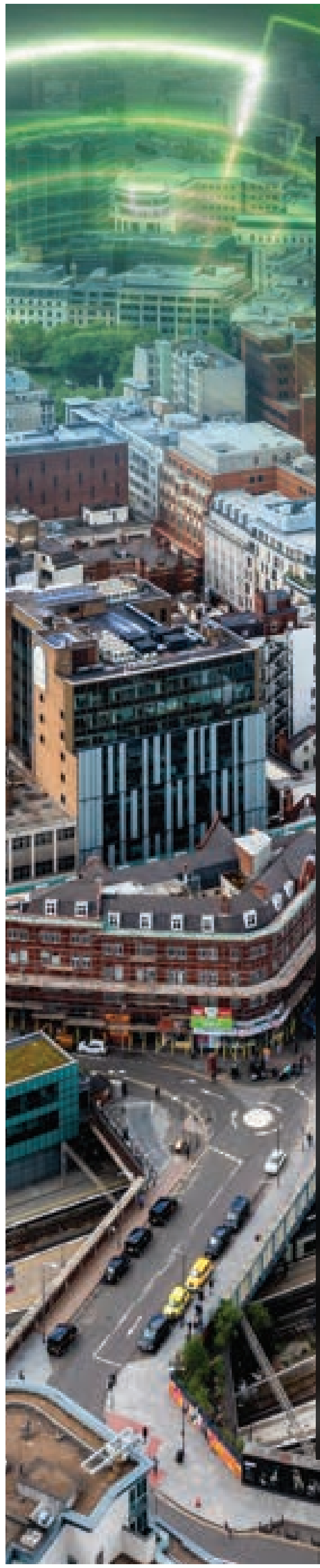
MYCITY: BIRMINGHAM



I CAME TO BIRMINGHAM POLYTECHNIC AT PERRY BARR IN 1985, HAVING GROWN UP IN THE VALE OF EVESHAM. TO SAY IT WAS A SHOCK MOVING INTO HANDSWORTH IS AN UNDERSTATEMENT, I COULDN'T WAIT TO GET OUT – OR SO I FIRST THOUGHT.

In the following four decades, I have moved four times and a total of six miles. My family and I remain firmly within the city boundary. My children are definitely Brummies.

What I have witnessed in this great city is a remarkable transformation supported strongly by our combined public and private sector investment, first-class education and medical sectors and world-renowned manufacturing complementing our automotive and jewellery sectors. We have a young and dynamic population, adding to a multi-cultural society enriching the city. Never did I anticipate we would be host to the Commonwealth Games and other international sport and leisure events of which I would be extremely proud.

The next 20 years will present additional challenges and opportunities, at a pace far quicker than we have seen before. The key drivers of technological advancement, ESG and demographic shifts are well known – but what will this mean for Birmingham?

TIME WILL BEAR WITNESS TO THE ACCURACY OF THE VISION, BUT HERE'S MY LOOK BACK FOR BIRMINGHAM IN 2040....

A NOTE FROM 2040

“

20 years ago, back in 2020, Birmingham set out its 2040 vision and worked tirelessly to make it happen, in close partnership with the private sector. Recognising the social and demographic shifts and leveraging its success in hosting major sporting and leisure activities, Birmingham is a sustainable city embracing change. Its young, dynamic and diverse workforce leads the way in life sciences, AI and advanced manufacturing.

Birmingham is recognised worldwide as a city of innovation and sustainable commitment to growth. Its extensive green credentials, linked to its parks, cycle routes and illustrious canals, along with the catalysing effect of the completed HS2 network, means the city attracts more inward investment and relocations than any other city in the UK. Its multi-cultural society has continued to work together to strengthen the city's sense of identity, contributing to the prosperous and thriving local economy.

A PIPE DREAM MAYBE, BUT LOOKING BACK OVER THE LAST 40 YEARS I SUSPECT I MAY HAVE SERIOUSLY UNDERESTIMATED OUR ABILITIES AND AMBITION.”

JON LEEDHAM

REGIONAL MANAGING PARTNER
MIDLANDS

02 HISTORY OF BIRMINGHAM

Birmingham was an established new planned town in the 12th century. Historic use of the city in the medieval period was centred around an important industrial and market centre. The only surviving buildings from this period are the Old Crown pub in Digbeth and parts of St Martin's church, although the medieval street pattern is still used through the city core and into Digbeth.

GROWTH OF THE CITY CENTRE IN THE 18TH AND 19TH CENTURIES RESULTED IN THE RELEASE OF LAND FROM LARGE ESTATES TO ENABLE INDUSTRIAL DEVELOPMENT, THIS ALLOWED FORMATION OF THE INFAMOUS BIRMINGHAM CANAL SYSTEM. THE JEWELLERY QUARTER, ST GEORGE AND ST CHAD ARE PARTICULARLY WELL-KNOWN AS BEING PART OF THIS PERIOD OF BIRMINGHAM'S DEVELOPMENT.

The intricate canal system is still a part of the surviving industrial character of the city, once featured as an integral part of the city's industrial distribution network. They now serve as a historic reminder of the city's past and act as a source of aesthetic beauty, surrounding and enhancing many commercial and residential developments. The canal network is accompanied by wharves, bridges, tunnels and basins. Additionally, and of greater consequence to modern transport, the railway network was established in the mid-19th century and is still a central part of the city's transport infrastructure.

World-famous confectioner, Cadbury, was founded in Birmingham in the 19th century, growing to become a substantial employer and responsible for forming the town of Bournville in 1879, providing a good quality of living and working environment for factory employees. Bournville remains a well sought-after place to live in the modern day.

Aston University and the University of Birmingham, founded in 1895 and 1900 respectively, as well as Birmingham City University, continue to shape the academic component of the city, fuelling innovation and globally recognised research.

The end of WWII and the subsequent rebuilding and expansion of the public sector saw 37,000 social homes constructed in Birmingham in just nine years, with streets of terraced housing and tower blocks. In part, these helped to house the considerable volume of immigrants who came to the city from the Commonwealth and beyond.

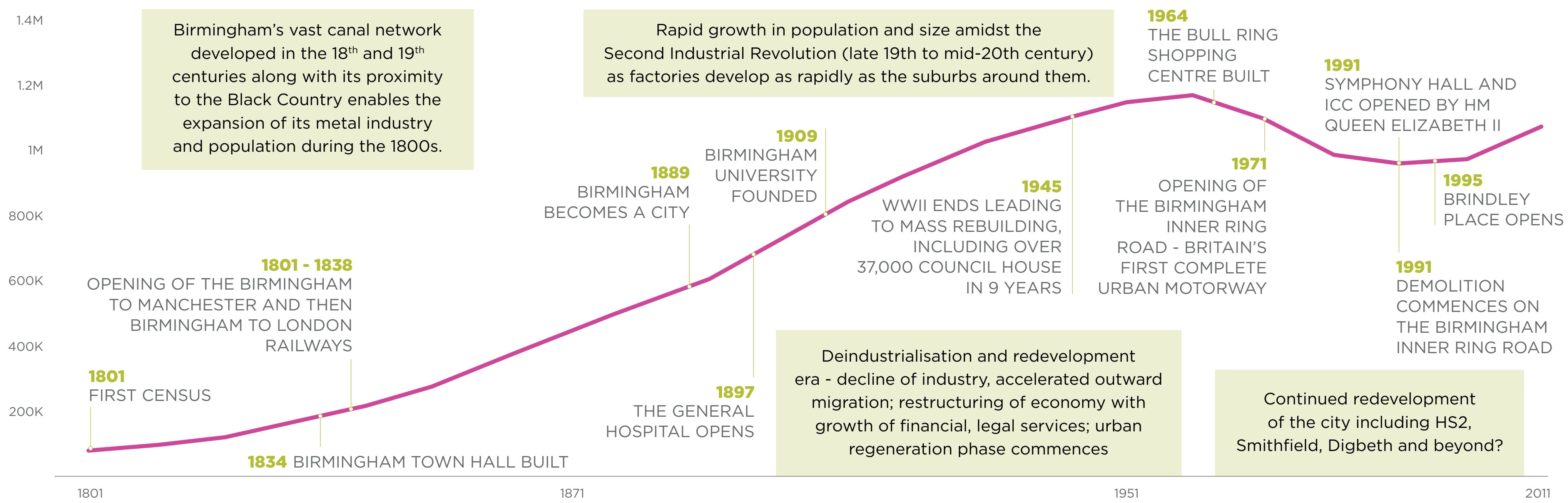
The first of two iterations of the Bull Ring Shopping Centre was completed in 1964 (to be redeveloped latterly in 2003 and renamed as just 'The Bullring') and was the first indoor shopping centre in the UK.

