

## Foreword

It is an exciting time for the West Midlands. With the third Mayoral term upon us, we have a significant opportunity to take the reins and optimise our devolution powers to drive transformative change across the region.



Vicky Evans

Midlands Cities, Planning and Design
and Advisory Services Leader

The region's future is bright, but there is a need to build on the momentum we have seen over the past decade in terms of investment in our towns and cities, the drive to net-zero and showcasing the West Midlands on the world stage. We must also focus on strengthening the region's ability to tackle the complex challenges we face, including public sector funding constraints, growing inequalities, and climate change.

We are committed to sharing fresh perspectives which encourage positive change and resilience across the region. With approximately one third of the West Midlands Combined Authority (WMCA) area population being under the age of 25, we turned to the voices and changemakers of the future – our early careers cohort – to lead this exploration around their areas of interest.

This publication distils our ideas into the following six key themes, which are underpinned by our aspiration to shape places that address the needs of our diverse region:

- a climate resilient region;
- a skilled and prosperous workforce;
- affordable and sustainable homes;
- inclusive and safe communities;
- driving connectivity and a modal shift; and
- a hub of culture and innovation.

The twelve ideas contained within this publication are intended to be bold, thought provoking, and inspire debate, change and collaboration amongst those who live, work and study here.

We are proud to have worked in the region for over 55 years, and contributed to transformational projects including; Paradise Birmingham, High Speed 2, UK Central Solihull, Sandwell Aquatics Centre and delivery of the Birmingham 2022 Commonwealth Games.

We all have a role to play in supporting the region in realising its full potential, and by amplifying our diverse voices we can drive transformative change. We invite you to take a look at our twelve ideas and proposed next steps, and collaborate with us to bring these ideas, or any others that this publication inspires, to fruition.





**Arup's Ideas for the West Midlands ideation session** © Arup

## Twelve ideas for the West Midlands

## A climate resilient region

#### **4** Green lungs for our cities

Transform city centre road infrastructure into high quality linear parks to improve air quality, enhance biodiversity and community wellbeing.

#### **2** Large scale city centre water storage

Repurpose highway tunnels to create water storage and reduce flood risk within our city centres.

### A skilled and prosperous workforce

### 3 Skills and employment one stop shop

A digital platform that will be a first port of call for those seeking to upskill or secure employment.

### 4 Region-wide social value framework

A social value framework that ensures impacts are delivered where they are most needed across the region.

### Affordable and sustainable homes

### 5 Retrofit at scale

Scale up our retrofit efforts to focus on entire streets and neighbourhoods, taking learning from the WMCA's Net Zero Neighbourhood Pilots.

#### **6** Affordable housing champions

Bring together key players from the public, private, voluntary and community sectors to pledge how they will each contribute to delivery of high quality, affordable housing.

### Inclusive and safe communities

#### **7** Empowered communities

Capability building sessions and best practice consultation/ engagement activities to enable communities to understand and influence the development process.

### 8 Safety and inclusivity by design

A pilot project to identify residential areas, highstreets and other spaces that require intervention to improve safety and inclusivity, which can then be echoed across the region.

## Driving connectivity and a modal shift

### A sustainable "transport first" approach

A review of travel behaviour to determine how to make public transport our preferred mode of travel.

### 10 Electric driverless public transport

Introduce autonomous public transport to unlock new travel options and accelerate a shift away from private vehicle use.

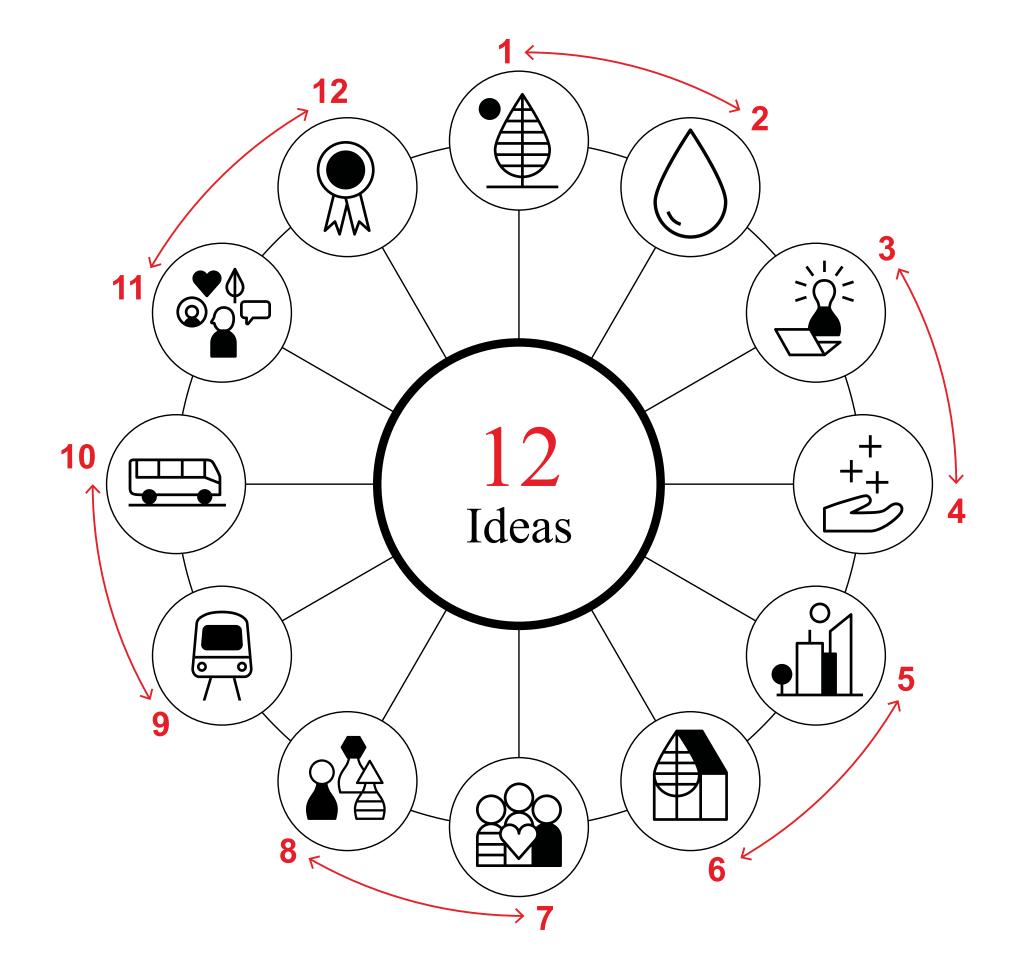
### A hub of culture and innovation

### 11 Powerful brand and civic pride campaign

Establish an overarching brand for the region to instil a greater sense of civic pride, and attract additional visitors and investment.

#### **19** Centre of Innovation

Celebrate the region as a Centre of Innovation to strengthen our international reputation, attract investors and inspire new innovators to drive inclusive economic growth.







# A climate resilient region

## A climate resilient region

### **Background**

In 2019, the West Midlands Combined Authority (WMCA) declared a climate emergency and pledged urgent action to reduce carbon emissions. There are now 5-year action plans in place to deliver the carbon reductions we need in the region.

