



Above: Chamberlain Square, Birmingham

Future Cities Forum: Levelling up report 2022

Contents

1. Introduction
2. Leeds: the kind city
3. Manchester: housing, innovation and culture
4. Birmingham: the golden decade
5. Conclusions



View from Science + Industry Museum to the Enterprise City development, including the Bonded Warehouse (formerly Granada TV offices) and new workspaces of Manchester Goods Yard – designed by Chapman Taylor



View to Birmingham Town Hall, hung with banners for the Commonwealth Games

Introduction

Future Cities Forum has been carrying out a series of ‘levelling up’ events in the UK, to assess whether UK government policy has been working effectively to create greater economic prosperity for traditionally poorer areas of the country.

There are significant pockets of deprivation from north to south, and east to west in the UK, and this report serves as an interim assessment on three major regional cities: Leeds, Manchester, and Birmingham. The Forum will continue to look at further cities throughout 2022/23 and will be extending the report in due course to cover additional findings.

There has been debate within our events about the term ‘levelling up’ and whether it should be used for fear of sounding patronizing to leaders of towns, cities and communities, which have their own knowledge on where regeneration is most needed and where investment should be deployed. For the sake of this report, Future Cities Forum is referring to the Conservative Party’s policies on ‘levelling up’ but takes no political stance as to whether these are correctly advised. This report records the thinking of a diverse range of senior leaders across the public and private sectors, involved in shaping our cities.

It is fair to say that 'levelling up' in the UK has been a central policy of the current government, but will these levelling up programmes continue, despite the recent political turmoil?

The Department for Levelling Up, Housing and Communities, has recently released news of continued programme activity. It announced that derelict sites are to be transformed into areas for homes, as a new brownfield fund opens. Over 17,000 homes are promised through a £180 million new brownfield fund. Councils are invited to bid for the first £40 million and a further £140 million allocated over the next two years.

The scheme the Government says is to level up communities across the country and turn unloved areas into new places for people to live and work. The plan uses small council-owned sites that have been previously developed, by funding small scale infrastructure and remediation work, to enable the release of the land for new homes.

Birmingham City Council has welcomed the award of £3.19 million from the Department of Levelling Up, Homes and Communities (DLUHC) to carry on its work reforming the supported exempt housing sector in the city until 2025, as part of the government's Supported housing Improvement Programme.

Current Prime Minister, Boris Johnson in his farewell PMQs, argued that tax measures should be carefully planned, if the UK is to remain a good destination for investment. UK universities are particularly aware of global competition when it comes to attracting investment for science innovation, and this report includes the thoughts of leaders at city universities on the action they are taking to provide new facilities for worldwide talent and more local SME's.

Future Cities Forum report is releasing this report as the Commonwealth Games draws to a close in Birmingham. What will be the levelling up effect of the Games on the City? How will they have improved Birmingham's image for investment? These questions around the legacy of the Games are already being asked, as well as continued conversations around a bid to stage the European Athletics Championships in 2026, and a confirmed intention to secure the Eurovision Song Contest in 2023. How will cities like Birmingham observe climate change goals around staging large events which involve significant air travel?

Read on to understand current reflections from panel participants on the future of city development and wider questions around sustainability.

Future Cities Forum, August 2022



Above: The eastern approaches to the centre of Leeds (courtesy Leeds City Council)

Leeds - 'the kind city'

Leeds City Council states that it has the UK's fastest growing regional economy worth £64.6 billion. Over the next ten years, it says, the economy is expected to grow by 21%.

However, there are general questions around the lasting impact of the pandemic and whether the UK government's scaling back of HS2 will affect levelling up in the city.

Will investment in new offices attract employees back to the city, will infrastructure measures be put in place to ease city congestion and create greener transport, can Leeds grow its brand to become the UK's go-to centre for professional services and science innovation and can the city create a day to night entertainment culture that supports visitor spend?

At the first levelling up panel discussion in Leeds, Future Cities Forum invited the Leader of Leeds City Council, Cllr James Lewis, to give his vision for the future of the city, Liz Hunter, Head of Policy at the West Yorkshire Combined Authority to describe the transport needs of a growing region, Peter Jenkins, Head of Transport at BDP to comment on how station assets can be used for a wider cultural and social offer and DLA Piper Partner, Andrew Clarke to point out the value of the global law firm's £85 million investment in the city's office sector.

Cllr James Lewis, suggested investment is now needed to keep the projects alive that received levelling up funding in the 1990's:

'Leeds is a huge city and Leeds City Council is the UK's second biggest council outside London and my area has been levelled up once already in the 1990's. Twenty years on, a lot of it has thrived, but the big capital projects we invested in are not so successful and the money is not there to keep those going.

'The old industrial areas have developed because we have banged on about transport investment. HS2 was not just about connections to other cities in the UK but creating extra land around the main station and more opportunities to expand the local train offer. There are serious issues around connecting east to west in the region. Bradford for example, is not connected to Leeds at all.

'In terms of economic growth, there is a strong innovation network here and we are good at supporting each other. There is a broad-based economy through tech and there are twice as many advanced manufacturing companies here as anywhere. We have been working on our climate commission involving both public and private sectors and we have seen development around the NHS in Leeds. We have an amazing talent pool and more STEM students than anywhere outside London. We should collaborate with other cities such as Manchester because it is important for both of us to succeed. The idea of the 'kind city' does work with competition. Young businesses feel they have support from large institutions here.'

Leeds:

City region £64.6 billion economy

Combined population of 3 million

Workforce of 1.37 million

Source: Leeds City Council



Above: Leeds City Square in May 2022 with the restored and expanded Majestic, now home and HQ to national broadcaster Channel 4, on left

If Leeds is to become a city where it attracts talent to settle in a climate-conscious environment, should its' primary focus be to reduce the impact of the car? Leeds has long wanted to throw off its image of 'the motorway city'. Can it do this with the current transport measures in place?

Liz Hunter from the Yorkshire Combined Authority stated that the city would be a place of healthy transport, cycling and walking in the future:

'We are working on a mass transit system for Leeds - supporting connectivity - and there are business cases around it, but it is a journey of funding with the city council - and that needs to come to the table.

'Leeds has been a 'motorway city' and we can still see the impact of that on the city centre. For the last few years, the council has been working on making Leeds a city where you don't need a car, providing a more attractive bus offer and attractive places where you can walk round - a place where you can live and work.

'We are stronger when we work together and on improving transport for the north. It has been disappointing about the downgrading of the ambitions of the Northern Powerhouse Network connectivity across the North, but now investment needs to be maximised and studies are being undertaken to improve connectivity and making the most of HS2 coming to Leeds in the future.'

Improving Leeds Station itself – as part of a total package of improving connectivity - was a topic taken forward in the conversation by BDP's Head of Transport, Peter Jenkins:

'The priority for Network Rail is to get people moving through stations but you need to get the spin off benefits from station development. Currently Leeds Station is underwhelming considering how many passengers pass through it. The character of the buildings is a 'let down' and it is not an impressive landmark for the city. It is also important what happens under buildings and the dark arches below Leeds Station are an astonishing opportunity perhaps for cultural venues like a concert hall.'

Trevor Mitchell, Head of Region for Historic England commented from the audience about the important re-use of heritage buildings such as the dark arches below the station, perhaps for SME's rather than just supermarkets, and Peter Jenkins agreed but warned that these uses are only often thought of after buildings are converted and finished, and there needs to be some advanced thinking:

'Post pandemic as we return to the cities, studies have shown a peak in numbers using Leeds Station on a Saturday, greater than any other weekday, so somewhere for passengers to go and enjoy the station buildings such as the dark arches is a must.

'On the mobility agenda, there is a desire for passengers to make streamlined journeys, building in services at stations, such as doctors' appointments, which can be on offer at suburban stations, and this stops commuters jumping into their cars to drive to the town centre, two miles away. Local authorities could use this thought process to reduce dependence on the car and make public transport more inviting again.'



Above: aerial view of new DLA Piper offices, City Square House, central Leeds, (DLA Piper and MRP)

How can better transport connectivity help encourage the return to work post pandemic?

Andrew Clarke, Partner at DLA Piper, who is leading the £85 million development of new offices for his firm, agreed that a mass transit system in the city would be very welcome. The new DLA Piper offices are very well located next to Leeds Station and Andrew thinks this will help with connectivity:

'At DLA Piper, we never believed the office was dead, even during the pandemic and we have large numbers of people coming back in. The new offices do need to be more agile and offer greater collaborative spaces for working. The super-fast broadband is essential and on the sustainability front, we will be the only office in Leeds to be powered entirely by electric.'

'We need transport to be as easy as possible for staff and we have considered everything from e-scooter mobility to EV charging facilities. We will run all of DLA Piper's global IT from here and the city is very important for the firm. We have a 200-year history of working within Leeds and there is a moral imperative to invest here. Staff numbers are rising from 700 to 800 when the new offices open and they will really enjoy the state-of-the-art facilities including a roof garden that will be on offer.'



Above: the opening panel at Future Cities Forum in Leeds, with (from left) Cllr James Lewis of Leeds City Council, Andrew Clarke of DLA Piper, Heather Fearfield of Future Cities Forum, Peter Jenkins of BDP, and Liz Hunter of the West Yorkshire Combined Authority

Leeds and innovation

How important is good transport connectivity to the development of the science and tech industries in Leeds? How can regional cities like Leeds compete both in the UK and globally for investment? How can city leaders ensure that the appropriate mix of science labs, offices and housing is planned and developed for sustainability and to attract a diverse range of talent, businesses, and start-ups?

The University of Leeds, Arup, Leeds Teaching Hospitals NHS Trust, Perkins & Will and Bruntwood joined our second levelling up panel discussion in Leeds, to tackle these topics.

Professor Nick Plant, The Deputy Vice-Chancellor of Research & Innovation at The University of Leeds said he had great confidence in the city to attract the investment that it needs:

'We look at how we can partner for the right investment. Leeds is strong in healthcare through Nexus and the University is geographically next to the teaching hospital which all helps. The city is known for its record on sustainability, in fact it was the first place to have a climate commission, and with the research taking place at the university, we can really drive UK sustainability. We have strong finance capability and expertise within the city with great connectivity between the university and companies, so our collaboration works really well and that is why we can be called 'the kind city.

'Compared to other cities I don't think Leeds has an overheating problem yet. Nexus has been open for two years now and is providing a strong community for entrepreneurs and high growth companies. We are not quite full but getting there. How we get the next group of companies to come in we are working with the council to solve. Our innovation partnership is critical, and we have the space to build and create an environment where people want to stay. The connectivity that we provide is very good and we have companies coming out of the southeast of England wanting to relocate. We have some great places to live - such as Ilkley - and it is quick to commute into the city.

'To attract investment, we go out and create our own. We have just closed a £2 million package of investment that has a clear steady line. We make ourselves attractive and I was on the phone to a US company only the other day which wants to come to us first rather than going to London.'



Above: Sir William Henry Bragg building at Leeds University (ADP)

The University has recently opened the Sir William Henry Bragg Building, which has been sensitively repurposed from the 1930s School of Mining, extended with a new storey, and connected to a new seven-storey complex for learning and research. The £96 million facility provides an impressive range of environments to foster interdisciplinary collaboration.

Named after a former professor at the University who was awarded the Nobel Prize for Physics in 1915, the building brings together the School of Physics and Astronomy and the School of Computing. It houses some of the most advanced electron microscope technology in the UK, including the Royce Institute and Wolfson Imaging Facility. Arup was appointed as technical consultant to carry out complex vibration analysis, as it was vital that passing traffic did not interfere with ultra-sensitive laboratory instruments.

Arup's acousticians advised on measures to mitigate sound impacts on the environment and building users, recommending plant with noise reduction capabilities and mechanisms to control reverberation in teaching spaces. Through modelling of demolition and construction noise impacts, cost-effective and temporary mitigation options were developed to avoid disruption of learning and research. Space planning for equipment that causes electromagnetic interference contributed to cost savings of £1 million. Designing-in modern methods of construction validated the use of a largely precast concrete superstructure, rather than an in-site concrete frame, significantly speeding up construction time and cutting costs and construction waste.

