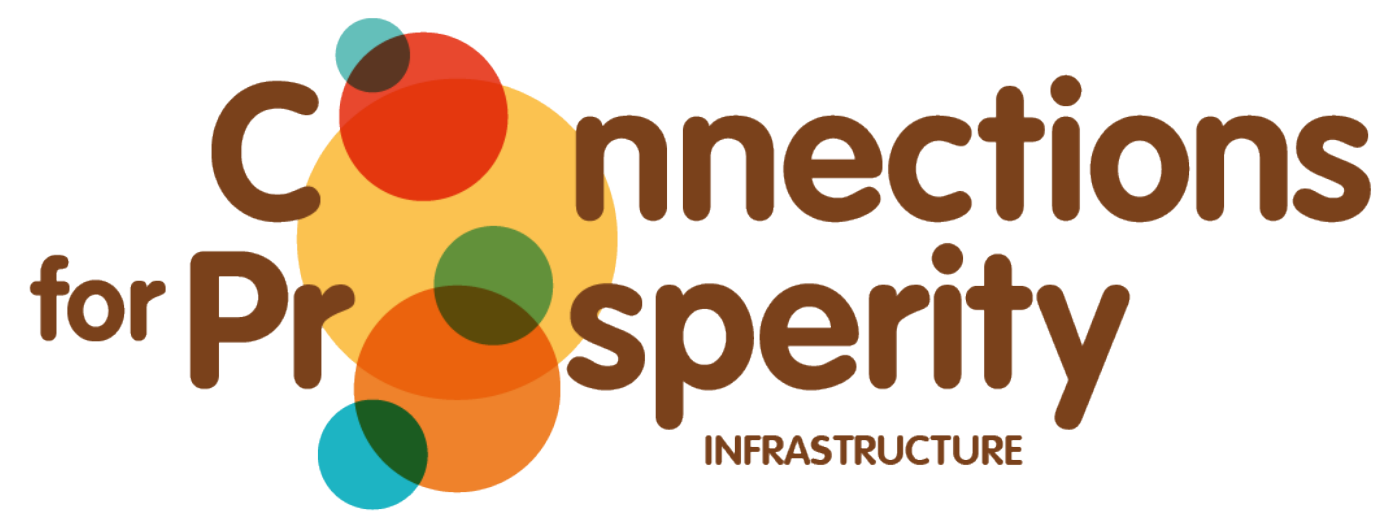



5th – 6th July 2023 Warwick Conferences, Coventry



Connections for Prosperity

INFRASTRUCTURE

Working together to shape a better West Midlands



Connections for Prosperity; a first for the centre and for the region

The objective of 'Connections for Prosperity – Infrastructure' - the first conference delivered by the Centre for the New Midlands - was to bring together influential political and business leaders to focus on the infrastructure of the West Midlands and how we deliver sustainable and inclusive outcomes for the region.

For a region with a long and distinguished pedigree of industrial production, and with a reputation for ingenuity and innovation, the West Midlands has had to cope with a changing landscape caused by a shift from manufacturing to greater reliance on services over the last four decades. The region has responded to societal and technological change through enhancement of its allure as a place in which there's an abundance of talent and commitment to success.

Crucially, though the political narrative from Westminster tends to stress the view that devolution is something it supports, the reality is that major decisions and investment still rely on active support from the incumbent administration. The intention of the organising committee of Connections for Prosperity was to explore how such challenges can be navigated by those who know best what is needed for the West Midlands. The following provides an account of the various sessions held during which over 150 delegates from a range of sectors as well as policymakers, developers, investors, and academics, listened to vibrant debate and hugely stimulating discussion presented by a number.



Chris Smith

Disclaimer:

This report is designed to provide an overview of the discussions held at 'Connections for Prosperity – Infrastructure'; the first conference hosted by the Centre for the New Midlands. This report has been generously produced by Dr Steve McCabe (Assistant Professor, Birmingham City University) and was originally produced in August 2023. Readers of this report should be aware that since this date, there have been some significant government policy changes, such as the cancellation of the northern leg of HS2.



Opening Session: Drinks, a BBQ and an Introduction to Conference

(18.00-23.00) Held in The Slate

The opening session of the conference enabled delegates to meet up over introductory drinks and hear opening speeches by Chris Smith (Founder and Managing Director for the Centre for the New Midlands) and Tim Fawcett (Birmingham Cities Lead, Mott MacDonald and Chair of the steering group for Connections for Prosperity). The message from both Chris and Tim was that as well as encouraging everyone to participate as fully as possible in the conference, those attending should be willing to use the opportunity of meeting like-minded people to create collaborating networks and commit themselves to supporting the objective achieving greater prosperity for the West Midlands.

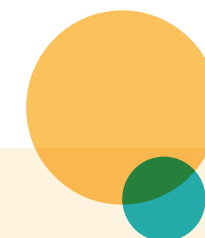
Prior to a BBQ buffet, delegates were requested to engage in the first of two online tasks in which they were asked to provide answers to two questions:

- What are the biggest social/economic/environmental challenges the West Midlands faces?
- How can infrastructure best facilitate positive outcomes in the West Midlands?

Later in the evening, the following question was asked:

- Ignoring the small matter of elections, if you were 'appointed' as the Mayor of the West Midlands, what would be your first three priorities in terms of enhancing the region's infrastructure?"