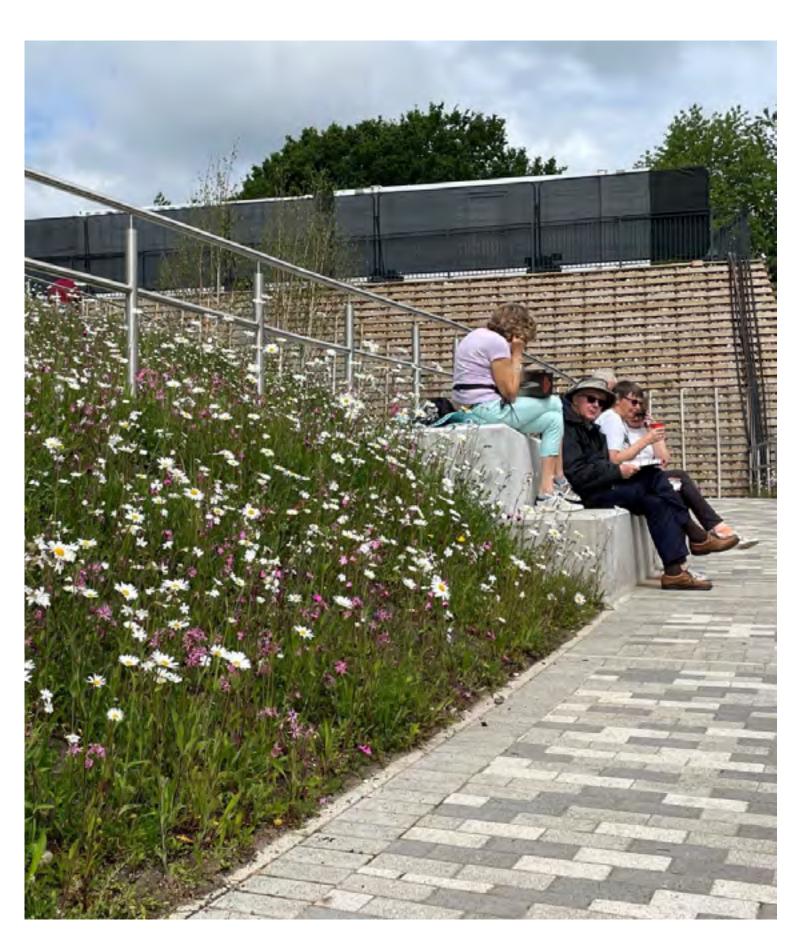
Despite this bold action, we are already heading towards at least 1.5 degrees of warming, and further intervention is needed to achieve the new Mayor's ambition to accelerate the 2041 Net Zero pledge.

## The opportunity: Applying innovative solutions to create a climate resilient region

Since 2021, WMCA have had a Climate Change Adaptation Plan supported by the Summary of Climate Change Impacts. There are several key focus areas for the region, which can provide a variety of co-benefits for climate change mitigation and adaptation. Work in nature-based solutions (idea 1), retrofit and adaptive reuse (highlighted through ideas 2 and 5) and supporting sustainable travel (through idea 9) are some of the ways of bringing these two climate concerns together.

Collaboration between the public, private, voluntary and community sectors offers the opportunity to expedite delivery of innovative solutions. For example, we all have a duty to support the WMCA in delivering the Local Nature Recovery Strategy for the region. WMCA has been considering their role in nature markets for the region for a number of years and have recently begun work to develop Local Investment in Natural Capital mechanisms.

Strategic forward planning to deliver biodiversity net gain (BNG) (as required by the Environment Act 2021), offers a pilot to work together across individual projects to maximise environmental benefits and drive climate resilience. Similarly, the region could collectively champion sustainable drainage systems (SuDs) as a nature-based solution. Our recent work with the WMCA makes the case for SuDs and could be shared amongst local authorities and developers to ensure they are aware of the associated opportunities to contribute to BNG and climate resilience as part of their projects.



Integrating biodiversity in the Alexander Stadium Redevelopment, Birmingham © Arup



**Lily Cotner**Graduate Environmental Consultant



James Vine
Landscape Consultant



## Idea 1: Green lungs for our cities

Birmingham, Coventry and Wolverhampton's city centres have been designed around car travel and are constrained by their 'concrete collars'. This infrastructure not only reinforces private vehicle use, but also hinders expansion of city centres and creates barriers within communities.

Why not put this extensive highway infrastructure to better use to drive climate resilience, economic growth and improved health and wellbeing?

Within the West Midlands Natural Environment
Plan (2021) the WMCA set out their aspiration to
ensure every household has access to high quality
green space within a 300m walk of their homes.
This ambition can be fulfilled by transforming
existing roads within our cities into high quality
green spaces in the form of linear parks. These
'green lungs' could deliver a multitude of benefits:

 Permeable surfaces and SuDS to reduce strain on drainage infrastructure, particularly as flood risk pressures increase.

- Improved connectivity for biodiversity, and increased canopy cover to reduce the urban heat island effect and improve air quality, providing resilience for hotter days.
- Inclusion of more attractive walking and cycling routes, and bus and tram connections to encourage a modal shift to more sustainable travel.
- Provide space for leisure, exercise and connection, to enhance wellbeing and community cohesion.
- Increased land/property values to catalyse further investment opportunities.

### **Birmingham Green Lungs**

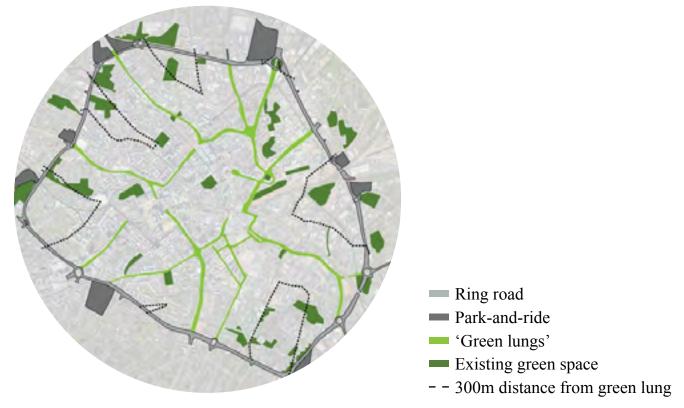
Birmingham City Council's (BCC) draft Our Future City plan proposes the introduction of 'greenways' or 'green lungs', by remodelling certain road infrastructure to create linear green spaces.

Our 'Birmingham Green Lungs' idea goes a step further and proposes the removal of private vehicles from within the A4540 ring road entirely to facilitate the creation of a city-wide network of green spaces, as demonstrated on the plan adjacent. Conversion of the city's main arterial roads into linear parks would ensure most households within the ring road have access to high quality open

green space, delivering the ambitions of the West Midlands Natural Environment Plan.

Access to the city centre would be through a public transport and active travel network, nestled within green linear parks and high quality public realm. Private vehicles would be left at park-and-ride facilities situated at strategic locations around key entrance points, with easy access to public transport, enabling commuters to efficiently reach their city centre destinations.

These principles can also be applied to
Wolverhampton and Coventry city centres, and
built into the Local Nature Recovery Strategy as a
mechanism to facilitate delivery.



**'Birmingham Green Lungs'** © Arup

Cities Alive

**ARUP** 

Click to download



Click to download



## Idea 2: Large scale city centre water storage

The Paradise Birmingham development demonstrates the complexity of delivering regeneration within city centre ring roads, and specifically, around Birmingham's A38 Suffolk Street Queensway tunnel (situated beneath the development). However, a high proportion of traffic passing through the tunnel doesn't stop in Birmingham and therefore isn't contributing to the city's economy but is adding to local congestion and pollution levels.

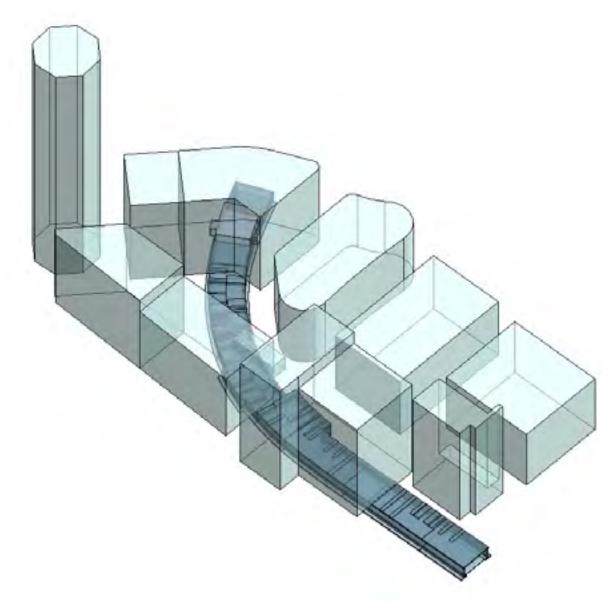
The Birmingham Connected White Paper previously proposed closure of the A38 tunnels and redirection of traffic onto an upgraded ring road. More recently, BCC's draft Our Future City plan proposes remodelling the A38 Suffolk Street Queensway to become a tree-lined greenway with improved public transport and active travel routes. Whilst we very much support the ambition to transform the highway into a sustainable transport route, the tunnel itself is in poor condition and would be expensive to maintain for this purpose.

