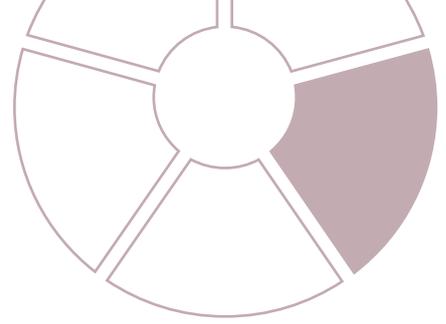




FUTURE URBAN LIVING

A policy commission investigating the most appropriate means for accommodating changing populations and their needs in the cities of the future

The Report
2014



Foreword

by the Chair of the Policy Commission



I am delighted to have been invited to chair the fifth University of Birmingham Commission into *Future Urban Living*. The Commission has listened extensively to the evidence of experts and practitioners and has distilled all the evidence it received into this report.

I should like to thank the Commissioners for giving their time so freely and for contributing their knowledge and experience so effectively in assessing evidence and recommending options for the future.

The Commissioners are particularly grateful to Professor Chris Rogers, Academic Lead of the Policy Commission, together with Audrey Nganwa, Sonia Large and Joanne Leach for their unstinting support in leading and coordinating all the work of the Commission.

Our report emphasises our concern that 'in order to achieve liveable cities of the future, we need to make radical changes in our planning, governance and indeed our thinking of what city life should be'.

Most of us live in urban areas, but the nature of urban living has evolved over time. Change has inevitably been incremental but we have concluded that urban areas need to articulate a clear vision of where they want to be a generation from now. We recommend that a City Narrative should guide the delivery of their ambitions. This would be founded upon the sustainable development and planning of neighbourhoods leading to the sustainable development of cities as a whole. It would include overall strategic planning, investment policy, community empowerment, and city governance. It would require meaningful powers devolved from Westminster.

This report is the outcome of many submissions and much discussion and I hope it will make a useful contribution to the current debate on future urban living.

Lord Shipley OBE
Government Advisor on Cities

Foreword

by the Academic Lead of the Policy Commission



The topic of this report – Future Urban Living – was arrived at after much discussion amongst the Commissioners. Perhaps naturally, agreement on the topic could only be reached once we had formulated the set of questions that we felt were the most important to put to those who lead the thinking on cities. There is a great deal happening in relation to the future of UK cities – the Foresight Future of Cities project, the Future Cities and Future Transport Systems Catapults, and the Glasgow Future Cities Demonstrator project, to name but a few. It was thus in a crowded space, filled with a multitude of ideas representing many agendas, that we embarked on the gathering of evidence to support our investigation of how future cities might best accommodate and support changing populations. We were particularly concerned that the findings should contribute positively to the conversation around cities. Was there anything new to say? In fact there was, as the Executive Summary of this report succinctly demonstrates, and as the report itself brings out in greater detail. However it is the nuanced findings that are contained in every section of the report that provide the greatest richness.

The focus of this report is the UK's urban areas, although this phrase naturally begs the question of scale. One answer to this question might be that the findings are of most relevance to the UK's 64 Primary Urban Areas (PUAs), although in fact they are more generally applicable and, for convenience, we have simply adopted the term 'cities'. The skill has been in posing the right questions, listening carefully to the answers and, as a result of the enormous combined expertise and experience of the Commissioners, identifying the ideas and synergies that get to the heart of the matter – the nuggets that can have profound consequences for how cities should be led, governed and operated for the greater benefit of both their citizens and the environment in which they exist (regional, national and global). It has been a privilege to work with such an inspiring group of leading thinkers on the Commission, and to take evidence from an equally inspiring and dedicated set of leading practitioners of the art and science of cities.

Professor Chris Rogers
University of Birmingham

Acknowledgments

The University of Birmingham would like to express its gratitude to those who contributed to the work of the Policy Commission.

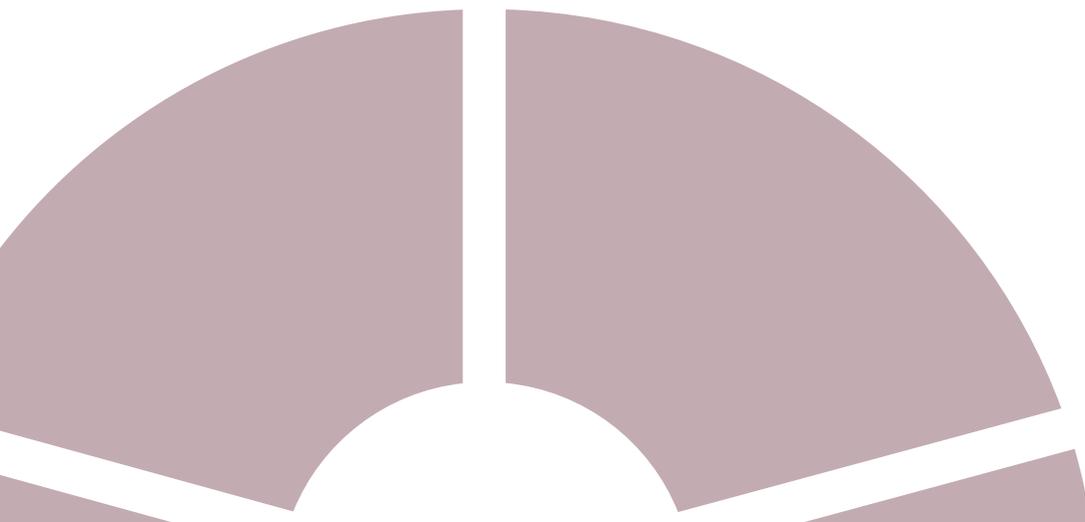
First come the Commissioners, who gave their time and expertise so generously. In particular, the contribution of the Commission Chair, Lord John Shipley OBE, included high-level insights and skilful steering of the Commission's activities.

The University would also like to thank all of those who contributed to the work of the Commission by giving evidence, testing the initial findings, offering advice and participating in events. The Commission's work was enormously enriched by these contributions.

The Commission also benefited from the expertise and commitment of many staff at the University of Birmingham. The Commissioners would like to pay tribute to Audrey Nganwa and Sonia Large, most ably supported by Joanne Leach, for organising and managing their activities and for providing them with outstanding support. The Commissioners would like to thank Helen Hancock, Dr Dexter Hunt (Research Fellow, University of Birmingham) and Richard Stephenson (London Sustainable Development Commissioner) for providing comments on the text, and the University of Birmingham Creative Media, Design and Publications team for the valuable contribution they made to the publication of this report.

Finally, the Commission would like to thank CH2M HILL for filming and producing the video that accompanies this report, which is available at <http://www.birmingham.ac.uk/research/impact/policy-commissions/future-urban-living/index.aspx>.

The views expressed in this report reflect the discussions of the Policy Commission and the research that informed them. They do not necessarily reflect in their entirety the personal opinions of the individuals involved.



Executive Summary

The Future Urban Living Policy Commission took evidence from a wide range of leading thinkers on cities from the UK and elsewhere, drawing from it ideas that might inform the way that we live, work and play in the cities and towns of the future. It then tested these ideas with a similarly diverse set of leaders in the various fields of urban activities. This evidence is clustered in a sub-section of the report under headings that strongly reflect the future challenges and opportunities for the UK's urban areas, as identified by witnesses and interpreted by the Commissioners. The major themes emerging from the evidence have been captured in a model that seeks to inform those governing,

and hence developing policies for, the UK's cities, so that they can help us move towards a more sustainable and resilient future. This evidence is presented as a stand-alone chapter, along with a commentary on the interdependence of these influences and how they can be aligned to produce positive outcomes for both cities and their citizens. The final chapter draws out the remarkable richness in the evidence and concludes with six recommendations for local and national policy-makers.

The Future Urban Living Policy Commission's Recommendations

Taking all of the evidence together, the Commissioners advocate the following six recommendations for change:

1. Citizens should be empowered to combine with those who govern and other city stakeholders to create a City Narrative that describes their city's history, its present context and its visions for the (far) future, via a transparently democratic process that delivers consensus across all sections of the community.
2. Citizens should be empowered to be instrumental in delivering this City Narrative, and be entrusted to do so.
3. There is a need for a system that creates inspirational local leadership, and this would best be achieved via either mayors or leadership groups elected on the basis of an ability to deliver the City Narrative.
4. Local government leaders in turn need to be empowered by the triple devices of a balanced degree of devolution of power from national government, an ability to raise finances locally and structures that enable effective cooperation with organisations beyond its boundaries (regional, national and global).
5. Cities need financial and business models that allow them to experiment, enable them to invest for the long-term, and facilitate the capture of economic, social and environmental returns on investment.
6. There should be a radical upgrade in the role of planners to promote creative, long-term, thinking on urban sustainability and resilience, and to enable more organic growth within that strategic framework. In this role planners should act as integrators of urban practitioners and other urban stakeholders.

Policy guidance needs to focus on a combination of what we collectively want of our cities and what needs to happen in our cities for them to deliver societal and environmental wellbeing – to make them 'liveable' both now and far into the future. It is helpful to consider fully what the intended benefits of the policies are (ie, the desired policy outcomes), and to establish the local and national conditions that need to be in place for these intended benefits to be realised in that particular urban context, one essential contextual feature being the citizens that live, work and play there. It is here that the first of many potential vulnerabilities in policy guidance lies – in citizen 'buy in'. Active participation in the conception, planning, designing and operating (or use) of a city is vital if the city is to be a success, leading many of our witnesses to question whether our current system of local democracy was a help or a hindrance in this regard. A better alternative, suggested by the evidence, would be for citizens and those governing them to develop, collectively, a 'Narrative' for their place in its own unique context, and to elect a leader or leadership group that is best able to deliver this Narrative in collaboration with the citizens and other urban stakeholders – a move that would effectively turn the current process upside down. This initiative would take the form of a collection of city partnerships – or forums – bringing together community, academic and business interests, facilitated by city officers acting independently of political parties, thus leading to greater stability and a situation more attractive to investors. The recast vision of democracy here lies in all citizens being able to contribute to, and vote on elements of, the Narrative.

A strong City Narrative provides evidence of its current place in the world, welcomes alternative analyses of how the city came to be where it is, and anticipates how the potential embedded in the city now can deliver health, wealth, and happiness to all its citizens in the future, while ensuring broad alignment with the effective functioning of the UK's system of cities. Narratives, therefore, should be reflected on and monitored, should be sufficiently flexible (or agile) to allow for modification with time and changing circumstances,

and should be place-based in terms of policy, governance and participation. The Narrative would then provide the foundation for 'mini-masterplans' for an area, a city or a city-region. Planners should play a central role here, helping to create and curate the Narrative for their city. Crucially, planners need to act as integrators drawing in community involvement as well as the full range of urban practitioners to collaborate in creating this Narrative. Planning professionals are appropriately trained and uniquely aware of the breadth of the issues that need addressing. To do this effectively, city planning departments will need greater skills and capacity, and the creative talent once prevalent in city planning departments needs to be attracted back. This multi-disciplinary group of urban professionals will then be well-placed to help synthesise this local, context-aware (bottom-up) thinking with national and regional (top-down) 'masterplanning' guidance, legislation and regulation.

The need to empower people to influence and develop their towns and cities was the strongest theme of all to emerge from the evidence. Giving the community ownership and responsibility, in partnership with city leaders, is the basis of the concept of a 'self-made city'. Crucially, trust needs to be built up between the community, politicians and local administrations if this is to happen. Moreover, it was emphasised that communities, rather than their elected representatives alone, should be a central part of this new collection of city partnerships. Facilitating this community involvement will require city planners to develop new and better ways to engage the communities, in part by exploiting supportive engagement strategies including novel media technologies.

The evidence underlined the need for exceptional leadership to drive change within a city or urban area, either by an individual or by a group of individuals. Every aspect of city living — the communal, the entrepreneurial, the environmental, the delivery of infrastructure, and so on — needs leadership, which should, therefore, be fostered wherever it is found, and

not expected to reside solely in local government or, indeed, solely in local business. This leadership should be local, rather than national, since cities are closer to people and exist at a more human scale than central government. Models of governance that aggregate upwards, rather than disaggregate downwards, in terms of agenda setting and ownership of visions, were considered to be more resilient and effective. There is a need to give citizens more influence over the production of urban space, to enable them to influence and take responsibility for what takes place in their area. In order to bring this about, central government has a role to play in capacity- and confidence-building in communities. Consequently central government's role should be not just about regulation or spending, but increasingly about empowerment and support within a (renegotiated) structure of national legislation, regulation and guidance.

Devolution of powers from central government was considered a necessary element of this future change, though it was noted that there are many models of devolution, and these need to be understood. Thus there needs to be a reconceived relationship between central and local government, and a renewed trust and vision for the role that the new city leaders will have. To introduce meaningful local democracy and leadership requires political will at all levels, overcoming strongly vested institutional and political interests, addressing gaps in skills and capacity, and bringing about cultural and attitudinal shifts. Cities need more autonomy and the ability to raise finance within sensible and financially prudent structures. Cities need to create an organisational capability to think longer-term and regain 'trusted adviser' status, with local politicians reversing the trend of the past few decades in which UK local government has seen reductions in its power and a greater dependence on national power. However, it was noted that whilst a significant degree of devolution is seen as desirable, there is the need to retain city-to-region connectedness and national connectedness. The greatest benefits were thought to lie in achieving greater autonomy, not absolute autonomy – a

rebalancing away from the current dominance of central government.

Cities need to be allowed to retain more of the taxes they are instrumental in raising, so that they are able to respond positively to projected demographic changes that include an ageing population, a more diverse society, and population movement (within cities, city-regions and nationally) in which people seek a sustainable lifestyle, while ensuring that equity amongst their citizens is prioritised. It would be helpful to recognise here that there are different forms or scales of urban living, ranging from (urban) villages, towns, county towns, cities and mega-cities. There is no single approach to the financial and business model aspects of future urban living that can be applied uniformly across the UK's cities: cities need to be developed on a bespoke basis, taking account of the local conditions and local priorities specific to each city. Cities have to be able to plan for the future with certainty, which requires budget certainty over a number of years rather than the current annual budget setting. Moreover there is no incentive for cities to work with the financial institutions and large private organisations (the so-called 'big corporations'), who should be doing more to invest in cities, and this needs to be addressed.

There are currently limited opportunities to experiment with new financing and business models, and there is still less tolerance of unsuccessful initiatives using public money. This constraint needs to

be eased to allow greater innovation, a strong theme emerging from the evidence being the need to allow 'beta testing' of new models and new ideas. New financial and business models should also support an ethos of 'communities in control', where the public is central to the choices, there is collective responsibility, and non-linear approaches are embraced. This in turn requires those in power to trust communities to make these choices, and for communities to trust each other. Moreover new measures of success for financial models are required – colloquially 'something lying between GDP and Gross National Happiness' – which value long-term benefits and promote social equity.

The influence of a city extends beyond its immediate boundaries, and so a stronger role for strategic planning is needed. Planners should increasingly be considered as part of the city management team, proactively seeking to improve the public realm and not just be engaged in a regulatory process. As such, planners of the future should become powerful enablers of resilient cities that unlock the potential for a more sustainable future, a common feature of the visions of cities given in the evidence. Moreover governance occurs at multiple levels and multiple scales – from the neighbourhood to the national – and planners need to synthesise the processes at all levels and scales, noting that certain aspects (for example, action on climate change adaptation) are best conceived locally and should influence processes upwards.

Planning that embraces experimentation and feedback from city users has proved successful. Such strong spatial frameworks require more nimble and responsive local planners, prepared to take risks, and to trust people. Early involvement of all relevant stakeholders in the development process is central to advancing the sustainability agenda. Putting in place nimble and responsive planning structures in turn facilitates organic development, or development from the bottom up. Over-regulation must be avoided in order not to stifle such an approach and there has to be trust, and an acceptance that mistakes may be made, in taking this forward.

An argument voiced by many was that if citizens were involved in the building, master-planning and zoning processes, it would be possible to create neighbourhoods which in turn would change the quality of the city itself. This reinforces our finding that integration of the various positive approaches to addressing social, economic and environmental concerns from the neighbourhood to the city scale (and all the scales above) is needed to properly embed sustainability. It was seen as necessary, however, to extend the objective of maximising community involvement in planning and design to an active involvement also in the management and maintenance of these neighbourhoods. This would provide further examples of experimentation, or 'beta testing', and foster the development of trust between a city's leaders and its citizens.



Introduction



Background

The University of Birmingham Policy Commissions were established in 2010 with the aim of bringing together leading figures from the public, private and third sectors with Birmingham academics, in order to generate new thinking on contemporary issues of global, national and civic concern. Future cities, and future urban living in particular, fall squarely into the category of issues that must be considered and planned for now if a good quality of life is to be sustained into the far future. Moreover the University of Birmingham has established a strong and growing research base on this topic on which to found the work of the Commission, while the underlying issues resonate with many of the Government's challenges concerning employment, energy security, equity, growth, housing, major infrastructure renewals and so on. All impact significantly on individuals, communities, the economy and the environment, the stewardship of which lies in the hands of local and national governments. As one commissioner commented: 'You won't have wellbeing unless you have economic success to go with it. In my experience, the phraseology emerging from those talking about their cities boils down to: having a thriving economy and a great quality of life, and doing it with minimum environmental

impact. That nicely maps onto people, planet, profit and the triple bottom line.'

The Commission operated by taking evidence from a wide range of leading thinkers, drawing from it ideas that should inform the way that we live, work and play in the cities and towns of the future, and then testing these ideas by putting them to a similarly diverse set of leaders in the various fields of urban activities. In this way, the Commission created a space for contributions that are engaged but not partisan, informed by research and practical experience, and borne out of open and wide-ranging discussion with people reflecting a wide range of interests. An underpinning aim was to provide an opportunity for academics from the University of Birmingham and elsewhere to combine knowledge generated from their research with the expertise of policy-makers and practitioners in an action-oriented way.

Given that this activity is based on current thinking and practice, it might be argued that radically new ideas are unlikely to be revealed. However this would be to overlook the power of the nuanced arguments, and the insights that duly emerge from them, during questioning and discussion amongst the eminent group of people who gave and received evidence. A second, related observation, raised in

different ways during the Commission, was that we have known for many years what we should be doing: the more important question, given that this has not been done, is 'Why has it not been done'? The question should perhaps be rephrased as 'How might these things be brought about?'

This is where the Future Urban Living Policy Commission adds a unique contribution: it seeks to provide guidance to policy-makers arising from the distillation and analysis of the evidence. Well-considered policies are essential for the generation of strategies and actions that will enable our urban areas to meet the demands of future living. In effect, the Commission seeks to deliver short-term policy guidance for long-term sustainable urban living.