Opening Plenary	09:45 – 10:45	The Slate	Infrastructure: Delivering sustainable economic growth for the West Midlands	Andy Street CBE Mayor of the West Midlands, West Midlands Combined Authority Professor Denise Bower OBE Group External Engagement Director, Mott MacDonald Sir John Armitt Chair, National Infrastructure Commission Phil Upton Host, BBC
Social	11:00 – 12:00	The Slate	Unlocking Social Mobility: The role of infrastructure	Dame Stella Manzie DBE Chair, University Hospitals Coventry and Warwickshire NHS Trust Dr Fiona Aldridge Head of Insight and Intelligence, West Midlands Combined Authority Mark Andrews Head of Planning, Design and Engagement, Solihull Metropolitan Borough Council Robert Franks Managing Director, WM5G Shamit Gaiger Managing Director, West Coast Partnership Development
		Radcliffe Space 26	Social Equity in Transport	Andrew Bamforth Director, Arup Chloe Williams Associate – Midlands Active Travel and Demand Management Lead, Arup Lara Tabet Transport Scheme Creation and Development Lead, Arup Mark Collins Head of Future Transport, Transport for West Midlands
		Radcliffe Space 20	The Transition to Net Zero Homes	Mike Leonard Associate Professor, Birmingham City University
Economic	12:15 – 13:15	The Slate	Whitehall vs West Midlands Who is best placed to make inclusive growth happen?	Ed Cox Executive Director for Strategy, Integration & Net Zero, West Midlands Combined Authority Harbinder Singh Birdi Creative Director, Birdi & Partners Gill Morris Executive Chair, DevolInfect Paul Woods Infrastructure Planning Director, WSP Tom Chance Chief Executive, Community Land Trust Network
		Radcliffe Space 26	Taking a human-centric approach to mobility and transport innovation for future generations	Giles Perkins Head of Profession, Future Mobility, WSP Sarah Windrum Future Mobility Cluster Lead, HORIBA MIRA Chris Wood Technical Director, WSP
		Radcliffe Space 20	Towards a socially inclusive circular economy in housing	Dr Halima Sacranie Chair, Housing and Communities Leadership Board, Centre for the New Midlands Carl Taylor Assistant Director of New Business, Green Square Accord
Environment	14:15 – 15:15	The Slate	Can we build our way to Net Zero Carbon?	Anna Bright Chief Executive, Sustainability West Midlands Courtney Murray Head of Investment Planning, Cadent Gas Ellie Horwitch-Smith Assistant Director – Route to Net Zero, Birmingham City Council Luke Strickland Net Zero Advisory Lead, Mott MacDonald Matthew Rhodes Chair, West Midlands Industrial Energy Taskforce
		Radcliffe Space 26	From yesterday to tomorrow: Skilling the Midlands	Dr Benjamin Silverstone Associate Professor and Director, WMG Skills Centre, University of Warwick Jon Melville Head of Engineering Digital & Sustainable Construction, University College Birmingham
		Radcliffe Space 20	The Hydrogen Valley	Stephen Smith External Affairs Manager, Cadent Gas Dr Kelly Manders Regional Development Manager, Cadent Gas
Closing Plenary	15:30 – 16:30	The Slate	What if..?	Sarah Daly Associate Director, Sustainability, Turner & Townsend Advisory

Opening Session – Setting the Scene

(09.00-09:45) Held in The Slate

Following dinner, the first speakers were introduced to the conference by the event's compere, BBC Coventry and Warwickshire presenter Phil Upton. The opening speakers, Dr Julie Nugent (Chief Executive Officer, Coventry City Council) and Richard Parker (Labour Party's candidate for West Midlands Mayoral election in 2024) provided their vision of how they believe they can ensure the pace of change within the region is maintained.

Julie, who prior to joining Coventry City Council was previously director of productivity and skills within the West Midlands Combined Authority, emphasised the importance of developing the talents within the existing and future generations. As Julie stressed, the West Midlands has a longstanding reputation as being characterised by having a fertile environment for new ideas and development of products which have transformed our lives. Coventry, in particular, is a noted as a city in which the mass production of motor vehicles thrived. Julie referred to deprivation caused by unemployment in the early 1980s which had a profound impact on Coventry. Because the 1981 seminal pop single 'Ghost Town' by Coventry band The Specials coincided with riots occurring in Britain in early summer, Coventry was particularly associated as a city in which opportunity for youth was a problem. Shaking off this image, she explained, has necessitated years of intense effort by all agencies working in collaboration with the council. The fact that two major universities are located within the city, both of which have achieved phenomenal success in teaching and researching students who possess knowledge and skills for the future is testament to this effort. Moreover, their attractiveness to overseas students, Julie believes, has created valuable opportunities for inward investment so critical to stimulating much needed jobs as well as collective wealth creation for the city and the region.

Unsurprisingly for someone representing a different political party to the present incumbent (who was scheduled to appear on Thursday), Richard Parker presented his vision of how he'd change the way in which the West Midlands Combined Authority is run if elected as Mayor in May 2024. One issue he stressed was the importance of reforming the administrative system he believes undermines incentives for local start ups in favour of overseas investment. So doing, Richard contends, would mean that local companies would remain in the region. Importantly, jobs created, he argued should be given to local citizens, particularly the young who should receive better education which equips them to be better prepared for the ever-altering challenges of employment. Additionally, and as part of Richard's agenda for change, would be the need to improve the provision of affordable housing that so crucial to those in the early stages of their working life.

Subsequent to their presentations, Julie and Richard were questioned by Phil Upton as well as providing responses to issues raised by the audience. This involved them in elaborating on their strategies as well as providing substance to particular policies. One which generated significant audience engagement was the way in which the West Midlands can develop skills both within education and the workplace to increase collective productivity. Vitally, the need for more effective transportation within the region to ensure people can get from home to their jobs was raised. A major concern expressed by a number of subsequent speakers was the fact that lack of such connectedness undermined collective effectiveness and productivity.



Phil Upton



Dr Julie Nugent



Tim Fawcett



Richard Parker



Session 1: Infrastructure: Delivering Sustainable Growth for the West Midlands

(09:45 -10:45) Held in The Slate

Having heard from Richard Parker on Wednesday evening, delegates were able to hear from the present Mayor of the West Midlands, Andy Street CBE. Andy began the session by delivering a short presentation on the need to improve infrastructure in the West Midlands to ensure consistent and sustainable economic growth in the region.