Herbert Manazoni was responsible for the construction of Birmingham's inner ring road, completed in 1971, which was designed for the easy import and export of automobiles, the primary manufacturing industry between 1950 and 1970. Almost immediately following the completion of the ring road, car manufacturing in the city went into decline. Consequently, the inner-city ring road became a considerable constraint on development, acting as a concrete barrier, limiting the city's expansion into a more service-based economy. Additionally, due to its Brutalist appearance including the Bull Ring Shopping Centre, the city became associated with grey concrete and busy roads, which damaged Birmingham's image. In 1991, just 20 years after its completion, works began to demolish the inner ring road.

The 1988 Highbury initiative resulted in a new city centre design strategy aimed at giving the streets and squares of Birmingham back to the people of Birmingham. Today, the only remaining part of the inner-city ring road is the St Chads and Queensway tunnels, which are now not in use.

20th century buildings in the city are often under-appreciated but are central to modern Birmingham, ranging from offices and department stores to wartime structures. Archaeological investigations on surviving structures and excavation of below ground remains from the past 300 years reveal much additional information on the past uses of the city centre. More modern assets, including Brindleyplace (opened in 1995), the Utilita Arena (1991), and the National Exhibition Centre (1980), have played key roles in shaping the city's cultural and business environments.

BIRMINGHAM POPULATION 1801 - 2011



SOURCE: GB HISTORICAL GIS / UNIVERSITY OF PORTSMOUTH, A VISION OF BRITAIN THROUGH TIME

03

RECENT DEVELOPMENTS SHAPING BIRMINGHAM

If the last 20 years are anything to go by, then over the next 20 years, we can expect to see some dramatic and transformational physical changes to Birmingham.

Following the great financial crisis in the early 2000s, there was a sustained recession period where funding for development and significant regeneration was extremely limited. However, in the period post 2010, the UK economy saw recovery and development was kickstarted again.

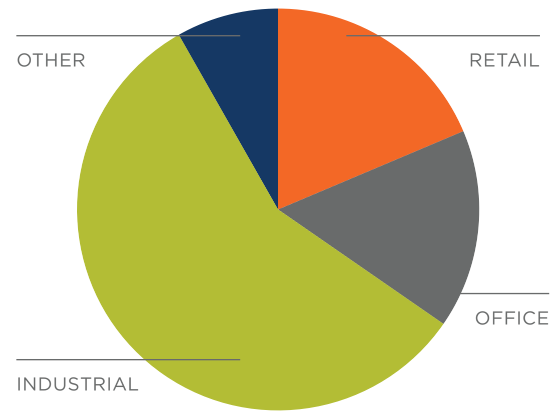
One of the major redevelopments that significantly changed the face of Birmingham during this period was the redevelopment of Central Birmingham Library and Paradise Forum. In 2013, the completion of the new 312,000 sq ft library and the renovation and integration of the Repertory Theatre, provided the public with a new destination fronting onto Centenary Square. The new development delivered by Birmingham City Council cost £186 million and enabled the former Central Library site to be cleared to enable the redevelopment of Paradise Circus.

Following the demolition of the Central Birmingham Library and Paradise Forum, construction began on the redevelopment of the area between Birmingham Town Hall and the new Birmingham Library, known as Paradise Circus. The Paradise Circus scheme is estimated to have cost £500 million, comprising of 1,740,000 sq ft of office space, 120,000 sq ft of retail & leisure space and a 250-bed 4-star hotel with three new public squares, creating a new and vibrant office-led mixed-use scheme. Phase 1 of the development saw the delivery of One and Two Chamberlain Square completed in 2020, with the second phase currently under construction. Later phases of the redevelopment will see new build-to-rent accommodation delivered alongside a new hotel and further office accommodation.

The redevelopment of Birmingham New Street also had a significant impact on the landscape of Birmingham City Centre. In 2015, following a five-year redevelopment period, the new station was formally opened, providing a retail-led destination for visitors arriving into Birmingham by rail. The new station, known as Grand Central, is five times the size of the original station, with an annual capacity of 55 million passengers and has boosted daily passenger capacity from 170,000 to 240,000.

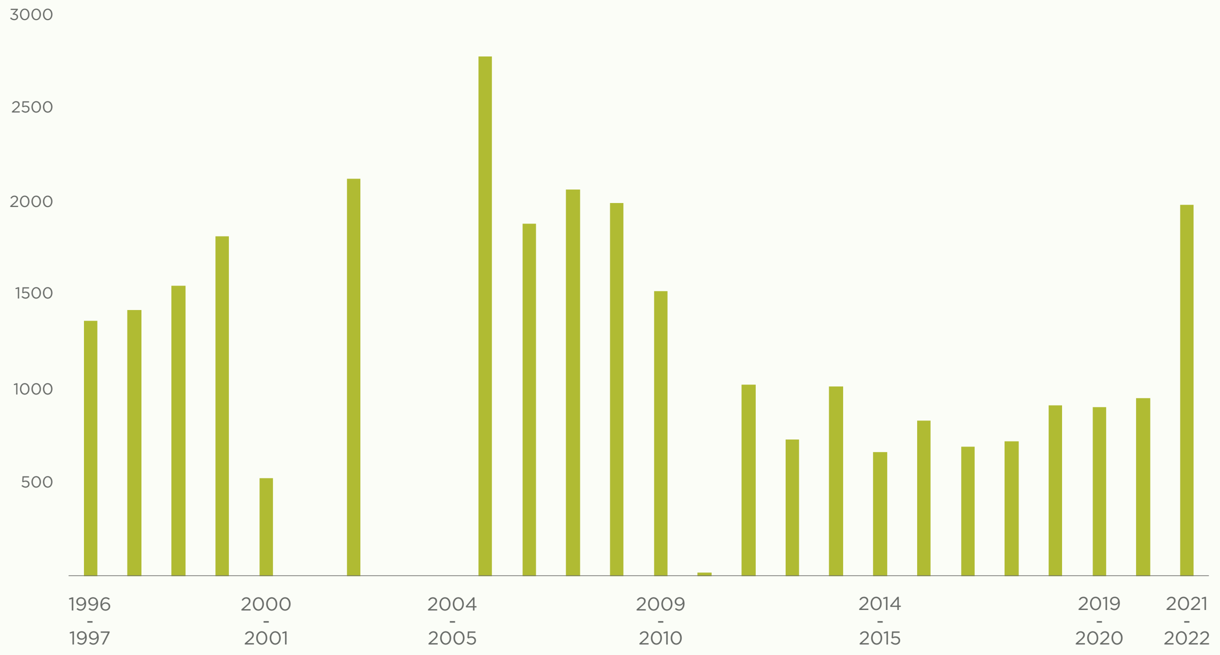
More recently, the development of 103 Colmore Row saw the delivery of a new 26-storey office block, delivering super prime Grade A office accommodation in the heart of Birmingham's Central Business District. The delivery of this commercial accommodation replaced the former NatWest Tower, delivering 230,084 sq ft to the market and has set the standard for forthcoming developments in the city.