Tim Fry, Head of Science, at Arup, stated at the forum, that there are massive changes in the way life science real estate is being delivered:

'Some companies like GSK are carrying out very specific research and want certain types of buildings but it is important to offer flexible space, and also re-use space where you can.

'A large pharma company from the US told us that they wanted to be in the King's Cross science hub in London and in The Crick - a project Arup has worked on. It is part of being in a community. Gone are the days where the science lab is buried away out of sight.

'Today you should be able to walk up to the front door and into the centre and the community should feel welcome. We need these places to be open to schools and STEM students to encourage them in their careers and welcome them in.'

The commercial property specialist Bruntwood (which manages a network of innovation districts across the UK via a 50:50 joint venture with Legal & General called Bruntwood SciTech) added to the discussion by saying that building a community within city centres for companies is essential. Head of Strategy, Jessica Bowles said:

'It's not just about providing real estate but about building communities across northern cities as well as the hubs we have in Oxford and Cambridge. These communities need to be highly connected, and we support businesses with what they need and workspace in city centres. We are supportive of city growth and city economies and have a really attractive offer. There are specialisms around health tech, combined with digital strengths that build a powerful offer. We don't choose between cities but combine all together for strength.'



View to Platform, above Leeds central railway station, home to co-working space, serviced and leased offices for over 80 young tech and digital start-up and scale-up companies, run by Bruntwood SciTech

The Leeds Teaching Hospitals NHS Trust, a major employer in the region, sees health and wealth as connected. So how can a health trust like this influence not only the science and tech development in the region, but the individual's prosperity and health outcomes?

Head of Strategy James Goodyear, explained that the social value of what they are trying to achieve through their building projects and apprenticeship programme will in the long term improve health outcomes:

'At the Trust, we see ourselves as contributing to the health of the Leeds economy. We are a major employer attracting staff from all over region in a 100 different roles and professions. There is a clustering of key national health assets in Leeds and we need to focus on how we can create opportunity from deprived areas. This is through concentrating on giving the support to people that they might need in our diverse communities, so that might be language courses and trying to fill our workforce gaps. We need a virtuous cycle of opportunity and over time this will improve peoples' economic prosperity and health.



Above - CGI of the Sky Garden at Leeds Hospitals of the Future project (Perkins&Will for Leeds Teaching Hospitals NHS Trust)

'We are still working with the challenges in the NHS post pandemic, but we are collaborating with the university on innovation and are expanding the hospital site with an 80,000 square meter children's hospital that attaches to the general infirmary. We have some fantastic heritage buildings which we want to draw together to form our innovation village, creating a destination and a place with digital and cultural assets, in an engaging way.

'Our leadership language at the Trust guides for all decisions and we have lots to be proud of in the way we can engage with our communities, build on our assets and move forward positively rather than just look at the deficits. The language we use informs all our conversations between all parts of our work.'

Mark Rowe from architecture practice, Perkins & Will, who is leading the team on the new hospital expansion programme commented on what the 'hospital of the future' should look like:

'It should - and this is what we are trying to do in Leeds - throw its arms open to the city. We are creating a space in front of the hospital, a square that brings people into the heart of the building. For too long, hospital buildings have kept people at a distance, kept people out, and we also wanted to create something of permanence. Other NHS buildings in other places can often look like they won't last, so we need these ones in Leeds to be solid and evocative of heritage. Buildings should speak with confidence and be an anchor for the wider innovation district.'

Perkins&Will, led by Penoyre & Prasad with Schmidt Hammer Lassen Architects, signed the contract with Leeds Teaching Hospitals NHS Trust to design two new state-of-the-art hospitals on the site of Leeds General Infirmary (LGI). The appointment follows a competition held by the Trust in 2021 to find an architect to design its "Hospitals of the Future" project—one of 40 new hospitals that the U.K. government has committed to build by 2030 as part of its New Hospital Programme (NHP).

'For too long, hospital buildings have kept people at a distance'

Mark Rowe, Perkins&Will

The Trust's vision for the LGI site calls for a single, state-of-the-art building that houses two unique hospitals—one for adults and one for children— including a centralised maternity and neonatal unit. Significantly, these designs bring together for the first-time clinical services for children and young people under one roof.

Patient care and well-being is at the centre of the design with all wards orientating toward the outdoors, maximizing exposure to daylight and good views. Communal spaces also feature throughout, including a rooftop plaza at the heart of the children's hospital. A garden terrace on the fifth floor of one of the hospitals, complete with plants mirroring the local landscape, as well as green space in the site's car park, draws inspiration from the surrounding verdant environment.

Taking cues from the ways people interact with technology in a pandemic era, the design team incorporated digital features throughout the project, too. For example, a cutting-edge twin technology will be used to track the building's energy performance and other

technology will reduce bureaucratic processes helping to increase the amount of time physicians and care staff can spend with patients.

The design team is now undertaking staff and patient engagement sessions to gather input and support the next stage of design development. The adults, children, young people, parents, carers and clinicians from across the region will be instrumental in helping to shape how the facility might look and feel in these early designs.

Below: CGI of Leeds 'Hospital of the Future' project (Perkins&Will)





Above: The Tetley art gallery on Leeds' South Bank, based in the refurbished brewery offices and part of a district regeneration project by international developer Vastint of Sweden.

Leeds: culture, communities, and tourism

The value of the cultural industries to the UK economy can sometimes be under-estimated, but Leeds has always had a thriving cultural programme, which has played a strong part in supporting job creation.

Leeds is now using its rich heritage and cultural history to expand its offer for tourism and communities within the region. The British Library which has always had a foot in the city, is planning to open a larger museum and public archive centre at the historic mill, Temple Works. A new residential and mixed-use district in Globe Road is being created on derelict land between the Manchester to Leeds railway line and the canal and next to the South Bank regeneration area, which includes the new Aire Park and the Tetley contemporary art gallery as well as the proposed British Library extension in Holbeck. Leeds Playhouse on the northern side of the city has a new frontage referencing the past pottery industry and new facilities for more diverse audiences.

However, many have reacted strongly against the proposal by the UK government that Channel 4 should be privatised. Channel 4 physically moved into new headquarters in Leeds last year to level up the opportunities for production companies and to expand the regional offer of programming. The move has made a big cultural impact in the city region and created new jobs.

Starting our levelling up discussion, Sinead Rocks, Managing Director, Nations & Regions at Channel 4 said she thought it would be a very big mistake to privatise the broadcaster:

'I think that Channel 4, which is forty this year, has a successful model being publicly owned but privately funded. It doesn't cost the taxpayer anything and we have kept our promise that we wouldn't make our own content but buy content from SMEs. We offer a lot to the cultural sector, and while the government has a right to question the model, privatisation won't help. It would change our status and we would no longer be a publisher. This would be a huge blow to production companies.

'We opened other Channel 4 centres in Glasgow and Bristol, ensuring more staff who worked for the broadcaster were outside London and ensuring that we spent more money outside London. Privatisation would mean less money in the regions, and it would be a backwards step. I think we have tried to be good neighbours and good citizens in our move to the regions. We tell stories that reflect different parts of the UK to create a better understanding and put that out to the world. Our content is therefore not one homogenised lump. We are shining a light on more unheard voices and what it is to be a citizen of the UK.'

'Historic England puts its money into communities not just capital works.'

Trevor Mitchell, Historic England

Trevor Mitchell, Head of Region (Northwest and Yorkshire) at Historic England, commented on how without Channel 4 and other prominent buildings, Leeds would struggle to promote itself:

'You can walk past fantastic buildings in Leeds all the time and they are all individual but why do people come into the city? They want to be in and around public buildings where there is a sense of identity - where we can all belong. Historic England puts its money into communities not just capital works.

' If I turn on my television to Channel 4, I can see the city of Leeds represented every day and we can therefore give Leeds a recognisable branding through heritage, which is marketed to the world. We have a pride in our place.

'We need to be marketing our cities and there is always going to be a tension between protecting the past and moving forward - but I don't think for Leeds anymore. The city is getting recognised for its work on climate change and next year is the 2023 cultural festival. The city will gain its share of brand.'

The importance of branding for Leeds will be helped by the promised move of The British Library to the famous textile mill, Temple Works, on the city's South Bank.

The British Library feels it has outgrown its northern collections and storage campus in Boston Spa in Leeds and wants to expand its operations to Temple Works where it can invite in more visitors including schools and the local communities.

Jamie Andrews, Head of Culture and Learning, and who oversees the expansion explained how important it has always been to have a foothold in Leeds:

'We have been in Leeds since The British Library was created in the 1970s and our archive in Boston Spa has been massively important to us. Most of it is stored here and will be forever in the city of Leeds. Over 100 million objects are located (at the Boston Spa site) in a former munitions factory but it is not a site that we can invite the maximum number of people to. At Temple Works we can have the digital and the human and start planning for the next 50 years. Only a public sector organisation could do this and guarantee stability.



CGI of what the exterior of a restored Temple Works might look like with The British Library in situ in Leeds, South Bank (Courtesy CEG and The British Library)

'There are lots of wonderful features to Temple Works such as the Egyptian frontage. The building covers 8,000 square meters with cast iron columns. Concrete slabs at a later date were added to the roof and there is currently water ingress. The first action is temporary stabilisation but by the end of the decade we will be able to occupy it. The re-use of buildings is good for sustainability, and it is a building that has defined Leeds, so good to keep it.

'Temple Works was always a large employer in the area and we see and capture the stories that this building has seen, which is part of our oral history tradition. We galvanised the knowledge economy in King's Cross in London in the 1990's and we are keen to continue to make Temple have both an economic value and a social space. We are continuing to build relationships and partnerships with all sectors of the community including families and migrants.'



Above: Leeds Playhouse in the Quarry Hill area of the city - facade with ceramic tiles (Page Park Architects)

Other important cultural buildings in Leeds have been sensitively restored to add to the impressive landscape of artistic expression in the city.

The original playhouse in Leeds has also been re-worked and re-modelled to provide for a wider range of theatregoer and Nicola Walls from architecture practice, Page Park, said it has pioneered the introduction of among other things, dementia friendly performances:

'One of the important elements when I was working on the building was to orientate the front of the theatre to face the centre of the city and to accommodate disabled parking at the back. Inside, the places for wheelchairs were not in a great place, so we altered that to provide a more inclusive experience.

'The physical connections of the building interested us, and we wanted to open up the front to newly developed public realm gardens but also took note of the plasticity of the ceramics history in the city. So, the new facade has four parts representing this with ceramic tiles, the black tiles suggesting the actors standing in the footlights looking out at the audience.

'We wanted to cut out the thresholds and barriers in the theatre and create resilience and sustainability and doing this we looked hard at the history of Leeds to provide inspiration.'



Above, CGI from Sheppard Robson showing Globe Road development's relationship with the canal and riverside - in central Leeds

Much debate has taken place recently on the need to provide a joined-up approach to new housing, workspaces for small businesses and cultural activities in cities.

Nick Ffoulkes, Partner at Sheppard Robson, who joined our discussion, has been working on a new residential development of housing, adjacent to the South Bank regeneration area where The British Library will be built:

'We have been working on Globe Road for four years, which we want to make as publicly permeable as possible and with imaginative public green space. Our front doors open onto

secure landscaped spaces where people will want to spend time. It is hugely positive for Leeds as it's a development that is releasing brownfield sites that have been lost for generations. Our ground floors connect to wider communities and offer small-scale employment opportunities.

'Housing is a huge part of the city's social infrastructure and not just an economic facilitator for other things.'

Nick Ffoulkes, Sheppard Robson

'I feel lucky to have worked on projects in Leeds for over 15 years and as a practice we feel Leeds is a city that is open and has always been keen to question itself in terms of improving the City framework and improve to create connections. Since the early 2000's we have enjoyed working with John Thorp (the UK's last Civic Architect) and Mark Burgess and others within Leeds to create a connected city. The post-industrial heritage can either be viewed as a barrier or benefit and it is up to the city to determine how it is embraced positively to create a sense of place that is unique to Leeds.