Andy, who will seek continued support in next May's election for Mayor of the West Midlands, was keen to stress the progress that has been made under him in securing seven more times funding for transport from government than when he assumed the role in 2017. He also drew attention to what he described as a "huge" increase in cash that has been dedicated to infrastructure which he considers vital to increasing confidence among investors. Though high inflation is, as experienced by every person and organisation, stripping away spending power, Andy contends that plans developed by the WMCA must be maintained to underpin such confidence. He cited the renaissance currently taking place in the Eastside of Birmingham which has been possible because of HS2 (High-Speed 2), the largest infrastructure project this country is currently undertaking. Finally, Andy drew attention to the region being the best connected digitally with the UK and that it is achieving its targets for housing (the only one to do so).

Professor Denise Bower OBE (Group External Engagement Director, Mott MacDonald) opened her presentation by stating her view that the West Midlands is the "engine room" of the UK and that as far as her organisation is concerned, its Birmingham office is "especially significant". Denise asserts that people are key to successful growth and any organisation must ensure they are nurtured to produce desired results. Education and training are, she explained, vital, a view which was heard repeatedly during the conference. An issue that is particularly challenging, Denise explained, is energy.

Though the centrality of the West Midlands in the country gives it an advantage of being the nexus of transportation, meaning goods pass the region, albeit congestion is problematic, its distance from the coast means access to energy supply from, for example, wind, is lessened. Denise acknowledged that climate change is the most pressing – but complex – issue we face and requires solutions that do not make what's an existential problem worse. In terms of energy, therefore, she believes it's necessary to "reimagine" what may be possible with current technology and to redouble efforts to use innovation to develop new technology. Finally, Denise concluded as part of her introduction, it's essential to take a "systemic view" which integrates the future needs of citizens for accommodation and healthcare. Critical to ensuring future growth is achieved but not at the environmental cost to the planet is "sustainable development."

Sir John Armitt (Chair, National Infrastructure Commission) who can claim to have been at the heart of national policy (as far as UK infrastructure is concerned) for the last three decades, was the third and final panellist. With experience in construction and involvement in rail, airports, power and major roadbuilding, John's views are seminal. In his short summary, he stated that the "three fundamental pillars" to achieving success in producing effective infrastructure are:

1. Decarbonisation
2. Economic growth
3. Resilience



Andy Street CBE

Similar to Denise, John emphasised the importance of energy in national and regional planning. This, he believes, is a challenge requiring collaboration between policy makers in London and those at local level who are intimately acquainted with the needs of citizens living in the region. Significantly, John stated that "fossil fuels are at the door" and its crucial that all available effort is dedicated to finding replacement for fossil fuel which has been responsible for the increase in carbon so harmful to our environment. As part of this effort John argued, investment in effective and 'greener' transport is vital.

Using a 'roving microphone' host Phil Upton posed a number of questions from the audience. The first concerned the apparent conflict between central government and those at local level. In response, John agreed that it is absolutely crucial that there is a unity of purpose and that whilst it's right that government develops national policy, localised decision-making on issues such as energy will always be sensible. Denise agreed that localised knowledge is essential in creating the demand needs and deciding how to achieve capacity. Andy was aware he frequently needs to argue the case for the West Midlands against Whitehall officials who do not appreciate what's happening at local level.

In response to a question about encouraging commuters in the West Midlands to use public transport, Andy agreed that providing cheap and effective public transport is key to successful transition. He was fully aware that congestion on the region's major roads is holding back economic progress in the West Midlands. Denise stressed here belief that communities must be engaged in providing their views about what they need as this will "unlock enthusiasm and goodwill". A question was posed about the building of energy houses which though traditional, are compliant with the standard to be introduced in 2025 and greatly reduce carbon. Andy, who was involved on the official launch of 'Project 80' acknowledged the importance of propagating the message that change is entirely possible. Andy did, however, recognise that though there's been some progress on decarbonising the stock of housing in the West Midlands, some 3,000 costing £44 million, give the total number is around 300,000, this is far too slow. He added that private investment is crucial and believes that this will occur if the environment is conducive combined with dedicated effort by public agencies.

Prof Denise Bower OBE



Sir John Armitt



Denise recognised that fact that people are less likely to respond if they feel they are being told what to do with implied threat. She cited Bristol where a change in attitude has been possible by consultation and consensus. She echoed Andy's point about the importance of private sector money though investment managers require adequate rates or return. John also appreciates the challenge of engagement of people in the critical decisions which need to be made to change their attitudes and behaviour with regards to energy consumption. As he stressed, the scale of the challenge is "enormous" and, in total will probably cost at least £300 billion [though this is what we spent during the recent pandemic] and needs to "happen everywhere" including housing and transport as key areas. John compared the woefully few heat pumps installed in the UK, believed to be over 40,000 last year (the installation target is 600,000 pa 2028) to France in which over 300,000 were installed in 2022. However, in a final statement on this question, John made the point that creating the necessary solution to net zero is "far from straightforward".

There were two final questions which were asked by audience members about the way to stimulate and support small businesses in the West Midlands and how innovation may be engendered. In response to both all panellists agreed that having the most effective and efficient infrastructure possible is crucial to the ability of businesses of every size to compete and prosper. Allied to this is the importance of all stakeholders in the West Midlands to do everything they can to implement innovation in all aspect and processes of their operations. John, in concluding this session, contends that government need to reasonably ambitious set targets that those at local level can attain through investment in innovation; "it's push pull again".