BIRMINGHAM COMMERCIAL FLOORSPACE, 2022



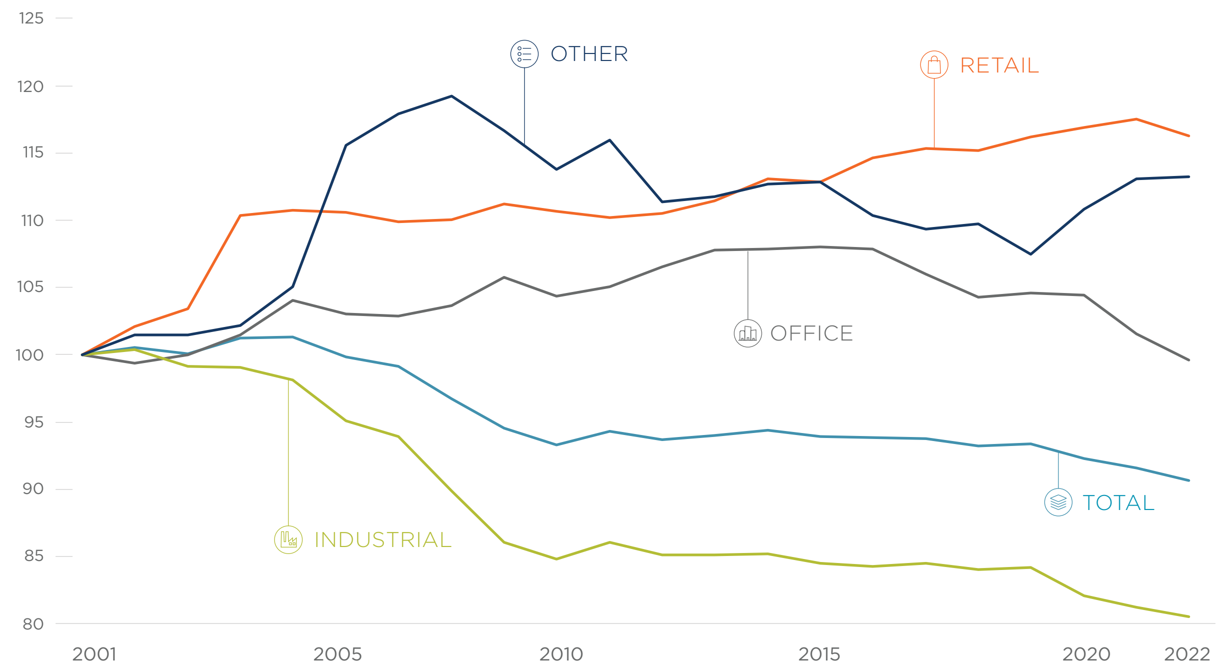
SOURCE: VOA

BIRMINGHAM HOUSING COMPLETIONS



SOURCE: ONS

BIRMINGHAM COMMERCIAL FLOORSPACE INDEX (2001 = 100)



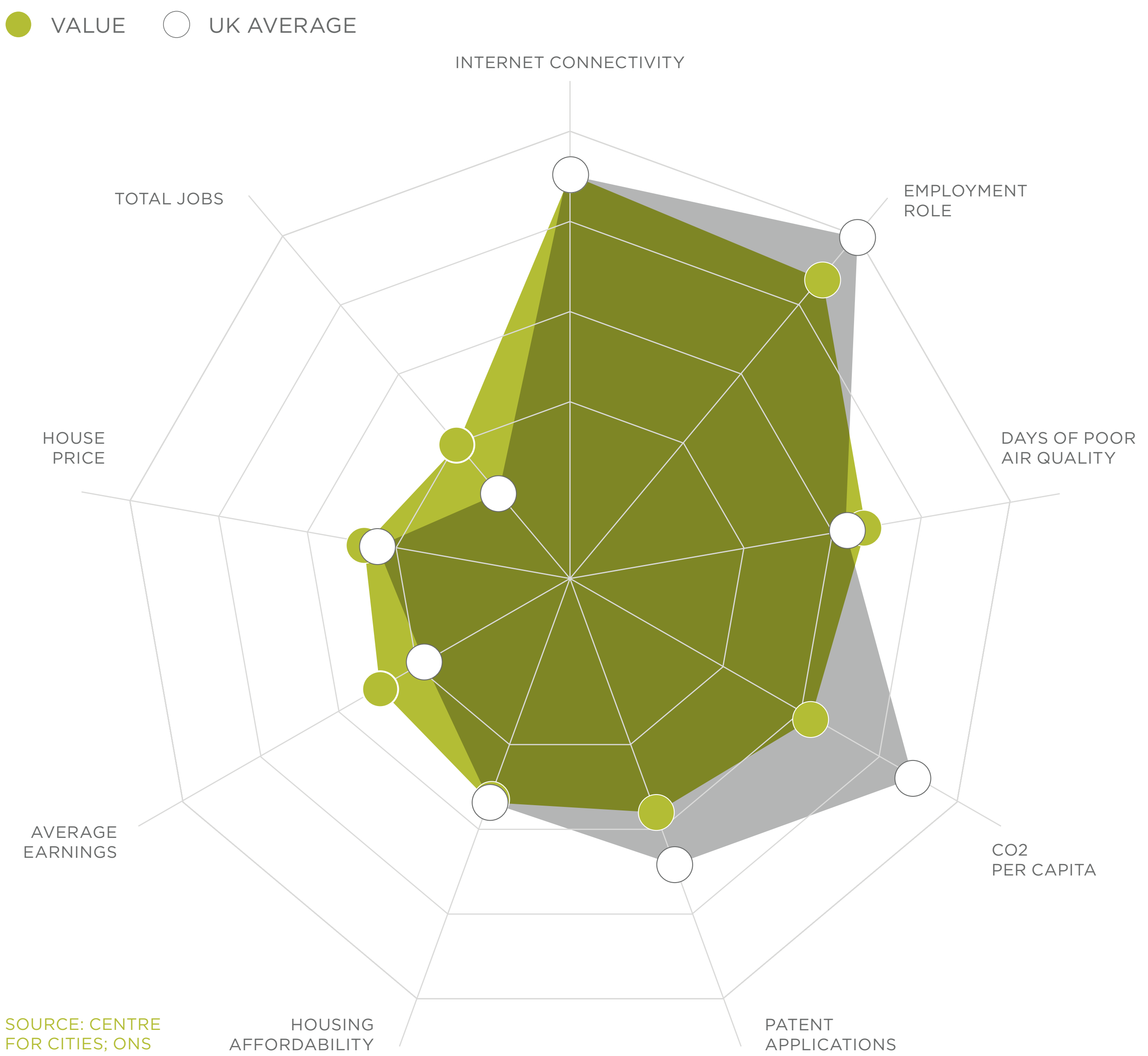
SOURCE: VOA

04 BIRMINGHAM TODAY

WHERE DOES BIRMINGHAM SIT IN THE CONTEXT OF THE UK

TO PLACE BIRMINGHAM IN A UK CONTEXT, WE HAVE BENCHMARKED ITS PERFORMANCE USING A NUMBER OF DATA SOURCES.

BIRMINGHAM VALUES AND UK AVERAGE BY KPI



SOURCE: CENTRE FOR CITIES; ONS

BIRMINGHAM'S WORKING AGE POPULATION HAS SEEN A **14% INCREASE FROM 2000, REACHING 2.0 MILLION IN 2020.**

Birmingham also boasts a young population, with 22% of the population aged below 16, versus 18% at the UK level, and 34% aged below 25, compared to 27% of the UK population. With the necessary supporting infrastructure in place, this youthful demographic could help contribute to strong growth in the city in years to come, supporting a vibrant economy and cultural scene in the city.

The city centre is a major economic hub for the West Midlands region and the wider UK, accommodating over 150,000 jobs and attracting more than £2 billion in shopping expenditure each year. Links to other local centres and regions, such as London, help to increase footfall and the appeal of the city centre.

The latest local authority level GDP data shows that Birmingham's economic output totalled £29.6 billion in 2021, making it the UK's largest city in fiscal terms outside of London. However, at £25,924, Birmingham's GDP per capita is only 1% above the UK median and the lowest of the major UK cities.

The young population of the city contributes to this lower level of productivity, along with the higher unemployment rate of 7.3%, considerably above the UK rate of 3.7% at the end of 2022. The low productivity in the city may present a barrier to growth in the future, but also poses an opportunity to deliver significant improvements and drive prosperity in the city.

The human health & social work sector is the largest employer in Birmingham, accounting for 17% of employment, followed by wholesale & retail trade at 14% and professional, scientific & technical occupations at 11%.

Over the next 20 years, the construction, administration & support services, real estate, professional and water & waste management sectors are expected to achieve the strongest growth as the city evolves. Conversely, manufacturing and wholesale & retail trade are expected to contact.

Mean house prices stood at £245,000 in 2021, giving a house price to earnings ratio of 9.1. This is slightly above the UK core city average of 9.0, suggesting that Birmingham is marginally less affordable compared to other major cities.