An alternative option, which could be considered by the emerging West Midlands Flood Resilience Taskforce is repurposing the A38 tunnel (below the Paradise development) for use as surface water attenuation. Our engineers have calculated that this tunnel alone would offer an attenuation volume of approximately 44,000m<sup>3</sup>. This could provide attenuation for 87 hectares of the city centre. Not only would this provide valuable surface water attenuation, but also reduce air and noise pollution within the city centre. This approach could be scaled up and applied to other parts of the A38.

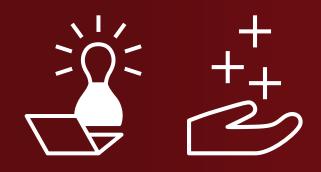
New developments are expected to incorporate SuDS. However, it is anticipated that rainfall events across the region will become heavier and more frequent due to climate change. As the need to attenuate becomes greater, the size of storage to attenuate surface water into the tanks is also increasing, placing ever-growing costs and space-planning pressures on city centre projects.

As recognition of the embodied carbon impact of new-build development grows, it is reassuring to see a subsequent increase in support for retrofit. However, there is currently no requirement to incorporate SuDS into building refurbishment projects. As such, the number of retrofit projects incorporating SuDS to address flooding issues arising from heavy rainfall will, in time, decrease.

We need to be proactive in addressing this future shortfall in attenuation and converting the region's highway tunnels is one option to ensure we can maintain momentum in delivering new buildings, retrofit schemes and public realm enhancements. Developers could also contribute to associated costs via Section 106 agreements, to account for savings made by not having to deliver SuDS on site.



A38 Suffolk Street Queensway tunnel beneath Paradise Birmingham © Arup



# A skilled and prosperous workforce

## A skilled and prosperous workforce

### **Background**

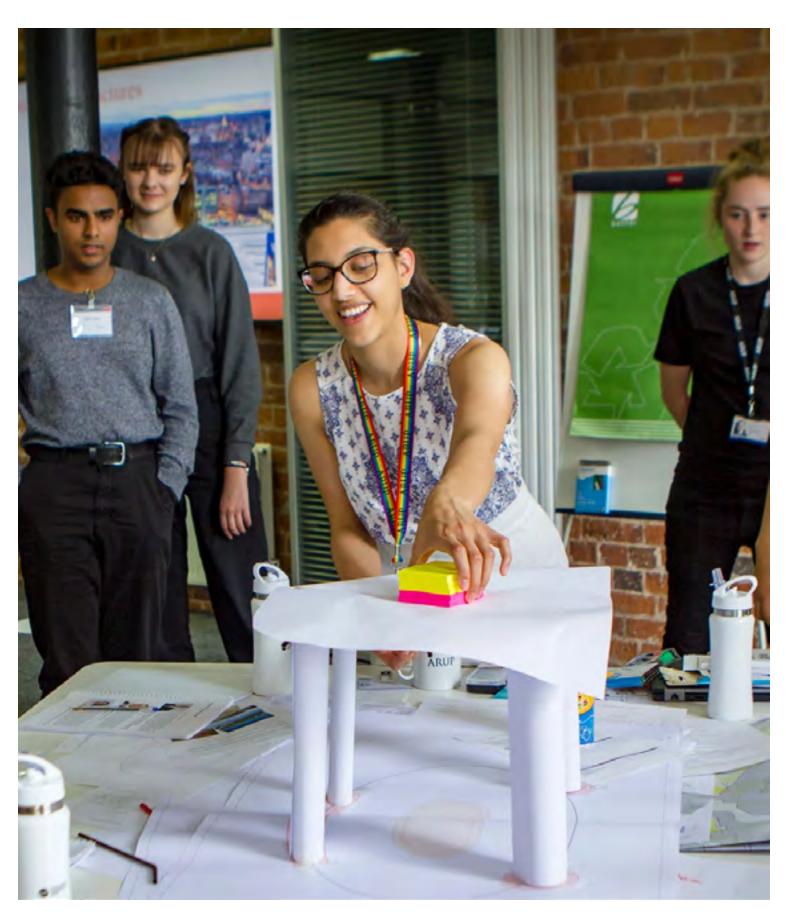
Despite progress, the West Midlands still performs poorly against the national average in relation to wages, qualifications, employment, and job security levels. There are also significant skills gaps in the region, demonstrated by 35% of vacancies in 2022 being attributed to the inadequate skills, qualifications or experience of applicants.

## The opportunity: Diversify skill sets and increase employment opportunities to drive social mobility and productivity

We are fortunate to be home to a richly diverse population in the West Midlands. However, the responsibility to ensure our communities are suitably equipped to realise their full potential and optimal quality of life is all of ours to bear.

Our new Mayor has committed to creating 150,000 jobs and training opportunities, with a focus on improving social mobility. The key to this will be a focus on inclusive economic growth which addresses local inequalities and increases accessibility of the region's skills landscape.

We should also significantly invest in our young people as a leading demographic and cornerstone to the region's future prosperity. We must ensure there are appropriate career pathways available and invest in their fresh perspectives, creativity, and digital knowledge to drive our innovation and productivity.



**Arup's 'Engineering Awareness Week'** © Arup



Samuela Osei Graduate Engineer



## Idea 3: Skills and employment one stop shop

An online one stop shop should be established to improve visibility of training and employment opportunities. Employers can advertise their vacancies, job seekers can search for appropriate roles, and education and training providers can publicise their courses.

The platform would act as a first port of call for those seeking to upskill or secure employment and offer a real-time view of available opportunities and routes-in. This should be accessible from any webconnected device - including in community venues for those without access to a personal computer.

The platform should include:

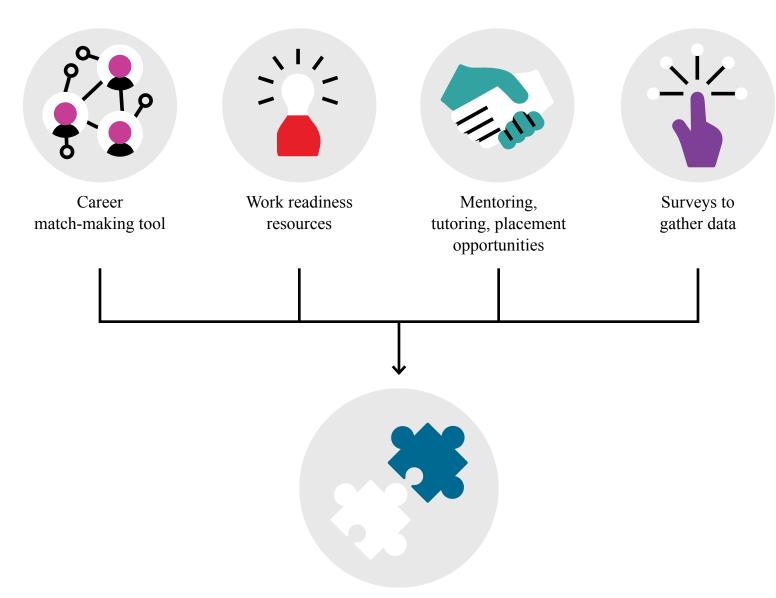
- A dedicated area for employers and training/ education providers to offer work readiness resources for job seekers - including tutoring and placement opportunities, and e-learning modules focussed on CV writing, interview preparation and foundation digital skills.
- A function enabling job seekers to enter their aspirations and be matched with appropriate career paths, mentors, training courses and employers.

 Surveys to gather data and insights to inform future Local Skills Improvement Plans and wider policy making.

The platform would facilitate further collaboration between employers and training/education providers to enhance career pathways. It would also increase the equality of opportunity, and help residents to secure appropriate training and employment to improve social mobility.

Designing and maintaining the platform by virtue poses opportunities for skills development – for example, could an apprentice shadow the developer, or could university students be responsible for producing certain components?

It is recommended that the WMCA oversee development and maintenance of the platform, with ongoing contributions from job seekers, employers, and training and education providers. The platform will help to realise the ambitions of the Jobs and Welfare Hub proposed by the Mayor and provide an invaluable resource for community youth workers to support young people into training and employment.