The views expressed in this report reflect the discussions of the Commission and the inputs received, but do not necessarily reflect in their entirety the personal views of the Commissioners or those who contributed evidence. The Commissioners were:

- Lord John Shipley OBE (Chair of the Commission, Advisor to the Minister for Cities)
- Professor Chris Rogers (Commission Academic Lead, Professor of Geotechnical Engineering and Director of the Birmingham Centre for Resilience)

- Research and Education, University of Birmingham)
- Professor Phil Blythe (Professor of Intelligent Transport Systems, Newcastle University)
- Peter Braithwaite (Sustainability Advisor, CH2M Hill and Director of Sustainability, Birmingham Centre for Resilience Research and Education, University of Birmingham)
- Chris Brown (Chief Executive, Igloo Regeneration)
- Professor Brian Collins CB (Professor of Engineering Policy and Director of the International Centre for Infrastructure Futures, University College London)
- Dr Susan Juned (Director, Greenwatt Technology and Councillor, Stratford-upon-Avon District Council)
- Professor Rob MacKenzie (Professor of Atmospheric Science and Director of Birmingham Institute of Forest Research, University of Birmingham)
- Dr Richard Miller (Head of Sustainability, Technology Strategy Board)
- Michael Pawlyn (Director, Exploration Architecture)
- Jon Price (Director of Energy Innovation and Knowledge Exchange, University of Sheffield)
- Corinne Swain OBE (Arup Fellow – Planning, Arup)
- Professor Miles Tight (Professor of Transport, Energy and Environment, University of Birmingham)
- Stephen Tindale (Associate Fellow, Centre for European Reform)
- Dr Paul Toyne (Sustainability Director, Balfour Beatty and London Sustainable Development Commissioner)

Research support to the Commission, including compilation of the interim and final reports, was provided by:

- Joanne Leach (Research Fellow and Project Manager, University of Birmingham)

The Commission was supported by:

- Audrey Nganwa (Birmingham Policy Commissions Project Manager,

University of Birmingham)

- Sonja Large (Assistant Birmingham Policy Commissions Project Manager, University of Birmingham)

Setting the context

The world is experiencing growing urbanisation and therefore future urban living is a topic of very considerable international importance¹. In the UK there are many conflicting patterns of urban change, with some cities growing in population while others are seeing a reduction. The trends of migration into and out of cities are different for different age ranges, and patterns of international migration play into this complex landscape of changing demographics and cultures². Nevertheless the UK's population is predicted to rise³ and this increased number of people will need to be accommodated. All of the above is occurring alongside a political trend towards decreasing national governance and increasing local governance⁴.

Underpinning these changes is the need to ensure that decisions taken today are both sustainable (they do not compromise future generations) and resilient (they continue to deliver their benefits in the face of change). Our cities start with physical, social and economic legacies from past generations, all of them shaped by a particular local context, and we aim to highlight the means to bring about a transformation of that legacy to benefit the UK's cities of the future. In order to do this, the insights obtained by the Commission need to be synthesised into guidance to policy-makers, so that they can create a context in which future urban living can flourish.

In formulating this guidance, the Commission needed to address the multiple and frequently conflicting agendas that shape cities, which include climate change, economic viability, infrastructure provision, localism, low-carbon living and working, political priorities, quality of life





and wellbeing, sustainability, resilience, and urbanisation. The Commission set out to explore how 21st century cities might evolve in the UK, adopting 2050 (a point beyond the projected peaking of global population around 2047-50⁵) as a staging post, with a view to illuminating areas of future priority for local and national government as well as identifying avenues for future research.

The guidance sought relates to UK cities, though the Commission was aware that lessons needed to be drawn from international cities and global influences and consequences. The agreed approach was to begin with the high-level challenges facing urban areas in the UK and Europe, and then focus the findings towards implications for UK cities.

The Policy Commission considered a number of questions:

- What is an urban area and how is it defined?
- What are the relevant spatial boundaries in urban areas and how are they defined?
- How does local context affect urban areas?
- What are the indicators of success for, and the characteristics of, today's successful urban areas?
- What will be the purpose of urban areas in the future, given the rapid and remarkable societal changes that are taking place and are envisaged?
- What should future urban areas take as their focus?
- What, therefore, will be the characteristics of the successful urban areas we desire for the future, ie, those that will deliver a preferred future urban environment?
- What should future cities, which will be in competition with each other, offer to attract inward investment and to reverse the trend of outward migration to rural areas by more affluent citizens?

¹ McKinsey Global Institute (2012). Urban World: Cities and the rise of the consuming class.

² Smith (2013). An Urban Renaissance Achieved? Mapping a Decade of Densification in UK Cities. <http://citygeographics.org>

³ Office of National Statistics (2013). National Population Projections, 2012-based projections.

⁴ DCLG (2010). Decentralisation and the Localism Bill: An Essential Guide.

⁵ Gonzalo JA, Munoz F-F & Santos DJ (2013). Using a Rate Equations Approach to Model World Population Trends. Simulation, 192-198

Methodology

The Commission operated as follows. After an initial scoping phase, in which the questions to be posed to those giving evidence were formulated (see Appendix A), the Commissioners invited several leading policy-makers, practitioners and academics (see Appendix B) to one of three 'select committee style' evidence sessions, either in person or via video conference link. The Commissioners considered it important to solicit views from a number of UK (eg, Belfast, Bristol, Cardiff, Glasgow, Wakefield) and European (eg, Almere, Berlin, Copenhagen, Lisbon) city perspectives to complement the views of those for whom cities provide the focus of their activities. The evidence was recorded, reported and analysed by the Commissioners under a number of broad headings. Once the results of the analysis had been distilled, Commissioners, individually or in pairs, interviewed further senior individuals to test the emerging themes (again, see Appendix B). This report was compiled from the evidence collected, the results of testing, and the Commissioners' own research and expertise. Where relevant, this has been referenced back to the outcomes of research from the University of Birmingham's Future Cities portfolio⁶.

Content of this Report

This report has been compiled in four chapters, together with an Executive Summary and two short Appendices. All of the chapters are designed to be read in isolation, although there is a logical flow to the way in which they are presented. The 'logical flow' refers to a presentation of the evidence first, from which the conceptual model for future urban living was created to help explain and structure the arguments, and both provided the

evidence base on which the insights and recommendations could be crafted. However the Commissioners were of the opinion that the insights and recommendations could be read first, dipping into the evidence where desirable to amplify points of interest and referring to the model to explore interdependencies.

Chapter 2 contains a summary of the evidence provided by witnesses, and those involved in testing the synthesis of this evidence and is structured under the topic headings that emerged as being of most importance to the witnesses. Interestingly, a number of topics that the Commissioners expected to feature strongly were conspicuous by their absence in the evidence. These included the role of the private sector in future cities, physical and mental health, security and crime, and individual and societal aspirations. This was perhaps in part because our questions did not lead witnesses directly to these issues, although that did not stop other issues emerging strongly. This chapter is primarily a record of the evidence, with context provided by the Commissioners only where it helps understanding.

Chapter 3 describes the conceptual model for future urban living and focuses on an analysis of the evidence including Commissioners' own views and information gathered from other sources. Taking the collected evidence as the base, the Commissioners' sought to extract the 'forces' that were influencing cities along two dimensions (which themselves emerged from the evidence): resource efficiency and degree of autonomy. These issues featured in the Commissioners' deliberations of the evidence, along with the interactions between those leading cities, those aspects of cities being governed (communities, and the markets and ecosystems operating) and the

institutions or structures in which they operate (eg, legislation, regulations, current business models). The outcome is a conceptual model that makes explicit the difficult push-pull dynamics of cities, and therefore one that will assist in guiding future directions of policy for cities.

Combining all of the evidence and analysis, a remarkably compelling set of insights emerged to achieve the ultimate goal of the Commission: guidance to policy-makers in national and local government around which to plan strategies and actions towards a more sustainable future for the UK's urban areas. In effect, this advice identifies the conditions required for the success of the strategies and actions, and enables them to be created. In so doing, it highlights the importance of creating and curating a compelling 'City Narrative' for each of our cities, reaching far beyond conventional urban planning to reflect, in all its social, environmental and economic depth and complexity, how residents want to live in their place.

⁶ University of Birmingham future cities research portfolio. www.liveablecities.org.uk; www.designingresilientcities.co.uk; www.esr.bham.ac.uk



Chapter 2

Gathering the Evidence

This chapter gives a summary of the evidence provided by witnesses and those involved in testing the ideas contained in it. Evidence has been grouped around nine themes that emerged from the witnesses, and which accorded well with those issues considered by the Commissioners to be of particular importance to future urban living.

Although ideas often cut across several issues, this use of different themes to view future urban living draws out consistent and conflicting views, and reveals nuanced thinking. A synthesis of this evidence is provided in the chapter describing our conceptual model for future urban living and in the chapter that summarises the insights for policy guidance.

There is ample evidence to suggest that if left unchecked, that is if changes are not made to policies and practices, cities will be required to accommodate most if not all of the world's population growth⁷; and this in turn will involve the creation of more and even larger cities (including more megacities). The Commission sought to discover whether this situation was desirable, given that many cities were already stretched in terms of resource availability and infrastructure capacity. In these cities, increases in population could result in an expansion of the poorest aspects of the urban environment and a widening of the gap between the economically active and inactive, thus perpetuating tendencies towards inequality and inequity, and resulting in greater social unrest.

The remit of the Commission was to adopt a UK focus, and it was therefore the consequences of an expansion of populations in towns and cities other

than London (it being the only UK megacity) that was of primary concern. In this regard, London was not neglected, but viewed as a separate case.

This simple picture of overall growth hides the fact that all cities develop in a particular context, and while many cities will grow in size strongly, others will (and in some of these cases, will continue to) experience a decline in population⁸. Moreover, the view – widely held, internationally at least – that people will drift from rural communities towards urban areas under the pressure of economic necessity and the lure of better living standards (whether real or perceived) has been more than countered in the UK by a drift of older and wealthier people from urban to rural environments. For example, UK towns and rural populations grew at between 0.4% and 0.5% per year between 1981 and 2003, while large cities (excepting London) showed a marginal population fall⁹. This in turn changes the age profiles in different parts of the multiple communities that make up urban areas.

This results not just in 'creaking cities' (those exhibiting brittleness, for example being close to their maximum capacities and supported by an ageing infrastructure) but in damage to the rural economy on which cities depend for food and resources. Urban areas and their rural hinterlands must act symbiotically.





The Commission recognises that our existing policies and systems do not cater well for this future, raising the cross-cutting questions of how we are to address future urban living to provide wellbeing, liveable surroundings, resilience and sustainable consumption. This direction of thinking, which emerged from the early meetings of the Commissioners, helped to shape the questions that were put to those giving evidence and which feature in Appendix A.

As a body hosted by a university and comprising academics, experts in urban governance and urban regeneration, and practitioners, the Future Urban Living Policy Commission had to work in a way that was faithful to the standards of academically rigorous research and cognisant of current practice, while also acknowledging that urban systems are highly complex, interdependent and significantly influenced by human behaviour. It was equally acknowledged that the future of urban areas depends not only on policy-making, economic growth, planning and engineering, but also on political will and social acceptability.

Perceptions of what constitutes the 'right course of action' will often be coloured by the views of the body defining the action, and inevitably stresses occur between bodies with differing viewpoints. The Policy Commission strove to reflect this diversity of views, drawing on a range of sources to do so. Commissioners were conscious of the need to be clear about the evidence base on which they were relying. The range of witnesses, and the

ways in which the Commission interacted with them, provided variety in terms of how those contributions were heard, contested and deliberated. They also presented the Commissioners with very different kinds of contributions, or 'evidence', to work with. These included:

- findings from academic and urban policy research and evaluation projects
- expert knowledge drawn from relevant experience
- findings from consultations
- knowledge culled from experience of how things happen in practice

In order to secure maximum value from the limited time available to interview witnesses, the Commissioners provided witnesses with six standard questions before the evidence-gathering event (Appendix A) and invited the witnesses to start by giving a 10-minute presentation focussing on the questions. This statement was followed by a semi-structured question and answer session to clarify and build upon the evidence and ensure that all topics of interest were covered by the Commissioners (additional questions were drawn from the supplementary questions in Appendix A). Finally, witnesses were invited to provide closing comments at the end of their session.

⁷ UN (2011) World Urbanization Prospects: The 2011 Revision, Highlights. New York.

⁸ DCLG (2011). Updating the Evidence Base on English Cities.

⁹ ODPM (2006). State of the English Cities, Volume 1. London, UK, March.

Gathering the Evidence

Future Visions

Future visions are a key component of the City Narratives that came to be a focus of much of the Commission's attention. The degree to which future visions of different cities, or images of a desirable future, were articulated varied enormously in detail and scope.

Almere in the Netherlands, for example, set a leading example by distilling its visions into a set of principles (see inset). Two of their principles explicitly referred to place-based thinking and this emerged as a core theme in much of the evidence, while the final principle – Empower People to Make the City – reflected the strongest theme of all to emerge from the evidence-gathering exercise. However in pursuing this principle, it was emphasised that it is necessary to adopt 'total place thinking', and move away from thinking in service or professional silos.

Several visions included cities being good and healthy places to work, raise families, and so on. This might be achieved by setting out principles for sustainable neighbourhoods that would combine to become sustainable cities. Organic development, or planning from the bottom up – looking at activity in life, then considering the spaces in which this might occur, and finally considering the buildings – was advocated by some witnesses as a means of achieving this goal. However, for this to work, over-regulation must be avoided, there has to be trust, and making mistakes must be accepted as part of the process. An argument was advanced that if people were involved in the building process, it would be possible to 'create neighbourhoods' and change the quality of the city itself, an idea that reinforced

the often articulated belief that sustainable neighbourhoods would combine to form a sustainable city. Moreover it was emphasised that the objective of maximising community involvement in planning and design should continue through the management and maintenance of these new neighbourhoods.

One witness argued that cities were a fundamentally positive force for the 21st Century – the pinnacle of human existence. They could be wonderful places to live; a source of collaboration, creativity and innovation; and, done well, they were the most efficient way to use land and other resources. This view accorded with the concept of 'the facilitating city'; yet it was emphasised that equity must feature in any city view – facilitating for all. This led to the vision of a sustainable and just city in terms of social structures. Indeed one witness argued that it was almost impossible to have a vision that did not aim for greater equity. In the same vein, it was felt that successful cities were cities that provided job opportunities for the residents who were already there, and the individuals who wanted to be there. Cities are in competition with each other, and in this context they are in competition for jobs and talent, which for some witnesses provided the primary element of a city vision. A recurring theme around the

notion of a 'facilitating city' was facilitating connectivity; and indeed, during the testing of evidence, it was stated that facilitating connectivity within a city and between cities led to multiple other benefits. An interesting addendum to this idea was that virtual connectivity might, in the future, replace (at least in part) physical connectivity, and this in turn might deliver greater equity.

One aspect that was conspicuously absent in the UK evidence was specific detail on the environmental or resource security aspects of future urban living, with the exception of the 'One Planet Cardiff by 2050' vision. Cardiff's vision is more aligned to Dutch aspirations to create cities that are sustainable and self-sufficient, especially in terms of food and energy. However, the aspiration for greater dependence on a city's hinterland, so that a city-region might become more self-sufficient, did feature in the UK evidence. The lack of emphasis on natural resources in city visions perhaps reflected a sub-conscious dependence on 'national systems of provision', that is if energy, water, telecommunications and other services are perceived to be supplied from some external source, then cities do not have to worry about their supply, or the consequences of their being supplied. However the witnesses provided more nuanced evidence in this regard, since several referred to cutting consumption,

while paradigm changes in the delivery of urban transport aimed to advance sustainability objectives. Indeed it was stated that a city's priorities should first focus on service provision – giving the people what they want in terms of public provision – and then ensure that services are provided in a way that reduces (carbon) emissions and fuel/energy use.

There was a concern that visions might not go much further than platitudes and generalities – although visions ought to precede actions – while it was considered essential to embrace flexibility in city visions (to allow cities to react to a changing context) rather than creating a rigid vision that would be imposed no matter how the future developed. There is a creative tension between planning to create a desired future and preparedness for change in the face of 'unknown unknowns'.



Almere: Making people the driving force in urban planning

'First of all you must trust the people – their fantasies for the city, their dreams and so on...'

Adri Duivesteijn, Dutch Senate Representative for Almere, *Commission evidence gathering session, October 2013.*

Almere is a new city (less than 40 years old) of approximately 200,000 inhabitants located in the central province of Flevoland in the Netherlands¹. In 1966 the Dutch government envisioned the development of Almere as one of a number of cities to be built on reclaimed land along Lake IJmeer. Then, as now, the dominant paradigm was for everything to be carefully planned. All this changed in Almere in 2008 with the publication of seven principles¹ that shifted the focus of urban planning from highly planned to organic and citizen-led. Almere's principles make its citizens the driving force for city planning and seek to avoid overregulation.

This change did not come easily, requiring the city to trust its citizens and the citizens to trust their city. A careful balance had to be struck between large-scale activities that were primarily city led and small-scale activities primarily led by the people. For example, the city has invested in public transport to connect Almere to its hinterland and close neighbours, such as Amsterdam. Within the city, bus lanes connect all parts of the city to each other. At the same time, the initiative 'I build my house in Almere' allows all citizens to design and construct their own houses, creating vibrant, unique neighbourhoods and engaging citizens in city planning. Since 2006, over 2,000 self-build plots have been sold, including 500

affordable plots for lower income households.

Almere's seven principles²:

- 1 Cultivate diversity. To enrich the city we acknowledge diversity as a defining characteristic of robust ecological, social and economical systems. By appraising and stimulating diversity in all areas, we can ensure Almere will continue to grow and thrive as a city rich in variety.
- 2 Connect place and context. To connect the city we will strengthen and enhance her identity. Based on its own strength and on mutual benefit, the city will maintain active relationships with its surrounding communities at large.
- 3 Combine city and nature. To give meaning to the city we will consciously aim to bring about unique and lasting combinations of the urban and natural fabric, and raise awareness of human interconnectedness with nature.
- 4 Anticipate change. To honour the evolution of the city we will incorporate generous flexibility and adaptability in our plans and programs, in order to facilitate unpredictable opportunities for future generations.
- 5 Continue to innovate. To advance the city we will encourage improved processes, technologies and infrastructures, and we will support experimentation and the exchange of knowledge.
- 6 Design healthy systems. To sustain the city we will utilize 'cradle to cradle' solutions, recognizing the interdependence, at all scales, of ecological, social and economic health.
- 7 Empower people to make the city. Acknowledging citizens to be the driving force in creating, keeping and sustaining the city, we facilitate opportunities for our citizens to pursue their unique potential, with spirit and dignity.

¹ The city of Almere. <http://english.almere.nl/>

² The Municipality of Almere (2008). The Almere Principles: for an ecologically, socially and economically sustainable future of Almere 2030. THOTH Publishers, Bussum, The Netherlands.

Gathering the Evidence

Natural Environmental Context and Ecosystem Services

A strong thread in the evidence described the contrary effects of private and public ownership on sharing, and hence benefiting from, green spaces: for example, in the idea that suburbs reduce the potential for sharing resources.