CO2 emissions in Birmingham per capita stood at 3.85 tonnes per year, the second lowest of the core UK cities studied. Additionally, the city's emissions have been decreasing over the past 13 years, with the introduction of the clean air zone in the city centre driving a 13% decrease in harmful NO2 gas in the first seven months. Despite this, in 2019, the A38 in Birmingham was ranked the most congested UK road outside of London (INRIX, 2020), demonstrating the requirement for significant infrastructure improvements.

05

DIRECTION OF THE CITY TO 2040

IN FRAMING OUR VISION FOR BIRMINGHAM IN 2040, WE HAVE CONSIDERED THE EXISTING STRATEGIES AND INVESTMENT COMMITMENTS THAT ARE ALREADY 'BAKED IN' TO THE CITY'S FUTURE.

INFRASTRUCTURE PROPOSALS

The following infrastructure schemes are proposed or under construction:

- HS2 railway is currently being built, with the Birmingham Curzon Street terminus being the centre of a wider redevelopment project in the area
- Extension of the tram network into Eastside via Curzon Street HS2 station, through to High Street Deritend, and then on to Solihull in forthcoming phases
- Extension of the tram network to the west, with a new line reaching out through Dudley and into Brierley Hill, and an continuation of the track further into the centre of Wolverhampton
- Multiple proposals have been made to close and remodel the city centre, parts of the A38 road and two road tunnels, converting them into green spaces and active transport routes

DEVELOPMENT PROPOSALS

The following major development schemes will shape the city and drive property market activity over the next 20 years:

WESTSIDE

The redevelopment of Paradise Circus, Bakerville Wharf and Arena Central provides significant new mixed-use office led floorspace. Centenary Square, to be expanded across Broad Street, the new Library of Birmingham and the enhanced setting of the Town Hall and Council House will provide key focal points for the area.

NEW STREET STATION

This redevelopment has transformed the arrival experience and has created new links within the city centre as well as contributing considerably to the retail offer. The Drum redevelopment will see the existing building expanded to incorporate high-grade office space which will capitalise on the exceptional transport links of the site, along with 40,000 sq ft of hospitality space on the ground floor.

SNOW HILL DISTRICT

The eastern expansion of the central office core incorporating key developments around Snow Hill Station will generate major opportunities for mixed-use office-led floorspace supporting 10,000 jobs, along with around 4,000 homes. Enhanced pedestrian linkages across Great Charles Street will improve the transition from the City Core into the Jewellery Quarter.

EASTSIDE

The growth of the City Core eastwards will see opportunities for mixed use development, including office, residential, learning and leisure space. The Eastside city park will deliver a linear route through the area joining a series of new squares and development opportunities, while Curzon Street will catalyse investment.

SMITHFIELD

The £1.9 billion Smithfield scheme will be key to the wider, long-term transformation of Birmingham and forming a key piece of the Southern Gateway. Located in the heart of the city, it will provide a new home for the city's historic Bull Ring markets, outstanding new leisure and cultural spaces including a festival square and landscaped park, integrated public transport, and space for 3,000 new homes alongside community facilities.

ARENA CENTRAL

The Arena Central masterplan has been created to provide a truly mixed-use location in the centre of Birmingham. Planning consent is in place for the delivery of over 1 million sq ft of high-quality office space, a hotel and 323 residential units in a vibrant, class-leading development with a unique and innovative public realm. Arena Central capitalises on the city centre Enterprise Zone and forms a significant part of the city's vision for regeneration, as laid out in the Big City Plan.

AXIS

The Axis is located in the heart of Birmingham city centre, adjacent to the Mailbox and Arena Central. LCR initially secured planning consent for the development of an office-led Fletcher Priest Architects-designed scheme comprising five buildings combining to 1 million sq ft of new office accommodation. However, the site has been purchased by Vita Group, who are expected to propose a new residential-led masterplan.

PARADISE DEVELOPMENT

The £700 million Paradise development is located in the heart of Birmingham with excellent transport links via the tram, railway and bus routes. The development consists of 10 high quality buildings comprising of 1.7 million sq ft of office space, 120,000 sq ft of retail and leisure space and 370 spacious new build homes along with three new public squares.

REGULATORY CHANGES

- Birmingham City Council's target for the city to be carbon neutral by the year 2030 (or as soon as possible thereafter as a just transition allows), focusing on increasing public transport use, increasing active travel and improving energy efficiency
- Future Homes Standard requiring additional standards of sustainable construction of homes by 2025
- Birmingham Local Plan Five Year Land Supply 2022-27 lays out that 7,136 homes should be delivered each year from 2022 to 2027
- Minimum Energy Efficiency Standards (MEES) will require all commercial buildings to have an EPC rating of at least "B" by 2030, while private rented domestic properties will be required to achieved an EPC "C" in 2025 for new tenancies

There remains some uncertainty regarding the delivery of these proposals with some subject to Government funding commitments and others dependent on market conditions.

SIGNIFICANT MILESTONES ON THE PATH TO 2040

2024
CONSTRUCTION OF BIRMINGHAM SMITHFIELD STARTS

2026
NEW BIRMINGHAM LOCAL PLAN ADOPTED

2028
BIRMINGHAM WHEELS REDEVELOPMENT COMPLETED, DELIVERING 3,000 NEW JOBS

2030
BIRMINGHAM TO BE A CARBON NEUTRAL CITY BY 2030

2030
PHASE ONE OF HS2, BETWEEN OLD OAK COMMON AND BIRMINGHAM TO OPEN

2036
NEC PHASE 1 COMPLETED, DELIVERING 2250 NEW HOMES

2040

2024
PHASE 2 OF THE SPRINT BUS CORRIDOR IMPROVING PUBLIC TRANSPORT CONNECTIONS TO WALSALL AND SOLIHULL

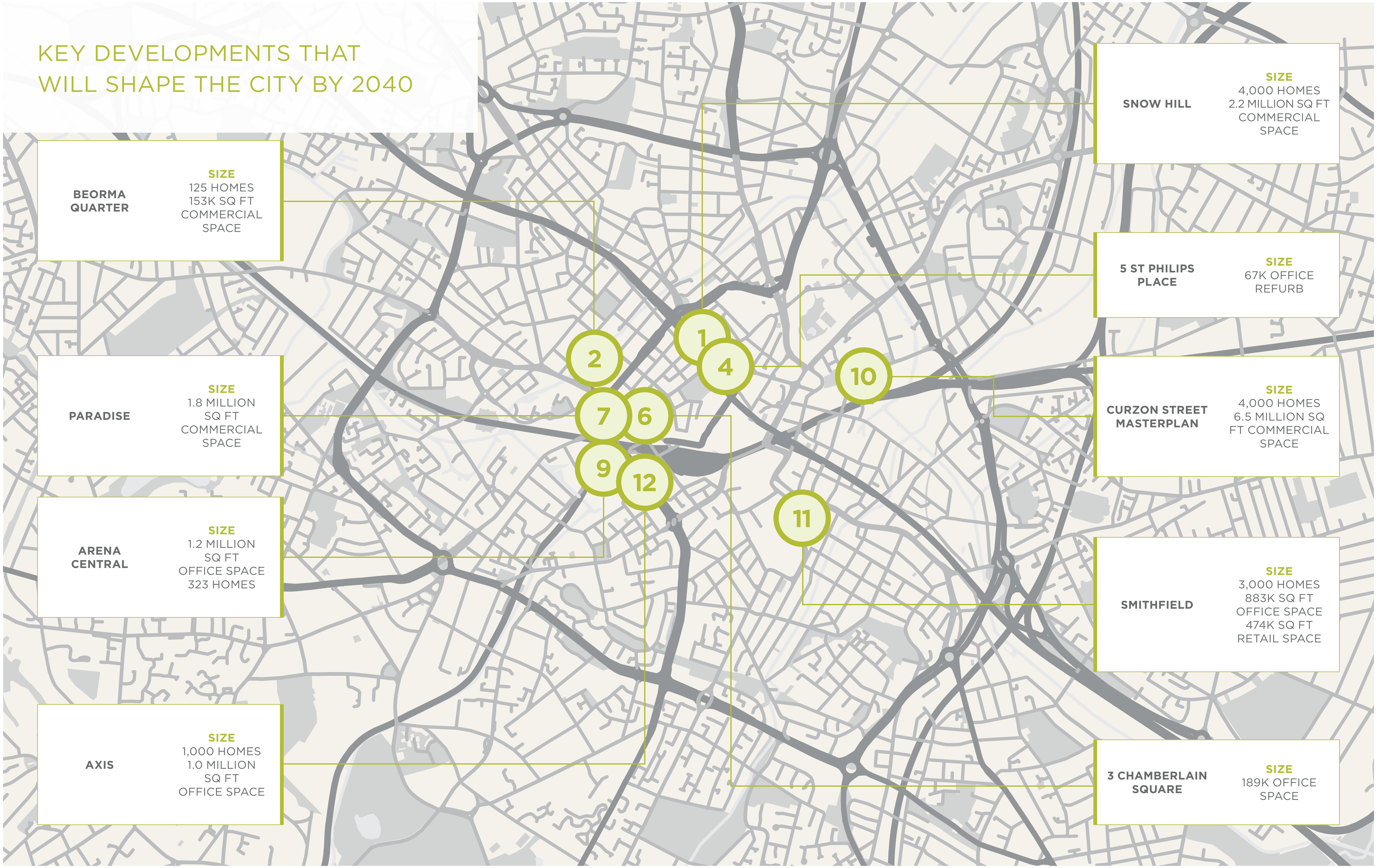
2026
NEC URBAN VILLAGE CONSTRUCTION START