'Globe Road is a good example of the challenges that Leeds faces with a car dominated environment with limited or no priority or space for pedestrians, so moving towards a pedestrian prioritised and Green City will be hugely positive for Leeds. Interestingly, we did consider closing Globe Road for pedestrians only at the early stages of the project and then connect back to the waterfront, but this proved a significant challenge for Leeds' city network. Strategic decisions on re-balancing are important decisions that are the priority for the next ten years in the city.

'Housing is a huge part of the city's social infrastructure and not just an economic facilitator for other things. How we use our assets should be driven by different views. Some people find this difficult, and it all takes time, but we need to do this to evaluate what cities will become, it is all too easy to stereotype.'

The investment partnership behind Get Living Plc, the UK's largest build to rent operator, is investing £180m in the creation of the five-acre Globe Road residential neighbourhood of more than 780 homes for rent comprising studios, one-, two-, and three-bedroom apartments as well as family townhouses. The development will create eight residential buildings linked by a series of new public spaces and a new Hub building overlooking the canal.

According to the developer, the design for the district moves away from creating a single monolith and allows for new pockets of public realm to be created in-between the buildings. These spaces will be brought to life by a range of amenities – such as food stores, retail units and a gym – which activate the ground floor and streetscape. Residents will also be

able to retreat to communal terraces found on the first floor of the development and the townhouses benefit from private gardens.

There will also be a Hub building, a pavilion that sits on the waterfront to the east of the site. This lighter structure with glazed facades includes restaurant space at ground floor, with co-working space positioned above offering a workplace destination for small and emerging businesses.'



Above: Calls Lane, Leeds in May 2022 – once an area of mills, docks, and print works, now home to digital businesses, apartments, and restaurants after restoration by the city council



Above: View to entrance of Science + Industry Museum, Manchester – host venue to Future Cities Forum

Manchester: housing, innovation, and culture

Future Cities Forum held its 2022 levelling up event in Manchester at the Museum of Science and Industry. Leaders from government, universities, health partnerships and the cultural sector were brought together to answer the following questions:

- How can Manchester continue to sustain a creative and tech industry that remains ahead of and competitive with other UK and global cities?
- What elements will build Manchester's brand for international science and tech innovation?
- Will Manchester be the first city to reach its climate goals in 2050 and which technologies will enable it to do this?

A multi-million-pound programme for the Museum is underway at the globally significant industrial heritage site to carry out crucial restoration work and reveal new spaces for visitors to enjoy. At the Grade I listed 1830 Station and Warehouse, which is the oldest surviving passenger railway station in the world, the first £1.9 million phase of work funded by the DCMS, will give the building a new roof, gutters and rainwater pipes.

Economy at a glance

Greater Manchester



Population 2.7m



GVA

£62.8bn

(ONS 2016)

Up to 40%
lower operating
costs than London

(Source and graphic: www.investmanchester.com)

Future plans include a dedicated STEM learning space, together with improved outdoor area linking new connections and entrances between the Science and Industry Museum, The Factory and the developing St John's and Castleford neighbourhoods.

The Factory is due to open in 2023 and will be Europe's largest and newest arts and performance venue and the new home of the world-renowned Manchester International Festival. It is part of Enterprise City, a cluster of media, tech and modern businesses in a series of new and heritage buildings. Companies located here include Booking.com, Department, Versa Manchester Studios, WPP, MediaCom, Code Computerlove, Auden, Tech Nation and the tech Exchange program.

'Manchester has a confluence of university talent and media around Salford as well as start-ups. Bring all that together as a creative whole and you have a sustainable tech city.'

Mike Gedye, CBRE

Manchester's economic development agency, MIDAS, states that the city:

'...represents the largest UK city region economy outside London, worth £62.8 billion (GVA). With access to 7.2 million people within a one-hour drive and over 100,000 students, Manchester provides companies with an unrivalled access to a wealth of talent. The city has strengths in cyber security, FinTech, genomics, advanced materials and more...the birthplace of the Industrial Revolution, it continues to be a city which innovates across a variety of sectors...Home to Europe's largest purpose-built digital hub, MediaCityUK, it boasts a fast-growing £5 billion digital ecosystem. It has more than 10,000 digital and tech businesses, from start-ups and SMEs to global brands including Google, Microsoft, IBM and Cisco.

CBRE's Head of Tech Sector Vertical, Mike Gedye told Future Cities Forum before the event:

'Manchester has a confluence of university talent and media around Salford as well as start-ups. Bring all that together as a creative whole and you have a sustainable tech city. We are not seeing a chaotic distribution from tech investment because there is a value from clustering. There are a small number of UK cities now benefitting from growth outside London. Leamington Spa is one of them. Twenty thousand new jobs have been announced there and we will see this regionalisation growing with a clustering of talent and tech businesses to include cities such as Glasgow, Edinburgh and Bristol.'

On health, MIDAS says about Manchester:

'As the first UK city to have devolved control of its £6 billion health and social care budget, the region has developed a more streamlined Health Innovation Manchester, with the aim of delivering new health and social care innovations at pace and scale serving the region's extended patient population, representing a unique opportunity to life science companies.'

While on the environment, MIDAS states:

'The Greater Manchester Environment fund (GMEF), the UK's first regional environmental impact fund, aims to generate over £100 million of funding and investment to align with projects that benefit the environment around Greater Manchester. In addition to The Bee Network which will comprise of 1,800 miles of fully connected cycling and walking routes across the city region, Manchester is investing £295 million into building a low carbon bus network by 2025 along with fast and rapid electric vehicle chargers installed across the

region. Manchester is tapping into the £3 trillion global hydrogen market opportunity and has already submitted planning permission for up to 200 MW capacity of hydrogen production facilities. The Manchester Fuel Cell Innovation Centre is a £4.1 million facility which is leading the way in harnessing renewable energy and has been structured to enable collaborations between academia, industry, and policymakers.'



CGI of housing at Victoria Waterside, the first phase of the Victoria North development, a joint venture between Manchester City Council and FEC (Far Eastern Consortium)

In terms of levelling up, housing has become the number one concern for Manchester City Council. An important development for the city is the Victoria North project (formerly known as the Northern Gateway project, which will deliver up to 15,000 new homes while rejuvenating disused land over the next 15 years. This project involves the creation of seven new districts, adjacent to the River Irk, and is being designed to level up a traditionally poor area with low educational attainment and employment.

Cllr Gavin White, Executive Lead for Housing at Manchester City Council, was asked at Future Cities Forum's event about whether his plans for housing would ensure they were built with connections for jobs and sustainable high streets:

'Levelling up has to be about our local communities. There is a lot of brownfield land in the city that needs use and where we can build sustainable communities. Victoria North is being

built on land that has been contaminated for thirty years and now is being cleaned up and housing is being built there. An attractive river runs through it and we are making sure there are a series of parks, new schools, GP services and so on, so that we can be sure we are building communities.'

Far East Consortium (FEC) is the developer behind the scheme and Senior Project Director Tom Fenton, who spoke at the forum said:

'This is a lesson on how traditionally the wealth of the Manchester has always travelled south in the city, and the development has to work for a new populace as well as existing households, who don't feel connected to the centre. We don't want to gentrify because it won't work for these existing inhabitants, but we are trying to provide access to better built housing with improved air quality and we need joined up government investment in infrastructure at the right time.'



Hoarding displaying restoration images of Manchester's Civic Quarter

In the Collyhurst area of the development, Manchester City Council says it has consulted extensively with local residents and will incorporate a mix of townhouses and low-rise apartments. So why is the council still planning tall tower blocks in the centre of the city, when in some parts of the country and particularly London, high rise living has been seen by some social commentators as a poor choice in the 1960's adding to loneliness and splitting up communities? Tom continued:

'I wouldn't rule out tall tower blocks for housing particularly in the centre and there is evidence that it is not just young people who want it, but families and people over 50 too. It is about delivering on our housing targets but also preserving the green belt for our neighbours. But the tall towers must be close to services.'

He added that there is an awareness that with failing high streets, one method for sustainability is to provide housing near shops:

'It is important that we can get people living in high streets again, making sure that the retail and leisure offer is right. We need good quality high streets in both large areas and smaller districts.'

When asked about the council's plans for good transport measures in the face of some rowing back on national HS2 plans, Cllr White commented:

'The council is passionate about delivering services and the UK government also has to deliver. We want an underground station that connects HS2 to the centre of Manchester and we have a big ask on buses too. We want a London-style bus network so that we can bring down fares. We don't want to be continually moaning but want to work together with government so that we can invest for our residents.'

'At Wythenshawe, land is being used for the creation of 1500 new homes with connectivity for jobs at the airport and hospital and there is a good high street there. We need to invest in good transport and follow our ambitious plans for the city to be net zero by 2038.'

'Manchester is seen very much as a technology and digital centre by the UK government'

Clive Anderson, Government Property Agency

The Government Property Agency's Director of Capital Projects, Clive Anderson, continued the discussion about the importance of levelling up in terms of bringing more jobs to Manchester. Clive is driving forward the GPA's delivery of Government Hubs and Whitehall Campus Programmes, as well as leading its design standards to deliver smaller, better and greener Public Estate. In November, the GPA announced it was recruiting for more than one hundred roles to support the delivery of its essential role as part of key Government initiatives, such as the Levelling Up agenda and Net Zero initiative:

'Manchester is seen very much as a technology and digital centre by the UK government, Darlington as a centre for financial services and Wrexham for the criminal justice system. The way we do things is to move senior civil servants up to these areas first and then start

recruiting locally. Now there is a move to tailor courses at universities to meet graduate demand for those centres.

'We have just announced a new hub centre at First Street in Manchester. We are demolishing the current centre at Piccadilly Manchester, and First Street will have initially 1500 people and grow to two and a half thousand. There is a third and fourth centre to be created within the city and we are working with the council to open up site 3 by 2027. The fourth site will relocate GCHQ as a new cyber security hub.

'In terms of cyber security in the Northwest, we have always known that we were able to recruit digital people and we feel that Cheltenham isn't the place they want to work. In Manchester, they can look at property exchange, get their children into good schools and we need to increase our cyber security capability.'

'As a museum we need to be more upfront about being part of the regeneration of the city and not just being a great visitor centre'

Sally MacDonald, Science + Industry Museum

Encouraging young people into the new jobs of emerging economies, was a topic that Sally MacDonald, Director of the Science & Industry Museum, Manchester, wanted to expand on in the debate. The Museum occupies a site of global significance as the world's first surviving passenger railway station in Manchester, the world's first industrial city. It has received £2,6 million of funding to transform the Power Hall, improving its energy efficiency and place carbon literacy and zero carbon technology at the heart of the museum's story and visitor experience. Sally questioned:

'How do you encourage young people to aspire to some of the roles out there in a gentle way? As a museum we need to be more upfront about being part of the regeneration of the city and not just being a great visitor centre. We are a STEM ambassador for the city and we want to open up jobs for young people who might not have considered them, and bring schools and teachers along.

'Manchester has its own historic story to tell about its impact on climate, but how do you take that forward? This will happen through the work we are doing in the Power Hall - the



Above: view to site of world's first passenger railway station at the Science + Industry Museum Manchester, host to second of Future Cities Forum's Levelling Up event series

original northern powerhouse - where we are currently drilling a 90 meter bore hole, to install ground source heating to power all those machines by green energy. We also need to tell the story about the skills needed for these new industries.'

Sally stressed the importance of the need to be a permeable site:

'Historically we have always been a bounded site but the practical part of our wider role is to be more permeable. We cover six and a half acres in the city centre and have never been a sustainable site. We are glad that levelling up money is going into creating a new tech hub in the Air and Space Hall, so that we can get on with developing some of our own buildings to be more commercial and in turn re-invest in our historic estate. We have had lots of Covid-19 funding and the government has been good with that, but our visitor numbers are only back up to 55% and the international visitors have not yet returned. We have a brilliant attraction but we need to be an institution that washes its face.'

Manchester is increasingly becoming known internationally for the high quality of education that the city provides and this is a key component that Andrew Coles, Director, Aviva Investors, says makes the asset management company want to invest in the city:

'The key for us is scale. Manchester is one of the most exciting parts of the country. It's got talent. We invest in real estate but we need people. There are one hundred thousand

students in the city and compared to other places, there is a higher percentage that stay on after their courses. The quality of education in the city is very high.