There was less recognition of the way in which privately owned green spaces could provide ecosystem services for the community (for example, the combined cooling effect of private gardens on the 'urban heat island' effect – ie, city centres being markedly hotter than surrounding suburbs and rural areas). In discussing dense urban centres, one witness advocated 'privileging the outside', providing the example of Times Square in New York, in which 90% of the users use 10% of the space. The co-benefits in terms of air pollution of redesigning urban places to make neighbourhoods walkable were recognised by many witnesses.

Accounting that does not consider the hidden costs, or externalities, such as dumping waste in the 'environmental commons' (the natural environment, in which we all have a stake), was highlighted by several witnesses as false accounting of natural resource use. One witness argued that management of local externalities (eg, local acute pollution, such as the smoke from a chimney) should be negotiated locally, doing away with the cadre of environmental experts who are no longer trusted by the people, while acknowledging that some externalities (carbon dioxide being probably the best example) manifest themselves 'downstream', and so require regulation/planning at a higher than local level. It was noted, however, that a potential unintended consequence

of localised environmental regulation (such as road pricing to reduce air pollution) might be that pollution would be exported to those areas that were less well organised socially and politically.

Witnesses drew attention to 'waste land' in cities, usually as a negative aspect of the urban environment or, as one witness graphically described it 'the missing city'. There was little recognition that this land could already be working for the city – that is, delivering ecosystem services of biodiversity, pollination, amelioration of the urban heat island, and so on. There was more recognition of the ecosystem services delivered by formal green space in and around cities, and this is being audited in many cities (for example, through the Clyde Valley Green Network Partnership¹⁰). Conversely, one witness emphasised how little green belt (suggested to be 0.03% per annum¹¹) it would take to fulfil the UK's current housing requirement, implying that there is land in the green belt that is currently being wasted by not being developed for housing. Finally, Commissioners noted that discussion of the green infrastructure and ecosystem services usually changed the focus from

the city to the wider city-region (ie, the city and its hinterland).

Many witnesses mentioned the 'Not In My Back Yard' (or NIMBY) tendency as a barrier to change that was already prevalent and that could dominate in the future if there was too much local control, although some argued that people's NIMBY-ism was conditional — there was always space for negotiation — and so this shouldn't be taken as an incurable problem with local control. Other witnesses argued for development and planning structures above the local scale in order to prevent stagnation. It was suggested that there were strong cultural forces at play, with an 'anti-urban English psyche' preventing radical change inside and outside city boundaries. This psyche, if indeed it does exist, could be a catalyst for change in English cities, although several witnesses suggested that the more likely outcome was that people would not see the city as fit for all their life stages and so would escape to the countryside rather than struggle to make the urban environment 'more natural'.

The clearest concepts put forward in the evidence about helping cities recognise and value the environment and ecosystem services shared two common elements:

- 1 'learning from nature', including concepts like biomimicry, the biophilic city¹², the ecopolis¹³, and the circular economy/urban metabolism¹⁴
- 2 valuing nature in hard monetary terms, however incomplete a valuation that might provide.

¹⁰ GCV Green Network. www.gcvgreennetwork.gov.uk/

¹¹ Population Matters (2013) Population Growth and Housing Expansion in the UK. www.populationmatters.org

¹² Beatley T. (2010). *Biophilic Cities: Integrating Nature into Urban Design and Planning*. Island Press. Washington D.C.

¹³ Downton P.F. (2009) *Ecopolis: Architecture and Cities for a Changing Climate*. CSIRO Publishing, Australia

¹⁴ Wolman A. (1965) *The Metabolism of Cities*. *Scientific American*, 213(3): 179–190.



Berlin: Fostering experimentation and citizen participation

'There was a special situation in Germany, with a political vacuum and large amounts of space with unclear ownership – a situation that gave rise to interesting ideas and actions.'
 Professor Cordelia Polinna, Center for Metropolitan Studies, Technical University Berlin and Polinna Hauck Landscape and Urbanism Consultants, Commission evidence gathering session, July 2013.

In addition to being the capital city, Berlin is also Germany's largest city with a population of almost 3.5 million. For the first time in 20 years, Berlin's population is increasing and with this comes growth in development, infrastructure and pressure on resources. Unlike the UK, where

localism is in its infancy, in Berlin there is a long tradition of citizens taking an active role in developing their city. From 1978-1987 this was manifested in the International Building Exhibition which – among other things – gave rise to an era where people occupied and squatted in houses, were granted legal ownership and then started to renovate. When the Wall fell in 1989 this was extended to industrial sites. As businesses declined and/or relocated, people moved in and used the vacant spaces with little or no regard for legal ownership. There was limited follow up from politicians and planners, and eventually the new residents began to put pressure on the government to come up with appropriate policies to legitimise their occupancy. These people, and those like them since, have become known as 'urban pioneers' and are now engaged by the government to 'activate spaces' by testing different usages of

abandoned sites (exploring what can be done and public acceptability).

Such 'civic economy', alongside collective ownership projects, is contributing to new types of affordable urban living in Berlin as well as new types of urban agriculture, green spaces and use of public spaces. Such projects have been found to be drivers of urban development and are laboratories for testing new ways of urban living. The International Building Exhibition is now used as a planning tool in other cities and regions in Germany and allows practical experimentation in the urban realm (temporary and permanent). Especially in Berlin, 'urban pioneering' is becoming more and more professionalised, with individuals and groups increasingly equipped to interact with the municipality and its systems in order to promote their ideas.

Gathering the Evidence

Natural Resources and Flows

Although resource use did not feature strongly in city visions, it did recur in a variety of contexts in references to the operational issues that cities have to face both now and in the future. Consuming more natural resources than the planet can provide was a concern, and it was acknowledged that future urban living would require radical behavioural change to address this.

In this regard, it was stated by one witness that public information comparing household energy and water usage with an anonymised aggregate had found that those who used more than their neighbours generally improved their performance when informed; so awareness and peer pressure might helpfully combine. Minimising energy demand and maximising renewable energy supply commonly featured in the evidence, with mention of decarbonising and diversifying energy production and much retrofit activity. The drivers of these beneficial changes, however, were the need to ensure continuity of supply of energy, reduce cost, and mitigate fuel poverty, rather than to address environmental concerns. Water supply featured far less prominently than energy – only one witness raised it as a resource constraint and voiced concerns that universal water metering could lead to water poverty for some. Waste management was similarly conspicuous by its absence although, like other utility services, it generally featured in prepared answers quoting a city's intentions to move towards efficiency and sustainability. Food, like water, was largely bypassed in the evidence as something that is 'provided from elsewhere', though with occasional reference to more urban food production reducing reliance on sources outside the city, and the health or quality-of-life benefits associated

with good food and 'growing your own'. Raw materials were even farther from the thinking of the witnesses.

Overall though, whilst the evidence was not as specific as Commissioners might have expected on these issues, a general desire to move towards greater self-sufficiency for energy, food and other consumables could be discerned, and the balance between what might be sourced locally and what might be imported from elsewhere was acknowledged in the statement that cities could not have fixed boundaries in terms of natural resource flows. So, cities are aware of the issue, perhaps, but confused about how to address it and, indeed, about the reasons for addressing it.

Climate change effects were often mentioned. For example, the 'urban heat island' effect is a growing concern, and it was considered that a tipping point would be reached once air conditioning proved routinely necessary in UK houses. However once again it was the effects, rather than the causes, that provided the focus of these comments; and indeed it was stated that long-term issues, such as 'carbon', were difficult to sell, so tangible, 'here and now', issues were favoured. This was exemplified in the comment that food, because of production, processing, distribution and waste management, was a significant contributor to a city's



ecological footprint (and a cause of environmental harm); and yet a key concern was that city growth meant a need for more food production on less available land (the effect on citizens). Adaptation to climate change, accepted as necessary in cities, would involve change to existing urban structures, while mitigation of climate change was implied in the need for changes in urban mobility (with the stated benefits of greenhouse gas and energy reductions). Similarly links to key amenities (shops, doctors, schools, etc.) focused around public transport nodes were considered to play a key role in forming sustainable urban neighbourhoods. Complicating this picture further, there was concern over social polarisation, possibly resulting in social exclusion, between those able and those unable to afford a sustainable lifestyle: the fear that hot, flooded, noisy, polluted areas from which travel would be prohibitively costly could be the norm for some. Taken together, these opinions show that the causes and effects of climate change, the costs incurred and the need for equity in doing something about it, and the quality of environment and quality of life that might result, are commonly conflated.

In terms of actions that lead to a more sustainable and resilient future, it was noted that technology could be an enabler (eg, for carbon reduction), but it would not

work without behavioural change and community involvement. For example, community-based and decentralised schemes (eg, combined-heat-and-power, district heating schemes) were praised, and it was felt that community-owned facilities should be encouraged to ensure local buy-in. Ageing infrastructure was cited as a problem, notably water leakage and drainage capacity linked to local flooding. Similarly 'waste to energy' was mentioned as a solution, while an example was given of efficient waste management via different authorities working together, the authorities being mandated to work together to achieve a solution or otherwise suffer financial penalties.

Resource use was not infrequently linked to urban form. Compact, multi-centred, socially mixed, well designed and connected cities were considered to be effective in reducing resource use, an idea that chimes well with the concept of amenities being clustered around public transport nodes. Concern over wasted space in cities was commonly voiced, with increased density being viewed positively, and by implication the advantage here would be when increased density occurred around local centres or transport hubs. 'Going underground', that is using underground space in cities, although it could be an expensive solution, was nevertheless considered a significant option to achieve higher densities.

While all of the above points to urban form solutions, one witness directly posed the question: 'How can suburbs (a particularly UK phenomenon) be adapted to work more effectively?'

It is perhaps fitting that this chapter on the evidence given to the Commission should end with a question, rather than an answer, since there was little clarity on how to deal with what is a highly complex set of interdependent issues, allied to an equally complex and poorly distinguished set of drivers; and there was no clarity on whether the responsibility should lie with national government, local government or the citizens themselves. It was evident that many could discern in all this what 'the right thing to do' would be for any one issue, but not necessarily how to do it, who should do it, or (because of a lack of clarity on overall purpose) where the priorities should lie. Tools exist to help policy-makers unpick the complexity of interdependent drivers – the Designing Resilient Cities methodology¹⁵, for example – but these have yet to find a 'home' in public- and private-sector organisations dealing with urban change.

¹⁵ Lombardi DR, Leach JM, Rogers CDF, et al. (2012) Designing Resilient Cities: A Guide to Good Practice. IHS BRE Press, Bracknell.



Cardiff: The capital city curse

'The main risks relate to the performance of the global economy over the period up to 2050, as this will impact on Cardiff's ability to perform its economic role.'

Phil Williams, Cardiff City Council, Commission evidence gathering session, July 2013.

As well as being the capital of Wales, Cardiff is its largest city and social, cultural and economic centre. The city's population is just under 350,000 and half of the total population of Wales (which is just over three million) live within 30 miles of the city. Half of all Welsh local authorities are within the Cardiff city region and only one year in four does Cardiff not have an election of some sort (eg, Westminster, Welsh Government, local elections).

Cuts impact disproportionately on the city because of the high proportion of public sector jobs found within it. Moreover, given Cardiff's position within Wales, what is bad for Cardiff is also bad for Wales. Cuts impact on the

delivery of sustainable transport solutions and other infrastructure provisions, which are essential if the city region is to function properly. Approximately 80,000 people enter Cardiff every day for work and tourism with only an estimated 20% travelling by public transport. Capacity issues on the rail network, insufficient modal choice and high fares mean that public transport is simply not competitive relative to the private car.

When the calculations for new homes were made by central government, Cardiff took the lion's share. Cardiff's local development plan proposes the construction of 40,000 new homes by 2026; a target that will be difficult to achieve and one that is being challenged by the city as based upon erroneous population growth projections.

Cardiff has a strong vision to ensure future success for itself, its region and Wales. By 2050 Cardiff aspires to be a 'one planet city'. This means that if everyone were to live as those in Cardiff will by 2050, then we would only require one planet to supply our needs.

One planet Cardiff¹:

- energy – reducing demand, diversifying supply
- waste – reduction, reuse, recycling and diversion from landfill
- movement – modal shift to active travel and transport, 50/50 modal split private to public transport
- water – controlling demand, managing waste, resilience to flooding
- food – reduce ecological footprint
- place – sustainable urban design with planning to facilitate it
- behavioural change – capturing local entrepreneurship, knowledge and innovation

¹ One Planet Cardiff.
www.oneplanetcardiff.co.uk/content.asp#/home

Gathering the Evidence

Accessibility and

Movement

Access to facilities (places of education, work, leisure, service provision, shops, etc.) and movement through cities is one of a city's core functions, and was universally considered important. A generally held view was that urban transport systems must change to redress the balance between private motorised transport, public transport, and walking and cycling.

However, radical changes to make these latter modes of transport more effective might not be widely popular and might have consequences in terms of their impact on the economy, which was widely acknowledged as being heavily dependent on effective transport systems, as well as on lifestyles and behaviour. Moreover the problems currently faced were understood to be a by-product of past economic success (eg, car ownership and a flourishing car industry), making this loop more complicated still.

One compelling thread in the evidence, whether from the UK or elsewhere, was that step changes in the way mobility was delivered to citizens could only be effectively achieved if there was a clear champion (either an individual or an organisation) who could articulate the arguments for change, explain the benefits, and formulate a long-term strategic plan to deliver the necessary changes. By itself, the championing of change is not enough to deliver change (as discussed in our conceptual model), yet without such championing, the task is manifestly harder. The context for such changes is equally important, and from a UK perspective post-WW2, and especially post-1960s, transport provision in many cities meant giving ground to the motor car as the preferred means of travel, despite many

UK cities having adequate and well-developed public transport alternatives. This certainly became the age of the motorist, where the middle and then the working classes aspired to own, and use, a motor car, and cities saw this as a beneficial sign of economic growth and personal success, as well as spawning the motor manufacturing industry and the concomitant jobs and wealth this brought to a city or a region.

Evidence given by a number of witnesses clearly suggested that there is now a sea-change in thinking in many cities, and that providing alternatives to the motor car, notably new means to manage the use of cars and optimise all the transport alternatives, is a priority. This is needed to address the growing urbanisation of nations, along with the resulting additional demands on transport networks as more people wish to travel and, in many cases, travel more often. Witnesses pointed to the need for long-term strategies and innovations that would make a significant change in how citizens travelled. For example, in Copenhagen, reducing car use by redesigning road networks and having a focused, long-term (20-year) plan to support cycling and walking have indeed delivered benefits. Similarly in London, one of Europe's megacities, a focus on an integrated public transport

(supported by clear information provision and an integrated smart ticketing system) has been allied with the first large-scale congestion charging system in Europe, which has both reduced the number of cars entering central London by about 16%¹⁶ and raised a net revenue of around £100m per year¹⁷ for re-investment in London's transport and transport-related schemes.

Interestingly, walking was often not consciously regarded as a transport mode, although witnesses talked about significant amounts of walking as being 'an indicator' of a good city. Formidable obstacles to the expansion of walking remain, such as low-density residential areas generating long trip distances and the historical growth of motorised traffic.

While in Britain there is wide divergence in the use of, and attitudes towards, cycling, which is accepted in some cities (eg, York, Cambridge and Oxford) and encouraged in others (eg, 'Boris' bikes' and demarcation of cycle lanes in London), cycling in countries such as the Netherlands, Germany and Denmark was cited by witnesses as universally accepted and engaged in by citizens of all ages. In this respect, a growth in electric cycling could make it easier for older people to adopt this mode of transport in cities with undulating topographies, this being cited as a reason why many UK cities do not follow the examples set in European cities with flat landscapes. The benefits were stated to be improved health and wellbeing for the cyclists, which sat alongside the more normal justifications of reduced vehicle emissions, improved air quality and reduced local congestion. Yet this

underplays the strength of the arguments in the evidence, which included public space becoming a place of opportunity and choice in which the public could flourish, a rethinking of transit resulting in pedestrian streets, and the establishment of a cycling culture by putting people mobility first, improving the facilities for people movement and then reducing the space allocated to cars.

The experiences of Copenhagen were cited as a good example of what can be achieved: a city where cars give way to cyclists and cyclists give way to pedestrians; where vehicle speeds in the city are significantly lower than the norm for EU cities; where there are very few 'through streets' – you do not drive through Copenhagen, you drive round it; and where public transport (eg, the Metro) is continually being improved. Berlin was similarly cited as walking- and cycling-friendly, as a result of having a long-established polycentric structure, being a very green city with lots of waterways, parks and trees, and providing access to everyday necessities in local areas. In discussing how the city and its region might grow to accommodate a larger population, it was acknowledged by those giving evidence that public spaces would play a key role, together with local centres containing essential amenities (retail, health, education, etc.) focussed around public transport nodes. Inherent in this argument for facilitating greater walking and cycling was the delivery of greater equity. Interestingly, when discussing the issue in a UK context, witnesses suggested it as an aspiration. Yet one witness did not wish this to be seen as part of a war with motorists, and perhaps for this reason suggested that the UK was 40 years away from a situation where cycling would be the norm for all groups in society. Interestingly it was stated that large transport providers in the UK do not see walkers as key stakeholders, whereas cyclists might be, as they use the roads. Nevertheless, national government would need to provide a lead to bring about change on the roads, for example copying the rigidly-enforced cycling guidelines of the Netherlands.

The lessons from all this are not entirely straightforward for the UK. Increasing density encourages walking and cycling, yet the streets would need to be reclaimed in part from motorists for walking and cycling to gain traction; and the narrow streets in some of the UK's historic city centres do not help. Solutions would require changes in policy and attitudes, as well as investment in appropriate infrastructure; and investment, in times of relative austerity, is difficult to justify on economic grounds alone. Wider environmental benefits (reductions in fuel use and emissions, better air quality) and social benefits (health and wellbeing) would need to be invoked, valued where possible, and then prioritised. Moreover facilitating is not enough: behavioural change in citizens would be needed to move the mind-set away from the car-focussed society; and for this to happen, policies would have to make walking and cycling easy, safe, comfortable, and accepted as normal for most people. Small-scale incremental change will not be enough – there needs to be clear thought, rigorous planning, substantial effort, appropriate investment, coordination and, most of all, desire, with a clear view of where we want to be. We formalise this set of interlinked requirements in our discussion of a conceptual model for city change, but it was eloquently summarised by one witness: the key is to understand where, as a society, we wish to go (with urban mobility strategies) and to consider (collectively) what we will need to do to get there. If this were clearly the wish of the people, and it was seen to be so by those able to bring about change, then structural change in cities synchronised with bottom-up change would be far more likely to succeed.