2030
ALL NON-DOMESTIC BUILDINGS MUST HAVE EPC RATING OF 'B' OR HIGHER DUE TO REGULATIONS

2035
HS2 LINK TO EUSTON FROM OLD OAK COMMON DUE TO OPEN BETWEEN 2031 AND 2035

2042
FORECAST POPULATION GROWTH OF 134,000

KEY DEVELOPMENTS THAT WILL SHAPE THE CITY BY 2040



06

MEGA TRENDS SHAPING THE FUTURE OF CITIES

OUR FUTURE OF CITIES INSIGHT HAS IDENTIFIED **THE FOLLOWING MEGA TRENDS THAT WILL COMBINE TO RESHAPE CITIES IN 2040:**

ECONOMY

- Sluggish growth won't last forever, but its impact on development will carry a legacy
- A pensions crisis created by post-GFC sustained low interest rates will have an enduring impact on a growing elderly population
- Lagging economic growth will mean that younger generations are comparatively less well-off than their parents
- Technology, particularly the growth of AI will continue to reshape our economy.
- Role automation will be a feature of the next 20 years and will change workforce composition and create more attractive conditions for re-shoring
- New forms of real estate will be needed to respond to new economic activities and other forms to become obsolete

POPULATION

- Natural population growth will slow, then potentially reverse during the course of the period to 2040. The UK remains attractive for international migrant workers, which will be the primary driver of population growth and continue to have a bearing on demographics
- Gradual ageing of population and an increase in the elderly
- Economic obsolescence principal will overtake population growth as the driver of development
- Growth will impact density more than footprint of UK cities

URBANISATION

- With the UK already highly urbanised, there is unlikely to be further room for significant additional urbanisation, whereas new work models and housing costs could in fact lead to deurbanisation. This remains an uncertainty – with a number of other possible scenarios
- Pull factors of city centres – towards culture and employment - may weaken as distance becomes less relevant due to technological improvements
- Affordability, quality of life and youth unemployment are likely to continue to be issues, with, at present, no clear direction of travel to alleviate these problems
- The push-pull equation for cities varies by demographic group, which will skew cities towards younger people

MOBILITY

- Transportation is perhaps the biggest determinant of the shape of our cities today
- There is a sharp differential on public transport adoption and reliance across UK cities
- Conventional infrastructure can take easily 20 years to deliver; we are well sighted on the pipeline to 2040, but not on technological innovations which may change the game
- Increased capacity on existing lines will increase densification and public transport use. New last mile modes and decentralised work have the potential to disperse congestion away from city centres and towards suburban areas
- Changes in ways of working and an increased environment pressure on some transport modes mean we are all likely to travel less by 2040

AUTOMATION

- Waves of automation have triggered radical changes to society over the course of history
- A new wave of automation, now supported by AI - will drive significant change to the nature and focus of existing work
- Automation will impact primarily process driven roles, and this includes many office workers
- Humans will increasingly work alongside machines in the coming decades
- A significant minority of UK residents are likely to become left behind by this change; solutions are needed
- New buildings are needed to respond to new forms of work that will emerge

VIRTUALISATION

- Digitisation has not run its course, and will continue to influence how we work, shop and live
- Virtual environments will be improved by processor power, wearables - and ultimately implanted chips
- People are increasingly seeking out virtual worlds for leisure and the experience is improving
- Increased virtualisation may lead to growth in virtual city equivalents, including metaverse environment, for commercial and social use cases
- The city of 2040 will be augmented with visual data, enhancing experience

EMERGING TECHNOLOGIES

- There has been rapid technological advancements driven by significant reduction in the cost of core technologies
- Internet / communication-led technologies and infrastructure will enable automation and digitisation
- AI will provide personalisation, experience and a refocussing of work
- 3D printing and new construction materials will deliver significant improvements to speed and cost of construction

PUBLIC HEALTH

- Significant public health improvements in the last number of decades will continue
- Zoonotic threats will increase the role of healthcare and create social and physical change
- Greater focus on health and wellbeing will play through to leisure pursuits and more active lifestyles
- There will be a huge focus on improving air quality and environmental standards ranging from car use to increased biodiversity and biophilia
- Technology will play a central role in the early prediction and treatment of disease, further extending average lifespans

THE ENVIRONMENT AND ENERGY

- The mitigation and creation of resilience towards climate change are some of the most significant factors for cities in 2023 - this will continue to be the case to 2040
- The challenge of moving away from gas will disproportionately impact tall existing buildings and give rise to an increase in local heat networks, and on-site energy generation
- Increased use of heat pumps, solar – and potential for growing food - will mean competition for valuable roof space on tall buildings
- Energy storage will become a necessity for large scale developments
- Changing environmental standards will be a significant cost to landlords, developers and occupiers – including residents – of all real estate
- Air quality in cities should improve as emissions are brought under control, but this is not taken for granted

SOCIAL CHANGE

- Delays to life's milestones (e.g. having children, purchasing first home) - means people have an extra decade of early adulthood
- Renting for at least a decade will be the social norm, with a difference between London and elsewhere in the UK
- Cities need to provide infrastructure for new leisure trends to remain culturally relevant
- Cities must maintain community diversity and cohesion to thrive

SOCIAL CHANGE AND INEQUALITY

- The UK still suffers from an acute North-South divide, and some minority groups experience generational disadvantage
- Social pressure, enabled by social media, is likely to be a continuing force for change and greater equality
- Public sector focus will drive cities to become more equitable in the future
- The pace of change will be hampered by systemic barriers
- The real estate industry of the future must modernise to keep pace with society

GLOBALISATION AND POLITICS

- China and India will continue to see sustained economic growth
- As a result of Brexit, the UK needs to secure many new trade deals and memberships to remain a valued trade partner and significant on a global stage
- Political fragmentation will resume, and new or splinter political parties may form
- The political divide between cities and rural populations will widen
- High levels of government debt and damaged public finances will constrain future governments

12 FORCES

SHAPING CITIES OF THE FUTURE

The following 12 forces will to different degrees impact on the city of 2040. This table assesses the trend, and relevant factors, and then makes an assessment of the potential impact to status quo and the certainty with which we can judge the outcome. We bake in 'high impact certainties' of environment, automation and social change into our hypothesis, and then use the 'critical uncertainties' of urbanisation and virtualisation to explore scenarios.