Skills and employment one stop shop



## Idea 4: Region-wide social value framework

We have seen the tangible impact that social value activities can have on skills development and generating employment opportunities. Most notable are activities associated with capital projects and organisations' corporate social responsibility pledges.

For example, Arup delivered significant social value impacts as part of our involvement in the Birmingham 2022 Commonwealth Games, including:

- two apprenticeships;
- four ten-week paid work experience placements;
- thirty-five one-week unpaid work experience placements; and
- 363 staff hours supporting young people into work, such as through careers fairs, CV support, mock interviews and STEM talks.

However, typically social value activities are delivered through geography-specific initiatives, resulting in an unequal distribution of benefits across the region. Going forward we need to take a coordinated approach to ensure social value activities are delivered where they are most needed, respond to local socio-economic challenges, and tackle the region's inequalities. The WMCA's previously established 'Social Value Taskforce' provides an excellent mechanism to do this, and therefore we recommend that a reinvigorated taskforce implements and oversees a pioneering region-wide social value framework which the public, private and voluntary sectors are responsible for implementing as part of their day-to-day roles.

All too often, social value opportunities are solely focussed on the procurement process, whereas social value delivery should be considered from the very outset of a project, right through to implementation. It is important that project managers hold themselves to account and champion social value at all stages of schemes.

The taskforce must comprise representatives from across the public, private, voluntary and community sectors to ensure the framework responds to local challenges and opportunities. Representatives would be responsible for championing delivery of the framework amongst their networks, monitoring and measuring outcomes, and capturing best practice.

Impactful social value initiatives would include:

- A review of where social impact is most needed across the region to enable targeted intervention.
- A region-wide matchmaking platform similar to those established by BCC and Younity, to enable community needs to be matched with appropriate offers of support from businesses.
- A pioneering 'adopt a neighbourhood' scheme whereby businesses can identify a community they would like to partner with to deliver long lasting, systematic change.

Interventions such as these will complement and supplement the outcomes of the Mayor's £1 million community fund.



Arup STEM curriculum support



**Arup** at a school careers fair © Arup







# Affordable and sustainable homes

## Affordable and sustainable homes

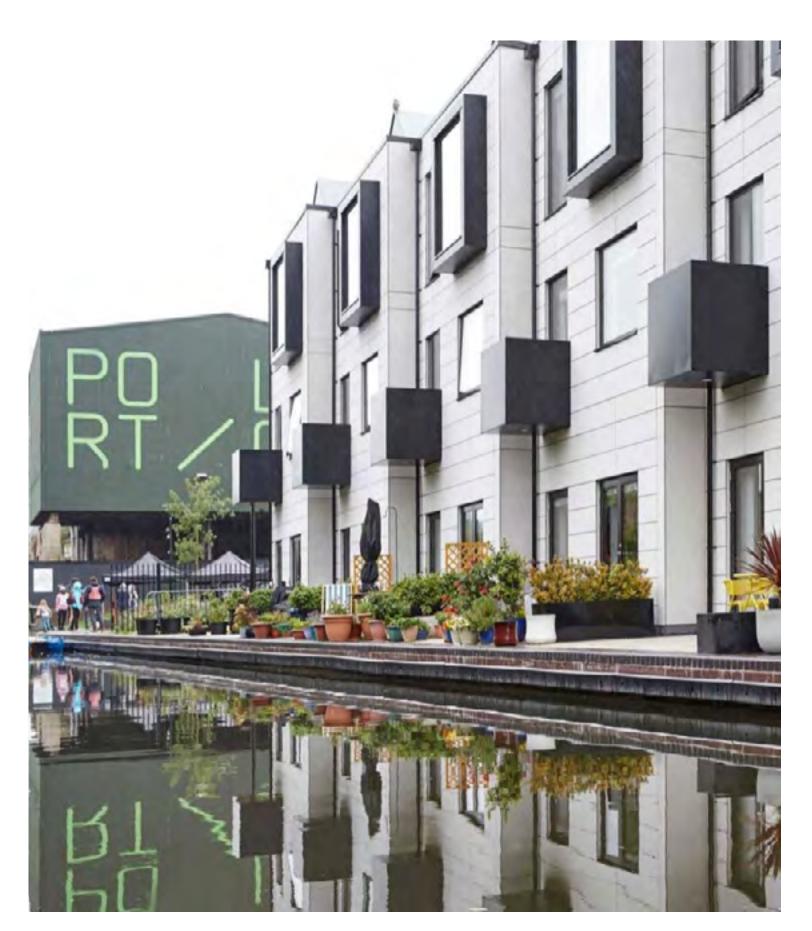
### **Background**

Our local population is growing and by 2028 its predicted that over 6 million people will call the West Midlands home. To address this, the WMCA has set an ambitious target of delivering 215,000 new homes by 2031. Whilst we are currently on track to meet this target, we must continually challenge ourselves to focus on the quality of homes, as well as the quantity.

## The opportunity: Accelerate housing delivery and provide high quality, affordable homes which are resilient to climate change

The West Midlands' devolution deal is a fantastic opportunity for us to make further progress in providing affordable housing in particular. Since 2018, 2,045 out of the 6,285 homes delivered with WMCA funding were affordable (as of 2023). We must build on this success, and optimise opportunities posed by the Affordable Homes Programme 2021-2026 and grant funding to maintain this momentum.

Future homes should enhance equality and quality of life across the region, whilst also contributing to meeting our net zero targets. We therefore need to rethink our current approaches, innovate and drive a further shift to alternate means of delivery, including adopting modern methods of construction and scaling up our retrofit programmes. This will require effective collaboration amongst local authorities, landowners, developers, registered housing providers, contractors and communities.







Matt Sangster Engineer



## Idea 5: Retrofit at Scale

Whilst retrofit is gaining momentum, we need to take a more ambitious approach within the region. This should include a 'retrofit first approach' and a shift from retrofitting individual buildings to focus on entire streets and neighbourhoods.

The WMCA's Net Zero Neighbourhood Pilots are a great example for this and are building strong case for this approach. Similarly, WMCA's Repurposing to Zero Framework (developed by Arup) provides a useful resource to help developers assess whether retrofit would be a feasible approach for their project.

Arup's UK Cities Intelligence report demonstrates that retrofit at scale can be delivered by taking a systematic, people-centred approach, driving efficiencies, and generating benefits which extend beyond meeting our net zero targets. This includes increasing the energy efficiency of buildings, enhancing biodiversity and the public realm, and creating training and employment opportunities in the process. The publication considers different delivery and funding models which can be tailored to different contexts, grounded in strong collaboration between the public and private sectors.

Arup's work around retrofitting social housing also demonstrates the mental health benefits that can arise by ensuring that our homes are not leaking heat and money. We are therefore proud to be supporting the Department for Energy Security and Net Zero in managing their £1.8 billion 'Housing Decarbonisation Fund and Home Upgrade Grant', which will facilitate retrofit of social and lowincome housing across England.

In addition to funding, our ability to scale up retrofit programmes will be dependent on ensuring that the region possesses the required skills to deliver. There is an opportunity for the public and private sectors to work together to facilitate upskilling across the WMCA, local authorities, and developer and supply chain organisations.

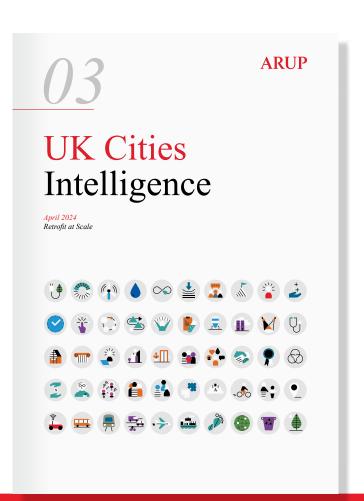
An opportunity exists between retrofit technology companies and developers to collaborate on devising efficient and cost-effective means of heating and cooling in retrofitted homes. The expansion of community energy companies in the region could also push this into wider adoption.

Where changes to existing buildings are extensive, they may create 'waste' products that could have a successful second life, such as steel beams and glazing units. It is imperative that lead contractors and supply chains apply these circular economy principles to retrofit for housing schemes and make use of materials passports and local reuse hubs to facilitate this process.