Session 2A: Unlocking Social Mobility - The Role of Infrastructure

(11.00-12.00) Held in The Slate

The importance of increasing social mobility has never been more pressing. The difficulties posed by economic change in the West Midlands has created considerable challenges to local agencies who have had to cope with the consequences of a post-industrial landscape and its associated societal alterations. Though such challenges are not novel and, indeed, regional policy has been existence since the second world war, the exigencies of creating more equal society has assumed a much higher profile as a direct result of the current government's proclaimed policy of 'levelling up'. As this session explored, what can be done to ameliorate the negative aspects of such change and to embrace new opportunities through infrastructure?

Chaired by Dr Fiona Aldridge (Head of Insight and Intelligence, West Midlands Combined Authority), the five-person panel consisted of Dame Stella Manzie DBE (Chair, University Hospitals Coventry and Warwickshire NHS Trust), Mark Andrews (Head of Planning, Design and Engagement, Solihull Metropolitan Borough Council), Robert Franks (Managing Director, WM5G) and Shamit Gaiger (Managing Director, West Coast Partnership Development).

In introducing the session, Fiona stressed her belief that relevant qualifications are essential to success and those without them will be "held back". Stella agreed and posited her view that a decent infrastructure is indeed crucial to social mobility as well as enhancing health through greater engagement enabling those unable to work to contribute to society and the economy. Stella added that an effective and well-functioning health system can create good employment opportunities. This she explained, required adoption of the latest technology to increase diagnostic ability and provide a service allowing patients to access remotely from their homes. Part of this development will, Stella explained, mean investment in robotics which will ensure productivity is increased. As she concluded, this requires "kit, plant and support through revenue."

Mark described his experience of local planning and the need to "take people on a journey" which requires having "open and honest conversations" to achieve collaborative relationships with all stakeholders, most particularly those who will live and enjoy the intended environment to be created. Mark also emphasised the need for plans to have a clear sense of impact on the environment and that development achieves the best outcomes. Mark agreed with Stella's position enhanced environment to both live and work will potentially create a more effective and healthier workforce. He also stressed the importance of space being "vital to good health" and used in a way which created community. As part of his overview, Mark explained the difference between 'green' and 'blue' infrastructure. The former referring to the way in which nature is utilised to provide space which, as well as being used for leisure, will ensure protection against flooding, overheating and will improve the quality of air, soil and water. The latter, blue, specifically referring to the way in which society manages and treats the most valuable resource we have, water.

Shamit, who explained her organisation is a "shadow operator" for HS2, believes the high-speed line when completed will provide, as well as increasing capacity, "tremendous potential to unlock growth and productivity" in the West Midlands. Shamit also explained that the connectivity HS2 will provide will increase social mobility. The overall effect, she contends, will contribute to "placemaking". However, Shamit added, it's crucial that the "myth" that transport planning and operation can occur in isolation should be confronted. Rather, she stressed, for transport to be effective, agencies that are close to community, particularly local authorities, must be involved at every stage. They, she explained, "better understand where need exists" and better appreciate solutions that may be applied. As Shamit concluded, a systems perspective which brings everyone together is essential and that "social mobility must be part of a larger framework of action which operates in harmony and coincidentally".

Robert, who explained his organisation is a subsidiary of the WMCA, was unequivocal in his belief of the importance of investment in digital solutions being "essential for social mobility". As he described, there are differing live expectancies across the region related to affluence. Those who are unable to afford to use broadband and mobile phones, Robert contends, are excluded from the best deals for good and services. Unfortunately, and unsurprisingly in the current cost of living crisis, "30% of households are struggling to afford" the cost of broadband. Robert believes that it's vital that more people, particularly the young, from "diverse backgrounds" should be attracted to enter the telecoms sector.

Demand for the network is growing at a rapid rate which requires investment. As Robert describes, it's estimated the cost of upgrading the network from 3G to 5G will be at least £3 billion. A problem, he added, was that it can take "up to three years to gain planning permission for a new mast" which impedes the ability of network providers to increase capacity. Nonetheless, 85% of the West Midlands (80% of citizens), are currently covered by 5G.



In posing the question of how barriers to social mobility might be reduced through infrastructure, Fiona asked the panel what they believe the solutions might consist of. Stella was passionate in her view that vocational education, which has suffered from underfunding must become a priority. Stella reinforced the importance of place and that there should be a "matrix to maximise social and health benefits" which ensure appropriate resources for those living in particular areas. Shamit agreed and asserted that infrastructure must be about people and that devolution should mean that there is more intelligence to target support (and resources) to where they are required, especially in "forgotten neighbourhoods". As Shamit stated, "vision is essential to placemaking, and effective partnerships are part of successful action". Mark described the experience garnered in Arden Cross in thinking about the use of space and how it is possible to create a new town and community around the new station being built in Solihull as part of HS2. Finally, Robert stressed any solution to social mobility must be "integrated" to include all needs and ensure full fibre and broadband that is at a cost that's affordable to those living in deprived communities who are most in need.

In response to the question from the floor of how to encourage future generations, especially those from deprived or underprivileged backgrounds, Stella and Shamit argued that though there are already a number of initiatives to do this, the effort must continue with as much enthusiasm as possible by those already working in their organisations. Mark suggested that because planning can seem over-jargonistic, it's important to demystify what happens and to make the discipline as appealing as possible. He also extolled the virtues of work-based experience as a way to give young people a taster of life in practice. Robert agreed with this point.



Session 2B: Social Equity in Transport

(11.00-12.00) Held in Radcliffe Space 26

The session on “Social Equity in Transport” was delivered by Arup experts Andrew Bamforth, Chloe Williams and Lara Tabet.

In the first half of the session, participants were split into 4 groups, where they were introduced to a persona, including a personal profile, a lifestyle description and some information on their traveling patters, preferences and requirements.