FORCE	DIRECTION	IMPACT			CERTAIN		
ECONOMY	MULTIPLE CYCLES / LOW RATES / SKEW TO THE OLD / STRUCTURAL SHIFT	L	**M**	H	L	M	**H**
POPULATION	GROWTH SLOWING OR NEGATIVE / AGEING / INORGANIC	L	**M**	H	L	**M**	H
URBANISATION	SLOWING OR NEGATIVE FOR LARGE CITIES, INCREASINGLY YOUNG	L	M	**H**	**L**	M	H
MOBILITY	PT GAIN SHARE / LONG LEAD FOR INFRA / FINE-GRAIN INNOV / MAAS	L	**M**	H	L	**M**	H
AUTOMATION	TECHNOLOGICAL UNEMPLOYMENT / NEW ROLES / PRODUCTIVITY	L	M	**H**	L	M	**H**
VIRTUALISATION	E-COMM / WFH / LEISURE EXPERIENCES / AUGMENTED	L	M	**H**	**L**	M	H
NEW TECH	5G / IoT / CLOUD COMPUTING / BIOMETRIC	L	**M**	H	**L**	M	H
HEALTH	COVID / NEXT COVID? / ANTIBIOTICS / LATER LIFE CARE / OBESITY	L	**M**	H	L	**M**	H
ENVIRONMENT	WARMING / FLOODING / SOCIAL RESPONSE / NEW ENERGY	L	M	**H**	L	M	**H**
SOCIAL	YOUNGER FOR LONGER / RENTING VS BUYING / DIVERSITY	L	M	**H**	L	M	**H**
SOCIAL JUSTICE	ACTIVISM / CORPORATE ETHICS / MINORITY REPRESENTATION / EQUITY	L	**M**	H	L	**M**	**H**
POLITICS	EASTERN SHIFT / BREXIT / POPULAR POLARISATION / PROTECTIONISM	L	**M**	H	L	**M**	H

07

FUTURE OF CITIES: OUR VISION

LOOKING THROUGH THE CHALLENGES OF OUR PRESENT TIMES, WE HOLD AN EXCITING VISION FOR OUR CITIES OF 2040; ONE WHICH WILL BE PART OF A PATH OF SIGNIFICANT CHANGE DRIVEN BY NEW TECHNOLOGIES, AND ONE WHICH WILL DELIVER A BETTER QUALITY OF LIFE TO URBANITES.

The period to 2040 spans economic cycles. The recent period of volatility will have receded to history, but its legacy will remain in persisting societal change and attitudes to work and where we spend our time. A period of slow growth and austerity will also leave its mark on the physical fabric of our cities. The slow-moving nature of real estate means that changes take time to set in, while its longevity often causes it to outlast the people and circumstances under which it was built, remaining as a manifestation of the past that continues to shape the present - and real estate in this current cycle is no exception.

While weaker near-term growth and a shift towards decarbonisation may impact the near-term development pipeline, it may also help to stoke a critical reframing toward retrofitting and refurbishment rather than redevelopment. This will not only deliver a more equitable use of embodied carbon in the built environment, but will also pave the way for a more adaptable and resilient city.

Meanwhile, a softening of real income and automation will shift wealth towards the retired and the asset rich, exacerbating existing inequalities. This will sit against the prevailing mood for change, and likely lead to increased public interventions in our cities and in our society.

Significant waves of technological adoption, particularly in the areas of automation, virtualisation and artificial intelligence will significantly change the focus and nature of working, shopping and playing.

The ability to perform many of our day-to-day activities using these technologies will put pressure on the historic role, form and function of real estate. At its most extreme, this could start to change the nature of reality, blurring the lines between virtual and physical environments and triggering the need for new forms of real estate. Our cities of the future will be run more efficiently through deeper integration of urban design and internet connected devices.

VIRTUALISATION

URBANISATION

URBANISATION

VIRTUALISATION

THE SHAPE OF OUR CITIES IS SIGNIFICANTLY DETERMINED BY HOW WE TRAVEL. IN GENERAL TERMS, WE FORESEE EACH OF US TRAVELLING LESS IN 2040.

Sustainability and cost of time pressures will be matched by solutions in new work models, virtualisation, and a focus on the ability to connect with local communities. The days of long commutes, frequent international travel and fossil-fuel reliant car usage will have peaked. This could trigger significant changes to our cities.

Primarily the shift will be in where we choose to live. The option to work at distance from the marketplace for the first time becomes a reality, and some (those with the privilege of such choice) will make that shift. This will move higher value demand to areas of higher amenity and lower social pressure. Over time it has the potential to reweight the economic balance of our cities, rather than the high pressure currently felt by our major cities. Population growth will be delivered through increased density, repurposing of existing real estate, and the growth of smaller towns, rather than continued urban sprawl.

Our city centres will play a more focused role in housing activities that require or benefit from close personal interaction. We will no longer go to a city centre office to sit at a desk in silence, or to a shopping centre to collect a pre-purchased item. These venues will become stimulating, exciting places, with a strong focus on cultural pursuits, business engagement and personal fulfilment. Those assets that cannot deliver against these new criteria will become irrelevant and subject to reinvention.

The size of the typical city core may reduce as activities are reallocated, creating a tighter more clearly defined central zone. Meanwhile, amenity and neighbourhood uses will be redistributed to match where people are spending their time.


OUR 2040 VISION
Mass adoption of digital technology
Better quality of life for all
Carbon negative becomes the norm
Less distance travelled
Automation shift the nature of 'work'
Flexible reuse of real estate
Rebalancing of city hierarchy
Wealth continues to shift to the rich
Focus on managing obsolescence
Increased public interventions
New construction materials
New hybrid real estate concepts
Heightened social tensions
Augmented reality becomes the norm

UNPACKING THE CITY OF 2040

FLOWING FROM OUR VISION, WE SET OUT A VIEW BELOW ON HOW ELEMENTS AND CONCEPT CONCERNING OUR CITIES MIGHT CHANGE OVER THE NEXT 20 YEARS.

	THE CBD	OPEN SPACE	GROUND FLOOR	SUBURBS	COMMUNITY	TRANSPORT	GOVERNMENT
VISION	More focused on interactions. Blurring of retail, leisure and work.	Quality over quantity, Greening, Commercialised, Reuse of roads / rooftops, 24 hours.	Flexible use, unique personalised experience, Interface of virtual and physical.	Rejuvenation due to WFH, Co-working activities, increased investment, 15 min villages.	Digital communities rise in importance. Daytime communities due to WFH. Local shops.	Fewer long journeys. Repurpose redundant roads. Walkable green citites.	Fewer-larger authorities. New forms of service financing. Increased digital participation.

	CITY BRAND	OWNERSHIP	HOUSING	CULTURE	SMART CITIES	CITY AT NIGHT
VISION	Increased competition at city level. International brands. Tie-ups with local businesses.	More renters. More single-person households. Polarity with exurbs.	Modular / prefab. Increase in non-demised space and amenity. Demand for home office space.	Increase in virtual and augmented experiences. CBD doubles down on culture.	Focus on infrastructure. Sustainability, wellness, efficiency and public service delivery.	24/7 cities. More mid-week stayovers. Professional night shifts. Re-use space day-night.

NAVIGATING SOCIAL JUSTICE, SUSTAINABILITY, AND URBAN TRANSFORMATION IN THE CITY OF 2040

The current drumbeat for social justice in all walks of life will become more persistent, fuelled by social media. Ethics and equity will become defining business and investment strategies. At the core of this will be sustainable practices. This in turn will elicit paradigm shifts in how we design our real estate. The role of Government in the provision of social housing will increase and building codes and commercial practices will tighten around environment sustainability. Carbon neutral or negative will be the norm, and lifecycle energy costs and emissions will be substantially mitigated through the use of batteries, local grids and the ubiquitous use of renewables. Building will be designed with wellbeing in mind. Reliance on steel will soften, in favour of demountable modular timber and biophilic design will become as common as desks in fit out.

As the tempo of change increases, the big challenge for our cities of 2040 will be the disconnect between that which is demanded and that which exists. As industrial change drives new needs, it will not be matched by the rate at which the real estate industry can deliver it. On this basis we anticipate a heightened level of prolonged obsolescence by 2040. As seen in deindustrialised areas of our cities in years gone by, the legacy of disused factories can stymie city quarters until new uses can be found. Strong government support for change including active participation in change programmes will be needed.

The city of 2040 will continue to be on a journey of change that is more people-centric than the cities of today. It will give back wasted time and create increased flexibility in how we wish to lead our lives; it will create exciting, stimulating environments in which to circulate and connect, and it will have social and environmental sustainability at its core.