'We invest in tech city offices outside the UK such as Amsterdam, but Manchester remains very high in our ranking at around number 25 out of 300 cities for its tech and IT services. It only slightly falls behind in its current connectivity. Employees stay around in UK cities compared to European cities I think because the language is 'sticky' and it is not hard to travel in a small island.'



Manchester Goods Yard, Enterprise City, with former Granada Television offices in background

Aviva Investors has funded Manchester Goods Yard which is part of the new St John's district, and which sits next to The Museum of Science & Industry. It is set to become the fulcrum for Enterprise City, a new digital media technology hub which be home to a mix of SME's and multi-corporation technology and creative industry organisations.

It has been designed by architects Chapman Taylor with large-format office floorplates which provide adaptable and flexible uses. The design embraces health and wellbeing and elements of biophilia in order to create a vibrant environment for people enjoy. There will be bars, restaurants and leisure facilities, with the aim of creating a vibrant neighbourhood in which to work, shop and relax. MGY will be accredited BREEAM Excellent and uses off-site Modern Methods of Construction (MMC) to maximise opportunities to reduce waste, improve quality and minimise its carbon footprint.

Andrew stated:

'At Manchester Goods Yard we are fully let with companies taking space that could be going overseas but want to be here. There is a diverse range of product made up of large and small incubator spaces and when a company wants to expand it can on the same campus, so there is flexibility.

'The design quality of offices is important as expectations from customers are enormous and there is a very high quality of work environment here, coupled with F&B and leisure which is available in Enterprise City, and which is first class. Culture is an important component, and we know that people even want to come here at weekends. It is important that the development is in the city centre and not on the outskirts, by a motorway.'



Above: Manchester Arena - CGI of new ramp (designed by HOK for ASM Global)

The value of sustainable cultural infrastructure to the life and economic wellbeing of cities has been discussed in depth at Future Cities Forum and sports facilities have been an important part of this. Manchester Arena is a focal part of the city and architects HOK are re-furbishing and extending it. John Rhodes, Design Principal in HOK's London office is a director of the Sports + Recreation + Entertainment practice and is helping spur urban regeneration and economic development in communities.

John explained at our forum:

'The arena is 25 years old, and this is the right time for refurbishment. Its location in city centre is good particularly as the high street is a challenge. In retail, the big anchors aren't there anymore, so the arena is a place that can drive footfall seven days a week and that is significant. It benefits from good transport and a loyal community. Arenas are proving to be excellent anchors in cities, and we have been asked to create new arenas around the world.

'Arena design can drive a distinctive city brand. They are emotional places, where you might remember meeting your future partner for instance. It is in the experience of buildings where you create place. In the stadium that we are designing in Atlanta, a rap artist has his own space. He has become the central character of the building. We need to embrace the environment of the arena in Manchester to help define that place. The lightbulb was actually invented in Gateshead, and we need to take these things, embrace them and make them relevant in our modern culture and use it to create content.'

'Public realm is fundamental - it lasts longer than individual stadiums - it will be there for hundreds of years, and you have to make sure they have the right character with active edges. The challenge is with capacity when you have peak flows and again how the space are working when they are not being used so much - it is an art.'



Above: the rotunda of Manchester Central Library with Manchester Town Hall behind which is currently being restored with investment in improving the new public realm.

Head of Region for Historic England, Trevor Mitchell, added to the discussion by asking whether current investment is enough to protect areas around key projects in the city. He talked about a level of decay around buildings that require attention:

'We aren't losing lots of our historic environment, we are just slowly watching it decay. We have talked about anchor institutions, and I am concerned that while we invest money in new facilities, everything else is left to fend for itself, which it won't. If a site can be bought and the square mile around it, then we would be in business, and I don't think there is enough attention for curating places in cities. Every building in a city is more exciting than a new building or a refurb.

'I think we need to find the sweet spot between saving the old and creating the new. We need to capture the carbon benefit of old buildings, but we need a scale of investment to make that happen and I don't think we are operating at a sufficient level of investment. We must remember that people care about the streets they grew up in and the buildings they worked in. We ignore that at our peril, that sense of belonging and pride. This is about feeling that you belong in a certain place or city and that is timeless.'

'We must remember that people care about the streets they grew up in and the buildings they worked in. We ignore that at our peril, that sense of belonging and pride.'

Trevor Mitchell, Historic England

Despite this, Historic England says good progress towards rescue and removal from the Heritage at Risk Register has taken place in the Northwest and includes Rochdale Town Centre Conservation Area, Tyldesley Town Centre Conservation Area, and Warwick Bridge Corn Mill.

Rochdale's town centre conservation area was added to the Register in 2013 after suffering many years of a lack of maintenance, loss of historical details, and a high number of vacant buildings. Historic England, Rochdale Council and other local partners set up a Heritage Action Zone in 2018 to provide grants for repairs to buildings, encourage economic regeneration and re-engage residents, businesses, and visitors. Rochdale was a textile boom town during the Industrial Revolution, and from its many mills sprang the Rochdale Equitable Pioneers Society, regarded as the founders of the world-renowned co-operative movement.



Above: Manchester panel from left, Sally MacDonald of Science + Industry Museum, Andrew Coles of Aviva Investors, Heather Fearfield of Future Cities Forum, John Rhodes of HOK, Trevor Mitchell of Historic England, and Clive Anderson of the Government Property Agency

This heritage is now being harnessed to help regenerate the town centre and a new Co-operative Enterprise Hub has opened in a prominent but previously vacant building. The curved terrace of shops on the corner of South Parade and Drake Street is a distinctive feature of the route from Rochdale's train station. Rochdale Council is undertaking further work with building owners to find new uses for vacant buildings.

Tyldesley is located in the borough of Wigan, twelve miles from Manchester and grew into a colliery town during the Industrial Revolution. The High Street Heritage Action Zone project is repairing buildings, restoring historic features and encouraging economic regeneration.



Above: Professor Ben Bridgewater, Chief Executive, Health Innovation Manchester

Manchester: innovation in health and science

How can Manchester solve some of its pressing health problems while building its brand as one of the most important science cities in Europe?

Future Cities Forum's second panel discussion at its levelling up event in Manchester included debate on UK government investment in science and innovation, the threats to this from ongoing issues related to Brexit, new science buildings that are helping to shape the brand of Manchester as a science city and attract talent, and a new understanding of social mobility for a city where young people have traditionally left to find employment elsewhere.

The debate panel members were Professor Ben Bridgewater, Chief Executive, Health Innovation Manchester, John Holden, Head of External Partnerships at The University of Manchester, Stephen Platt, Leader of the Mechanical Services Team at Arup, and Northern Powerhouse Partnership Director, Henri Murison.

Health Innovation Manchester is an academic health science system that brings together health, academia and industry. The mission is to accelerate innovation into practice at pace and scale, so to transform the lives of Greater Manchester's 2.8 million citizens. It was formed in October 2017 by bringing together the former Greater Manchester academic health science network (GM AHSN) and Manchester Academic Health Science Centre (MAHSC) under one single umbrella, which also represents Greater Manchester's wider research and innovation system.

It works with innovators to discover, develop and deploy new solutions, harnessing the transformative power of health and care, industry and academia working together to address major challenges and tackle inequalities. Partnership is the core of its work and through strong relationships and collaborative working it brings together expertise from across the system to turn great ideas into healthcare solutions. From clinical trials to digital tools, academic research to healthcare analytics, our work is wide-ranging, exciting and makes a difference to people's lives.

'We need a joined-up approach that encompasses all sorts of different areas such as the plan for the NHS and the local industrial strategy'

Professor Ben Bridgewater, Health Innovation Manchester

Professor Bridgewater is a leading expert on health informatics, national clinical audit, clinical governance, healthcare transparency, patient experience measurement and digital transformation in healthcare, publishing numerous high profile academic outputs and delivering innovative IT tools for disseminating clinical outcomes to professionals and the public.

He was asked during the panel discussion about his view on the UK government's commitment to science and innovation levelling up. Ben said:

'I have looked at the UK government's levelling up document and I am pleased that investment is taking place in research and development. The trouble is that through the sorts of conversations that I have in Manchester, it seems people have very different takes on what levelling up is. For some, it is about NHS waiting lists and for others it is about university research.

'We need a joined-up approach that encompasses all sorts of different areas such as the plan for the NHS and the local industrial strategy. At the moment too many people are thinking in silos.

'There is probably not enough investment going on and we have to use small pots of money to create benefit into our innovation accelerator. We have got to get it right.

'You can be living next to a very good hospital but sometimes not get the best outcomes in healthcare delivery. Obesity remains a big challenge and childhood obesity is bad to see and just not fair. It's not a fair world and post pandemic we need to tackle mental health. We are getting better at helping children deal with stress, using mindfulness at an early age and that is one thing, like other projects which are now building resilience.'



Above - CGI of new landscaped space at ID Manchester, the £1.5 billion innovation district (Manchester University)

The discussion turned to John Holden on the ramifications from Brexit around university research funding and in addition, the investment in state-of-the-art science buildings, to attract talent to The University of Manchester.

John joined the University as Associate Vice-President for Major Special Projects in January 2020. He is responsible for supporting major external bids relating to regional and national government and to private, commercial, and charitable organisations.

He also works with the government on locating key national and international activities in the Manchester city region. He works closely with leaders across the University and collaborates on cross-institution initiatives and with a wide range of external stakeholders. John has extensive regional and national policy experience, with expertise in devolved regional. His previous roles include senior strategy and research at the New Economy think tank promoting regional growth and prosperity and most recently as the Greater Manchester Combined Authority's Assistant Director, Strategy/Research.

John warned:

'Brexit doesn't make levelling up easier. The UK government is definitely committed to science and innovation with £22 billion pounds being invested by 2027, which creates a good and strong platform. However, there is a shift away from European programmes, which affects student exchange - particularly students from abroad coming to study here.

'The scientific programme - Horizon - is something that potentially will not be done here now and we are having to fund domestically what was funded from abroad before. The question is - will the UK government give long term assurances on this? Programmes in some areas are now half what they were and that will affect our work with SME's, but largely I am optimistic here in Manchester.

'The shift to net zero is strongly supported by the UK government and it is committed to nuclear, energy grids and wind turbines as well as behaviour change with technology.

'However, I am concerned culturally about how universities are seen at the moment.'

The University's research expertise is in - among other disciplines - enhancing the efficiency and viability of sustainable energy sources such as solar, wind, tidal and bioenergy. It is supporting partners in the bridging of fuel sectors, such as oil and gas, to continue to meet demand. It is helping to ensure energy gets to the point of need efficiently, providing UK network partners with the knowledge to deliver reliable and sustainable power. Renewable sources of generation tend to be more intermittent – so it is working on systems that will help keep supply constant and finding ways to persuade people to use energy at the best times.

The University works closely with the local region on projects such as the UK's largest ever trial of heat pumps. It is finding out more about how today's urban society uses energy, blending expertise from engineering and the social sciences to learn more about demand and how it can be met. Scientists at Manchester are supporting National Grid on a project funded through the Strategic Innovation Fund (SIF) from the Office of Gas and Electricity Markets (Ofgem) to address the challenge of increasing demand for electricity, particularly in more densely populated urban environments.

This Discovery Phase project will be led by NGET with support from partners to develop an understanding of the barriers, opportunities, and benefits of modernising existing electricity infrastructure by replacing conventional cables with the use of High Temperature Superconductor (HTS) cable technology to increase network capacity in the urban environment. Additionally, the University has been extending and enhancing its buildings to meet the need for advanced research. This includes the Manchester Engineering Campus Development (MECD.) It is one of the single, largest construction projects undertaken by any UK higher education institution. The development for the University of Manchester will provide over 75,000 square metres of modern facilities in a bespoke environment, to support world leading research and an outstanding teaching and learning experience for more than 8,000 students and staff.

John commented:

'We need good engineering buildings, but we also need good people. The University has invested £10 million to supporting this combining the strengths of both older and newer universities in the city. It allows us to compete globally for research and attract students. We will have different engineering groups sitting next to each other in the new MECD site. The project also frees up 20 acres of land in city centre, where we will be creating a mixed-use innovation district with homes and hotels. It will be important in driving a connection between the University and the real world.'