This simple but immersive experience provided participants with an opportunity to walk in the shoes of a persona (Claire, 47; Rob, 34; Farah, 21 and Olu, 84) and understand first-hand the challenges that this persona might have when hearing of a new (fictional) transport scheme being proposed in the Midlands.



Andrew Bamforth



Participants left the session with a better understanding of social equity and the challenges, opportunities and importance of designing inclusive transport solutions to cater for the needs and incentives applicable to all sub-sets of the population and achieve real mode shift away from cars, leading us further down the path to net zero and to an overall healthier lifestyle.

The concerns raised by the participants on behalf of their personas uncovered important considerations for any transport interventions to be successful across various population groups and confirmed the importance of social equity and community engagement when planning, developing, and designing transport schemes.

The second half of the session was structured in a panel format with guests Mark Collins (Head of Future Transport, Transport for the West Midlands) and Mel Jones (Head of Transport Planning, Birmingham City Council) who provided invaluable insights into the meaning of social equity, how it translates in practical terms, as well as the challenges, opportunities and responsibilities of local and regional government. The importance of collaboration with industry and the leveraging of data-based insights and social sciences in planning and engineering was also discussed. Finally, the panellists shared their thoughts on the status quo and the path ahead in considering social equity consistently and inherently through transport project stages, thereby more fully realising the opportunities available to the Midlands.

Chloe Williams, Mark Collins and Mel Jones



Lara Tabet





Mike Leonard

Session 2C: The Transition to Net Zero Homes

(11.00-12.00) Held in Radcliffe Space 26

Mike Leonard (CEO of the Building Alliance and a Visiting Professor at Birmingham City University) provided an overview of the extensive research being undertaken by the “Centre for Future Homes” into the future of new build and the retrofitting of existing stock to meet the Climate Change and Building Safety challenges.

Research is being conducted into indoor air quality, overheating, fire, heat pumps, single life plastic and operational and embodied carbon reduction. This is complimented by a range of teaching including the recently introduced Fire Engineering Degree Apprenticeship.

A key focus of the presentation was the Project 80 Future Homes Standard Demonstrator, which features 12 homes built in Handsworth to the 2025 standard which have now been lived in for 12 months and are the subject of extensive pre and post occupancy research. This is the only at scale occupied demonstrator in the UK and the findings will directly influence the Technical Consultation on the Future Homes Standard which is expected to be launched by the government in the early summer. The interim report was launched on Friday 21st July at STEAMhouse, Birmingham City University.



Session 3A: Whitehall vs West Midlands: Who is Best Placed to Make Inclusive Growth Happen?

(12.15-13.15) Held in The Slate

In a fascinating session the key question of appreciating how control is exercised between centralised power in Whitehall and West Midlands was considered. Chaired by Paul Woods (Infrastructure Planning Director, WSP), 4 panellists presented their perspectives of how the system currently operates and what changes are needed to ensure more inclusive growth among all citizens of the West Midlands:

- Ed Cox, Executive Director for Strategy, Integration and Net Zero, West Midlands Combined Authority
- Harbinder Singh Birdi, Creative Director, Birdi and Partners
- Gill Morris, Executive Chair, DevolInfect
- Tom Chance, Chief Executive, Community Land Trust Network

Following a brief overview of the objective of the session and introduction of the panel, Paul asked each to reflect on their own experience and observations. Ed believed that what we have learned in recent years is how global challenges can cause severe problems at local level.

Cascading of power and finance from Whitehall as part of the 'deal' to achieve devolution has been valuable in stimulating inclusive growth he believes; "the deal has been a big step forward". Ed contended this alteration to arrangements has helped to narrow "some of the gaps which currently exist", particularly in terms of increasing digital inclusion and the consideration of 'smart cities'. Nonetheless, Ed stressed, more needs to be done. In what may be a particularly damning comment, Ed concluded by describing his observation that, in the West Midlands, there's "little appetite by local authorities to co-operate in many of the key areas."

Gill believed that it is always better to have local accountability and that ceding power away from Westminster is beneficial. She thought that the "Westminster machine" has a long tradition of operating in pursuit of its own political interests which creates tension between it and those at local level. Whilst applauding the objective of the levelling up 'white paper', Gill questioned whether what has been offered so far could have gone much further.

She acknowledged that the powers given to the metro mayor has been "enormous" but wants to see more power and funds given to the holder of this role. As she stressed, there's an increasing view by many that voters want to see local politicians "getting on with it". She also asked whether Whitehall would proceed with its usual caution.

Tom contended that creating jobs to enable communities to support themselves is valuable and that devolution should be additive to increase capability. Notably, he claimed, "Whitehall is not very good at reading what's really needed at regional level" Tom recognised a tendency among those in government not to fully trust local agencies. However, he posited, community action when, adequately supported and funded can be invaluable. In citing the example of the service station on the M5 in Gloucester he explained how one percent of the profit generated is dedicated to improvement of inclusive growth. Additionally, he also cited the example of Witton Lodge which he thought provided a good exemplar of what's possible through collaborative action at local level.

Harbinder talked about his experience of becoming an architect and the fact that he believed that in order to achieve career progress he needed to move to London where, he explained he has worked on major infrastructure projects including design of stations of the Elizabeth Line which opened last year. That 80% of architects are in London, is, he suggested, a telling statistic. He acknowledged that there is a cultural tendency among those in the capital to think that everything that happens elsewhere is less important and agreed with others that Westminster is unwilling to give up control. Crucially, Harbinder argued, "we all want autonomy" and passionately stated his view that "you want the greatest talent nurturing the next generation" which, unless things radically alter, will, for the foreseeable future mean that new recruits will continue to migrate to London after their degree.