There are, however, rays of hope. Cities that have a vision for future urban living and embrace the best tenets of the 'smarter cities' concept have achieved both the buy-in of their population (as demonstrated by the extensive public and business engagement achieved by Glasgow) and an understanding of what a 'smart city' is and what technology building blocks are necessary to achieve this (such as the Smart City Principles espoused by

Bristol). One challenge posed by mobility in future cities is that trends suggest there will be a greater demand for mobility; yet combining this growth with the implied need for efficiency of travel bumps up against the constraints of the legacy of urban form and the need for a reduction in energy use and greenhouse gas emissions from the transport sector. Thus when considering the pathway towards a 'smart city' for future urban living, the key building blocks are better information from a range of sensors and other sources, better synthesis of this information, and then use of this information to make more informed, optimal decisions at the individual, stakeholder and city levels. The other factor potentially influencing city travel – the ability to work remotely from offices and thus remove some of the need to travel – is covered in the next section.

¹⁶ Transport for London (2007). Central London Congestion Charging Impacts Monitoring Fifth Annual Report
¹⁷ Transport for London (2007). Annual Report and Statement of Accounts 2006/07



Copenhagen: Designing out the car, designing in the bicycle

'Giving people the opportunity to use their cars less requires infrastructure changes, it means that bikes are given part of the road – the whole city is a bike city, and every street is a bike-able street. The difficulty in the UK is simply that a lot of the city centres are very dense, the streets are very small and the willpower to give any of that up to anything other than a car is limited.'

Allison Dutoit, Gehl Architects, Copenhagen, Policy Commission evidence gathering session, October 2013

Copenhagen in Denmark is well known for being a cycling city. Its population is similar to that of Birmingham in the UK, with just over one million citizens, and its heritage extends back to the 10th century. Approximately 52% of

Copenhagengers ride bikes to their work or education location and, of those that use public transport, a high percentage ride bikes to the train station. If you were to ask them why (and the city does so every other year, publishing the results as a report on the municipality website), the response with the highest percentage (63%) is that cycling is convenient, fast, easy and enjoyable¹. The city is intent upon increasing the modal split, and bringing even more people to cycling; 75% of Copenhagengers now perceive cycling as secure or very secure.

Part of what makes cycling a better option is the pervasive cycling network – commuting and recreational routes are intertwined. In Copenhagen the ambition is for every street to be high quality and suitable for cycling, meaning cyclists can easily travel anywhere in the city. There are defined routes where cyclists want to go, not where planners decide they should go.

This is combined with careful planning of car routes to discourage journeys across the city centre that are better made on foot, bike or with public transport. It is said that you don't drive through Copenhagen, you drive around it.

Investment in the public transport network means that there are a range of travel options other than the car. Regional trains, the Metro, buses, bicycle parking and pedestrian routes are all being thought of together, as a network, so that users can easily switch between modes of transport without having to pick up their car keys. The benefits go beyond increased travel options: air pollution is reduced, road safety is improved and everyone is able to use the city with confidence.

¹ Copenhagen: City of Cyclists, Bicycle Account 2012. http://kk.sites.itera.dk/apps/kk_pub2/pdf/1034_pN9YE5rO1u.pdf

Gathering the Evidence

Resilience, Adaptation and Smart Technologies

Witnesses made relatively few references to the issues of resilience and adaptation. Nor did they refer to the use of smart technologies in addressing these.

In responding to the question about the challenges of future urban living in the UK, a number referred to the need to be able to adapt to:

- climate change – the impact of rising sea-levels on coastal cities, the increase in extreme weather events, and the need to move to a low-carbon economy to mitigate climate change.
- the effects of city growth – including urban heat island effects, transport congestion and air quality issues
- changing demographics – ageing populations, migration and ethnic diversity
- resource availability and cost – energy, water, and to some extent food.

These are accepted as the background conditions against which future urban living must be planned. Indeed, as mentioned earlier, many cities include in their vision some reference, whether direct or implied, to being more sustainable, low-carbon or resource efficient, the best example being the Cardiff One Planet Living vision, even if the references are less strongly advanced on the basis of environmental concerns than on that of operational practicalities.

However, witnesses proposed few solutions to the challenges. The most frequently mentioned approaches were to reduce general energy consumption, particularly through improvement of the

building stock, and a reduction in car use, coupled with changes to the patterns of people's movement through a modal shift to public transport, walking and cycling, allied to increasing the density of city centres. Copenhagen asserted that putting living spaces close to transit stations had a much bigger impact on reducing carbon emissions than decarbonising the transport system, while Berlin propounded a polycentric urban form in which key amenities were focussed around public transport nodes to form sustainable urban regions. However it was noted that this call for densification in cities, almost as something that we simply have to do, goes against the evident UK aspiration for living in suburbs, which was suggested to be a particularly strong, and indeed peculiar, UK trait (an 'anti-urban English psyche'). Caution against repeating the mistakes of the past in introducing high-rise flats to cities was aired, while it was pointed out that the European enthusiasm for living in apartments was by no means shared by all UK citizens.

A significant insight into how a resilient and adaptable economy might be delivered came from witnesses at the Centre for Cities, who observed that successful cities are constructed on a scale big enough not only to offer jobs, but also to offer a sequence of jobs that could satisfy citizens throughout their life.

Such cities have a high concentration of skilled workers, and in general good transport connectivity to other pools of workers and economic activity. The geographic context of a city was therefore thought to be vital to its success, and transport connectivity is a positive enabler of this business activity. Perhaps surprisingly, freedom from the need to travel and the other benefits of remote working, following the idea that for many 'work is what you do, not where you do it', did not feature strongly in the evidence.

The use of technology to address these challenges was barely mentioned. The overall evidence suggested that we do not lack technologies, nor the data captured by technologies, but that the bigger challenge lies in governance, financing, and complex ownership structures that make it difficult to put the data to good use. Moreover although the challenges of resilience and adaptation were seen as important, they were usually discussed purely in terms of environmental sustainability and so not seen by witnesses as being the highest priority. Rightly or wrongly, the consensus seemed to be that issues of economic performance and social sustainability were more important, and that if these were addressed, we would be better able to tackle the problems of climate change, urban growth, demographic shifts and resource use.

Gathering the Evidence

Financing and Alternative

Business Models

There is no single approach to the financial and business model aspects of future urban living that can be applied uniformly across the UK's cities – they are developed on a bespoke basis, taking account of the circumstances specific to each city.

Accordingly witnesses focussed on the influencing factors – the context provided by the current situation in UK cities; visions for future urban living that finance and business models must facilitate; the constraints under which these models will have to operate; the requirements they will have to address – and in so doing some novel ideas emerged on how future cities might thrive. While it was commonly noted that cities cannot be viewed in isolation and larger-scale perspectives were considered important, the same can be said of the need to scale-down towards wards, neighbourhoods and communities when discussing business models. City regions and national links are therefore important influences, while acknowledging also that cities operate in a national and global economic context.

The perception that all UK cities are growing is false¹⁸. For example, some UK northern industrial towns are exhibiting a reduction in population, while in other cases (eg, Belfast) a city's population is reducing while that of its surrounding towns is increasing. This latter point raises the issue of where a city's boundary lies, and in fact a city will have a number of boundaries depending on the aspect of the city under consideration. For example, the boundaries relating to people living in a city are different from those relating to people working there, while the boundaries for governance may not

correspond with either. It has been stated earlier that good integrated transport systems are a strong enabler of a vibrant jobs market, and the provision of jobs is one of the initial attractions that a city can offer. Set against this is the fact that the nature of work offered in cities is changing, with a movement away from traditional manufacturing over recent decades being only one of many trends. Similarly, the nature of trade continues to change rapidly from high street stores to out-of-town retail parks to growing online shopping, with this change occurring differentially from place to place depending on the local context.

One observation, reinforced by several witnesses, was that the economic benefits accruing from a city's economic growth and job creation largely go to the Treasury. Cities only capture marginal benefits through council tax and a proportion of the growth in business rates. It was noted that in other countries cities were able to raise more of their income from local sources, and thereby act more autonomously; whereas, if much of a city's funding derives from central government, with associated limitations on how it is spent, a city is constrained when trying to act on behalf of its citizens. For example, national and local mandatory targets (eg, related to greenhouse gas emissions, landfill waste reductions) and policies (eg, on green belts) constrain financial models

and prevent cities from growing in response to market forces.

Added to this, little public (UK or EU) funding is being granted for urban regeneration, and UK local authorities cannot easily borrow for this purpose. Every year's budget must be balanced, and local authorities do not know what their income is going to be in the medium- to long-term. Given this, confident long-term planning was widely stated to be impossible. A further constraint on the adoption of new financing and business models is a city's limited ability to experiment. If it cannot be seen to fail, it becomes 'risk averse'. Political boundaries equally constrain – for example, Bristol's physical growth beyond its political boundaries has necessitated an interface with external authorities – and this may mean that integrated services, such as transport, across a metropolitan area become a problem. When these factors are taken together, and allied to slow and complicated financing and approval processes, cities find it hard to avoid the lowest direct cost choice.

In terms of proposing changes to benefit both cities and citizens, it was suggested that financial/business models should support 'communities being in control', where the public is central to the choices, there is collective responsibility, and non-linear approaches are embraced.

Models should align externalities (costs and benefits that fall unevenly on the population) with the planning system in order to bring greater equity to all who are affected by change in cities. This in turn requires new measures of success for our models – something 'lying between GDP and Gross National Happiness', and which values long-term benefits and promotes social equity.

Finance and business models must be capable of both supporting home working and bringing those who need to co-locate (eg, creative people) together when necessary, perhaps by providing a wider range of property options. Following the arguments laid out above, profits need to be earned whilst environmental impact is reduced and sustainability is improved. Within these constraints, technology can enable emerging social enterprise to do things differently and create new forms of value – for example, Information Communication Technologies (ICT) should encourage and support as many small-scale innovations as possible. One such proposed novel model that would deliver local social and economic, and in the longer-term environmental, benefits is the 'sharing economy'¹⁹, where citizens share commodities (eg, cars, lawnmowers, power tools) facilitated by social media.



¹⁸ Geography in Action. www.geographyinaction.co.uk/Urban_structure/Urban_growth.html

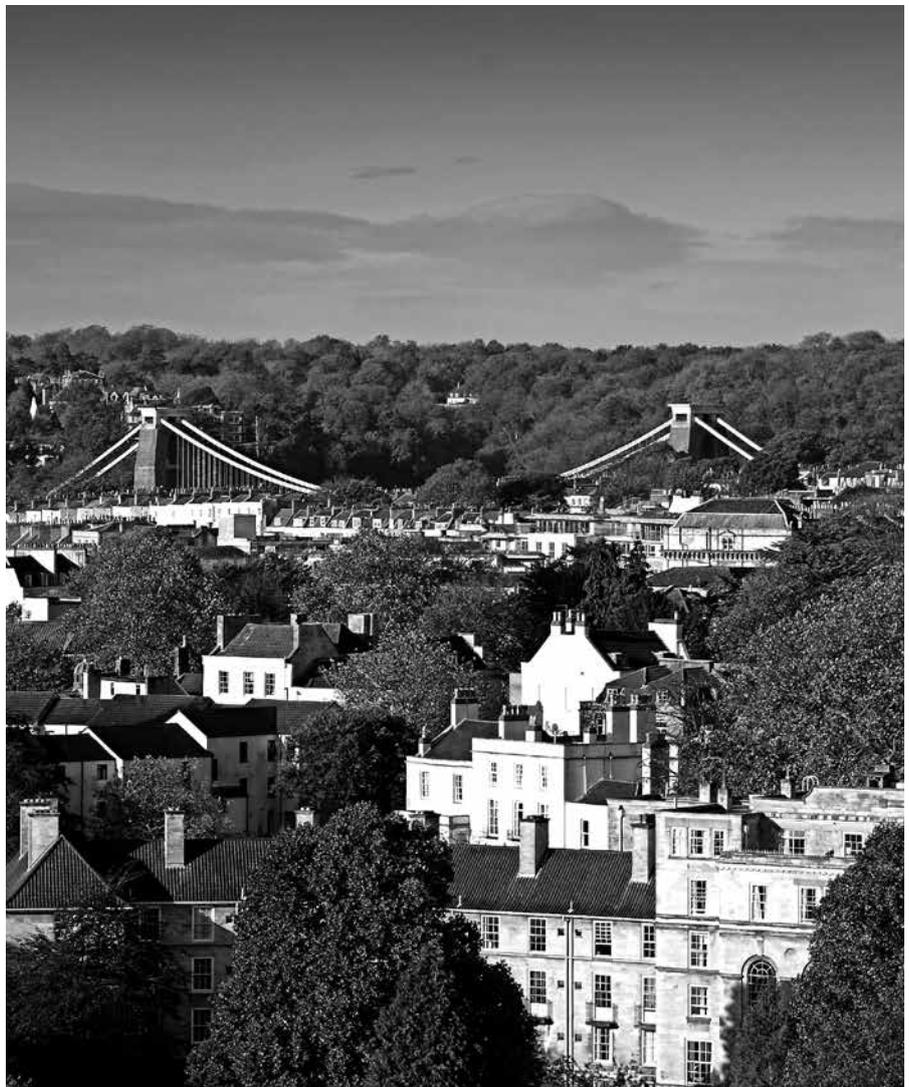
¹⁹ The Rise of the Sharing Economy. www.economist.com/news/leaders/21573104-internet-everything-hire-rise-sharing-economy

Bristol: When is a city not a city?

'The biggest barrier to change in Bristol is getting over the demarcation of political boundaries.'

Mayor George Ferguson (Bristol),
Commission evidence gathering
session, July 2013.

The city of Bristol is also the county of Bristol, located in the South West of England. The unitary authority (taking the city council boundary) has a population of almost 500,000 with the larger urban zone housing just over one million citizens and impinging on the surrounding counties. This makes it that much more complicated when dealing with issues and infrastructures that do not recognise political boundaries, such as transport and housing. Having clear leadership and a city model that takes into account the surrounding area – from which food, resources and goods come and into which waste goes – is vital in creating a vibrant and successful city and city region. In Bristol a cabinet of four different political parties works together, leaving their party politics aside and putting Bristol first.



Gathering the Evidence

Governance

More than one witness voiced strongly a feeling that there was a profound disconnect between the way in which cities were framed – in policy and economic terms – and the everyday experience of people’s lives, as well as persistent inequalities (both spatially and, inherently, within the economic system) that needed to be addressed in future urban governance.

Central government’s role is increasingly not just about regulation or spending, but also about empowerment and support, providing the soft skills which are needed to help places help themselves, as well as providing a bottom rung below which places should not be allowed to fall. Whilst devolution (to a variety of degrees) was seen as desirable, the need to retain city-to-region connectedness and connectedness through scales was acknowledged. Cities are a key economic driver, but they cannot ignore their regions, nor ignore that fact that they exist in a national context. In addition, it was recognised that government-set guidelines might play a constructive role in addressing needs for which there was no obvious pathway for market representation. Thus a balance between national and local governance was typically advocated, to sit alongside the generally strong desire for greater devolution; though it was noted that there are many models of devolution and these need to be understood.

Most witnesses seemed to agree that models of governance that aggregate upwards, rather than disaggregate downwards, in terms of agenda setting and ownership of visions are more resilient and effective. Witnesses would welcome better ‘place-based governance’ that is able to take account of and leverage local

strengths, opportunities and drivers of development. In this respect, there was felt to be a need to give citizens more influence over the production of urban space – to influence the urban form (via a voice in local planning) and take responsibility for what takes place in their area. However, some questioned the level of ambition present among citizens at a local level and the extent to which communities tend to embrace containment over expansion. It was argued that central government has an empowering role to play in capacity and confidence-building in communities that are not well-placed to develop localised agendas, though set against this are barriers that include strongly vested institutional interests, gaps in skills and capacity, and a need for cultural and attitudinal shifts.

Given the current economic climate, public sector funding cuts were thought to constitute the greatest risk to achieving city visions. As discussed earlier, when compared to other Western democracies, local government in the UK is highly constrained in its ability to raise capital and control its income, thus precluding confident long-term planning. Allied to this is the need for better internalisation of full environmental and social costs, and better measurement and understanding of the social returns on investment when

Belfast: Lessons from a shrinking city

'Belfast presents lessons for moving forward from a legacy of segregation...'
Mark Hackett, Forum for Alternative Belfast, Policy Commission evidence gathering session, October 2013.

Belfast has a population of less than 290,000, a reduction of almost 200,000 people since 1950. Even so, it is Northern Ireland's largest city as well as its capital. The Troubles have had a lasting impact upon the physical city, its people and its governance. They have left citizens divided and local government constrained, with neither the necessary power nor, in certain cases, the appetite for strong decision-making and risk taking. In 2010 Belfast Lord Mayor Naomi Long launched the Missing City Map¹ showing the vacant sites of central Belfast. The associated website asks, poignantly: 'why is so much space sitting empty despite 15 years of building boom? Why is there no central and coherent plan to rebuild the city?'

Although Belfast has a vision for its future, it seems there is limited capacity or capability to develop a pathway to realising it. Belfast City Council is chronically underfunded and understaffed. Its population suffers from consultation fatigue and lack of confidence (and trust) in those that run the city. The city lacks good spatial leadership and suffers from the lobby and power-base of a large hinterland who wish to commute by car, giving way to swathes of car parks where

wealthier individuals from the suburbs can easily park during the day. There is a tendency towards social divisions (by class/income), and 'gated' communities are prevalent. A lot more work such as the 'Shared Space' project² is required to make more effective and socially inclusive use of the City's space.

Yet for various residents, the city is easy to live in; it is affordable and easy to navigate. Being a small city allows for good networking. Belfast has a vibrant arts and culture scene for a city of its size. It attracts and retains many foreign arts graduates. Such factors present a level of potential on which the city could better capitalise to kick-start city centre redevelopment and build trust between its residents and government. This will require:

- increased, effective, powers for local government,
- working with professionals (currently the city does not employ any senior architects in planning)
- a comprehensive and inclusive city vision and development plan
- individuals to be much more active in their city and politics
- the council demonstrating flexibility and agility following two decades in the 1980s and 1990s of increased systemisation. In this way both its members of government and its citizens will start to believe they really can make a difference.

¹The Missing City Map

www.forumbelfast.org/projects/The-Missing-City.php

²Shared Space 2011.

www.forumbelfast.org/projects/shared-space-2011.php





investment decisions are contemplated. In short, a great deal of effort is required to change the way things are done, with a currently declining capacity (in terms of staff numbers and capability) for providing this effort, reduced funding, and little power to raise funding. Moreover there is currently little incentive for cities to work with big corporations, who should be doing more to invest in cities, because the latter's taxes are generally going to central government rather than to the cities, while at the same time the remit of traditional planners has narrowed and new stakeholders are gaining influence, particularly the private sector. Given this changing picture, it is not yet clear how large developments funded by private investors are being steered with limited public sector resources.

Added to the challenges of addressing current and future needs is the legacy of the past, in terms of the historical evolution of cities. The considerable financial and resource challenges alluded to above are allied to an ageing infrastructure in UK cities, and it was widely acknowledged that integrating the infrastructure needed for a future city with current infrastructure would be a major challenge. Moreover the infrastructure required to support a city is also changing, and concerns were voiced about the ability to respond positively to demographic change, including an ageing population, a more diverse society, and population movement where people seek a sustainable lifestyle.