It is fantastic to see that the WMCA is establishing a reuse hub in Wolverhampton, where surplus building materials and supplies can be sold instead of being sent to landfill. Whilst the reuse hub is still in development, there is an opportunity to make it part of the local requirements for 'Considerate Contractors' and to establish equivalent facilities across the region for use on all retrofit projects. Applying an associated administrative fee could help reuse hub operators to track the quantity of materials deposited, and what they have been reused for to generate a compelling social value report for the region.



Retrofit at scale project to improve the energy efficiency of homes in Coventry
© Sustainable Building Services (UK) Ltd



Click to download



## Idea 6: Affordable housing champions

We fully support the WMCA's definition of affordability, which advocates that residents should not spend more than 35% of their salary on mortgages and rent, and we are keen to contribute to realising this.

We note that our aspirations are shared by colleagues across the region, evidenced by the fantastic work already undertaken by the Centre for the New Midlands. The Centre's roundtable in 2023 brought together key stakeholders from across the public, private and not-for profit sectors to discuss how we can collaboratively overcome the barriers to affordable housing delivery, and culminated in identification of six policy priorities which the Centre will continue to champion.

We encourage the WMCA to build upon this momentum, and embrace appetite for a collaborative solution to ensure we deliver 20,000 council and social homes by 2030, in accordance with the Mayor's target. Partnership working can be facilitated through a large workshop style event, which builds on the outcomes of the Centre's roundtable and brings together other key players from across the region, including local authorities,

Homes England, housing developers, registered providers, contractors, charities, and importantly, community representatives. These 'champions' will each pledge how they will contribute to delivery of high quality, affordable housing.

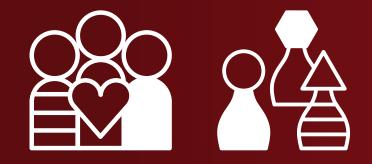
The event should include discussion on the following topics and priorities:

- 1. best practice examples;
- 2. partnership opportunities, funding and delivery models;
- 3. opportunity for local authorities to add more weight to affordable housing policies; and
- 4. developer pledges to deliver on-site affordable housing commitments in accordance with local policy.

The outcomes should culminate in the evolution of the existing Memorandum of Understanding established between the WMCA and five housing associations in 2021 (known as the 'Affordable Housing Collaborative Development Vehicle'), to reflect commitments for future affordable housing delivery across the public, private and voluntary sectors.



Click to download



# Inclusive and safe communities

## Inclusive and safe communities

### **Background**

There remains deep-routed socioeconomic inequalities in housing, education, employment, health, and safety within the region.

The following statistics provide just a small insight into some of the region's disparities that we must collectively tackle:

- Circa 28% of the population are identified as living within England's top 10% most deprived areas.
- Residents have a shorter life expectancy than the national average - women by 1.2 years and men by 1.8 years.
- Only 2.9% of the population identified as lesbian, gay, bisexual, or another sexual orientation - a lower proportion than Greater Manchester and London.
- Circa 1 in 5 neighbourhoods have poor housing and overcrowding.
- Almost 25% of disabled people live in socially rented housing, rather than owning their own home.
- Only circa 55% of the population feel safe after dark.

## The opportunity: Ensure our neighbourhoods meet the needs of the region's diverse population and enhance their quality of life

The West Midlands is home to a youthful and diverse population, with nearly half from ethnic minority groups and 66% with a religious affiliation. This results in a rich culture which we must celebrate to drive community cohesion, economic development and improve quality of life for all.

Responding to these challenges and opportunities will require effective partnership working amongst the public, private, voluntary and community sectors. Interventions must be place - based, grounded in local need, and assessed through an 'inclusivity' lens to ensure our region enables all communities to thrive.





**Emily Lewis**Apprentice Town Planner



**Gina Macworth**Graduate Acoustician



## Idea 7: Empowered communities

It is imperative that communities, as the ultimate beneficiaries, are put at the heart of all future developments.

Communities must be empowered to take ownership of opportunities posed by the development process to drive maximum value. However, the development process is often inaccessible due to the use of technical terminology and adoption of 'tick-box' consultation activities. The fatigue that has arisen from multiple consultations associated with capital projects and elections in recent years must also be addressed.

To help communities understand what to expect from consultation/engagement activities and how to contribute to influence the outcomes, the public, private and voluntary sectors should deliver inperson or online capability building sessions which cover key matters including:

- the different planning and policy-making processes;
- key terminology;
- what communities should expect from a developer in terms of engagement and consultation;

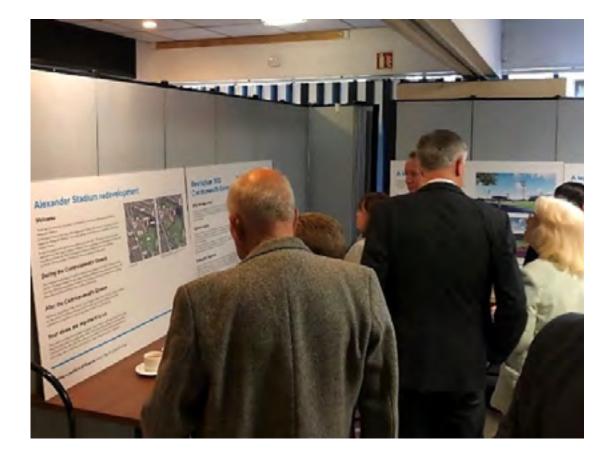
- what constitutes a material consideration in the planning process;
- tips for writing impactful and material representations; and
- how to maximise social value opportunities.

Equally, those delivering development projects must be encouraged to apply a best practice approach to engagement and consultation which includes:

- Alignment with the respective local authority's
   Statement of Community Involvement.
- Opportunities to influence projects at formative stages and a regular drumbeat of communications.
- Equality Impact Assessments to ensure approaches are inclusive of all demographics and the hardest to reach groups.
- Use of non-technical language to ensure communities understand proposals and can feedback accordingly.
- Use of both traditional and digital engagement/ consultation tools to encourage maximum participation.

- Robust qualitative and quantitative feedback analysis which informs the development process.
- Explaining how feedback has been considered and influenced the project to build trust.
- Continual evaluation of engagement/consultation activities to measure effectiveness.

It is important that there is consistency in the approach to engagement and consultation across the region, and wide-spread understanding amongst communities as to how they can participate. The WMCA could facilitate this by disseminating the aforementioned capability building materials amongst communities, and sharing principles for best practice consultation/engagement with the public and private sectors.



Public consultation for the Alexander Stadium Redevelopment, Birmingham © Arup







## Idea 8: Safety and inclusivity by design

The Birmingham 2022 Commonwealth Games demonstrated just how welcoming and safe our region can be. However, this level of safety and inclusivity needs to be replicated in all aspects of daily life to enhance wellbeing, encourage community cohesion and civic pride, reactivate our highstreets and drive economic growth.

A pilot study should be undertaken within a single local authority area to determine residential areas, highstreets and other spaces that require intervention to improve safety and inclusivity. The study should assess current concerns and associated drivers, opportunities for enhancement and conclude with recommendations for design-led interventions. The study must be evidence-based and grounded in engagement with the local community and could utilise digital collaborative mapping to generate spatial feedback. This approach could then be applied to other local authority areas to identify recurring patterns across the region and inform a safety and inclusivity design guide for future development. The outcomes will also provide

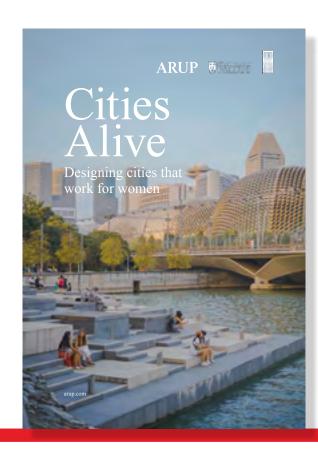
valuable evidence to inform where the town centre patrols, and increased police presence proposed by the Mayor should be implemented.

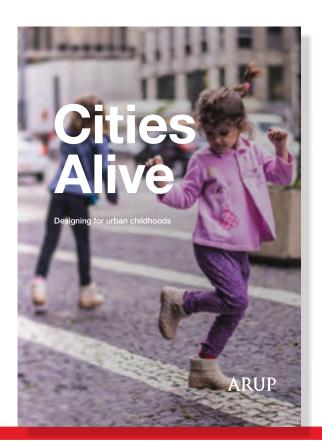
Arup's 'Cities Alive' series takes a human-centred approach to considering how we can design inclusive cities. It considers the different experiences and challenges faced by individuals and how these can be addressed to create healthier, resilient and competitive cities.