Paul asked the panel whether they thought devolution needed to go much further. In response Ed pointed to the accepted view that the UK is characterised as being the most "over-centralised form of economy in Western Europe" and believes that this is a reason why there so much "dysfunctionalism". Ed also cited the statistic that in terms of regional spending, only 2% is given to regions outside London (he accepted this figure is far higher in Scotland and Wales). Instead, he described, we should carefully consider how Germany operates through far greater regionalism and funding to Landers. This, Ed contends, shows how local democracy, based on giving powers with concomitant accountability, can work to better serve the needs of citizens nationally.

Gill agreed with is point and referred to Lord Jim O'Neill who is an enthusiastic advocate of devolving power to local level. That's stated, she accepted, we are a "long way from being a federal nation" and there's far too much willingness to continue with the system of being rules by patricians. Importantly, Gill believed, the ability of local voters to hold mayors to account is virtuous though this will mean that policies alter to whoever wins.



Ed Cox, Gill Morris and Tom Chance



Paul Woods



Harbinder Singh Birdi

Session 3B: Taking a Human-centric Approach to Mobility and Transport Innovation for Future Generations

(12.15-13.15) Held in Radcliffe Space 26

This interactive session led by WSP and HORIBA MIRA looked at what our living generations, right up to Gen Alpha, will both need and demand from mobility in the future. The session's delegates heard from an 11-year-old about her expectations of future vehicles and explored the rapid pace of technological change in the last 100 years alongside the relatively slight change to a vehicle's physical appearance. The session then broke into groups for delegates to discuss the needs and demands on personas from Baby Boomers to Gen Alpha and what we should consider when designing a future mobility-as-a-service for them.



Giles Perkins



Chris Wood



Sarah Windrum



Session 3C: Towards a Socially Inclusive Circular Economy in Housing

(12.15-13.15) Held in Radcliffe Space 20



Carl Taylor



Dr Halima Sacranie

Dr Halima Sacranie (University of Birmingham and Centre for the New Midlands) and Carl Taylor (Green Square Accord) delivered a presentation entitled “Towards a Socially Inclusive Circular Economy in Housing”.

The overarching theme of the talk was around innovative and socially inclusive approaches to sustainable social housing, sharing learning from the Interreg NWE funded CHARM (Circular Housing Asset & Renovation Management) project.

This research project, led by TU Delft in the Netherlands, aims to achieve a reduction of carbon emissions, construction waste and the prevention of down-cycling of building materials through the application of circular economic principles to social housing exemplars in the UK, the Netherlands, France and Belgium respectively.

Carl and Halima reflected on the design approach and decision-making rationale, the construction methods undertaken and also the challenges experienced by Green Square Accord in the delivery of their plastic free homes. Their presentation also highlighted policy incentives for adopting circular economic principles in the UK social housing sector, by linking these underlying principles to whole life and embodied carbon approaches to construction. This would provide a less narrow road to net zero housing, rather than being limited to the carbon efficiency and energy performance of homes, which is the current focus of net zero housing policy in the UK.

Carl Taylor outlined how Green Square Accord had practically adopted circular housing principles in the design and construction of 12 virtually plastic free homes in Redditch town centre. Their choice of materials and the construction processes were underpinned by waste reduction, reusable materials and sourcing alternatives to plastic materials. Carl brought along some small sections of the building materials used for the audience to see and handle, like mineral insulation copper clad (MICC) cable. He also reflected on the project challenges around building regulations, product warranties and fire safety, which had meant compromising on some plastic-free components.

Halima discussed the social impact of these circular housing CHARM projects and explored how tenants had been engaged through the process, drawing on literature around inclusive and social solidarity approaches beyond environmental and economic targets to engender sustainable housing transitions. Typically, the social aspect of sustainable models like the triple bottom line or circular economy seems to be less of a focus compared to capturing economic and environmental impacts, and the same was true for the CHARM demonstration exemplars which were required to track waste prevention and down-cycling prevention, material exchange and procurement and economic impacts, rather than any specific social impacts.

In this case of social housing organisations adopting circular construction approaches, the question was explored as to whether the social impact of circular social homes was implicit in the social purpose of the organisations that provide high quality affordable homes, or explicit with further opportunities identified for tenant and community engagement. The audience debated whether the circularity of the social homes in this project was significant or incidental to tenants. Recent Social Housing regulation legislation in the UK requires increased and transparent tenant engagement to ensure tenant voices are heard and represented. Decarbonising social housing is also a legal requirement for housing associations. Tenant engagement in sustainable housing transitions is therefore arguably equally crucial but remains a gap currently, although social housing organisations are starting to raise the importance of taking tenants and communities along the journey to decarbonising their homes.



Session 4A: Can We Build Our Way to Net Zero Carbon

(14.15-15.15) Held in The Slate



Ellie Horwitch-Smith



Luke Strickland



Courtney Murray



Anna Bright

Undoubtedly the consequences of changes in our climate means we must urgently reconsider the way we live, work and travel in order to reduce emissions. Though the amount of investment this requires is considerable, not responding to the threats will undermine economy progress and undermine society. In this session, hosted by Luke Strickland, Net Zero Advisory Lead at Mott MacDonald, 4 panellists presented their views on whether we can indeed build our way to net zero carbon:

- Anna Bright, Chief Executive, Sustainability West Midlands
- Courtney Murray, Head of Investment Planning, Cadent Gas (formerly BG Network)
- Ellie Horwitch-Smith, Assistant Director – Route to Net Zero, Birmingham City Council
- Matthew Rhodes, Chair, West Midlands Industrial Energy Taskforce

Following a brief introduction, each panellist provided a brief overview. Anna stressed the importance of “thinking about the big issues” and the need for us all to collectively engage in behavioural change. Courtney believes that we need to work out how to reduce reliance on natural gas but to be aware that achieving a viable alternative will take a long time and “come at tremendous cost”. Ellie concurred with the previous speakers and believed “adaptation and resilience” are essential. Given that Birmingham City Council is the largest owner of social housing in the city, it has immense responsibility for making changes to its properties to achieve the objective of net zero.