Political will and leadership are key challenges. For example, it is questionable whether there is an appetite for turning pilot schemes into full-scale

implementation even when the evidence in their favour is compelling. Partnership approaches are likely to be an essential enabler, but still require leadership and the removal of 'red tape'; and there needs to be sufficient political appetite for the experimentation and disruption inherent in innovation, this being especially the case where lifestyle and behaviour change are involved. Nevertheless local government has considerable powers to influence change, given political leadership, community engagement and vision, as long as there is sufficient confidence in the stability of resources and finance. Information on good (UK and international) practice and examples of successful urban development would help in this endeavour.

Expertise is a problem for local government, particularly in the areas of procurement, strategic planning, managing public participation, economic development and building resilience, and this necessarily inhibits effectiveness. Exacerbating this picture is the fact that sustainable development is a policy and operational challenge that requires a different style of thinking and governing: the 'capacity to work across organisational boundaries, to think holistically and to involve the public'. Research²⁰ points to the weaknesses of a traditional bureaucratic approach to integrated strategies, while addressing issues such as energy efficiency, affordable housing and utility service provision (eg, water, sewage and waste) requires the ability to work beyond local government boundaries. The ability to work strategically with a range of stakeholders, public authorities and private bodies, both within and beyond these boundaries, is needed.

²⁰ Regional Integrated Strategies in Europe (RISE). www.espon.eu/main/Menu_Projects/Menu_TargetedAnalyses/riase.html

Gathering the Evidence

Cities and City Regions and the Role of Planning

Planners and the planning system should be enablers of more sustainable future urban living; yet planning in the UK has a negative image due to the legalistic nature of the UK planning acts and the adversarial practices adopted.

This adversarial practice almost invariably results in planners tending to be defensive and reactive rather than proactive. Indeed most witnesses supported a reinvention of planning as a positive and creative role that was applicable at different scales. Cardiff, for example, recognised the role of planning in influencing the location of new development to promote opportunities for sustainable transport, while Berlin is using planning to intensify local suburban centres around public transport hubs to create a polycentric city region.

Cities being constrained by their own administrative boundaries was a common concern, and thus better integration of planning, economic development and transportation at the city-region level was called for. In this regard, the limitations in England of the voluntary system of cooperation could be addressed either by requiring city-regions to collaborate via central government assistance or by incentivising joint working (eg, by City Deals).

Concern was also raised around what was termed 'a profound implementation gap' between plans and what is achieved on the ground; while there was also a concern that providing what citizens might aspire to could lead to unintended, undesirable consequences – for example, providing good through roads and plentiful central parking in Belfast has encouraged commuting from outside and resulted

in underused land in the city. Several examples of good practice were cited. In Almere, giving individuals a greater degree of freedom to design their own homes, albeit within an infrastructure framework set by the public sector, has added to the diversity of the built fabric and created local jobs. 'Urban pioneers' have tested new forms of development in Berlin (the 'self-made city'), although the scale of such initiatives has owed much to the context-dependent urban fragmentation after the Wall came down. The importance of real community involvement, and maintaining momentum through events and pop-up activities, was illustrated from experience in several US cities. A similar idea is being tested in Belfast, where a citizen-led initiative to create small parks aims to reduce the fragmentation caused by vacant land, roads and other barriers, and to increase community interest in the urban environment. Although such ideas might start as small local initiatives, it was argued that a positive approach to experimenting through 'meanwhile uses' and pop-up activities would help to animate urban areas without much risk – most involve temporary structures and reversible activities – while success could lead to permanency.

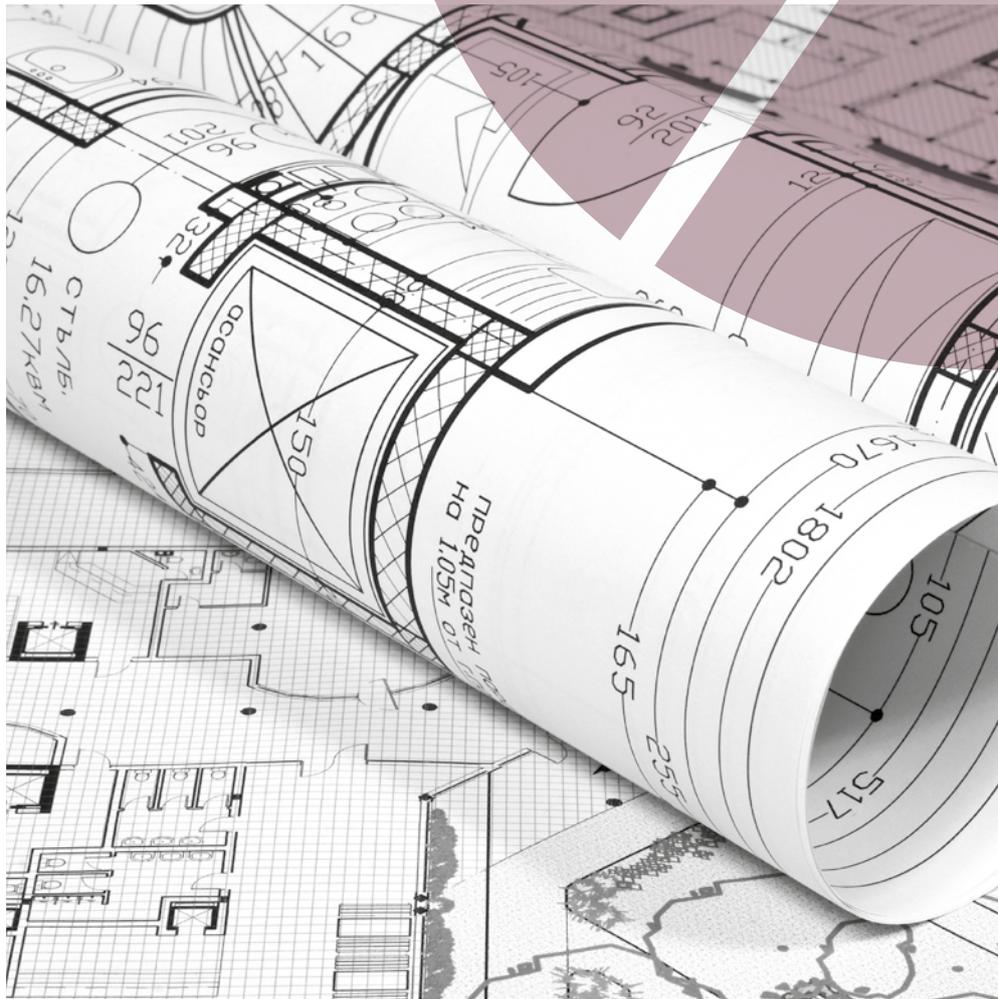
One extreme suggestion was that planning controls should be relaxed such that developments should be allowed to go ahead unless neighbours object, and while

this could be embraced in a role that engenders greater community involvement, a fine line exists between facilitating NIMBYism and reducing 'red tape'.

In redefining the role of planning, it was emphasised that planning should not be externally imposed, but should happen in a way that grows out of the story of the local area. Local Government Officers and councillors are already responsible for preparing a Local Plan, which sets the planning policies for their area, which amongst other things must take account of sustainable development objectives. Collaborating creatively with local communities to enunciate their vision and shape their urban environment is simply an extension of this responsibility, albeit a significant extension. However, it was recognised that balancing interests across communities, and especially balancing rural and urban interests, can be challenging. Community consultation is also perceived as costly, even though longer-term savings typically result. Community involvement, traditionally confined to consulting on top-down options, is equally important and will involve enabling and shaping ideas which emerge from the bottom-up. The recent introduction of neighbourhood planning is a step towards this. Moreover, creating a long-term vision needs the business/utility sector to engage alongside a more active citizenry. Planners can facilitate this collaboration, and will need to exploit social media and similar technology

in linking to wider sections of society than traditionally (eg, the young). To do this effectively, city planning departments will need greater skills and capacity: creative talent and multidisciplinary skills need to be attracted back to create an organisational capability to think longer-term; and there is a need to regain 'trusted adviser' status with local politicians.

As this evidence base on the potentially transformative role of planning was growing, it became clear to the Commissioners that planners should increasingly be seen as part of the city management team, proactively seeking to improve the public realm rather than just engaging in a regulatory process. However to be effective, local planners must be able to see a broader picture of how their city relates to the wider context, since to influence the location and broad form of major new developments requires planning on a spatial scale that reflects the activity patterns of wider zones of influence than individual cities: the city regions. This would require statutory status²¹, thus allowing infrastructure funding to be targeted to locations with strong economic prospects and where synergies exist with housing investment and/or regeneration funding.



²¹ Swain C, Marshall T, and Baden T (eds), English Regional Planning 2000-2010: Lessons for the Future. Routledge/RTPI series, 2012

Gathering the Evidence

Indicators of Progress

The Commission was particularly interested in measures of success and measures of performance for cities now and in the future.

To draw out this thinking, the following supplementary questions were asked of those giving evidence: How would you measure movement towards successful future urban living? How can we know what success might look like? What are the indicators?

It was evident that there were four different interpretations of this question, with the responses incorporating traditional SMART indicators (specific, measurable, achievable, relevant and time-bounded, and including such things as walkability, employment levels and average economic output); targets set in legislation (such as carbon reduction and air quality targets); guiding principles/factors of success (such as well designed, well connected and sustainable); and characteristics of indicators (such as pragmatic, few in number, easy to measure and flexible, and with a commitment to continued measurement and reporting). While the latter three aspects of indicators are undoubtedly important, this section focuses on the first interpretation: SMART indicators. It was also evident from the responses that the items it was considered important to measure varied widely, with almost no repetition, and that confidence in the ability of existing indicators holistically and accurately to measure city performance was low.

Of the fourteen witnesses to whom these questions were specifically addressed, five did not mention any indicators in the sense included here. Only in relation to Glasgow was a comprehensive set of indicators (key indicators) for the city mentioned. Although these indicators made explicit interconnections, and thus worked to break down 'siloed thinking', it was not clear how they would be used to demonstrate the city's vision. One witness described a single overarching indicator that could be used as a general health check (population movement), whilst others, as expected, listed a suite of indicators. There was stated to be a need to replace the currently used economic indicator with either a family of indices or a range of measures of progress (a 'city dashboard'), or to develop a new index 'somewhere between GDP and Gross National Happiness'. Numerical targets for indicators were never mentioned, but frequently desired directions of travel were (eg, the number of private vehicles in the city centre should be small and there should be an increase in the number of people cycling and walking).

One concern voiced about indicators was the need to avoid undue focus on them and the potential inequalities that might arise as a consequence of cities 'chasing' targets – putting in place activities that

improved indicator measurements at the expense of some sections of the community. In this regard, one of the most important measures of success would be a social equality indicator, since witnesses expressed concern that there was a growing gap between affluent and non-affluent social groups. Questions were also raised about how to measure the value of culture and heritage, which are important for the development of a successful city yet less tangible in terms of quantitative measurement. Picking up on the earlier theme of community involvement, it was stated that one way of increasing ownership of indicators would be for communities and neighbourhoods to set their own measures and indicators, although it was noted that this would raise a problem of aggregation and the need for a certain level of governance.

The following list includes all the SMART indicators named by those giving evidence prior to being asked the supplementary question (ie, unprompted ideas):

- the number of private vehicles in the city centre
- the number of people cycling
- the number of people walking
- the number of people sitting/relaxing
- the comprehensive range of key indicators given for Glasgow on www.understandingglasgow.com

Glasgow: The reinvention of an industrial city

'The perception of Glasgow has changed dramatically. The Observer in the 1980s described it as a hellish place to live. Since then successful regeneration has seen Glasgow be the European Capital of Culture and UK City of Architecture and Design. The work continues and next year (2014) Glasgow will host the XXth Commonwealth Games.'

Cathy Johnston, Glasgow City Council, Policy Commission evidence gathering session, July 2013

Glasgow sits on the River Clyde in the West Central Lowlands. It is Scotland's largest and most dense city, with a population of just under 600,000 people. Though not without its challenges, Glasgow is a thriving city with a clear vision for its future and its realisation. This was not the case just thirty years ago.

Like all cities, Glasgow is facing challenges that include improving its residents' quality of life and health, creating a vibrant economy, responding to demographic and population changes, improving transportation and communication links, adapting to and mitigating climate change, developing its infrastructure, and creating high quality natural and built environments.

Strong and clear leadership, combined with knowing that progress can be measured, gives policymakers the confidence to set clear and ambitious visions. The recent consultation, 'A Vision for Future Glasgow to 2061'¹, involved a wide range of partners, members of the public and experts and, importantly, potential targets were identified¹. A finalised Vision was placed before the city council in 2013.

Being able to make the best use of funding is crucial to a coordinated approach to city evolution. The Glasgow Economic Commission² was set up to respond to rapid changes in economic conditions. The Glasgow Economic Leadership implements the Commission's recommendations and findings. This provides a strong basis for a plethora of initiatives to secure Glasgow's place as a world-class, sustainable city. Most recently Glasgow was nominated in the first of 33 global cities to be part of the Rockefeller 100 Resilient Cities network³.

Giving certainty to investors and communities is essential to realising these visions and the planning frameworks contained in Glasgow and Clyde Valley Strategic Development Plan⁴, City Plan 2⁵ and the emerging City Development Plan⁶ set out the City Council's approach.

Through its "Understanding Glasgow" initiative⁷, the city has created a comprehensive range of key indicators for

these issues. How the city performs with regard to them informs a wide audience, including policymakers and the public. The initiative illustrates trends and allows comparisons within the city and with other cities. Importantly, the indicators set baselines and allow progress to be monitored against targets. This gives Glasgow the information it needs to identify priorities, develop future plans and measure progress. As an example, data on Glasgow's particular history of health inequalities led to the setting up of a specific public health research unit, The Glasgow Centre for Population Health⁸ - a resource which, since 2004, has been working to generate insights and evidence, create new solutions, and provide leadership for action to improve health and tackle inequality.

¹ A Vision for Future Glasgow
www.glasgowcityvision.com
² Glasgow Economic Commission
www.glasgoweconomicfacts.com
³ Rockefeller 100 Resilient Cities.
<http://100resilientcities.rockefellerfoundation.org>

⁴ Glasgow and Clyde Valley Strategic Development Plan. www.gcvsdpa.gov.uk
⁵ City Plan 2
www.glasgow.gov.uk/index.aspx?articleid=2910

⁶ Proposed city development plan
www.glasgow.gov.uk/developmentplan
⁷ Understanding Glasgow
www.understandingglasgow.com

⁸ The Glasgow Centre for Population Health
www.gcp.h.co.uk/

Further reading:
Regeneration in Glasgow
www.glasgow.gov.uk/regeneration
Invest in Glasgow City Council.
www.investglasgow.com/
Future City
<http://futurecity.glasgow.gov.uk/>
Sustainable Glasgow
www.glasgow.gov.uk/index.aspx?articleid=3377

The following list includes all the SMART indicators named by those giving evidence in response to the supplementary question (ie, prompted ideas), grouped by the traditional factors contributing to sustainability but otherwise in no particular order:

Environmental indicators (including the city's physical environment)

- the quality of the physical environment
- resource use
- walkability

Social indicators

- the number of people walking
- happiness
- the number of families taking their children to nursery schools (as a measure of integration into society)

- the lollipop indicator (measures if parents are willing to send their children to buy a lollipop, incorporating issues of community cohesion, feelings of safety and walkability)
- the number of students dropping out of school
- levels of unrest
- levels of education
- the degree to which people move around the city
- the number of people who leave the city for rural areas (population movement)
- how successful people think the city is as a place
- how connected people feel to the city
- skills profile (high to low)

Economic indicators

- GDP (in combination with happiness)
- unemployment/employment levels

- real estate prices/rent
- the number of city-projects/pilot projects that receive funding
- national average economic output (across all UK cities)
- financial self-sufficiency (of the city)
- job growth and opportunities

In our conceptual model of change in cities, we use the term City Narrative to include not only a broad and inclusive vision of a desired future for a place, but also to include the detailed measures of success that indicate positive progress towards that vision. Since the City Narrative is co-created by citizens, local businesses and local government, we would expect it to include indicators that allow each set of stakeholders to measure progress in their own sector as well as indicators that function as checks and balances on the progress of other sectors.



Chapter 3

A Conceptual Model for Future Urban Living

Positioning a City in the Context of Internal and External Influences

It became clear to the Commissioners, while they were collecting evidence from various experts, that discussions on future urban living and future cities were revealing a number of conflicts and tensions between witnesses' views and the commonly-perceived 'desirable' actions that should be taken if we are to move towards a more sustainable and resilient future. Moreover, like biological ecosystems, like humans, cities are multi-dimensional and non-linear: in short, they represent a complex system of systems. However, any view taken of a city and how it operates tends to come from a particular personal, professional or disciplinary perspective (a single dimension) unless a conscious effort is made to consider a variety of different viewpoints. Piecing together a wide range of views is therefore necessary to gain a true picture. Furthermore, a change made to one policy or practice in a city is likely to result in impacts on urban living in many other ways, and it is not always clear what these impacts might be. Indeed, it appears from our witness statements that experts are just as likely as lay-people to focus their proposed interventions on one feature of the urban system-of-systems, de-emphasising the connectedness that characterises cities. While it is necessary and appropriate to

focus on individual aspects of city living — the communal, the entrepreneurial, the environmental, the delivery of infrastructure, and so on — only policy-making that explicitly considers the relations between these aspects is fully urban in scope.

Understanding these conflicts, tensions and multiple consequences of interventions in our city systems, and how they interact, is not straightforward. Unforeseen consequences are to be expected and should not be treated as signs of failure. During the Commission, distillation of the evidence helped to reveal the important conflicts, tensions and consequences (whether perceived or actual) of changes in cities, but their interrelationships remained unresolved. The Commission therefore sought a way of describing the important aspects of a city's operation, as they relate to governance and policy-making, along with the factors that cause change to happen, and to consider all this in the context of cities striving to progress. The result is a city 'force diagram' that is presented in Figures 1-3.

The Commission recognised that it would not be productive to try to capture explicitly all the dimensions of urban life in a single model or diagram. It becomes difficult to imagine and to work with so many dimensions, which is why understanding change in cities is a good

example of a 'wicked problem' (a tricky problem that defies clear definition, has contradictory elements and is difficult or impossible to solve). Instead, a simple, conceptual model is presented in two parts: the interrelationship between three core aspects of cities, as identified from the evidence (see Figures 1 and 2); and the push and pull forces exerted on the city that affect its resource efficiency and degree of autonomy (see Figure 3).