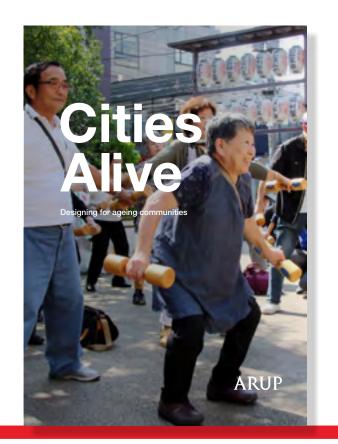
For example, Arup's 'Cities Alive: Designing cities that work for women' publication considers a gender-inclusive approach to design and has contributed to the debate on women's experiences in cities. The evidence base comprised of an extensive literature review and engagement with diverse groups of women and men from around the world.

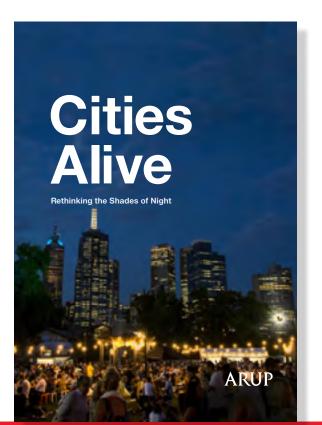
Similarly, Arup's 'Queering Public Space' publication, grounded in engagement with practitioners and LGBTQ+ people, recommends how we can design more inclusive spaces for LGBTQ+ communities.

A pilot study could follow a similar methodology by considering the specific safety and inclusivity challenges that different demographic groups in the region are faced with.











Click to download













# Driving connectivity and a modal shift

## Driving connectivity and a modal shift

### **Background**

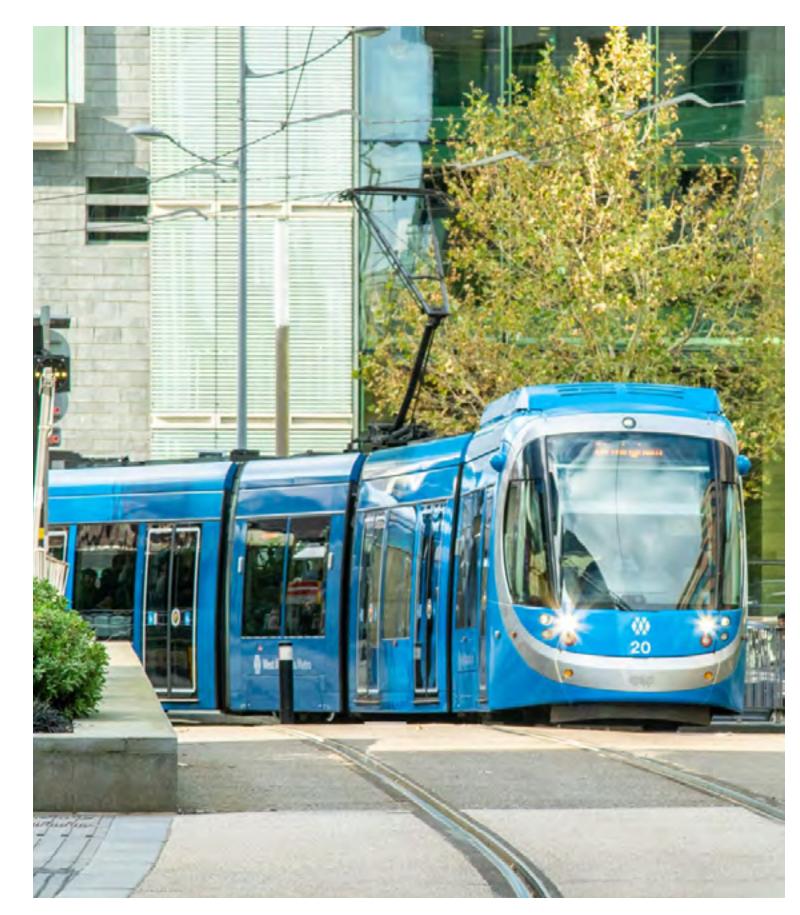
Private car use across the region remains high and most residents would be able to access more than double the quantity of job opportunities within 45 minutes of their home by owning a car. Moreover, vehicle journeys have almost returned to the levels seen before the COVID-19 pandemic. This demonstrates a fundamental need to drive real behavioural change and promote a shift from private car use to more sustainable transport modes.

## The opportunity: Close the gap between our cities and towns by improving transport networks and facilitating a modal shift

The scale of investment in the region's transport infrastructure provides substantial opportunities to enhance the public and active transport network. This investment includes the arrival of HS2, the expansion of the West Midlands Metro, the proposed Midlands Rail Hub, and de-privatisation of our bus services as well as the City Region Sustainable Transport Settlement fund which will provide circa £1 billion for local transport interventions.

We can also leverage the region's thought leadership and ability to form effective partnerships to make a strong case for change and investment in sustainable transport infrastructure. As has been demonstrated by the region's work with Greater Manchester to produce the Enhanced Connectivity Report which highlights the need for additional capacity between Birmingham and Manchester in light of the cancellation of HS2 Phase 2B.

However to drive a significant modal shift it is imperative that public transport and active travel routes are efficient and safe. Increasing the efficiency of travel between businesses and people will drive greater economic output leading to wider agglomeration effects from clustering. This will be fundamental in facilitating housing delivery and supporting the transition to net zero.



West Midlands Metro

© West Midlands Metro



Will Taylor
Graduate Engineer



Sophie Corr Technician



## Idea 9: A sustainable "transport first" approach

Critical to driving a modal shift from private car to sustainable transport modes is gathering a robust understanding of what is influencing our residents' and visitors' travel choices.

A segmentation review should be undertaken to assess the diverse needs, preferences and motivations of transport user groups across the region. Followed by a complementary deep dive public transport usage study, which would gather opinions from residents and visitors in relation public transport across the region and how to make it a preferred mode of travel. It is recommended that Transport for West Midlands (TfWM), as the Local Transport Authority would oversee the study, with support from public and private sector organisations.

Evidence gathered can inform the Mayor's approach to reshaping public transport networks, including redesigning bus routes, enhancing rail connectivity, expanding the tram and very light rail network, and increasing affordability. Outcomes can also inform large-scale and targeted behaviour change initiatives to achieve the aspirations set out in TfWM's Local Transport Plan (LTP5).

"The need for behavioural change towards sustainable travel is not new, most people understand that our over-reliance on cars has caused us issues and resolving these issues would mean using cars less. However, like eating right and exercising, this can be easier said than done in the region as it stands today."

LTP5 Core Strategy



**Coventry Station redevelopment** © Rail Business UK



A38 Blue Cycle Route, Birmingham
© Hedgehogcycling

## Idea 10: Electric driverless public transport

The implementation of public transport is often a costly and disruptive endeavour. Recent advances in autonomous vehicle technology represent an opportunity to deliver affordable and attractive public transport services where conventional modes are currently unfeasible.

However, should the evolution of this technology be fully left to technology developers then there is a risk of a sub-optimal solution which does not consider local context or regional ambitions. Therefore, intentional strategic direction is needed to ensure implementation of new technology supports modal shift and the region's journey to net zero.

In 2023/24 working in collaboration with technology providers, TfWM and Solihull Metropolitan Borough Council, Arup investigated the feasibility of providing an electric driverless public transport service on a partially segregated corridor connecting East Birmingham and North Solihull. The study examined the constraints and opportunities along the route, costs, safety, and risks, to understand whether an automated system could feasibly deliver the same benefits as a conventional metro system at a lower cost.

Our work demonstrated how autonomous public transport can unlock a myriad of new mobility options, rapidly accelerating a shift away from private vehicle use towards more sustainable solutions.

This work also highlighted the existing expertise in this space across the West Midlands and helped to identify and upskill other key stakeholders. This will enable the region to take advantage of autonomous technology in the future, and continue to lead the UK in this space.