08

FUTURE OF BIRMINGHAM: OUR VISION

USING THE FUTURE OF CITIES FRAMEWORK AND OUR ON-THE-GROUND KNOWLEDGE OF BIRMINGHAM, **WE SEE THE FOLLOWING CHANGES AND DEVELOPMENTS TAKING PLACE IN THE CITY BY 2040.**

01

HS2 will help to sustain the continued growth of the knowledge economy and will cause the CBD to gravitate toward Curzon Street station. The growth of the life sciences and health sectors will be a key feature of this, with a new campus forming around Curzon Street being a major driver of innovation for the UK and the wider industry. The Women's and Children's NHS Foundation Trust will have a new city campus with the University Teaching hospital alongside, and a satellite campus for the Francis Crick Institute. These institutions will continue to drive Birmingham toward becoming a world leader in the research of childhood cancer and mental health in young adults – two of the government's key pillars of its life sciences vision. Ensuring the sector has the room it needs to grow, the redevelopment of Snow Hill Station will deliver the first vertical labs built outside of London, bringing a total of 750,000 sq ft of office and lab space to the city that will support a host of new diverse employment opportunities.

02

HS2 will act as a catalyst for investment and development across Birmingham, driving some major regeneration schemes within the city. Birmingham Smithfield will be in its final phase, providing some of the best leisure, office and city living the country has seen delivered. It will include a school and will lead the way in attracting families back into the city centre and acting as a regional exemplar for the 15-minute urban neighbourhood. The success of these schemes, HS2 and the legacy of the 2022 Commonwealth Games will lead to Birmingham outperforming the government's levelling up agenda.

03

With a continued trend in agile working and the continuing drive to reduce costs, significant redeployment of major office occupiers from London will occur. Birmingham's reduced cost base with operating expenses some 40% below London equivalents, alongside the vibrancy and sustainability of the city, make it an attractive draw, particularly from more secondary London locations. Shorter commute times for employees, high quality office space and the strong amenity offer around Birmingham all contribute to improved employee retention and the appeal of the city, which will help to drive growth in demand. Consequentially, rental growth is expected to be significant and sustained in key centres within the city, enabling more sustainable, high-quality buildings to be delivered.

04

The city will lead the way for the UK in a pilot to de-privatise public transport following other European countries, driving considerably reduced costs for consumers and resulting in a model shift. The number of cars in the city centre will be greatly reduced, leading to the repurposing of several car parks and roads – including the A38 which will serve as a park and cycleway, providing a green vein through the heart of the city.

05

Natural capital will be considerably enhanced across the wider city too, delivering on the ambitious Park Birmingham plan. The city's plan to enhance its natural capital includes significant investment into the river and canal system and a network of linked green spaces, as well as a new park in Smithfield which will complement the landscaped A38. Project Blue will also be implemented across the city – the most ambitious blue and green infrastructure project in Europe – opening up the canals and providing safe, healthy canalside and green spaces for future generations. As part of this scheme, a number of substandard canalside buildings will be replaced with new leisure facilities with the help of private investment.

06

Birmingham's aim will be to make cycling the fastest and safest alternative form of travel. Pursuing a similar strategy to that of Copenhagen, the city will be the busiest cycling city in the UK outside of London. A funding initiative for massively subsidised e-bikes if households' pledge to have only one car will help to lead families toward utilising e-cargo bikes to complete the school run, which in turn will have a significant knock-on effect in road safety and congestion at peak times. Most bulky weekly food shopping will take place on the internet with top-up shopping mainly undertaken with the use of e-cargo bikes – benefitting from free and secure charge ports that will be installed at supermarkets. Combined with a cheap and fast public transport system, the active transport boom will cause car ownership to decrease for the first time in the city, along with reductions in crime and antisocial behaviour to the lowest of the core cities. The city's strategy on modal shift will enable the closure of the tunnels to become a viable option, providing a green link to many of the neighbourhoods it has previously served.

07

New concepts in leisure and health are already attracting younger demographics into the city centre, appealing to their pursuit of an active and health-conscious lifestyle that focuses on wellbeing.

Providing wellbeing-orientated alternatives to traditional leisure pursuits, as well as the significant investments into cycling and walking infrastructure across the city before, during and after the successful 2022 Commonwealth Games, will also significantly increase Birmingham's graduate retention rate, helping to fuel the growth in the knowledge economy.

08

Significant investment and innovation around Solihull's Arden Cross – a European centre of excellence for hydrogen engine development – will lead to high value jobs in the automotive and engineering sectors. The innovation district here will be a major proponent in developing the hydrogen rail network in the UK, as well as producing the next generation of zero carbon autonomous road vehicles. Spin offs from this and other industries will put Arden Cross at the epicentre of the development of clean tech – also benefitting from its position just 38 minutes into Euston's Knowledge Hub.

09

Last mile logistics has seen a radical replanning to keep up with the rate of change in the market. Driverless delivery bots deliver on behalf of all of the major supermarkets from their co-located, semi-automated food picking and packing warehouses. Many of these are situated in Washwood Heath which houses a hydrogen rail facility that provides national and international clean transportation: Branded as Amazon's first "Prime Rail Hub" it's powered by a collaboration with Tesla Hydro Rail that has been developed and manufactured at Solihull's Arden Cross.

10

Digitisation will be embraced across the city with the ICC being a flagship of this, being repurposed into a national tourist destination focused on digital play. With sponsorship from Microsoft or another major industry player, the ICC will evolve to encompass the latest advances in multilevel hybrid reality gaming. The Birmingham Philharmonic will enhance its reach through digitisation, hosting concerts performed and broadcast in the metaverse which will allow youth orchestras worldwide to participate in landmark performances. The concerts will be an international tourism draw – especially the annual open-air concert in Centenary Square, set to impressive and immersive digital lighting displays and the largest of its kind in the UK.