Taken together, Figures 1 and 2 describe how well the internal forces within cities affect its operation, and how these internal forces can increase or decrease as a city attempts to become more sustainable and resilient. The three core aspects of cities are:

- 1 **Leadership**, which includes all aspects of championing causes and informal influence as well as institutional power structures in the private and public sectors;
- 2 **City Ecosystems**, embracing communities, natural and industrial ecosystems and the market; ie, all social, environmental and economic systems that emerge via self-assembly;
- 3 **Formal and Informal Rules by which Cities Operate**, which encompass institutional structures and controls, including laws, rules, regulations and codes of practice as well as informal customs and practices across all sectors.

Although evidence often focused on the need to strengthen one of the three core aspects of cities, our investigations repeatedly uncovered the need to accommodate the forces that draw together or separate these aspects (Figure 1). If the three aspects align, as in Figure 2, they are most likely to operate effectively to help a city achieve its vision and goals, whereas if they try to work independently they are more likely to operate ineffectively. For example, leadership that did not engage communities, or change the formal/informal rules by which they operate, was viewed as empty rhetoric; bottom-up initiatives that did not inspire formal

leadership were seen as praiseworthy but unlikely to be influential; and so on. It became apparent through the evidence that, as in a three-legged race, successful change in cities requires coordinated action in Leadership and City Ecosystems and Formal and Informal Rules.

These three core city aspects can be identified in evidence regarding local authority structure, the private sector, health and well-being, environmental activism, social entrepreneurialism, utility infrastructure, and all the other dimensions (or levels) on which we talk about how cities work and how they can change. So we can imagine each aspect

as a delicately balanced pile of similar issues, each relating to a particular level. When we talk of public sector regulation of the private economy, or how leaves on the line affect transport choices, we examine the forces towards or against cohesion between these levels. We can also think of levels of spatial organisation (neighbourhoods, cities, national governments) — each with core aspects in terms of Leadership, City Ecosystems, and Formal and Informal Rules — producing unifying or disruptive forces in their relations with other levels. If our efforts for change are focused too narrowly on one level of the problem, then the conflicts between levels will increase, holding back and potentially undoing progress.

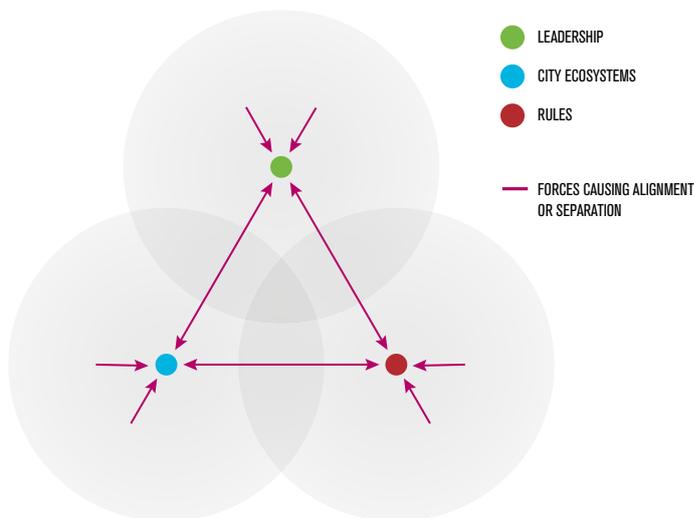


Figure 1. Relationship between the three city aspects

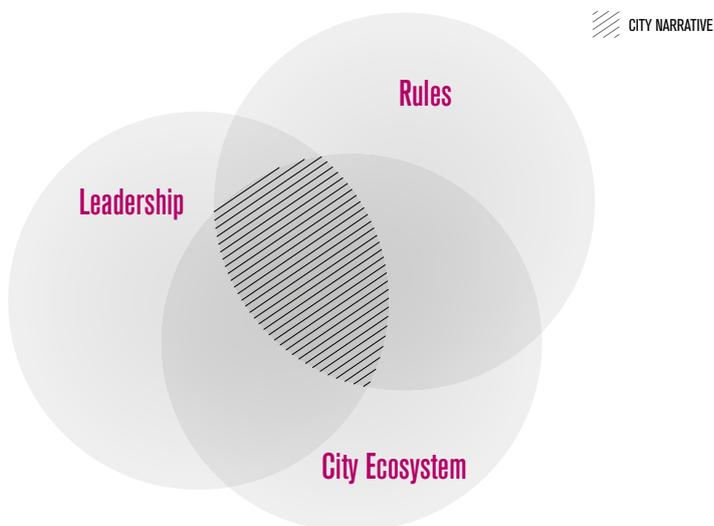


Figure 2. Focussing the three city aspects to deliver the City Narrative

The city itself is the sum of the three core aspects on all the levels, and exists in the push-pull of forces exerted by stakeholders of all kinds. However, just as humans have a sense of self that does not require us to know the intimate workings of our biochemistry, psychology, and so on, so a city can be described by a Narrative (which must incorporate an honest assessment of the city's current context as well as pressure-tested visions for the future). It is in trying to understand how this urban narrative can be turned into purposeful action that each core aspect of cities, and the forces between them, should be acknowledged and brought to bear. This is difficult, there is no denying it, and a great deal of work remains to be done to learn how to shape effective City Narratives; but some general rules have emerged about what will tend to enhance or impede purposeful action, as shown by the arrows in Figure 1. For example, leadership that changes hearts and minds will change the patterns emerging from communities; agility in regulatory structures will allow visionary leadership to inspire change; successful experiments in living will deepen into philosophical visions of how to live – all of these are forces of attraction that bring the core aspects into alignment, and the City Narrative assists this process (Figure 2). Conversely, a progressive loss of trust between citizens and their leaders, civil disobedience due to disaffection with regulations or laws, and autocratic politically-driven leadership that ignores

the formal/informal rules by which cities operate would cause misalignment and compromise the operational effectiveness of cities.

From the evidence two factors emerged as particularly important when envisioning a city's future: its level of resource efficiency; and the degree to which the city was in control of its actions (degree of autonomy). It is possible to measure cities (and the relationship between the three core aspects of cities) with reference to these two factors. The result is an X-Y grid within which we can analyse our evidence in general and the choices of individual cities in particular – see Figure 3. There are other possible sets of axes, but we believe that these capture a lot of what is most interesting and dynamic about how cities are positioning themselves with respect to future challenges.

To take a concrete example, a city can be positioned in relation to the axes in Figure 3 to reflect the efficiency with which it is using resources, which is related to the level of resources currently consumed, and the degree of regulation formalising life in the city (Figure 3). It is commonly stated that the UK consumes 'three world's resources' in the way that we live, work and play (what might be termed 'three-planet living'). By way of comparison, it is claimed the US uses 'four world's resources' and India is closer to 'one world's resources'²². This resource consumption can be correlated with the efficiency with which the resources are used or wasted, and thus allow cities from these countries to be positioned on the resource efficiency axis. UK cities would tend to lie lower vertically in the diagram to indicate less than desirable resource efficiency (ie, to

reflect our consumption of 'three world's resources'), though of course some cities are more efficient than others and there will be vertical variation within the UK. UK cities are also strongly regulated by Westminster and therefore would sit towards the right hand side of the diagram indicating a tendency for more nationally imposed regulation. However the devolution of powers, in Wales for example, would mean that Cardiff might sit to the left of most current English cities, as would London.

²² WWF 2012 Living Planet Report 2012. http://awsassets.panda.org/downloads/lpr_2012_online_full_size_single_pages_final_120516.pdf

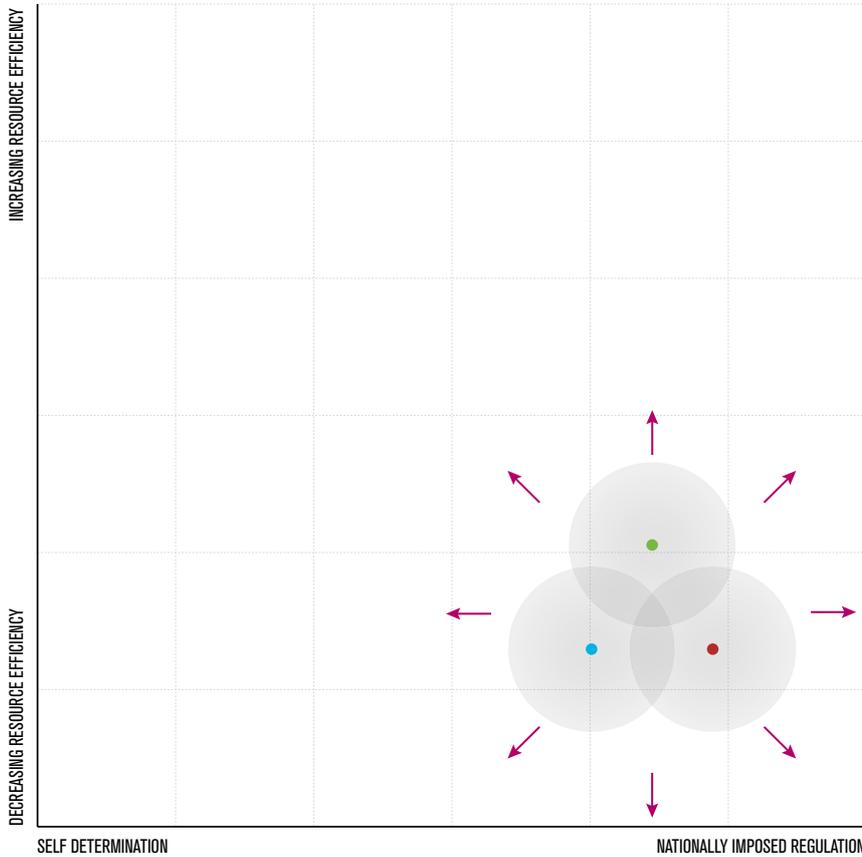


Figure 3. Relationship between the three city aspects, resource efficiency and degree of autonomy



Each of the three core aspects of a city's operation, and the city as a whole, is subjected to forces, the arrows on the diagram, which can push or pull the system (see Figure 3). There are forces that move the system towards greater resource efficiency (often, though not necessarily, associated with reduced consumption), with the aspiration for the world as a whole being One Planet Living; and forces that move the system towards decreased efficiency (or wasteful) use of resources and/or increased resource consumption. There are also forces that move the system towards a highly regulated, planned and consciously designed system in which moral choices are constrained by rules; or towards an emergent, self-organising system in which moral choice is not constrained by legal or quasi-legal structures. Only when all three core aspects of cities move more or less in concert is progress towards a sustainable future substantive and permanent. If one aspect lags behind, or pulls in a different direction, then tension in the system increases rapidly, leading ultimately to organisational breakdown (eg, social disorder, or bureaucratic sclerosis, or despotic leadership).

One example of the movement of UK cities horizontally to the left in the force diagram would be the growth of localism. If this tendency towards localism enabled a city to realise its aspirations for a low-carbon world in which resources were consumed more responsibly, then the city would experience a movement upwards as well as to the left. Furthermore, if regulations were sufficiently agile to adapt and help the city become more self-sufficient by empowering its citizens, then the forces causing the city to move towards 'one-world living' with communities having greater self-determination would be stronger.

Each core aspect is strongly connected to the other two (they will always overlap unless there is total breakdown), and pairs of aspects are drawn together or forced apart, as represented by the arrows in Figure 1. Each core aspect can move relative to the other two – they are not at fixed distances from each other – and the movement of one relative to the others would move the 'centre of gravity' (or the city's socio-enviro-economic context, since it sits at the heart of these three core aspects) across the grid. The overall direction in which these influences move the city depends on the forces between the core aspects. So, for example, a bottom-up approach to planning would strengthen the link between communities and regulations and in so doing would pull the city's overall position towards the left, but only so long as the communities affected were ready and able to take advantage of the new regulatory framework.

It is then possible to explore the influences that can occur as a result of cities adopting different strategies. For example, a city may adopt leadership through vanguardism, where politically advanced members of the community cooperate to develop new moral forms of governance. Vanguardism puts the moral case for change in the formal/informal rules that define how we live: national and international laws, of course, but also all the judicial and quasi-judicial rules and regulations acting at every level of organisation from the nation to the micro-enterprise or community group, along with all our customs and practices. The moral imperatives enunciated by vanguards then pull the Formal and Informal Rules aspect upwards in the force diagram towards increased resource-use efficiency, and therefore towards One Planet Living. Regulations and other rules

by which cities are governed, for their part, then push the vanguard in the same direction (ie, upwards) by encapsulating previous moral activism in new codes for living that will themselves inevitably provoke further calls for change from visionary leaders.

The conceptual model can thus be used to explore directions of travel and the influences that would come to bear on any movements across the grid. So, for example, Cardiff aims to be a One Planet City by 2050 and in making the move to this state it has aspirations to empower the people and local communities to help bring this about. If we assume that Cardiff is broadly representative of UK cities as they currently operate, it will currently be positioned towards the right hand side of the grid, albeit that its powers of devolution allow a greater degree of self-determination and thus it will not be as far to the right as most UK cities, and in the lower part of the grid reflecting resource inefficiency. This current state positions Cardiff as shown in Figure 4. The movement that Cardiff would need to make, and the forces that would bring about this movement, would be represented by the city's 2050 state and the associated arrows in Figure 4. The risks most obviously inherent in plans such as those put forward by Cardiff in the evidence are that regulatory structures (the formal rules), at city level and above, will not be agile enough to accommodate local community action and that communities will not cohere around a common endeavour of One Planet Living. In such a case the coherence of the city aspects may be lost (alignment as shown in Figure 2 will be poor) and the movement of the city may be slowed or diverted from its trajectory, thus risking missing its target.

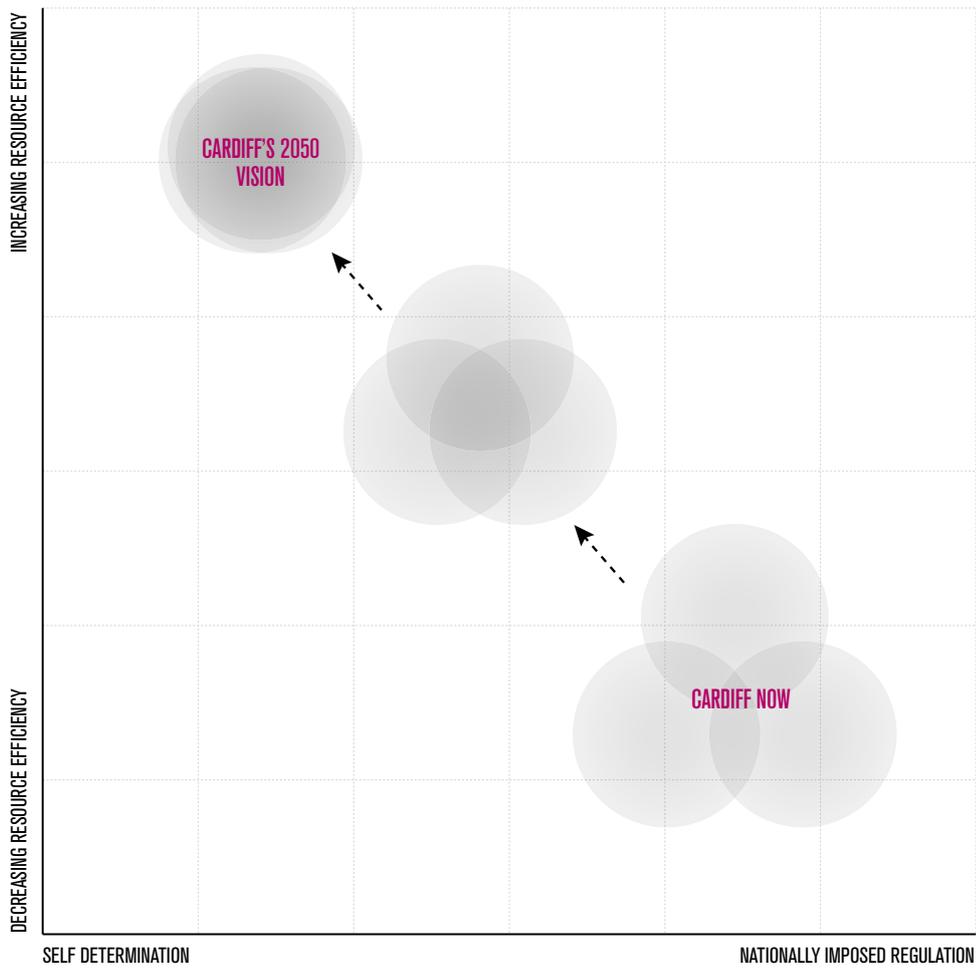


Figure 4. Moving towards Cardiff's One-Planet City Vision

The city force diagram can be used to frame the debate about new initiatives or concepts, and their impact on all of the core aspects of a city's operation. To continue with Cardiff's 2050 Vision, to enable them to achieve a One Planet City, the leadership has to be empowered through 'institutional controls' to move away from consumption-focused metrics and towards new structures for more sustainable living. The community must also be fully engaged and willing to accept new ways of living. Whatever actions are taken must be consistent with moving the whole system towards One Planet Living; but there is also a need for the leadership and community to agree on the degree of control, and who shall provide this.

The force diagram is an inward-looking model intended to demonstrate why some best intentions do not produce substantive change. However, most of the witnesses recognised that city boundaries are not well-defined in all respects, but rather need to be seen as permeable. This is reflected in Figure 5. There was a clear tendency in the evidence to talk about neighbourhoods when discussing social issues, and to discuss wider city regions when discussing infrastructure,

economy, food and other aspects of the 'urban metabolism' (the processes that make up a city, akin to human metabolism). This sliding across the spatial scale begs questions such as: 'Are cities the right unit of measurement/subject of discussion (for example, as opposed to regions)?'; 'Should cities be a special site of power?'; and, 'How do we specify what a city is (or should be)?'.

One possible response to these questions, culled from the evidence, is that cities in fact present a convenient scale in which to vest political power precisely because they stand between the atomising tendency of neighbourhoods (one witness commented that communities tend to embrace containment) and the machines of macro-engineering and economics (described by another witness as the dogmas of economics and engineering).

The evidence regarding the role of cities provides two lines of argument:

1. Focusing too strictly on the city is liable to break the cascade of information upwards and downwards, between person and supra-national entity, at just the wrong place. The evidence both from Bristol and Cardiff made this case strongly. One might be tempted to

conclude that the successful city of tomorrow (and today) is not a homogeneous city (a view which the city league tables might promote), but is rather a set of differentiated neighbourhoods set in a hinterland. When thinking of 'a city's hinterland' the development of transport, telecommunications, and globalisation requires thinking beyond the adjacent countryside to diffuse, virtual and ragged (self-similar) zones.

2. Those witnesses emphasising the importance of neighbourhoods and community involvement argued that we are 'getting it wrong', because the information used to make decisions is overly dominated by information flow (downwards) from the largest scales (national/international policy). Information in this sense is not just public or community opinion; it also includes the spatial and social arrangements existing in communities. Neighbourhood modes of living should be able to influence the patterning of infrastructure, as well as infrastructure imposing its pattern on communities.