As Ellie explained, there are estimated to be 425,000 properties in Birmingham, the majority of which are privately owned. As she added, the level of fuel poverty has increased dramatically and that owners who need most support in terms of affording fuel, are unlikely to be able to make the adaptations needed to achieve net zero. Finally, Matthew claimed the history of the West Midlands is based on proximity and access to coal and that this mindset needs to change. Instead, urgent change must be made. To delay will, he argued, “cost considerably more if we continue with what we’ve currently got”. Luke explained that hydrogen capture and storage would certainly need significant investment.

Luke asked the panellists whether it’s possible we’ll possibly end up with a “bad” net zero and whether there is a problem in the language used in explaining it?

Anna was forthright in her view that the voice of the community is essential in gaining “trust”. Ellie believes that people, particularly during the current cost of living crisis, want solutions that are “realistic and affordable”. Luke responded to suggest that there is an increasing tendency for people to experience “carbon blindness” and accepted the need for consistent and passionate leadership to have any chance of achieving net zero. How, he asked, is such leadership to be achieved?

Ellie stated that long-term planning is crucial and there needs to be credible ways to achieve net zero solutions. Moreover, she stressed, solutions will take many years to implement. Courtney explained that she works in a regulatory business with “regulatory cycles” and that any alteration needs clear and consistent leadership from government as well as commitment from all suppliers and manufacturers in the supply chain. Anna and Matthew echoed these sentiments.

Luke asked panellists to comment on the way in which local power can be harnessed to achieve net zero and whether there are unique opportunities in the West Midlands

Ellie responded by making the point that young people, who understand the arguments and want to see a better future, are key to success in implementing what may appear to be radical change in behaviour. Courtney returned to the point that the centrality of the West Midlands may be really advantageous to the storage of hydrogen which is then distributed to other parts of the country. She also believed that this region could be a leader in any potential transition to methane gas. As she stressed, however, what is needed is clear vision from local leaders together with a national strategy by government. Anna concluded by drawing attention to the excellent partnerships that already exist in this region between industry and academia which has creates innovation.

In a question from Luke about the need to change the mindset of people from avoidance to engagement in change, Ellie responded that government is not always responsive, and that definitive evidence needs to be offered as to the collective societal and economic benefits that are likely to accrue. Anna reinforced this point and called for more unequivocal policy which leaves people in no doubt about how important their involvement is in achieving net zero.

A question was posed by the audience about how to achieve the “right holistic answer” to net zero. Matthew claimed that all organisations must be open and honest and fully accountable. Courtney asserted that leaders should be committed to “grown up conversations” about what is possible and cited the fact that scenario planning showed that in some areas total electrification may be the most sensible solution to supply energy to consumers.

In response to a question about whether importation of heat pumps from the Far East represents wisdom and, indeed, shipping is contributing to carbon emission, there was a marked sense of uncertainty about what is required. Matthew thought that small manufacturers and suppliers could play a vital role. Courtney contends that what’s needed is greater choice in the energy they use even though it may be that they end up with fewer. She referred to the ‘Hydrogen Valley’ project which may offer a form of gas that will feel like a continuance of what’s already available. Ellie argued the “best energy” is that we don’t need which, she explained, requires us to reduce our demand. This, she explained, may be created by a combination of incentives to use less energy and the continued high prices that have been caused by conflict in Ukraine (known as ‘demand destruction’).

Luke concluded the session by stressing that the “uptake of transformative technologies has always been faster than predicted” and that tipping points are experienced more quickly than we envisage. As he stated, the place-based approach to ensuring we reach net zero has much to recommend it.



Matthew Rhodes

Session 4B: From Yesterday to Tomorrow, Skilling the Midlands

(14.15-15.15) Held in Radcliffe Space 26



Dr Benjamin Silverstone

Dr Benjamin Silverstone, Associate Professor and Director, WMG Skills Centre, University of Warwick.

Jon Melville, Head of Engineering Digital & Sustainable Construction, University College Birmingham.

This session was delivered as an interactive session where participants contributed to the discussion around the changing skill set required to meet today's needs and how this skill set is set to evolve in the future. The session explored how companies can get involved in setting the skills agenda in the future and how to grow their skills resilience.



Jon Melville

The key findings from the discussion and presentation:

Skills needs

- Difficulty in engaging with the right people to train
- Differences in the expectations of employers and employees (remote working); this mismatch is poorly understood by both parties
- Perception of manufacturing no longer dirty manual labour
- Increasing importance of transferable skills, "soft" skills etc. in the workplace
- Awarding bodies, universities etc. are not agile enough in updating curriculum
- Resilience is needed
- High demand for digital skills – cyber security, data analytics, control of robotics, networking

Expectations

- SMEs need to collaborate to provide a broader range of career options which utilise the same skills for trainees, as they are viewing jobs increasingly as short-term roles
- New entrants to engineering are looking for jobs rather than careers; need to "grow" candidates from school onwards to provide skills for lifetime learning
- Employers have unrealistic expectations of staff retention; a generic skillset facilitates movement within the industry

Barriers

- Difficulties finding a centralised information source to link employers, providers and candidates
- Schools are not preparing students for work, providing information on options or employment expectations
- School subject choices are not necessarily the best preparation for a career (maths, physics and chemistry at A-level will attract a type of person who may not make an ideal engineer)

Leading best practice

- Create effective interactions between employers and schools/colleges/universities
- Employers supporting and sponsoring projects at college and university level
- Employers offering mentoring to students, especially in respect of transferable skills
- Employers offering staff to second into teaching



Session 4C: The Hydrogen Valley

(14.15-15.15) Held in Radcliffe Space 20

The session on the Hydrogen Valley was a deep dive look at the work that Cadent and National Grid had done to gauge the opportunities for hydrogen in the West Midlands.