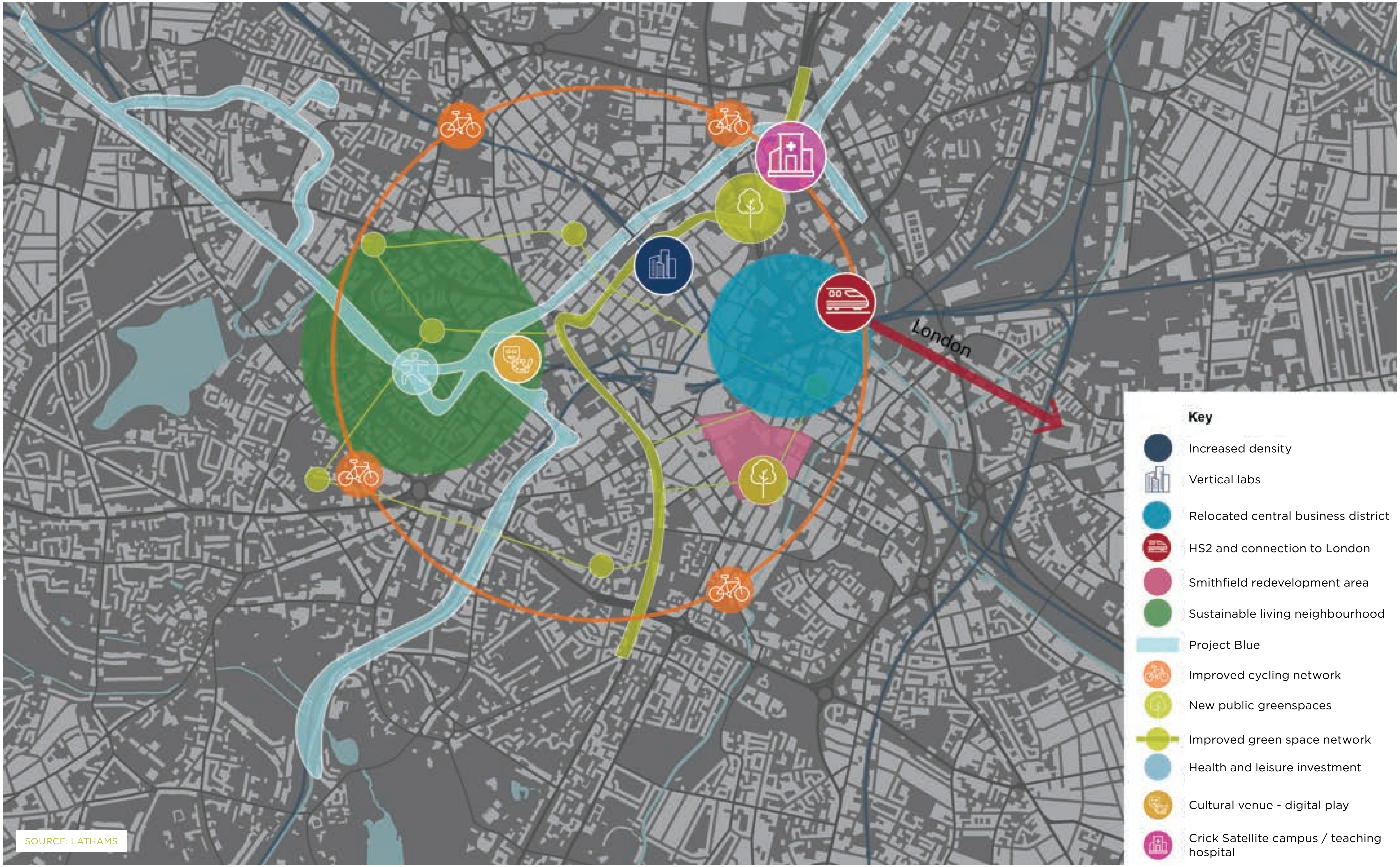
11

Brindleyplace will evolve into Birmingham's first sustainable co-living neighbourhood, responding an ultimately overcoming the gravitational shift in the office market towards Curzon Street. Many of the buildings will be repurposed and retrofitted to form the first sustainable co-living neighbourhood in the UK with a large number of young key workers, PhD students, researchers and professionals forming a strong and vibrant city community further bolstering graduate retention. An urban farming project will also be located in Brindleyplace, with residents working a four-day week in their commercial role and undertaking farming roles on the fifth day.

The University of Birmingham will use the scheme to study productivity and mental health impacts of a reduced working week supplemented by participating in food production, and its function in driving civic pride and wellbeing. The Brindleyplace neighbourhood will report some of the lowest levels of crime and antisocial behaviour in the city, while instances of mental health crises will also be minimal.

12

Pressure on housing land however, will continue to prove problematic over the next 20 years. Further allocations are on the brink of breaking into the green belt which will continue to be the focus of political debate for the coming decades. Joint delivery entities that brings together the key public and private bodies to scale-up the supply of sustainable homes will be key to effectively responding to these challenges. Planning powers will need to be amended to simplify land assembly, particularly on brownfield, inner urban housing zones, to enable the rapid deployment of new high-quality sustainable urban neighbourhoods (Project SUN) which will be well-received by the new residents provided their design standards are sufficient.


London
SOURCE: LATHAMS
Key
Increased density
Vertical labs
Relocated central business district
HS2 and connection to London
Smithfield redevelopment area
Sustainable living neighbourhood
Project Blue
Improved cycling network
New public greenspaces
Improved green space network
Health and leisure investment
Cultural venue - digital play
Crick Satellite campus / teaching hospital

09 CALLS TO ACTION

WHAT DO OUR PREDICTIONS MEAN FOR REAL ESTATE IN BIRMINGHAM? HOW SHOULD THOSE IN THE PROPERTY SECTOR REACT TO THE OPPORTUNITIES AND CHALLENGES PRESENTED BY THIS VISION?

01

A REPURPOSING REVOLUTION IS REQUIRED TO FACILITATE THE RE-USE OF ASSETS IN THE 'GREY' SPACES CREATED BY THE CITY CENTRE'S CONSOLIDATION.

Many commercial buildings in the city centre, particularly office and retail assets, are at risk of becoming obsolete due to the combination of changing occupier requirements and energy performance standards. Landlords need to meet the challenges of retrofitting buildings to meet required standards and to manage assets effectively to protect values. A progressive and sympathetic planning approach is required, coupled with public sector funding support as part of the Levelling-Up agenda.

02

NEW OPPORTUNITIES FOR DENSIFICATION AND THE REDEVELOPMENT OF SMITHFIELD SHOULD BE EXPLOITED TO RESHAPE THE CITY CENTRE, DOING SO IN A WAY THAT MEETS THE CHALLENGES ASSOCIATED WITH ACHIEVING NET ZERO.

Forthcoming developments will drive a gravitational shift in the direction of the city centre from north to south and thus investors, developers and existing landowners should be aware of opportunities to intensify and redevelop sites, particularly low-density commercial uses which might be capable of being redeveloped for a high-density mix of uses. The potential of multifamily living in socially diverse communities alongside opportunities in our educational & medical sectors can build on the regeneration of the south side of the city.

New assets being developed today need to be future-proofed to meet aspirations for net-zero carbon and to reflect the changing demands from occupiers in the long term. How can this be done? How should developers of the major sites take into consideration mega trends to protect long term asset value?

03

INVESTMENT IN RAIL AND INFRASTRUCTURE MUST BE ACCOMPANIED BY PROPOSALS FOR VALUE CAPTURE AND REGENERATION.

HS2 should be the catalyst for continued inward investment in both housing and commercial occupier demand for the city. There is the potential for more businesses to move to the city, providing opportunities for further regeneration of sites on the periphery of the core and in areas around Broad Street, Brindleyplace and the wider Digbeth area. There is a need to develop centres within the city which provide vibrant and safe environments and to develop and utilise our canal, tram and cycle routes to create green spaces to reflect lifestyles focused on wellbeing. Improved connectivity and a focused investment in our public realm are needed. Can the Public and Private Sectors collaborate further on funding to improve our open spaces?

04

THE DEVELOPMENT OF THE CITY OVER THE NEXT 20 YEARS NEEDS TO HAPPEN IN ACCORDANCE WITH THE PRINCIPLES OF 'INCLUSIVE GROWTH', AND SPECIFICALLY TO ADDRESSING THE THREATS TO SOCIAL INEQUALITY OF COMMUNITIES AROUND THE CITY CENTRE.

Labour market interventions will be required to address the negative side effects of automation and artificial intelligence on lower skilled / lower income people living within the inner-city areas. These interventions will need to be accompanied by place making strategies to facilitate a transformation of neighborhoods into areas where people want to live. The continued dismantling of the "concrete collar" will help to open up the constrained city centre – particularly to the north towards Newtown and west around Summer Row towards Ladywood – both of which have seen nearby investment from the Universities and at Icknield Port Loop.

There should be a means of enabling a greater distribution of the accretive value benefits of land and property growth from higher value areas to those communities, through new value capture and redistribution mechanisms. New models of affordable housing delivery need to emerge to ensure that local residents are not priced out of locations which benefit from new infrastructure and place making investments. The scale of intervention required can only be delivered by the City, WMCA, Homes England and other partners continuing to take a strong, partnership role in Public and Private delivery. The ambitious new Birmingham Plan is welcomed.

05

ACHIEVING THE 'GREEN MAKEOVER' REQUIRES A COMPREHENSIVE STRATEGY TO ESTABLISH MULTIPLE NEW PUBLIC GREEN SPACES, AND STANDARDS AND POLICIES DICTATING REQUIREMENTS FOR GREEN ROOFS.

Grey spaces need to be repurposed into green spaces, bringing natural capital into new and existing concrete-heavy public spaces. Along with contributing to urban drainage, biodiversity and reducing urban heating, greening will also create living locations that encourage active transport and use, support placemaking and contribute to carbon reduction. This will require new models of financing and stewardship to ensure that the value benefits of such spaces, both financial and non-financial, can be monetised to justify the investment in creating these spaces. Planning requirements will also need to ramp up the standards for 'green' strategies.

WE HOPE THAT YOU JOIN US IN SEEING THE OPPORTUNITIES PRESENTED IN THESE ACTIONS.

WE LOOK FORWARD TO WORKING WITH BOTH THE PUBLIC AND PRIVATE SECTOR, THE LOCAL BUSINESS COMMUNITY, OUR CLIENTS AND OUR COMPETITORS TO POSITION BIRMINGHAM FOR GREAT SUCCESS IN THE COMING YEARS.

MYCITY
BIRMINGHAM

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FUTURE OF CITIES