As with most arguments, there is no one correct answer. In this report, neighbourhood planning is strongly



Figure 5. The city and its environs – where do the boundaries lie?

supported as a way of progressing cities, but such bottom-up planning must interface with wider local and national government, especially in terms of the funding and resilience of services and the local economy. Strategic infrastructure provision will most usually cascade from national government. It is therefore suggested that accountability for actions flows both ways between neighbourhoods and the city hinterland.

Time, Age and the City

Cities exist in time as well as space. Like regenerating vegetation, cities have the potential to be ever-lasting. The places discussed by witnesses to the Commission had existed for between 35 years (Almere) and at least 2,000 years (London). The age of a city was only remarked on explicitly when discussing Almere, which implies that, beyond a certain point (100 years, or a human lifetime, perhaps?), city age is regarded as largely irrelevant except, as noted by several witnesses, to the extent that history sets in place physical and legislative boundaries that are often very hard to move.

Much more important than city age to the witnesses and Commissioners were the age profiles of the residents of UK cities. One witness argued strongly that current UK cities are not 'intergenerational-friendly', although the wider evidence did not show a clear benefit arising from generationally mixed communities. In the end, the preferred age mix for cities is a value judgement about the kind of cities we want. It was implicit, rather than explicit, in much of what was said to the Commission that intergenerational issues are difficult to address without considering how interventions and innovations play out over time. In terms of the fabric of the city, the influential concept of 'cradle to cradle'²³ implies timescales for decision-making that incorporate not just political

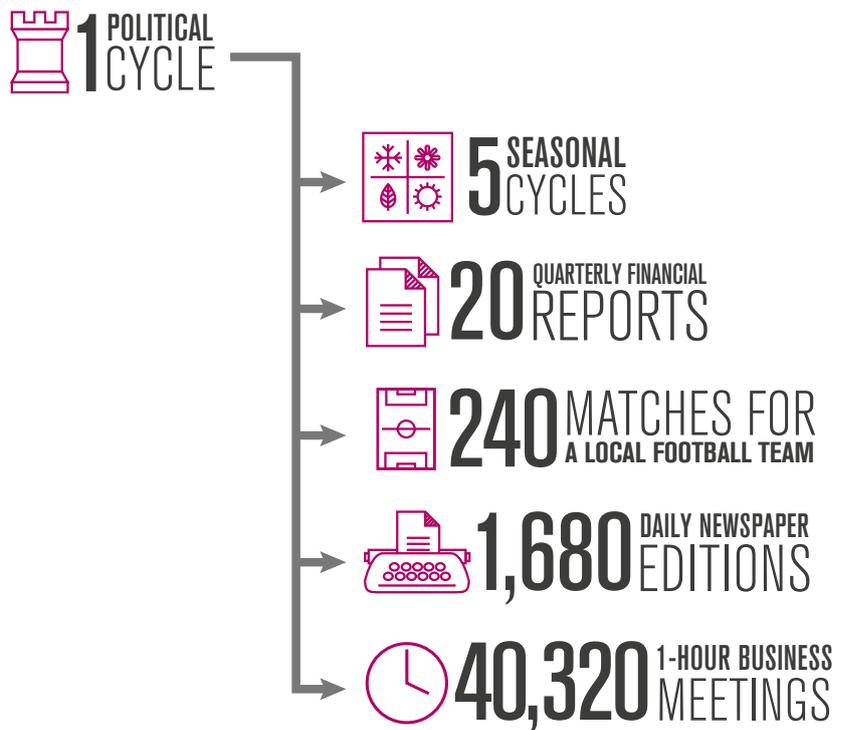


Figure 6. Time equivalences

and human lifetimes, but the operational lifetimes of what we build, as well as the timescales that shape the environment around us (Figure 6).

Explicit time horizons mentioned by witnesses included: the UK Core Cities being financially self-sufficient by 2050; Bristol's aspiration to understand and to put into place necessary changes by 2020, even if the effects are not noticeable until 2030, 2040 or 2050; Cardiff's Local Development Plan, which covers the period up to 2026 and paves the way for its 2050 vision; Glasgow's key timescales of a vision to 2061 and a strategic plan for 2012-2017; and the four-to-five-year electoral cycle (mentioned as a problem by almost all witnesses). Another timescale remarked on is embedded in the EU's 20-20-20

legislation: 20% shifts in energy consumption, greenhouse gas production and energy efficiency by 2020.

When considering time and change in cities in general, one witness spoke warmly of the concept of 'slow cities'²⁴, while another noted that some citizen resistance to change acted as 'good inertia', preventing domination by 'expert engineers'. More active 'time-domain approaches' to urban planning were introduced by the argument for the replacement of a 'predict-and-provide' approach to service provision with the more agile measures of 'aim-and-manage' and, especially, a 'cap-and-share' approach to resources. Ultimately, market-based solutions were regarded as slow, sometimes too slow, to help societies meet future challenges. One witness

²³ McDonough, W., and M. Braungart (2002) *Cradle to Cradle*, North Point Press, New York, USA.

²⁴ Cittaslow. www.cittaslow.org.uk

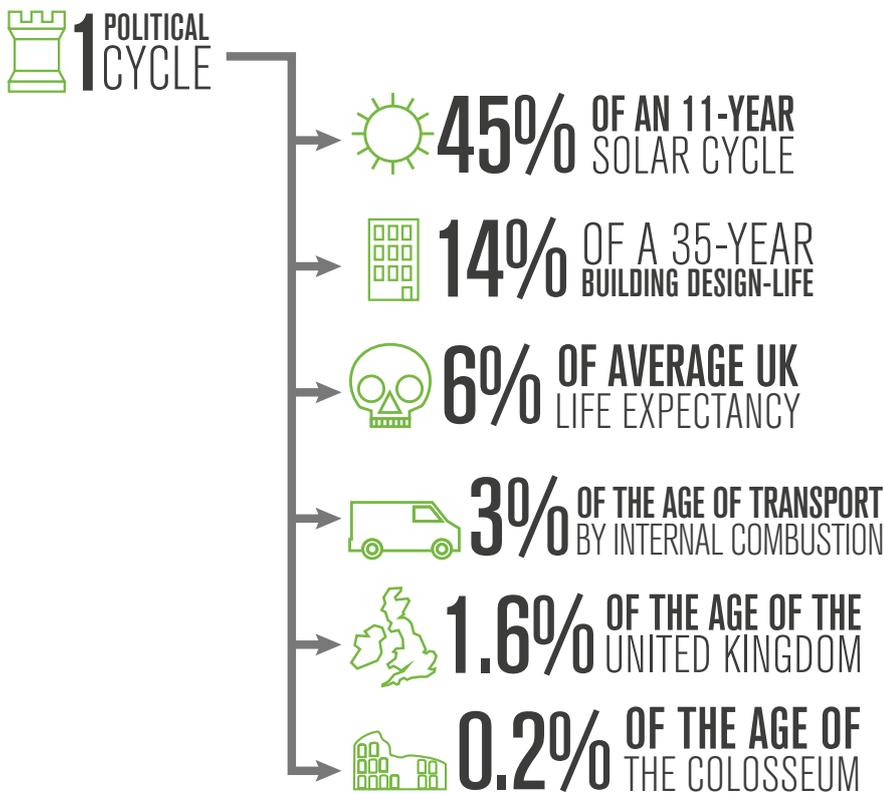


Figure 7. Time equivalences

commented that the market is efficient in reacting to clear signals, but takes a longer time to achieve the desired outcome than legislation. Elsewhere, it was argued that legislation is needed because the appetite for change in people is slow. In terms of our conceptual model (Figures 1-3), the arguments presented for legislation to speed-up change in communities and markets illustrate the important role structural forces can have in 'nudging' communities in a direction in which they may, in fact, themselves desire to travel. Indeed, this structural shaping of change can even go so far as 'shoving' reluctant communities when necessary, as illustrated by references to the ban on smoking in public places and the mandatory wearing of seatbelts. Many witnesses, especially those in favour of enhancing emergent behaviour in communities and markets, gave 'pop-up' facilities as examples of agile action in the face of obstructive bureaucracy, although it was not always clear how this would translate into permanent change.

As with space, so with time: there is no one timescale on which it is appropriate for cities to act. Certainly focusing on the timescale of political change will gravely harm attempts to take action that is fair to future generations. Accountability for actions over time is often curtailed by political, organisational and even human lifetimes, so strategies are always best 'nested', with strong explicit links between short-, medium- and long-term planning that limit the potential for making short-term gains at the expense of long-term goals. Because regulations and other societal structures are a way of codifying changes over time, we would argue that recognising the connectedness of urban systems (Figures 1 and 2) will help 'nest' time-domain interventions.

The conceptual model described above has been used to develop the guidance to policy-makers.



Chapter 4

Guidance to Policy-Makers on Setting a Context for Success

In providing guidance, there must first be agreement on what the guidance is intended to bring about. This must be a combination of what it is that we collectively want of our cities and what needs to happen in our cities for them to deliver societal and planetary wellbeing (ie, react appropriately to the effects of climate change and seek not to exacerbate them, live within the resources that the planet can provide while avoiding pollution and other environmental degradation, and so on).

This is, indeed, how the Liveable Cities research team is defining future cities that are 'liveable'²⁵, and for which it is exploring what radical engineering is needed to assist them – those who govern them, as well as those who live in them – in achieving these goals.

The Designing Resilient Cities methodology, similarly deriving from research led by the University of Birmingham^{26 27}, can help in crystallising the focus of delivery. The methodology applied to policy guidance first establishes what the intended benefits of the policies are (the desired policy outcomes), and for each of the intended benefits then establishes what conditions need to be in place for the intended benefits (ie, policy outcomes) to be realised. Any particular urban context, that is any specific town or city, can then be analysed to determine whether these necessary conditions are in place, and if they are not in place, what policies or actions should be introduced to ensure that they are put in place. Once the conditions are in place, the policies have every chance of succeeding, whereas without them the policies would be vulnerable to failure (that is, the reasons why the policies might fail would be evident).

However none of these activities can take place without a broad and deep understanding of the current landscape in which new policies are to be introduced, and thus of the current urban situations and the current thinking that supports them, along with aspirations for the future and requirements for future urban living. This is what this Policy Commission has spent considerable time and effort in revealing, as is reported in the chapter describing the gathering of the evidence, and has brought together and synthesised, as is reported in the chapter describing the conceptual model for future urban living.

One very strong theme that emerged and recurred throughout the evidence gathering process concerned the vulnerabilities that are introduced by individuals, communities, neighbourhoods and, when integrated, the citizens of a place as a whole (ie, society at all scales) in terms of the potential lack of citizen 'buy in'. Active participation in the conception, planning, designing and operating (or using) of a city is vital if the city is to be a success; and it was questioned by many whether democracy, as currently applied locally and nationally, was a help or a hindrance in this process. While the concept of 'benign dictatorships' was mentioned in passing, a more helpful notion might be termed 'the reconceptualisation of local democracy'.

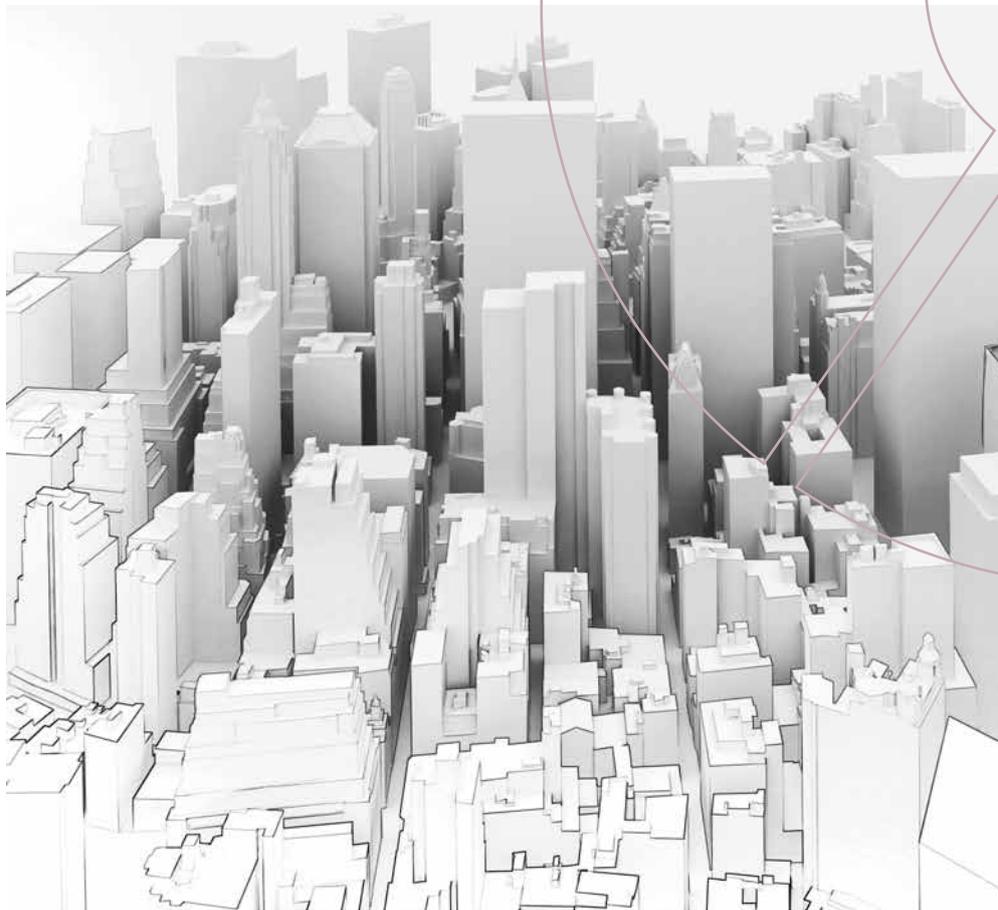
The current system of democracy in the UK involves people (prospective councillors, mayors, MPs) presenting a portfolio of policies, often in alignment with a political party, which citizens then consider and vote upon. In each portfolio a citizen might identify good and bad aspects, and there are typically only a small number of portfolios to choose from. The elected councillors/mayors/MPs then use whatever levers of power they have available to bring about actions that deliver their set of policies, tempered by the constraints that apply during the time in which they are in office; and this time is limited in that elections typically take place on a four-to-five-year cycle. The time limitation in turn necessarily influences the policies that are put forward, in line with what can be achieved and therefore provide the necessary evidence to support an elected representative's re-election.

A potentially better alternative suggested by the evidence provided to the Commission would be for the citizens and those in governance collectively to develop a City Narrative for the place in question – city, town, electoral ward, constituency – and for prospective councillors, mayors or MPs then to present their credentials (ie, policies linked to strategies and actions) for the effective delivery of this Narrative, in partnership with the citizens. Such a

process would recognise that those who govern would not be able to deliver everything contained in the Narrative, and so the policies would then need to establish who or what – individuals, communities, neighbourhoods, large corporates – would be best placed to deliver the respective elements of the Narrative in what would be a collection of city partnerships that would combine all of these interests. Such a system would entail delivery irrespective of political parties and would require cross-party buy in, leading to greater stability for the attraction of investment. The democracy here lies in all citizens being able to contribute to, and vote on elements of, the Narrative.

All of the above is predicated on the idea that 'cities are our future'. Throughout the work of the Commission, this fact has been challenged and tested, and all of the evidence supports the view that accommodating a larger future population and future economic growth in the UK depends upon the health of our cities. As one witness stated, cities are a fundamentally positive force for the 21st Century. Cities can be the pinnacles of human existence: they can be wonderful places to live, a source of collaboration, creativity and innovation; and, done well, they are the most efficient way to use land and other resources. However, it was equally clear that in order to achieve the liveable cities of the future, we need to make radical changes in our planning and governance systems, and indeed in our thinking of what city life should be.

While cities and urban areas are complex, non-linear, and specifically shaped by their historical and geographic contexts, a number of common ideas have resulted



from both the evidence base and discussion amongst Commissioners which we believe need to be incorporated into policies at both national and local level. These commonalities provide guidance on the future directions needed to achieve more sustainable cities by 2050 and, importantly, on what should be included in today's policies to put us on the right road. However, to realise this vision of liveable cities requires radical change, and new thinking at all levels of

decision-making. In particular, it is essential to regain public interest and trust in politicians and democratic decision-making. Without active public engagement, the necessary change will not be possible.

The Policy Commission identified six conditions which will need to be in place for liveable cities to be developed successfully.

²⁵ Liveable Cities. www.liveablecities.org.uk

²⁶ Lombardi DR, Leach JM, Rogers CDF et al. (2012). *Designing Resilient Cities – A Guide to Good Practice*. BRE IHE Press.

²⁷ *Designing Resilient Cities*. www.designingresilientcities.co.uk

Guidance to Policy-Makers

2. Empowering the People

Cities are in competition with each other, and thus one measure of a city's success is that people are attracted there to live, work and play: this is their place of choice, to which they bring social and economic benefits.

To help shape desirable cities, community involvement and empowerment is needed. Crucially, this requires trust to be built up between the community, politicians and local administrations. While collective development of the City Narrative will be a greatly beneficial start to this process, the importance of real community involvement in delivering the City Narrative and maintaining momentum through events and pop-up activities cannot be understated. This is illustrated from the experience of the 'urban pioneers' in Berlin, while the Belfast citizen-led initiative to create small parks to reduce fragmentation of the city's landscape has manifestly increased community interest in their urban environment.

Empowering people to develop their towns and cities was the strongest theme of all to emerge from the evidence-gathering exercises. Giving the community ownership and responsibility, in partnership with elected members, local authorities and other communities, is the basis of the concept of the 'self-made city'. However, it was noted that ownership and responsibility must be democratically spread across the community and not concentrated in any special interest group, and that community engagement must be done in such a way as to avoid 'consultation fatigue'. Moreover, in developing trust,



all citizens must have the ability to hold those in authority to account, and in turn they should support local leaders to deliver the Narrative, once agreed, while accepting that leaders learn by trial and error.

While it is recommended that new partnerships with business and academia are needed to maximise the use of resources and skills, it would be important also to draw these sectors more closely into the community and develop real engagement, to the benefit of the city. This emphasises the need for communities, rather than solely their elected representatives, to be a central part of these newly-conceived city partnerships.

Guidance to Policy-Makers

3. Developing the Right Kind of (Local Government) Leadership

The evidence gathered by the Commission underlines the need for exceptional leadership to drive change within a city or urban area.

This leadership can be provided by an individual, as happened when Michael Bloomberg, as Mayor of New York, brought about many impressive changes, against the odds in regulatory terms, including measures to reduce carbon emissions²⁹; or it can be provided by a group of individuals. However one aspect of this leadership on which everyone appeared to agree is that it should be local rather than national, since cities are closer to people, and are of a more human scale, than central government. For example fewer than 10 % of Americans are said to trust the Congress they elect, while 70% or more trust their mayors and municipal councillors²⁰. In changing this balance, it should be recognised that governance at national, city and regional levels have different purposes, and that greater benefits will accrue if city and regional governance is properly effective so that national government does not have to intervene to address any shortfalls.