**Autonomous Public Transport Shuttle** 









# A hub of culture and innovation

## A hub of culture and innovation

### **Background**

The region's cultural industry is particularly vulnerable in this challenging time due to rising costs and falling funding, as local authorities must continue to cut cultural spending to meet statutory needs. We all have a role to play in protecting our cultural infrastructure to strengthen our reputation as an international cultural hub.

## The opportunity: Bolster the West Midlands' reputation as an international hub of culture and innovation

Culture significantly strengthens the economy by providing employment across various professions, and generating economic ripples that uplift related businesses. It's a catalyst for innovation and skills development, and a cornerstone for tourism, enhancing regional appeal and productivity. Moreover, culture fosters social wellbeing and a sense of belonging, underpinning the economic and communal prosperity of societies.

The West Midlands already has a strong cultural presence, particularly in relation to the arts, sport and culinary sectors. Our globally renowned organisations and venues are vital for the local economy, whilst also boosting the vibrancy of our urban centres. This includes our sports teams, the

City of Birmingham Symphony Orchestra, and the Royal Shakespeare Company, as well as venues such as Birmingham's Ikon Gallery, Symphony Hall, The International Convention Centre, Wolverhampton Civic Halls, Solihull's Resorts World Arena and the Warwick Arts Centre.

Our research with WMCA, 'Making the Case for Culture', uncovers opportunities to further expose the cultural infrastructure that the region has to offer. It provides several recommendations to the WMCA, with the aspiration of increasing protection and investment in the cultural sector through planning. We encourage the WMCA Cultural Leadership Board to use this research to build on their existing work and reinvigorate their mission to place culture at the heart of sustainable growth and enhance quality of life for our diverse communities.



**Ikon Gallery, Birmingham** © Ikon Gallery



Resorts World, Solihull
© Ian Rob



Coventry Cathedral
© Andrew Walker



Civic Hall, Wolverhampton
© WILLMOTT DIXON



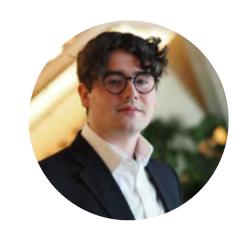
Royal Shakespeare Theatre, Stratfordupon-Avon © David P Howard



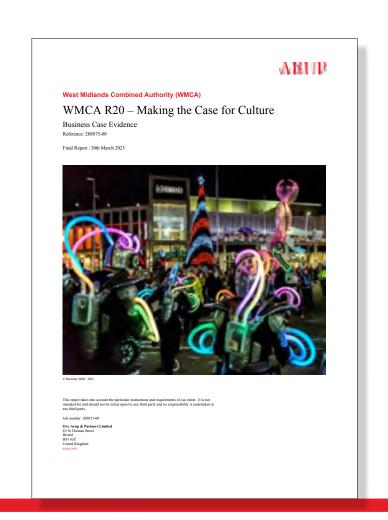
The Symphony Hall, Birmingham © Arup



Warwick Arts Centre
© Ben Smith



**Stephen Bromage**Building Sustainability Consultant







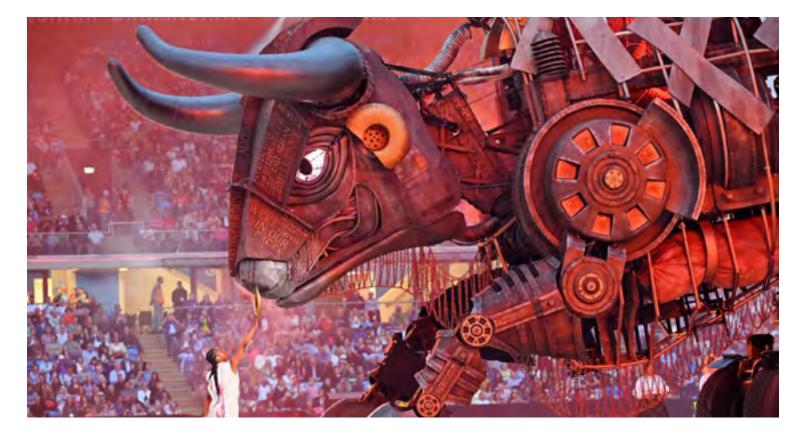
## © Idea 11: Powerful brand and civic pride campaign

We are proud to have contributed to the 'Be Bold, Be Birmingham' campaign which set the tone for the subsequent success of the Birmingham 2022 Commonwealth Games. The campaign demonstrated the impact a shared brand identity can have on inspiring civic pride and altering perceptions of a region on an international scale.

The West Midlands is home to a unique combination of cultural assets, influences, and expertise. However, it lacks an overarching vision and brand, which captures the essence of the region's identity and celebrates its distinctiveness.

Building on the prestige of Birmingham 2022, there is an opportunity for WMCA's Cultural Leadership Board to convene a cross-sector and cross-authority working group to collectively shape a brand and vision that everyone can rally behind, and which plays to our strengths and speaks to international investors.

In accordance with the Mayor's ambitions, it is important that the vision and brand are developed with and for our communities, to foster civic pride within a region that already has so much to be proud of. Let's challenge our modesty and ensure the world knows how welcoming our communities are, how innovative our institutions are and how inspiring our landscapes are, and why others should therefore live, study, visit and invest here.



**Birmingham 2022 Commonwealth Games Opening Ceremony** 



**Coventry UK City of Culture** © WMCA



**Be Bold, Be Birmingham**© Birmingham City Council



**Birmingham 2022 Festival** © Birmingham 2022



## Idea 12: Centre of Innovation

The West Midlands has a history of invention, characterised by era-defining developments from Shakespeare's plays to Boulton and Watt's steam engine.

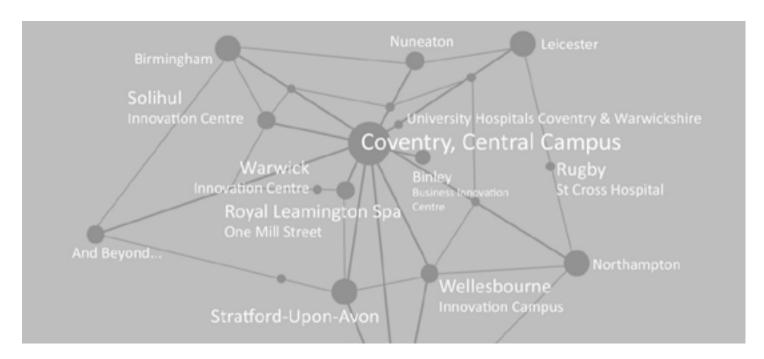
Arup's UK Cities Intelligence publication identifies the key components required to drive innovation which include talent, collaboration, diversity and creativity. It also sets out the quadruple helix of partners required for successful innovation places, comprised of research, industry, government and community representatives. The West Midlands possesses all of these ingredients and more, and is already successfully operating as an innovation place. This is evident in the workings of the Warwick Innovation District, and effective collaboration between industry and academia, including through the Energy Systems Catapult, High Value Manufacturing Catapult, and associated Warwick Manufacturing Group. Birmingham's future innovation quarter around the Aston University and Birmingham City University campuses will further bolster the region's innovation infrastructure and demonstrate our commitment to fostering innovation.

The Arup publication advocates the importance of making innovation visible and prominent to; attract new investors and innovators, further strengthen collaboration and facilitate engagement with local communities. It would therefore be prudent for a core component of our future brand and vision (proposed in idea 11) to celebrate the region as a Centre of Innovation.

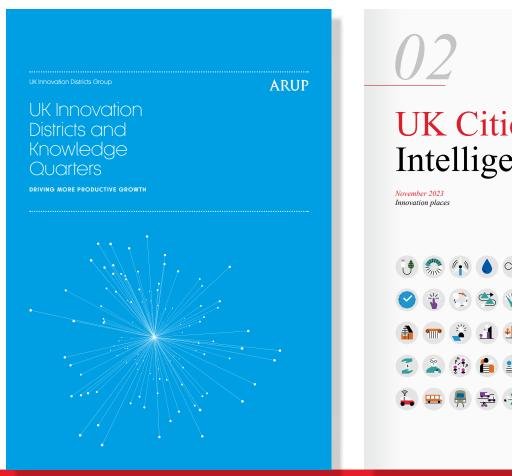
The region's Local Action Plan established by Innovate UK and the WMCA in 2023 provides an excellent framework to build the brand upon, and strengthen our international reputation and drive inclusive economic growth.