Engineering group Arup has been working with the University of Manchester since 2014 to deliver the multidisciplinary building and specialist engineering services for the MECD site. The campus will help transform how education is delivered, bringing together the four engineering and material science departments into one coherent facility.



Above: the new MECD building - Manchester Engineering Campus (Courtesy Arup)

Situated at the heart of the University of Manchester's campus, MECD represents a £420 million investment to support an integrated academic community, create opportunities for interdisciplinary collaboration, enhance the student experience and maximise space efficiency. Designed with this in mind, the buildings will house a variety of advanced technologies and equipment to help the University achieve its goal of becoming one of the top 25 research universities in the world.

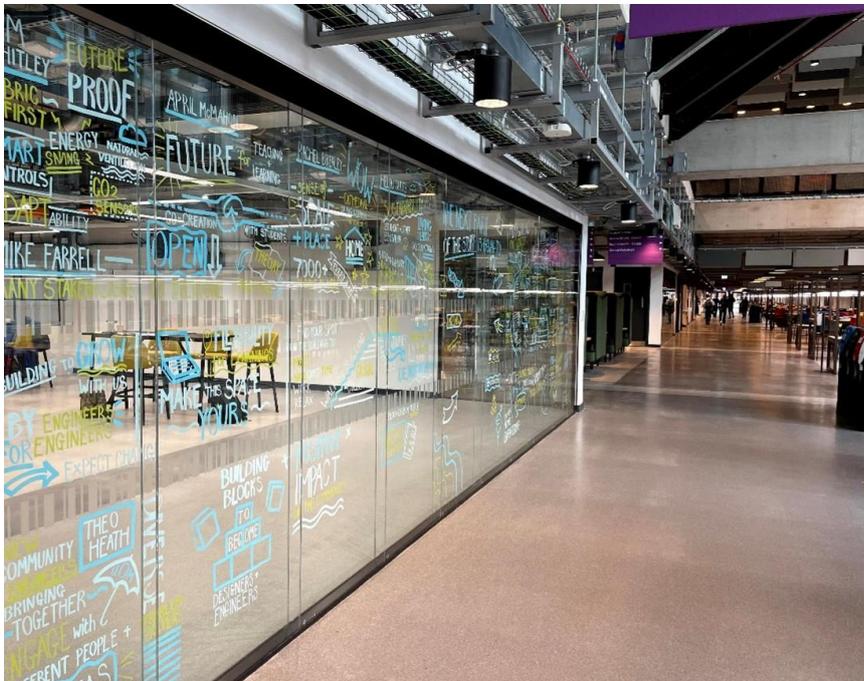
Stephen Platt, Leader of the Mechanical Services Team at Arup explained:

'The brief from the University was all about collaboration for scientists and the four original buildings that made up the Faculty wasn't the answer. So we wanted to create space where

students can work together and see into each others' labs. The way the building is designed doesn't give you a choice whether to look into a space or not, for instance, on the first landing as you turn, you have to observe the double height workshop space where drones will be tested.

'The project gave us net zero opportunities. It goes beyond BREEAM excellence - which doesn't specify particular energy requirements - as the University wanted to set up some stretch targets of its own. The University wanted energy consumption of the building cut by half and for me reducing energy at source from fabric installation was important.

'There will be lots of engagement for local communities - anyone can go round it - with cafes and joined up inspirational places for young people.'



Above - interior of part of the new Manchester Engineering Campus (MECD), courtesy Arup.

Improving educational opportunities and encouraging students to spend their careers in the City of Manchester was part of the social mobility message that Henri Murison - Director of the Northern Powerhouse Partnership, brought to the forum. Henri stated:

'Too often, the money that the UK government could have spent on Greater Manchester devolution, was all spent on benefits and public services. It is a bad way to spend money. It could have been spent on health prevention and drivers of growth, and there has been a misunderstanding of social mobility. Most people have concentrated, when starting work and careers, in getting out of Manchester, when they should be encouraged to stay. Attraction of R&D investment is the best end of levelling up. We should be looking at what

Greater Manchester is currently good at but also new opportunities for growth to close the productivity gap.'

Northern Powerhouse Partnership states that health innovation is one of the most dynamic and productive sectors in the Northern economy: 'Our strong clinical research capability is based within world-leading teaching hospitals and research-led universities, which work alongside a fully integrated supply of private companies. These fast-growing, innovative companies are largely concentrated in pharmaceuticals, med-tech and digital health, pioneering collaborative working with research institutions in increasingly interconnected clusters across the North.'

'We must fix the talent shortage but also share in talent outside the city and not just grow our own pool.'

Henri Murison, Northern Powerhouse Partnership

Henri was asked whether Manchester was taking note of the problems of overheating cities like Cambridge, as it continues to grow and expand its science offer.

Henri responded:

'When talking about overheating science cities such as Cambridge, the OxCam Arc was supposed to deal with that. It is a city that is doing well anyway, so you need to deal with housing problems there. These problems have come about from its success, and it is a challenge for the city to accommodate nurses who cannot afford to live in the city centre.

'I think what Cllr Gavin White was talking about earlier in the forum, about the expansion of flats in the centre of Manchester, will go well. Surrounding towns are being developed like Bury which provide viable living above shops and when prices go up in Manchester, this provides other options. So, I don't think we are going to have a housing crisis, but we must fix the talent shortage but also share in talent outside the city and not just grow our own pool.'

Northern Powerhouse Partnership concludes that spearheading a Fourth Industrial Revolution is 'essential to building a successful, productive Northern Powerhouse economy. This would see the North's historic expertise in manufacturing embrace the latest technologies such as additive manufacturing for the development of new innovative products. Unlocking growth will require investment in research, innovation and skills, alongside close collaboration with universities and translational institutes.'

ID Manchester, according to Manchester University is an 'internationally significant project (which) will cement the UK's position in the science and technology sector; providing vital

specialist infrastructure to power the growth of the knowledge economy and unlock the potential to commercialise R&D innovation, supporting the UK to build back better and level up.

'The University and Bruntwood SciTech, a 50:50 joint venture between Bruntwood and [Legal & General](#), formed a new joint venture to enhance, develop and deliver the vision to establish ID Manchester as a new innovation district, home to a global community that will play a vital role in the future of the UK science and technology sector, with the potential to create over 10,000 new jobs in the next 10-15 years.'

ID Manchester is adjacent to Manchester's main public transport hub Piccadilly Railway Station and future HS2 station and is a 20-minute train journey to the international airport.

The development is another piece in the jigsaw of the major regeneration taking place in that area of the city including Mayfield, London Road Fire Station, Kampus, Circle Square and the £1 billion investment already being made into its main Oxford Road campus by The University of Manchester



Above: I D Manchester development site, aerial view (Courtesy University of Manchester)

Sustainable districts, high quality place-making in Greater Manchester

Creating sustainable districts and towns with high quality place, was the topic of Future Cities Forum's third panel discussion which took a wider look at areas outside central Manchester and beyond to Blackpool.

Questions were asked on how cutbacks in council planning departments would affect the long-term appetite for investors, how heritage could be used as a starting place for a new masterplan and improved public realm at St Petersfield, Ashton, and how the UK government's Levelling Up Fund could help re-invent Blackpool town centre.

Panel participants included CBRE's Senior Director, Harry Bolton, LDA Design's Director, Mark Graham and Blackpool Council's Growth & Prosperity Programme Director, Nick Gerrard.

CBRE's Senior Director, Harry Bolton, voiced concerns at the forum that local authorities have lost some of their senior planning expertise and this will cause problems for future levelling up. Harry commented:

'We have seen this loss and are concerned that certain authorities are really stretched. If we are going to deliver our housing ambitions in levelling up, it all takes resources. The planning application process has suffered with the people we have lost from councils and that is a senior expertise loss. When you are dealing with complicated planning issues, you need experienced people to take what are sometimes difficult decisions.

'Regeneration is about people. Access to jobs and health and wellbeing makes a place. Materials costs are moving quickly and what investors need is surety around time frames. Could the 35% fee increase in planning applications go to planning departments to help build up expertise again?'

CBRE has been involved in work for a new masterplan for the market town of Ashton which Tameside Council has approved. LDA Design is leading the masterplan to create a new business neighbourhood, St Petersfield - a desirable location for the innovation, design and tech sector, bringing quality jobs to the area and making it a more connected part of the town.



Above: CGI of offices and streetscape at St Petersfield, Manchester (from the master plan by LDA Design for Tameside Council)

The St Petersfield site, Tameside Council says, represents a significant regeneration opportunity for Ashton town centre and was awarded almost £20 million from the government's Levelling up Fund for the revamp. The site is home to the Grade II* listed Ashton Old Baths and state-of-the-art Data Centre, now a successful digital hub and co-working space, and Henry Square, forming the centre piece to a network of historic grid-iron streets.

LDA Design provides landscape-led master planning, landscape architecture and planning services. The consultancy is currently designing and delivering some of the UK's most challenging public realm projects, including Strand-Aldwych in London, George Street in Edinburgh, as well as projects in Newcastle and Liverpool City Centres.

Working with officers from the council's investment and development team, the masterplan will look to create a significant new 'place' for people to work, which integrates with the wider town centre and is complementary to its prominent location, existing built form and assets of heritage value. St Petersfield will benefit from a Dark Fibre network ensuring it has amongst the best digital connectivity in the country. The plan will seek to bring together previous developments and will enlist the assistance of key stakeholders, existing occupants and members of the surrounding local community.

Mark Graham, Director at LDA Design and project lead for St Petersfield joined the discussion to explain the vision for the masterplan:

'I guess heritage is very important, but we look beyond that and focus more about place and streets. The old baths were derelict and but have now been converted into innovative workspace and it has attracted people who want to base themselves there, but when we started to look at the place overall, we focussed on the grid of streets.

'The industrial revolution meant that it became a planned town, looking after the health and rights of workers in the area, so we took that through in our plans, wanting to deliver healthy public spaces and buildings which enliven the streets. So, it was vital to look beyond the buildings. The challenge of thinking about the greening of cities is very important. Lockdown has shown that need to connect to nature. We are delivering future regeneration and social growth needs to be aligned with strong landscape growth and the importance of public realm.'



View from Peter Street, Manchester down to Spinningfields district and River Irwell



Above: 'Roll up! Roll up!' CGI of the Circus section of the new Blackpool Museum (courtesy Blackpool Museum)

Blackpool is another town in the Northwest Region that has suffered from the effects of the pandemic when it lost its strong conference programme. It has also had some poor housing provision. Now the Council is working to come back strongly from Covid with help from the UK Government's levelling up funding.

Blackpool Council's Growth & Prosperity Development Programme Director, Nick Gerrard, following on with the net zero theme, admitting in the debate that the town could do with a few more trees which would help to re-invent the town's brand as an attractive family leisure destination.

Nick Gerrard, commented:

'Blackpool has a £2 billion growth programme, with aim of creating more activity within its town centre, an all-year-round tourism offer and get jobs in growth sectors in the enterprise zone, next to the airport. The new conference centre has had renewed enthusiasm from people attending again and realising it is a place they want to go. It combines the historic and the new in its facilities.

'Additionally, we have a £300 million new leisure centre, one thousand new hotel bed spaces are being planned and a fantastic renovation of the old post office to convert to hotel and suites. We have a £50 million Town Deal from the government but have failed at

our Future High Streets Fund. I would like the government to start supporting private investment in a place like Blackpool. The good thing is we have a clear consistent vision which helps because we have setbacks every day.'

Last year in a Future Cities Forum discussion the V&A's Chief Operating Officer, Tim Reeve spoke of a collaboration with the council on a new museum - Blackpool Museum - which will feature exhibits from the world of showbusiness.

Tim said:

'Let me say that Blackpool is an amazing place, and the V&A has been involved with the town for many years, we will be offering some objects to the new museum project, some knowhow, some research expertise, but it is first and foremost a partnership.'

'We want to be known for more than being top of the list for things like deprivation.'