The session, hosted by Stephen Smith, Head of External Affairs for Cadent in the West Midlands, covered the main principles behind the Hydrogen Valley, which is a feasibility study looking at what a hydrogen economy in the West Midlands and East of England could look like, at what it could mean for different areas and their businesses. While the session covered the economic opportunities of hydrogen, it also opened up to some of the challenges we all face in the drive to net zero, including behaviour change, linking to other sessions that had been held throughout the day.

In particular, it was noted that while the West Midlands is landlocked compared to other regions, the history and current advantages in terms of industry and advanced manufacturing represented an opportunity for the region. Following the presentation and initial questions, a broader discussion opened up among attendees who had varying levels of understanding around both hydrogen and also the gas network, covering the different types of production to the pipes below our feet and how they could potentially carry hydrogen to our homes and businesses in the future.



Session 5: Closing Plenary – What If ...?

(15.30-16.30) Held in The Slate

This final session of the Connections for Prosperity Conference was presented by Sarah Daly who is Associate Director of Sustainability at Turner & Townsend. In a deliberately provocative and entertaining session, Sarah presented 12 cartoons which summarised the things we can all do to support the effort to achieve increased sustainability. As Sarah stressed, in order to engage in collective and sustainable action, we must understand the complexities and challenges that we face and which are frequently used as excuses for not doing anything (or not taking the issue of sustainability sufficiently seriously):

1. Whataboutism
2. Individualism
3. The 'Free Idiot' excuse
4. Technological optimism
5. All talk, little action
6. Fossil fuel solutionism
7. No sticks, just carrots
8. Appeal to social justice
9. Policy perfectionism
10. Appeal to well-being
11. Doomism
12. Change is impossible

In dealing with each of these impediments to change, Sarah explained her belief that if all we do is engage in putting off alterations to our routines and habits, the potential for catastrophic consequences that will affect the lives of many millions of people, most especially the poorest, will be made worse. Sarah argued that the £10 billion per annum cost of achieving net zero by 2050, an entirely arbitrary target she believes, should be considered as the minimum we need to spend to avoid the calamity we face due to climate change. Indeed, she contends, any investment made to increase sustainability should be measured against benefits that are likely to accrue to society as well as the significant financial gain we are likely to enjoy from a greener economy.

Sarah highlighted the fact that research indicates 28% of emissions are from housing. This, she claimed, requires a rethink in terms of what we expect from our housing and the way it is constructed. Essential is innovation and ingenuity to produce a housing stock which is far more energy efficient and fit for purpose. Part of any change in collective behaviour should, she suggested, include making sacrifices such as wearing more clothes at home during winter and, as she has achieved, not using our cars for every journey. Production of food, Sarah explained, also produces a "very large carbon footprint" and presents another opportunity for reduction in carbon emissions.

In funding any changes, Sarah believes the vast reserves in pension funds, estimated to be £35 trillion globally and £3.2 trillion in the UK, represent a way to create the investment needed. This, she accepted would require radical and adventurous thinking. The main impediment, as she explained in her cartoons was that people tend to fear what they don't fully understand.

As Sarah concluded, inaction and prevarication are no longer options. Instead, she asserted, we must dedicate ourselves to behavioural change "each and every day" that will eventually become normalised. The result, she passionately believes, will be improvement in health and wellbeing. Though such a transition requires leadership from Westminster whose message is not always clear, or consistent, "solutions can be localised, depoliticised and gains achieved enjoyed together" As Sarah concluded, the "prize is a better world."

As a way to end the formal presentations, this call to action was suitably optimistic.



Sarah Daly



Summary and Conclusion

When I first started discussing organising a conference on infrastructure with The Centre for the New Midlands we asked ourselves what would make it valuable; what would make it different from other conferences? Where we landed quickly was a few key principles:

- Not focussing on infrastructure sectors (e.g. transport, energy, or water and so on) as there are so many conferences which do this already, but on the interdependencies between these sectors
- Focussing on outcomes for people, place, and planet, rather than technically focussed outputs
- Engaging a wider audience than might be at typical infrastructure conferences. Infrastructure impacts everyone, so everyone should have a voice
- In line with the mission of The Centre for the New Midlands, focus on the creation and sharing of new ideas to build a 'better' West Midlands

This document captures the headline outcomes from each of the sessions from the conference, but one of the stand out themes that came out for me was the importance of long-term decision making, and the funding and governance models needed to facilitate this. The other was the need for true collaboration between public and private sector in solving the biggest challenges in the region, and in addition to this making sure that the communities who are impacted by decisions made in infrastructure projects are engaged in a meaningful way throughout the process.



Reflecting on the conference since those couple of exciting days in July 2023 I believe our key achievements were:

- Engaging high-profile speakers, with local and national prominence from public sector, private sector, academia, and third sector
- Bringing together a really diverse group of delegates, including many undergraduate and postgraduate students from the region's many excellent universities
- Getting a balance between wide-ranging discussions in the main room, with deep-dive interactive sessions in breakout sessions

The biggest highlight for me was generating new connections between people and the start of many threads of discussions. We're planning to use the conference as a springboard to continue those discussions, creating a new infrastructure workstream for The Centre for the New Midlands. I'm excited that I'll be chairing the leadership board for that workstream, and am determined we will collectively bring laser-like focus to improving outcomes in the region through infrastructure. We'll do that through producing thought leadership, and collaboration with a broad range of people and organisations.

Infrastructure is a key enabler to solving the challenges and unlocking the opportunities in the region. This conference will set the tone for the infrastructure leadership board and the conversations and collaborations that will emerge. I hope many of those who attended the conference will join those conversations and I'm excited to see how they will evolve over the coming years. Join us, take part, have your say – let's come together to 'debate, shape and create' a better region.

Tim Fawcett





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