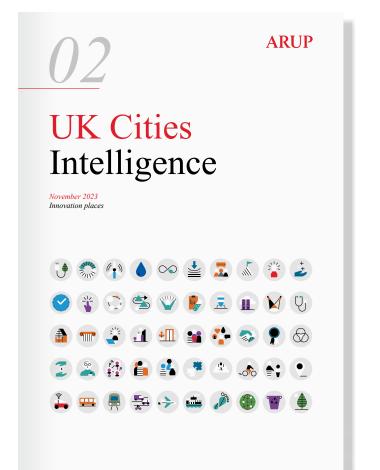


Birmingham's Innovation Quarter
© Bruntwood SciTech



Warwick Innovation District map
© Warwick Innovation District









## Next steps

## Next steps

We hope that you enjoyed reading our twelve ideas as much as we have enjoyed creating them.

We are keen to continue the conversation and work with you to bring the ideas to fruition. Key to this will be effective collaboration amongst the public, private, voluntary and community sectors to progress the following next steps, applicable to all ideas:

- Public/private sector practitioners and academics to share examples of how similar ideas have been implemented nationally and internationally, and any associated lessons learned.
- Public and private sector practitioners to develop strategic plans, business cases, and/or funding models to test the feasibility of implementation through ongoing engagement with the community and voluntary sectors, and decision makers.
- Representatives from across the sectors to share insights and data which will support feasibility testing and delivery.

- Challenge our peers, colleagues, collaborators, and clients to ensure they align with associated policy requirements and champion delivery of the ideas through their endeavours.
- Associated working groups, steering groups and task forces to include representation from across sectors and demographics.
- Seek volunteers from across sectors to trial associated pilot projects and provide constructive feedback to facilitate delivery.

We recognise that the whole is greater than the sum of its parts and therefore we must ensure that interventions are developed by representatives from across our diverse region, including our young people, as our future leaders. Only by taking this approach can we be confident that interventions are grounded in local need and have inclusivity at their heart.

If you would like to discuss an idea further, please contact us at the following email address: <a href="mailto:IdeasfortheWestMidlands@arup.com">IdeasfortheWestMidlands@arup.com</a>

We look forward to collaborating with you to shape our future West Midlands.



Arup's Ideas for the West Midlands ideation session
© Arup

## References

https://www.arup.com/markets/cities/retrofit-at-scale

https://www.arup.com/perspectives/publications/promotional-materials/section/social-value-a-uk-white-paper

<a href="https://www.arup.com/perspectives/publications/research/section/cities-alive-designing-cities-that-work-for-women">https://www.arup.com/perspectives/publications/research/section/cities-alive-designing-cities-that-work-for-women</a>

<a href="https://www.arup.com/perspectives/publications/research/section/">https://www.arup.com/perspectives/publications/research/section/</a>
<a href="mailto:innovation-districts-how-can-we-drive-growth-in-major-uk-cities">https://www.arup.com/perspectives/publications/research/section/</a>
<a href="mailto:innovation-districts-how-can-we-drive-growth-in-major-uk-cities">https://www.arup.com/perspectives/publications/research/section/</a>
<a href="mailto:innovation-districts-how-can-we-drive-growth-in-major-uk-cities">https://www.arup.com/perspectives/publications/research/section/</a>
<a href="mailto:innovation-districts-how-can-we-drive-growth-in-major-uk-cities">https://www.arup.com/perspectives/publications/research/section/</a>
<a href="mailto:innovation-districts-how-can-we-drive-growth-in-major-uk-cities">https://www.arup.com/perspectives/publications/research/section/</a>
<a href="mailto:innovation-districts-how-can-we-drive-growth-in-major-uk-cities">https://www.arup.com/perspectives/publications/research/section-districts-how-can-we-drive-growth-in-major-uk-cities</a>
<a href="mailto:innovation-districts-how-can-we-drive-growth-in-major-uk-cities">https://www.arup.com/perspective-growth-in-major-uk-cities</a>
<a href="mailto:innovation-districts-how-can-we-drive-growth-in-major-uk-cities">https://www.arup.com/perspective-growth-in-major-uk-cities</a>
<a href="mailto:innovation-districts-how-can-we-drive-growth-in-major-uk-cities">https://www.arup.com/perspective-growth-in-major-uk-cities</a>
<a href="mailto:innovation-districts-how-can-we-drive-growth-in-major-uk-cities">https://www.arup.com/perspective-growth-innovation-growth-i

https://www.arup.com/perspectives/publications/research/section/queering-public-space

<a href="https://www.arup.com/perspectives/publications/research/section/uk-cities-intelligence-issue-3">https://www.arup.com/perspectives/publications/research/section/uk-cities-intelligence-issue-3</a>

https://www.birmingham.gov.uk/downloads/download/6064/our\_future\_city\_-\_draft\_central\_birmingham\_framework

https://www.birmingham.gov.uk/downloads/file/1932/birmingham\_connected\_white\_paper

https://commonslibrary.parliament.uk/2021-census-what-do-we-know-about-the-lgbt-population/

https://www.gov.uk/government/publications/affordable-homes-programme-2021-to-2026-summary/2021-to-2026-affordable-homes-programme-summary-end-of-march-2023

https://www.gov.uk/government/publications/city-region-sustainable-transport-settlements-confirmed-delivery-plans-and-funding-allocations

https://www.gov.uk/government/publications/west-midlands-combined-authority-trailblazer-deeper-devolution-deal/west-midlands-combined-authority-trailblazer-deeper-devolution-deal#housing-and-regeneration

https://iuk.ktn-uk.org/wp-content/uploads/2023/07/Innovate-UK\_West-Midlands-Action-Plan PW AW2-Digital.pdf

<a href="https://labour.org.uk/wp-content/uploads/2024/04/Richard-Parker-Labour-Manifesto-1.pdf">https://labour.org.uk/wp-content/uploads/2024/04/Richard-Parker-Labour-Manifesto-1.pdf</a>

https://www.lancaster.ac.uk/media/lancaster-university/content-assets/documents/lums/work-foundation/WF Factsheet WestMidlands.pdf

<a href="https://www.lancaster.ac.uk/work-foundation/publications/west-midlands">https://www.lancaster.ac.uk/work-foundation/publications/west-midlands</a>

https://www.tfwm.org.uk/media/1p4ccrwt/wm-ltp-2023-corestrategy-v2-1.pdf

https://www.tfwm.org.uk/who-we-are/our-strategy/local-transport-plan/6-big-moves/public-transport-and-shared-mobility/public-transport-and-shared-mobility/

<a href="https://www.thenewmidlands.org.uk/deliver-affordable-housing-report/">https://www.thenewmidlands.org.uk/deliver-affordable-housing-report/</a>

https://www.wmca.org.uk/documents/inclusive-communities/equity-and-inclusion-scheme/equity-and-inclusion-scheme-2022-24/social-inequality/

https://www.wmca.org.uk/documents/productivity-skills/ employment-and-skills-strategy-2024-2027/employment-and-skillsstrategy-2024-2027/

https://www.wmca.org.uk/documents/reports/west-midlands-state-of-the-region-2023-2024/west-midlands-state-of-the-region-2023-2024/in-detail/

https://www.wmca.org.uk/media/5102/natural-environment-plan.pdf

<a href="https://www.wmca.org.uk/news/new-action-plan-to-boost-innovation-in-west-midlands/">https://www.wmca.org.uk/news/new-action-plan-to-boost-innovation-in-west-midlands/</a>

https://www.wmca.org.uk/news/new-figures-show-wmca-funded-schemes-exceeding-affordable-housing-targets/

https://www.wmca.org.uk/news/new-housing-collaborationannounced-to-deliver-more-affordable-homes-across-the-region/

https://www.wmca.org.uk/news/the-wmca-declares-climate-emergency-and-pledges-urgent-action-to-reduce-emissions/

https://www.wmca.org.uk/news/100-000-of-funding-for-region-s-first-construction-materials-reuse-hub/

## ARUIP