Cllr Lynn Williams, Blackpool Council

Leader of Blackpool Council, Cllr Lynn Williams echoed, in that discussion, the sense of partnership with the V&A, saying that the academic working that had already taken place with the project's curator had been well received, but admitted that it was 'real kudos' to be working with the V&A:

'We are most excited about the offer of the Morecambe and Wise suits and George Formby's 'banjo ukulele', but our programme is about more than this as we have a design lab project working with young people, objects going on show in Blackpool that relate to our illuminations and 'Light up North' work which we have invested a lot in. The Tracey Emin funding has been very helpful for NEON (fair access to higher education) in Blackpool.

'But there have been people who have never visited Blackpool and we also need to work with our residents raising their pride around Show Time. We want to be known for more than being top of the list for things like deprivation. We have the Winter Gardens and beautiful ballrooms too. Have we lost our international audience due to Covid-19? Perhaps we never quite had it, but we do want to present our cultural-led tourism and expand our residents and visitors ideas on what Blackpool has to offer, particularly among those who have never been to the Winter Gardens, for example.'

The UK government has stated 'Blackpool, which has 8 of the 10 most deprived neighbourhoods in England, will receive support to deliver a root and branch transformation of the town.

'The package includes a crackdown on rogue landlords by scaling up the local enforcement team to deliver more action on those not meeting current standards and a transformative

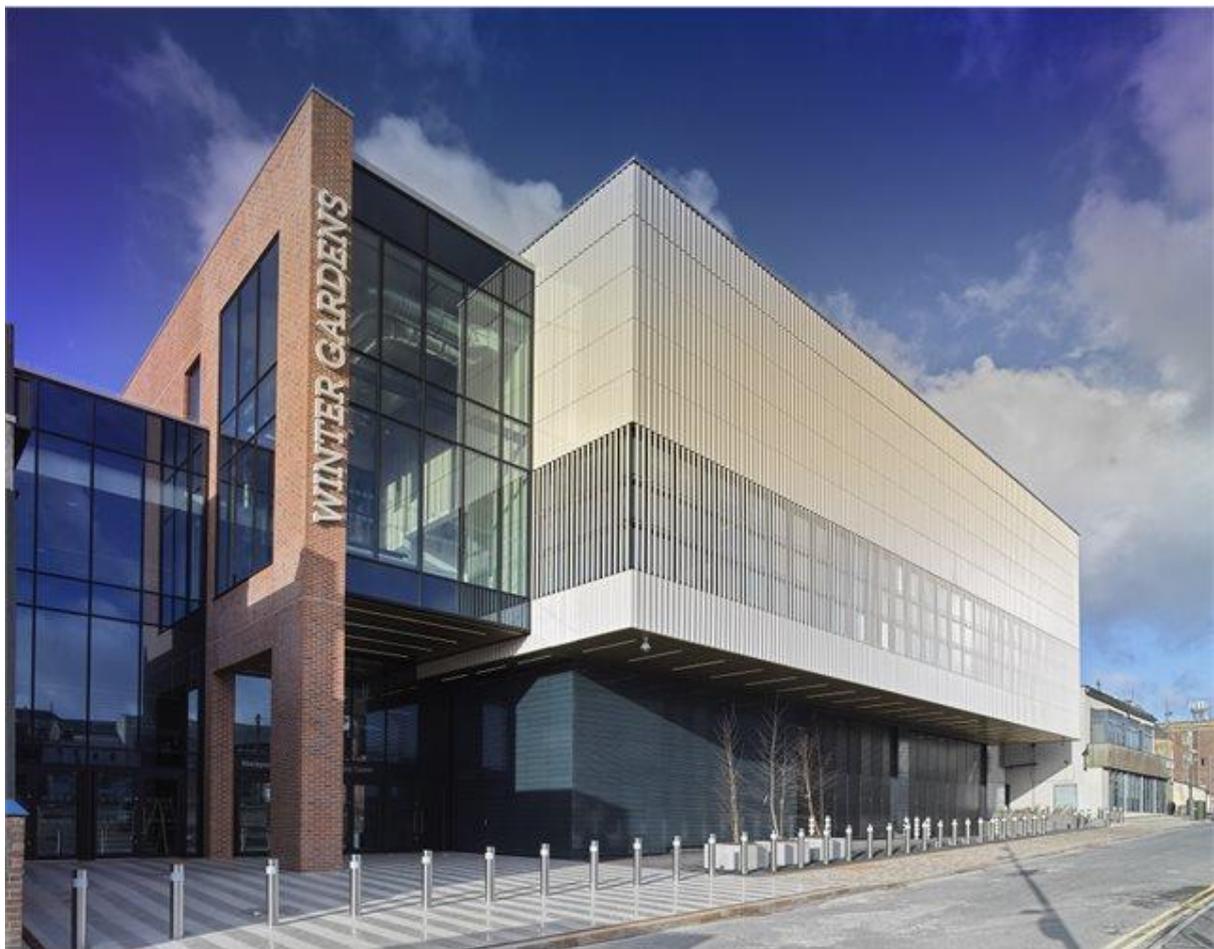
King's Cross style regeneration programme to create beautiful new homes and turbocharge tourism in the area.

'The plans have been developed by government, local leaders, businesses, and community groups who are working together to tackle the entrenched inequalities that have held the town back, as part of a new strategic partnership.

Levelling Up Secretary Rt Hon Michael Gove MP said:

'For too long great British towns like Blackpool have been held back by deeply entrenched problems that impact the everyday lives of local families - and we are working to put that right. Our levelling up plan will help transform this proud coastal town and deliver real change for thousands of families across Blackpool.'

Below: the newly extended Blackpool Winter Gardens and Conference Centre (Courtesy Blackpool Council)





Above: Chamberlain memorial and new office building facing Birmingham Museum in Chamberlain Square, part of the Paradise development by MEPC, Federated Hermes and Birmingham City Council

Birmingham: 'the golden decade ahead'

In a research seminar gathering of government, science academics, cultural leaders, senior real estate advisers and architects, Future Cities Forum asked questions around the potential legacy of the Commonwealth Games for Birmingham, broadening training and job opportunities for young people in the West Midlands, and how to attract investment partners for the new health innovation campus being built at Selly Oak.

In the discussion, there were concerns around how the UK government has been handling the process of assessing levelling up bids, on how some poorer areas of Birmingham would be regenerated for healthier living, and debate on how the new HS2 Curzon Street Station would act as a catalyst for economic growth.

*Economic Output & Output Growth –
Birmingham £31.9 bn
£61,385 GDP per worker
ICT £1.4 bn GVA (5% of the city GVA)
Real Estate £2.4 bn (9% of the city GVA)
Construction £1.6 bn (6% of the city GVA)*

Source: Birmingham City Council (January 2020)

The law firm Irwin Mitchell states that a new report predicts that Birmingham is set to see its economy grow by £1 billion by the end of 2023. The UK Powerhouse report produced by the Centre for Economics and Business Research showed its current GVA growth placed Birmingham as 7th out of the best performing cities in the UK for economic output. Significantly, the West Midlands is the highest placed northern region for bringing in Foreign Direct Investment and attracting this is thought to be a key factor for cities to compete with their southern rivals in the levelling up agenda.

*‘What we have a duty to do is make our place
the most attractive possible for investment.’*

Cllr Ian Courts- West Midlands Combined Authority

Leader of Solihull Council and Portfolio Holder for Environment, Energy and HS2 at West Midlands Combined Authority, Cllr Ian Courts, said the city faced a 'golden decade', whatever the current political turmoil over Conservative leadership contents:

' Look at what's happening in the wider region - we are all working together, all the local authorities for a common end. Most investment comes from the private sector, not government and what we do regionally is the most important element here. What we have a duty to do is make our place the most attractive possible for investment. The best

locations get through in any political turmoil and we are one of the best located places already in the country. The connectivity is excellent, and we are going to exploit that.

'The new HS2 (interchange) station at Solihull will be very complementary to HS2 Curzon Street in Birmingham, and it will sit next to the NEC, the airport, and motorways. It is going to be in one of the best-connected places in Europe, less than forty minutes from London. Yes, there is an issue around timescale, as it is years away, but HS2 has just agreed to release thirty acres of land in the next four years around the station site, and the University has submitted plans for a health campus which will be transformative for the region.

'Now that project does need government support and it is a shame that the ministers who came to Birmingham recently have now moved on with the political changes taking place, but the opportunities remain phenomenal. It's not about health tourism, I want to see a public sector legacy for our people, and it may not be a traditional hospital, but we want to carry out diagnostics for example and capitalise on technology. The West Midlands is connected on health, education and business and transport is the key thing. I think we get the funding for transport measures because government sees where it is used most effectively and where it is used properly.'



Image above: the western 'unpaid' concourse at Curzon Street HS2 Station (CGI Grimshaw)

On the design of the new HS2 station at Birmingham, Associate Principal architect at Grimshaw, Max Fawcett, felt that this would be a station that would stand the test of time and be a new impressive gateway for the city:

'It is much more than a railway station, it is one large interchange with a major public square in front of it. The station is being returned to the size it was before Beeching reduced it in the 1960's and it will be served by a new tram line coming in. It has two concourses with a 15-metre level change between each and potentially some existing rail arches could be opened up, but that is separate to HS2. The station will extend the city centre by half a

kilometre. Architects practice Glen Howells, which has worked on the masterplan, has said that the inner ring road has acted like a tourniquet to stop expansion, but now that won't be the case.

'There are going to be ancillary services in station for the public as well but we don't want to create another shopping centre. There is an arts and culture strategy that we are implementing and maybe the artefacts illustrating the manufacturing industry of the city, will be part of that.

'To illustrate the scale of what we are doing here, the roof of the station has the same profile as that of St Pancras Station. The design will be timeless and there's nothing added onto it, like cladding. It is functional as well as creating renewable energy, with what we term as 'rain gardens' that reduce the amount of run-off rain water from the city's drainage system.'

Arcadis joined the discussion to talk about the next stage of Birmingham's 'Our City Plan'. Arcadis has been appointed by Birmingham City Council to take the plan forward, which will help regenerate areas of the city that so far haven't benefited from investment. Director and City Executive Simon Marks said

:



Above: Future Cities Forum discussion at The Exchange, Birmingham in July 2022

' We're talking about the Big City Plan of fifteen years ago which has driven growth, but now and for the future we are talking about tackling a slightly different geography, of more challenged inner-city areas but with great opportunities. There is a collection of centres, with different characters, and we want to create more of these fifteen-minute walkable areas. We want to focus on city growth for all and make sure that investment really impacts the people who need it. We must concentrate on the city of nature, which is making the most of green spaces and regenerating poor green spaces as well as active green travel. Birmingham should work on being a city of connections as well as a city of knowledge and innovation. We need a bold vision but something that realistically we can deliver over the next twenty years.

'In all of this, there was an early round of consultation and we have used data analytic techniques to really get under the skin of what both business and community wants. We are ready to get back out again and engage more. Blue and green infrastructure are very important, Covid-19 has shown us that, and we need to develop the Digbeth canal masterplan for example. The Commonwealth Games will be a catalyst for exploring how we can develop sport in the city and I know that football clubs locally will be creating wider engagement. The Perry Barr development is all about this vision and the legacy of the games.'

However, in conclusion of our opening panel discussion at Birmingham, Managing Partner at Volterra, Ellie Evans, warned that the UK government has shown too much disorganisation around processing the Tranche 2 Levelling up Bids:

'We have been supporting local authorities to put in their latest levelling up bids but the portal through which to do this still does not exist and the timescales for local areas to submit them is unreasonable. Then there is the question with all the current political changes on whether the funding is still going to be there. The Government has developed guidance of the distributional effects of levelling up but concentrates on the capturing of land value. The problem with this is that poorer areas where existing land values are low, really struggle to make the case for uplift. Sports facilities, libraries and tourism should all count, i.e., how many visitors an area has, long term health can benefit from sports activities/facilities and so on. But this is not the Government's preferred method for assessment, and this really undermines the whole idea of levelling up.'



Above: Birmingham Health Innovation Campus in foreground (with buildings as CGI), with main Edgbaston campus of Birmingham University on right, and Queen Elizabeth Hospital top left - image from Bruntwood.