Several witnesses made the case for elected mayors. Most witnesses seemed to agree that models of governance that aggregate upwards, rather than disaggregating downwards, in terms of agenda setting and ownership of visions, are more resilient and effective. Witnesses would welcome better 'place-based governance' that is more able to take account of, and leverage, local strengths, opportunities and drivers of development.

Moreover there was a strong feeling that city problem-solving has to be more pragmatic than political ideology and that cross-party agreement is needed for long-term strategy and decision-making. As Fiorello La Guardia, Mayor of New York in 1934-45 said: there is no Democratic or Republican way of picking up the rubbish³⁰. Elected mayors were seen as the enablers of all this.

It was repeatedly stated that there is a need to give citizens more influence over the production of urban space, so that they have a say in and take responsibility for what happens to their area, though some questioned the level of ambition present at a local level and suggested that communities tend to embrace containment over expansion. Here it was felt that central government has a role to play in capacity- and confidence-building in communities, and in particular in those not well placed to easily develop their localised agendas. The underlying thinking was that central government's role is not just about regulation or spending, but increasingly about empowerment and support – the soft skills which are needed to help places help themselves – as well as providing a bottom rung below which places should not be allowed to fall. Interestingly, this aligns with the role that we would champion for planners.

There are many models of devolution that

need to be understood. A directly elected city mayor or governing body is seen by the Policy Commission as a first solution in providing the dynamic and problem-solving approach needed for our future cities; but the election should be on the basis of an ability to deliver the City Narrative. Acknowledging that there was little public appetite for elected mayors in the 2012 mayoral referenda, the Commission recommends that a better considered and focused case, founded on an evidence base, such as that we have produced, and on a reconceived democratic process, should be made for elected mayors. To make this case effectively, the mayor would need proper powers and proper support from the communities they serve (as embraced in a combination of all of the Commission's recommendations).

There is a need for a reconceived relationship between central and local government, and a renewed trust in, and vision for, the role that the new city leaders will have. To introduce meaningful local democracy and leadership requires political will at all levels, and the overcoming of barriers such as strongly vested institutional and political interests, gaps in skills and capacity, and a need for cultural and attitudinal shifts. In accommodating organic growth with community involvement, it was recognised that markets are good at reacting to clear signals, but it takes a longer time to deliver the desired outcomes than legislation. Consequently enabling legislation, sensitively designed to accommodate local needs and wants, should accompany this organic activity to increase the pace of beneficial change. Shifting the balance towards local governance would beneficially reduce the influence of lobbying of central government, thereby encouraging industry to turn its creative energies to problem-solving.



²⁹ Barber B (2013). *If Mayors Ruled the World: Dysfunctional Nations, Rising Cities*. Yale University Press.

³⁰ Botching the Basics. <http://nypost.com/2011/01/03/botching-the-basics/>

Guidance to Policy-Makers

4. Empower All Local Leaders

Cities need more autonomy — not least in order to cascade some of the power downwards — along with the ability to raise finance within sensible and prudent structures.

This will enable city officers to redevelop their multi-disciplinary skills, creating an organisational capability to think longer-term and regain 'trusted adviser' status with local politicians. However, over the past few decades, UK local government has seen reductions in its power and a greater dependence on national power. The reasons for this include the centralised nature of British democracy; the heavily constrained income sources of UK local government; the cautious rules, centred on prudence, under which local government functions; and the tight financial constraints placed upon local government by the Treasury. These constraints affect local government's capacity to participate in capital projects, while private sector investment is not being encouraged to fill the gap.

The Localism Act was introduced to counter, in part, this trend, but, crucially, it does not allow the imposition of new taxes. Cities should be permitted to retain more of the taxes they are instrumental in raising, for example when they generate and attract new businesses, for re-investing in local infrastructure, businesses and communities. Local leadership should be encouraged to act more creatively to stimulate revenue streams, and one or two examples ('going bold, going first') to change the system would pave the way for others to follow.

Devolved responsibility also brings major challenges. Cities need the ability to respond positively to projected demographic changes that include an ageing population, changing patterns of citizen (physical and mental) health, a more diverse society, and population movement where people seek a sustainable lifestyle. In addition, the prevention of polarisation between the 'haves' and 'have nots', a form of socio-economic segregation that might be caused by future decision-making, needs to be addressed. For example, sustainable solutions, such as adapting housing to reduce carbon emissions in line with government policies, should not favour the economically active over those who cannot afford the solutions. The new city partnerships between business, academia, local government and local communities previously discussed would help in this endeavour.

Whilst a degree of devolution is seen as desirable, there is a need to retain city-to-region connectedness and national connectedness. Cities may constitute a powerful economic driver, but they cannot turn their backs on their regions. A 'triple devolution' model, with central devolution to cities and then on to combined authorities/city regions, was suggested as an effective model for some aspects of city governance. However, cities do

already co-operate and work together in dozens of inter-city associations and networks across the UK, such as the Core Cities group³¹, and internationally, in organizations such as the C40 climate leadership group³², the Covenant of Mayors³³ and Citynet³⁴. Indeed cities have proved to be effective in confronting the urgent issue of climate change, by innovatively adapting solutions to the local context to greatest effect, where national governments have failed to cooperate. Cities are also sharing best practice, and indeed should be mandated to do so. Cycle-sharing programmes, pedestrian-only zones, congestion charging and recycling campaigns have spread around the world, and are having a big impact on the reduction of emissions and pollution on five continents³⁵.

³¹ Core Cities. www.corecities.com/

³² C40 Cities. www.c40.org/

³³ Covenant of Mayors. www.covenantofmayors.eu/index_en.html

³⁴ Citynet. <http://citynet-ap.org/>

³⁵ Barber B (2013). *If Mayors Ruled the World: Dysfunctional Nations, Rising Cities*. Yale University Press.

Guidance to Policy-Makers

5. New Business Models

There is no single approach to the financial and business model aspects of future urban living that can be applied uniformly across the UK's cities: approaches need to be developed on a bespoke basis, taking account of the circumstances specific to each city.

However, one common thread in the evidence is the real need for cities to have 'meaningful devolved powers' and to be able to raise finance and locally invest in their economies. The top down, one-size-fits-all approach by national government does not work and needs to change dramatically, particularly if finances continue to shrink.

Continued budget cut-backs are facing all cities, which can only continue to operate effectively by doing things differently. Innovation needs to happen on a large scale, and at a faster pace. Local government requires more devolution from Whitehall to allow it to pool budgets, combine resources, and work together (and make savings together) with other agencies from the public sector. Cities have to be able to plan for the future with certainty, which requires budget certainty over a number of years rather than the current annual budget setting. The fact that local authorities do not know what their income is going to be in the medium to long-term makes confident long term planning impossible.

At the moment there is no incentive for cities to work with big corporations, who should be doing more to invest in cities, because the corporations' taxes are for the most part unavailable to the cities. Economic benefits accruing from a city's

economic growth and job creation largely go to the Treasury, with cities only capturing marginal benefits through council tax and up to 50% of business rate growth. Cities should have the ability to retain such taxes, or at least a larger proportion of them, for reinvestment within the city.

There is currently limited ability to experiment with new financing and business models. Political boundaries likewise constrain experimentation. For example, Bristol's physical growth beyond its political boundaries necessitates interfacing with external authorities and makes difficult the provision of an integrated transport system across the metropolitan area. These constraints need to be eased to allow greater innovation, a strong theme emerging from the evidence being the need to allow 'beta testing' of new models and new ideas. Cities often provide the best scale at which to adapt new technologies, try them and gather data to assess their effectiveness.

New financial and business models should support 'communities being in control', where the public is central to the choices, there is collective responsibility, and non-linear approaches are embraced. This in turn requires those in power to trust their communities when making

these choices and assuming this greater level of responsibility. Models will need to align externalities (costs and benefits that fall unevenly on the population) with the planning system and ensure an equitable result for all citizens.

New indicators and measures of success for financial models are required that value long-term benefits and promote social equity – something lying between GDP and Gross National Happiness. More specifically, it was recognised that they need to capture quality of life and family friendliness. Allied to this is a need for better internalisation of full environmental and social costs, which in turn requires better measurement and understanding of social (and environmental) returns on investment to feed into investment decisions.

Guidance to Policy-Makers

6. Enhancing the Role of Long-Term Planning

A stronger role is advocated for strategic planning in shaping cities to meet the combination of challenges associated with moving to greater sustainability and resilience, acknowledging that the influence of a city both extends beyond its immediate boundaries and impacts future generations, whose voices need to be ventriloquized into current debates.

This involves activities such as influencing the location of new development and sensitively increasing densities, promoting sustainable transport, consolidating suburbs around public transport hubs, and intensifying local centres to create a polycentric city region. These changes would facilitate better the practice of the 'sharing city'³⁶, in which occasional-use items, from power tools and lawn mowers to books, are shared rather than individually owned. Light-touch infrastructure frameworks would allow a more organic form of urban development to occur within certain parameters.

Planning that embraces experimentation and feedback from city users has proved successful in locations from San Francisco to Almere, but this requires a means of empowering local planners to become more nimble and responsive, to be more prepared to take risks, and to trust citizens. It would, importantly, also enable the pace of regeneration to increase.

Early involvement of all relevant stakeholders in the development process is central to advancing the sustainability agenda, as individual design decisions at the early visioning and scheme design stages influence significantly the ability to meet a range of very different sustainability objectives³⁷. Planners are considered to be well placed to bring together the necessary built environment professionals

and other relevant stakeholders, and provide local leadership to ensure that urban design interventions serve cities and their citizens optimally. This in turn could facilitate organic development, or planning from the bottom up – developing an understanding of activity, then considering the spaces in which this might occur, and finally considering the buildings. Over-regulation must be avoided in order not to stifle such an approach, and there has to be trust, and an acceptance that mistakes might be made in taking this forward. Synthesising this 'bottom-up' approach with the currently prevalent 'top-down' approach to shaping cities will redress the balance and refine the process to secure the greatest advantages of both. This recognises the need for central planning to harmonise with these enhanced local processes and to make available the data required for spatial planning. This might be achieved via strategic infrastructure planning to provide a spatial framework within which a more organic approach to local planning can occur, while acknowledging that infrastructure development is part of the process of achieving economic growth and societal benefits rather than a driver of these benefits.

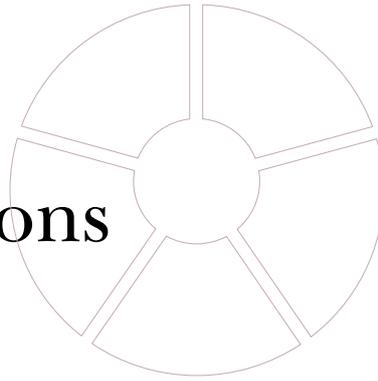
Planners should increasingly be considered as part of the city management team, proactively seeking to improve the public realm, and not just be engaged in a regulatory process. As such, planners of the future should be powerful enablers of cities, securing a more sustainable future, which was a common feature of the visions for cities gathered from the evidence. This requires a behavioural change from 'controlling or reactive planning' to 'facilitative or proactive planning' with a 'can do' attitude and a long-term strategic view. This is a wider role than currently performed, in general, by town planners in the UK system.

There was an argument, voiced by many, that if people are involved in the building process, it is possible to create neighbourhoods, which in turn changes the quality of the city itself. This reinforces the belief that sustainable neighbourhoods combine to form a sustainable city. The objective of maximising community involvement in planning and design should, however, continue through the management and maintenance of these neighbourhoods: that is, neighbourhood planning needs to be a much broader concept than is currently understood in the UK. This would provide further examples of experimentation, or 'beta testing', and the development of trust between a city and its citizens.

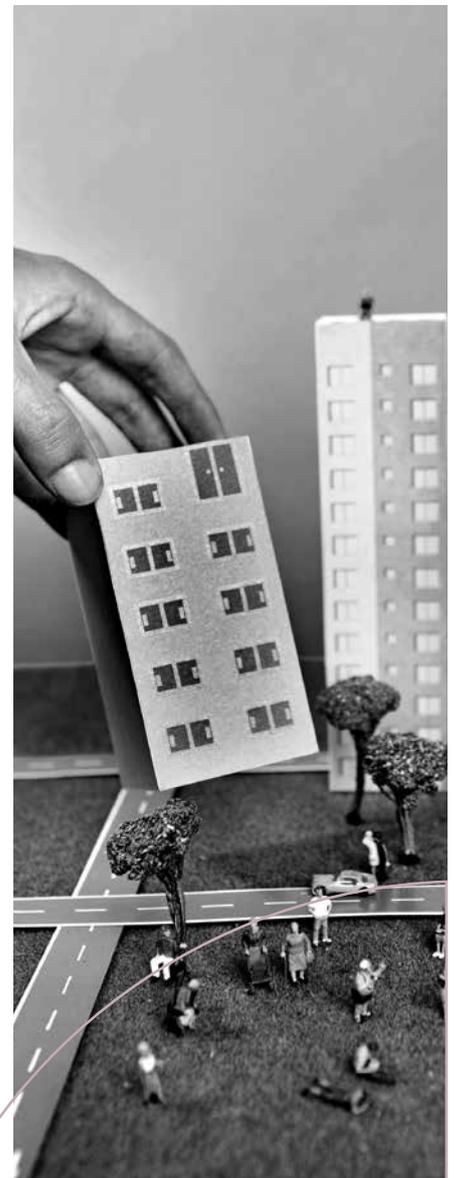
³⁶ Shareable. www.shareable.net/

³⁷ Lombardi DR et al. (2011). Elucidating Sustainability Sequencing, Tensions and Tradeoffs in Development Decision-Making. *Environment and Planning B, Planning and Design*, 38, 1105-1121.

Six Recommendations for Change



1. Citizens should be empowered to combine with those who govern and other city stakeholders to create a City Narrative that describes their city's history, its present context and its visions for the (far) future, via a transparently democratic process that delivers consensus across all sections of the community.
2. Citizens should be empowered to be instrumental in delivering this City Narrative, and be entrusted to do so.
3. There is a need for a system that creates inspirational local leadership, and this would best be achieved via either mayors or leadership groups elected on the basis of an ability to deliver the City Narrative.
4. Local government leaders in turn need to be empowered by the triple devices of a balanced degree of devolution of power from national government, an ability to raise finances locally and structures that enable effective cooperation with organisations beyond its boundaries (regional, national and global).
5. Cities need financial and business models that allow them to experiment, enable them to invest for the long-term, and facilitate the capture of economic, social and environmental returns on investment.
6. There should be a radical upgrade in the role of planners to promote creative, long-term, thinking on urban sustainability and resilience, and to enable more organic growth within that strategic framework. In this role planners should act as integrators of urban practitioners and other urban stakeholders.



Appendix A

Questions Posed to Those Giving Evidence

Six initial questions were posed to all those giving evidence:

- What are the major challenges facing future urban living in the UK?
- What is your vision for your city (or cities generally) for 2050?
- What are the risks and uncertainties around achieving your vision for 2050?
- What characteristics should future urban centres have if they are to be effective places to live, work and play?
- What changes need to be made, in for example governance, policy, public/private sector relationships, to ensure an acceptably good quality future urban living can be achieved for all?
- What might be expected of us, collectively or individually, to make future urban living work?

The following questions, or variants of them, were posed depending on responses to the above:

- How will the economy of future cities work, eg, commerce, industry, services, etc.? Do we need new economic models?
- Is the circular economy a good model for future urban living?
- Given the unimaginability of today's economy 50 years ago, how do you think cities should be preparing (note: not planning) for 50 years' time?
- How should future urban life and form be organised and operate?
- What behavioural change do we need for society, public bodies and private sector organisations to achieve your future urban living ideal?
- How would you measure movement towards successful future urban living? How can we know what success might look like? What are the indicators?
- What institutions should hold ultimate responsibility for developing future urban living?
- How would you envisage the power of the internet being harnessed by locally-based communities or on behalf of urban life?
- How do we reconcile the demands of a growing population with reducing natural resources, food, water, etc.?
- How will infrastructure needs (transport, buildings, utilities, ITC, etc.) be satisfied within the carrying capacity of the earth's natural resources?
- How can we ensure that urban living addresses the needs of all, especially the poor?
- How will culture, social structures and wellbeing be enmeshed in future urban living?
- Are we moving towards more or less autonomous cities?
- Thinking of the three spatial dimensions (including under the ground and up in the air), how well do the places you know best utilise all three dimensions? What would be gained and lost by making cities more 'space-filling'?
- How can places deal with the non-linearity, riskiness and uncertainty of preparing for the future?
- To what extent are cities 'the answer' – to climate, demography and other drivers?

Appendix B

Contributors to the Policy Commission

To inform its deliberations, the Commission consulted a wide range of experts. These included:

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Independent Consultant, Lisbon

Tony Armstrong

Chief Executive, Living Streets

Peter Box CBE

Leader of Wakefield Council and Chair of LGA Economy and Transport Board

Tony Burton

Independent Environmental Consultant

Andrew Carter

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Mike Childs

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Kru Desai

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Head of Studio, Gehl Architects Copenhagen

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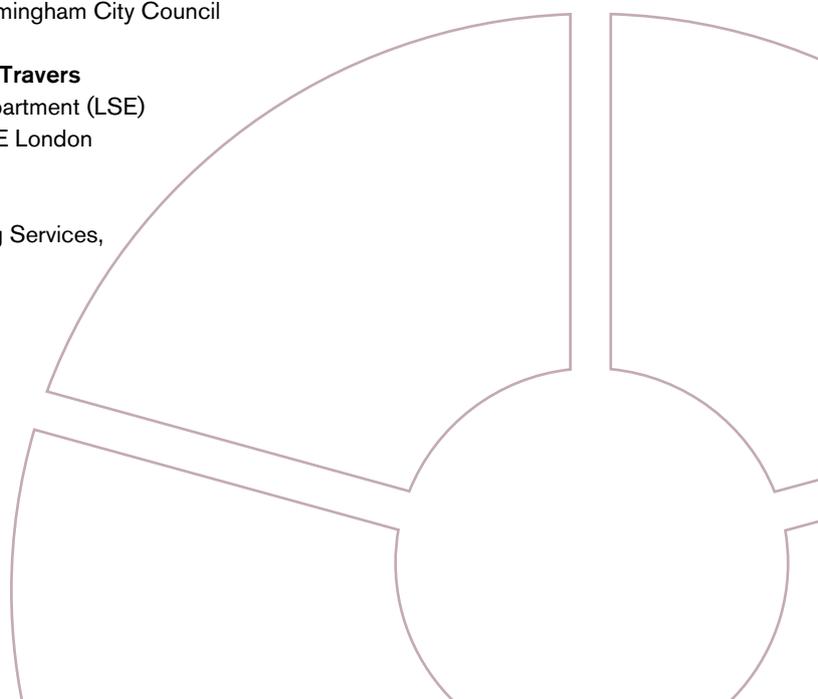
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