Birmingham: investment in science innovation

Our 'Science, healthcare and research' panel at Birmingham focused on the new innovation campus (BHIC) being built by The University of Birmingham and Bruntwood SciTech at Selly Oak, close to where the Queen Elizabeth Hospital and the University of Birmingham already have a strong presence.

Questions were asked around whether the campus will develop green transport infrastructure for connectivity, who will become the future tenants of BHIC and how the city can provide the right testing bed for new medicines.

Professor Gino Martini, Managing Director of Precision Health Technologies Accelerator, and who is overseeing the growth of the BHIC campus, brought insight to our discussion on the flexible facilities being offered for start-ups, while architect at BDP Ronan Connelly spoke about the need for multi-modal transport networks for connectivity, John Prevc, Director and Regional Lead for Planning at HOK spoke on sustainable planning for science

campuses, while Head of Business Development at the University of Birmingham, Richard Fox, described the need to retain scientists over the long term, if the drive on innovation is to be successful.

Birmingham Health Innovation Campus (BHIC), is set to become a world-leading life sciences campus. Due to open in 2023, it will offer high quality laboratory, office, incubation and innovation facilities for forward-thinking businesses and will be part of an integrated, physically connected critical cluster of patient-centred health excellence.

The campus is being delivered through a long-term collaboration between the University of Birmingham, as landowner, and experienced investor-developers [Bruntwood SciTech](#). It will become the only science park in the region dedicated to health and life sciences, sitting at the heart of a critical cluster of health excellence, led by BHP, creating opportunities for transformative collaborations between businesses, the University and NHS partners.

Professor Gino Martini, said:

'The co-location of the University and hospital at the site is a great strength. We were able to de-contaminate land for the building and it will create 10,000 new jobs and have a GVA of half a million pounds. A station has been built there to serve the Commonwealth Games, so there will be good connectivity. It will be a campus for change and will work to reduce inequality.

*'If you have research next to a hospital,
people always benefit.'*

Professor Gino Martini, Precision Health Technologies Accelerator

'It is important to make sure the right drugs get to the right people. We discovered during the pandemic how ethnicity responds very differently to drugs, and we have a stable and varied population in Birmingham which we can use to test and refine medicines. This is a very different environment to say a city like London where there is a transient population, which isn't so helpful for this type of research. I want to make sure that people in the West Midlands region get the right medicines.

'I am trying to stimulate innovation, providing flexible lab space for companies to expand. We have often lost people to places like Wales and Manchester, but we want to stop that. These companies often become good employers and fill a place in an ecosystem of ideas. If you have research next to a hospital, people always benefit. This is not a big pharma play; we are an accelerator giving businesses access to clinicians and academics. We need private investment to make us independent. I know this will succeed and it is more affordable to live here in Birmingham than say the Golden Triangle. We have a lot of women graduates from the STEM sector and we are making sure that this facility also helps local people with skills training so that they can succeed in these careers.'



Above: Birmingham University's Combined Teaching Lab (Darren Carter photo for Sheppard Robson)

The architecture firm BDP has varied experience in both hospital and transport design. Associate, Ronan Connelly, advised the discussion group about the need for multi-modal transport, if science parks were to succeed in attracting talent and creating open access for the community:

'Multi-modal is important, for instance, good bus infrastructure for poorer areas. Boris has always been a fan of buses. You need to get people out of their cars and there's much more interest post pandemic in cycling now, so important to provide cycle routes where you can, besides it is too expensive to fill up your car.

'The larger station today is now being invigorated but we need to pay attention to the small ones too, create a smaller web of networks and bus services need to be improved. We did this as a firm in Leicestershire. The Commonwealth Games acted as a catalyst for change when they were held in Manchester, but there needed to be re-investment in the north of the city. People got behind it, and we need to have those kinds of foresights now, not just focus on one big piece or large station. Victorian stations are all in the right places, they just need invigorating. Previously, you couldn't get across from Manchester to Leeds and we have to challenge where there are gaps. Birmingham is doing good things but there needs to be more time and money, to get everything working together.

'We are in new territory now post pandemic and the UK government is realising that we don't necessarily need big new hospitals but smaller projects to reduce waiting lists. So on the back of the Nightingale hospitals, we are working with loose fit ideas, buildings that can be taken down and adapted for new uses and bringing back engagement with the community.'

Cllr Courts, Portfolio Holder for the Environment at West Midlands Combined Authority, commented that Birmingham is still too car based for people coming into the city from outside. He said it is important to think about shared space and how some infrastructure might affect that. He insisted that the city should be cleverer on networks, and it might be better to spend money on smaller infrastructure with a longer-term strategy and on a web based approach rather than hub and spoke.

HOK's John Prevc responded to a question about social equity, and how health campuses and R&D facilities might be better planned for cities, post pandemic, especially as often even senior research staff and nurses cannot afford to live near to where they work:

'The best cities are mixed cities and the idea of living and working close to each other is an important one. We are currently designing a hospital in Edgbaston which is a public-private partnership, and this will provide a legacy in 30 years' time when it returns to the public sector. However, cities have always needed to generate space that is not just single use. We have come away from the central business district concept of the 1950s and 1960s and taking the car out of city centres. Science and medical campuses are slightly different places. They are the science and tech engines of innovation. We are working with some interesting developers on science campuses which will have everything from R&D to product testing, manufacture and distribution all on one site. This 'through network' is an interesting way that campuses might develop in the future.'

Vinci will build the Queen Elizabeth Hospital expansion scheme in Edgbaston, which will deliver acute healthcare for private patients in the region. The new facility is a joint venture between University Hospitals Birmingham NHS Trust Foundation Trust and HCA Healthcare UK, being developed by specialist healthcare property company Prime. The 160,000 square feet hospital, designed by HOK, will provide 66 private patient care beds and 72 NHS beds, as well as new radiotherapy unit and operating theatres.

'The innovation campus will provide the missing puzzle piece and deliver high impact for our research as well as helping patients.'

Richard Fox, University of Birmingham

Richard Fox, Business Partnerships Director at The University of Birmingham, said that while physical connectivity was important, investors largely judged the University on the quality of its research and how this was supported:

'We do have the connectivity and that is also illustrated in our local and global partners. We are increasingly working with SMEs to bring them to the region and growing businesses out of the University. The innovation campus will provide the missing puzzle piece and deliver high impact for our research as well as helping patients. It doesn't matter whether we have partners in Selly Oak, Boston or Zurich, we really have to make the most of this development and that means using the stable gene pool for testing here. We are competing to attract talent globally and are developing technologies in different areas such as rare blood cancers, but we are also carrying out research for the environment as well, with our green surgery group and our energy part with the WMCA.'

With both new entrants and established health and life sciences firms seeking novel approaches, the need to de-risk innovations – in diagnostics, software, devices or new therapies – through testing and evaluation in a relevant real-world environment is critical the University says, if it is to successfully commercialise and adopt new technologies.

Providing a bespoke physical home for collaborative research and data-enabled healthcare innovation, BHIC will also create the open and inclusive culture, infrastructure and environment needed to deliver key elements of the Government's Life Sciences Industrial Strategy. This includes the mission to 'transform the prevention, early diagnosis and treatment of diseases like cancer, diabetes, heart disease and dementia by 2030' The campus is set to attract innovative businesses to the region and will support them to create meaningful employment opportunities and sustainable economic growth to benefit both patients and the wider community. It will also create the grow-on space for the businesses currently incubating in [The BioHub Birmingham](#) which is fully occupied.

Future phases have the potential for around 65,000sqm (650,000 square feet) of lettable commercial space for innovative health and life sciences businesses seeking to co-locate and work closely with BHP. This will comprise high-quality lab and office space for new start-ups, alongside grow-on space for businesses either currently incubating at our existing BioHub, Institute of Translational Medicine, or elsewhere. The potential for flexible design will also enable businesses to configure their own space as they scale up.

There is also the option of developing pre-lets for established businesses seeking to relocate or co-locate teams at the heart of the BHP ecosystem.



Above: The University of Birmingham's Collaborative Teaching Lab, project-led and designed by Sheppard Robson (Image from Hufton + Crow)

New ways of delivering teaching laboratories by creating flexible, multi-functional spaces has also been completed by architects Sheppard Robson for The University of Birmingham.

The Collaborative Teaching Laboratory at the University of Birmingham has enabled numerous disciplines to work and collaborate side-by-side. The super-flexible labs are akin to 'hot desking' for scientific discovery.

Sheppard Robson's design team was challenged to push flexibility to its limits resulting in each level of the building revolving around three giant rooms (a wet lab, dry lab and e-lab), with servicing allowing the space to be reconfigured for different uses. The interstitial flooring for example, meant that one part of the same lab was still in use, further boosting utilisation. The design also removed corridors from the plan, making pockets of interaction space outside every super-sized lab, encouraging further interaction between disciplines to take place. The creation of centralised generic science space, which is not 'owned' by one set of users, means that Sheppard Robson needed to work upstream with the curriculum and equipment development teams of the university to calculate everyone's requirements for the space.

Given the large energy demands of a mainly laboratory facility, a detailed holistic review of the building form and usage was undertaken, helping create a passive design strategy. The site is long, linear and bordered on two sides by existing buildings, which impacted the orientation of the structure. It was important to limit solar gain to the southern elevation, where the main entrance is located. The use of a high quality engineered solar control glass, along with architectural shading elements, optimises daylight throughout the building.

Alex Solk, Partner at Sheppard Robson explained further:

‘It was an interesting brief that we received from the University, to co-locate the teaching labs from up to 14 different departments from the STEM area. Chatting to all departments, we realised it wouldn’t do anything for collaboration, so we developed a new proposition - the Collaborative Teaching Lab, and how students could share space – and everyone got excited about it.

‘We needed to incorporate efficiency, so we used a modular approach which meant all students sharing amenities. We developed an airport like system to answer how to get people into different timed sessions of the labs, very much like at airports where you go to different gates. There were a few teething problems in getting a 24-hour, 7 day a week use of labs – traditionally they had only been used in the morning or afternoon – and that meant talking to HR about different shift patterns for tutors, and also for ‘multi-skilling’ technicians, but we did eventually get all this in place.

‘The most important achievement was to avoid blocking lab benches and so we created informal learning spaces, where students could carry out an experiment in the lab and then move off to talk to their tutors in other less formal learning spaces. The campus became ‘sticky’ where students wanted to stay and study. We also designed it with sensors to monitor how the centre was working, and the students would use this in their own research.

‘We were offered six sites in the university campus to locate the new centre and we looked at all of them. We needed to choose a site where some subjects were on display like engineering to attract more female students and I am happy to say that this has achieved that aim. In fact, we also created a pathfinder model through this for doing things differently, whereby the University can now hire out services from the centre to other departments.’



Photo by Alex Upton of first phase of refurbishment of Birmingham University engineering buildings – which began the CTL project led by architects Sheppard Robson



Exhibit from Birmingham Museums: 'The Past is Now' exhibition - originally curated in 2018 to examine the relationship between Birmingham's communities and the British Empire - now on display.

Birmingham: culture and communities

Resilience in the cultural sector in Birmingham was an important part of our third levelling up discussion in Birmingham. Taking part were Symon Easton, Director of Culture at Birmingham City Council, Anna Williams, COO of Birmingham Royal Ballet, Erica Love, Director, Culture Central and Neil MacOmish, Board Director, Scott Brownrigg.

Questions were asked around the legacy of the Commonwealth Games in Birmingham, the creation of a more diverse workforce for the cultural industries in the city, improvements in connectivity to widen the range of people who can attend performances and the measures to put in place for the sustainability of big city events.

Birmingham City Council is turning its attention to how the city can enhance its cultural offer while promoting it as a national and international destination, as it recovers from the pandemic.

The [Visitor Destination Plan](#) will capitalise on the huge opportunities that hosting the Commonwealth Games brings, not least the unprecedented television coverage to a worldwide audience this summer. Outdated perceptions of the city and region will be challenged as viewers and visitors will see how much Birmingham has transformed in recent years.

The plan will support the visitor economy by showcasing areas where Birmingham is strongest including its vibrant culinary scene, world class culture and festivals, history and heritage, award-winning family attractions, independent and designer shopping, its acclaimed Christmas experience and a growing screen tourism offer. The council says it will work with its partners to ensure that these 'hero' themes will be communicated effectively to consumer and travel trade markets and become better known both nationally and internationally.

'We are the youngest and most diverse city and whatever we plan in terms of sport and culture, it must meet the expectation of different communities.'

Symon Easton, Birmingham City Council

Symon Easton said:

'We have had a lot of turmoil and challenges recently and the timing of the Commonwealth Games is appropriate. There has already been work carried out on the potential legacy of the games and it is good for people living in the city to start thinking about what the benefits could be. People now do feel disenfranchised. We are the youngest and most

diverse city and whatever we plan in terms of sport and culture, it must meet the expectation of different communities. That's where the Big Culture Conversation comes in - in terms of inclusivity and relevance - and making sure the varied voices of the city are heard. We are a city of different centres, so we need to engage people and those marginalised communities. We have had ten years of adversity and we don't have huge resources, but we have to make it work.'

Birmingham Royal Ballet kept going throughout the pandemic and is constantly evolving its offer to draw in a wider audience. At one point during the pandemic, there was talk of taking ballet onto the streets to make it more accessible.

COO Anna Williams stated:

'We often talk about art being performed in the centre of the city, but it is difficult as a traditional art form that is reliant on built infrastructure and large numbers coming in. An important question is how people navigate the city to come to performances and this is fundamental to the success of Birmingham. The transport infrastructure in London because it is a bigger city, works better and you can get to and home from performances that go on late into the evening, but it is much harder in Birmingham. We must make sure that people



Above: Birmingham Royal Ballet's production of Don Quixote with choreography by Carlos Acosta after Marius Petipa. Emma Price and Javier Rojas perform as the Gypsy Couple - photo: Johan Persson

in this city feel they can cross boundaries to take part and we have to do this through community and place-making.

'We are a touring company and I travel up and down the UK, so I am aware of different regional economies. The investment in Birmingham is extraordinary and in the centre you can walk among fountains and public spaces which is fantastic, a bit more of a challenge around The Hippodrome where we are and I do think we have to work on connectivity. In London, a lot of activity is moving to the east of the capital, and it is important that we keep growing these hubs.

'However, there is the danger of the centrist government with the idea of taking money out of London and redistributing it - the danger of the parachute policy - that negates the work of the people who understand their communities. It cannot be about gifting through largess, and we must recognise the strength of the work in these communities that happens.'

'The recent appointment of Carlos Acosta was a bold statement, and he has absolute ambition not only to make great art but has the warmth and ability to connect with young people and help drive talent and employment sustainably, which is drawn from local areas.'

Erica Love, Director of Culture Central added:

'We have been carrying out a programme of work to look at how freelancers can survive the instability of their employment in the cultural sector. Covid-19 has meant that the cultural sector is still suffering a loss of numbers in the workforce and we need a clear strategy around how to improve that, how funds can help and bring in the collective voice of the cultural sector to solve some of these problems. People have come from all over the country to work on the Commonwealth Games and we would like to understand how to retain that talent.

'There has been work done through the levelling up agenda to improve equality in the region, but there are still more places that don't have any investment. However, there is now incentive for companies in London to move to places like Solihull and the Black Country, and there is evidence of the desire of cultural organisations to spread to the regions. This is breaking down the misconceptions about culture in Birmingham and the surrounding areas.'

Scott Brownrigg's Board Director, Neil MacOmish who concluded our debate spoke of the importance of keeping an international perspective on culture and sports tourism.

He has reported on the work of the [UN World Tourism Organisation \(UNWTO\)](#) and Catalan Tourist Board which has published a summary of the proceedings, case studies, and the key lessons learned following the first World Sports Tourism Congress which took place in November 2021 in Catalonia:

'The process of transformation of tourism, and by extension also of sports tourism, began before the COVID-19 pandemic, but this has generated new elements that rethink the change. Aspects such as travel, essential for tourist activity, the profile of users, supply, or demand, will be affected. Both the events and the active practice of sports tourism should

rethink their configuration, considering aspects such as sustainability, the environment, health, the impact on the territory and its residents, among others.

At Future Cities Forum in Birmingham Neil MacOmish continued:

'It is good to think about local, but if you don't take a national and global stance, none of us are going to exist - it's one planet I am afraid - and there are tensions in tourism with jumping on planes, but travel is still part of a cultural experience and if we don't have that, we will have no empathy for other countries or care about them.

'Being transparent about policy makes it believable to local communities. I was asked to work on design codes for a football park in The Bronx, New York and the Yankee stadium opposite promised community engagement from the start, but it failed because it was just the rich who attended and paid very little once they were at the games. This did nothing for the community. We have been advocating long life, loose fit and the Emirates Stadium is the single biggest place where most learning happens because young people think they might catch a glimpse of one of their sporting stars and it's cool.

'The way for Birmingham to capitalise on the games is to tell the story and preserve the shared and collected memories, these become very significant. Urban fabric is critical and but also the experience that the host city gives visitors, how people are treated when they are there.'

Below: CGI from Scott Brownrigg of a design for The Barony in East Ayrshire, part of a 44-hectare masterplan for a cultural and well-being facility. Transforming the site of an ex-coal mine, The Barony will host 344 villas, a reception and visitor centre, and spa areas, alongside ecological sites that will generate produce and research from an ambitious re-wilding programme.





'Flat Iron' building (Leeds Bridge House) on Leeds South Bank, with view to The Tetley contemporary art gallery, and contractors completing public realm and access improvements – May 2022

Conclusions

Throughout our levelling up debates the question over the balance of attracting public versus private investment was a central one, as was the importance of continued investment in transport to connect regions, while the resilience of the sporting and cultural events sectors was highlighted. There were some very positive findings on the strength of science and innovation developments in all the three cities of Leeds, Manchester and Birmingham. Science innovation has been a cornerstone of UK government policy in the levelling up agenda. In detail, the findings of the report are as follows:

- Leeds is still struggling to keep the big capital projects of the 1990s levelling up going and more funding is needed. The cancellation of HS2 to Leeds and the downgrading of the Northern Powerhouse Partnership plan for connectivity across the North, has been

disappointing for the city. It is thought there needs to be more advance thinking in planning the benefits of a re-design for Leeds City Station and this has been lacking.

- However, developer Bruntwood is determined to build business communities across the North and international law firm DLA Piper which has a 200-year history in the city, feels a moral imperative to invest with new state-of-the-art offices. Leeds Teaching Hospital NHS Trust sees a social value in creating more apprenticeships and jobs, in turn improving long-term health. It is expanding its hospital site to provide much needed services and spaces for the community as well as creating an innovation hub with The University of Leeds. International investment in being attracted to The University which collaborates well with other partners.
- The British Library's intended move to Temple Works in Leeds will act as a major catalyst, to an already vibrant cultural scene, as well as a move that will create jobs and strengthen the visitor economy. A new mixed development with housing in Globe Road for Get Living, in the South Bank area, not far from the British Library's Temple Works, will have new public realm, spaces for new start-ups, restaurants and retail as well as the potential for cultural wayfinding into the city, using the river and industrial heritage for interest.
- Leeds Playhouse is currently working on widening the diversity of its audiences to include dementia-friendly performances. Next year the city will see its cultural festival 2023 take place and the individual heritage buildings of Leeds are expected to create an impressive backdrop as well as important televised branding for the city. Locally, there has been dismay at the plan to privatise Channel 4, which since its move has recorded more regional and unheard voices in its productions. Less government funding, it is feared will mean a backwards step in production and jobs for the city region.
- Manchester City Council's number one levelling up priority is housing and Victoria North will provide 15,000 new homes, rejuvenating disused, brownfield land over the next 15 years. This traditionally poorer area of the city with low educational attainment and employment, with communities who do not feel connected to the city centre, will benefit from £4 billion funding. Surrounding towns such as Bury can provide extra housing as needs arise due to city expansion in science and innovation jobs.
- The town of Ashton has received £20 million from the Government's levelling up fund to make it into a desirable location for the innovation, design and tech sectors. LDA Design has used the industrial revolution ethos of healthy town planning to extend this to better public realm with an emphasis on the power of nature post pandemic. Towns in the region such as Blackpool admit they should be planting more trees as they tackle the town's poor housing and build a programme of all-year-round tourism. It has been successful in winning its £50 million Town Deal but has so far failed to achieve what it would like in the Future High Streets Fund. CBRE warns of the loss of senior planners in councils, which may negatively affect the UK's levelling up housing ambitions.
- Professor Ben Bridgewater of Health Innovation Manchester said that currently one of the problems within the city for levelling up is that people have different understandings of what this should be and that too many people are thinking in separate silos. The University of Manchester believes that Brexit has not made levelling up any easier, with a shift away from European programmes now impacting student exchange.
- The Northern Powerhouse Partnership believes that graduates should be retained in Manchester, to reverse the historic exodus. Attraction of R&D investment is the best goal of levelling up according to the Partnership and the city should look at what it is good at and new opportunities for growth to close the productivity gap.

- The University of Manchester is creating a new 'innovation district' – ID Manchester – which will create 10,000 new jobs in the next 10-15 years and investment in its re-designed MECD campus by Arup will enable different groups of engineers to work together as well as open learning up for the local community.
- Birmingham is ready to capitalize on the Commonwealth Games, but some believe it and other cities should consider the impact to the environment and local communities when planning large events, to make them sustainable. It is hoped that outdated perceptions of the city can be challenged through not just sport, but cultural offerings. Birmingham City Council feels that after ten years of adversity, people feel dis-enfranchised and it is now that different voices from a range of communities must be heard. As many people have flocked to work on the Games, it is hoped that this talent can be retained and there can be a strategy to solve the loss of large numbers in the cultural workforce. There must also be efforts to tell 'the story' of the Games and to preserve the communities' collective memories. Arcadis believes that the provision for local community sport will develop after the Games, while blue and green infrastructure in the city can be developed towards healthier lifestyles and a linked collection of 15-minute walkable city districts.
- Volterra has suggested that the UK government's handling of levelling up bid assessments could be better if land value capture was not the predominant consideration. There has been concern that the Government's portal for tranche 2 bids has not been ready and the timescales for local areas, unreasonable. Meanwhile, The West Midlands Combined Authority has stated that the region must make itself attractive to private investment, but with its solid connectivity, has confidence it can get prosper through the current political uncertainty. Although the timescale of the delivery of HS2 is considered an issue, land has been released around the Solihull Interchange station, for a transformative new health campus with excellent connections to the airport and to London.
- The new Birmingham Health Innovation Campus (BHIC) at Selly Oak, is set to become a world-leading life sciences campus by 2023, creating 10,000 new jobs and reducing inequality of medicines provision around diversity. Facilities next to the hospital will attract companies to locate and improve research.
- Multi modal transport is key for connectivity within the city, whether for housing, or getting to science centres. The new Perry Barr Station is welcome and is a symbol of how the Commonwealth Games has already created some excellent regeneration. However, some believe transport infrastructure in the city is currently lacking and it must develop as a web, not as a hub and spoke approach, challenging where there are gaps in provision. It continues to be an issue for access to cultural events within the city, compared to the transport infrastructure of London.
- Birmingham Royal Ballet concluded our debates with the observation that while levelling up investment is needed, there should not be a default to a 'parachute policy' from national government but rather a recognition of the strength of individual communities to use their local knowledge for steering regeneration.

With thanks to our contributors

Leeds City Council, West Yorkshire Combined Authority, DLA Piper, BDP, Leeds Teaching Hospital NHS Trust, Bruntwood, University of Leeds, Arup, Perkins+Will, Channel 4, The British Library, Sheppard Robson, Historic England, Page Park Architects, Science + Industry Museum Manchester, Government Property Agency, Aviva Investors, Manchester City Council, HOK, Health Innovation Manchester, University of Manchester, Northern Powerhouse Partnership, Blackpool Council, Far Eastern Consortium (FEC), LDA Design, CBRE, West Midlands Combined Authority, Grimshaw, Volterra, Arcadis, Precision Health Technologies Accelerator, Birmingham City Council, Culture Central, Birmingham Royal Ballet, University of Birmingham

Copyright: The Broadcast PR Business 2022 / FUTURE CITIES FORUM

www.futurecitiesforum.london