Birmingham's Challenges

This document provides a summary of the results of the first stage of the Urban Living Birmingham project. The aim of this stage was to identify and assess the interdependent challenges facing Birmingham. There are two elements to this: evidence analysis and quantitative analysis. A summary of the results of each is provided in turn below, followed by a proposal for integrating the results of both approaches.

Evidence Analyses Results Summary

The four critical challenges for Birmingham identified through the evidence analyses are summarised below. The results are based upon several analysis methods, including a literature review and consultations with the ULB academic team and Touchstone Group. A mapping exercise of academic and policy-related documents with Birmingham components was undertaken and formed the basis for content analyses, hot and cold spot analyses, network analyses and geographic analyses.

1. **Promoting healthy living and healthy long lives**
   Birmingham performs poorly with regard to health despite 80% of its population rating their health as good or very good. At the ward scale health outcomes are variable and clearly health and healthcare do not follow ward boundaries (or ward-level policies). The network analysis shows a clear disconnect between an extensive, but narrow, academic medical literature and other academic and policy literatures. The hotspot analysis showed 'health and wellbeing' in the top two literature hotspots (linking most often with itself and then with demography). Health and healthcare cut across city services, drawing in the medical health system, green spaces, transport and food, for example. This challenge also touches upon gaps in knowledge (e.g., the food demand profile of the City).

2. **Minimizing high-carbon mobilities whilst maximizing connectivity**
   The hotspot analysis showed 'mobility and transport' as the third and fourth top literature hotspots (linking most often with itself and then with creating an evidence base). In addition, mobility and transport features highly on the city's agenda as well as for many of the Touchstone Group. Currently, some wards suffer from disproportionately high levels of traffic congestion whilst other wards (notably those further away from the city centre) have poorer access to public transport. Some wards are less connected in non-physical ways. For example, some wards rely more heavily upon working practices that don't lend themselves to working remotely and some wards have higher percentages of older residents who are less likely to use digital services. In direct contrast to the health challenge, mobilities and transport policy is based upon targeted studies (e.g., of a particular intersection) and there is less evidence that the provision of mobilities and transport are being radically and strategically considered at the city scale (e.g., making Birmingham car free).

3. **Reducing environmental risks through the sustainable use of low-carbon, local energy and securely-supplied non-local energy**
   Environmental risks associated with carbon emissions, air pollution and flooding feature as the last of the top five hot spots identified through city-scale evidence mapping. Surprisingly energy, the largest contributor to climate change and the resultant environmental risks, was identified as a cold spot. Energy does form part of city-scale and ward-scale policy documents, primarily in relation to reducing carbon emissions. In these documents, the impacts of energy upon the environment (as a contribution to climate change and contributing to pollution) feature in general terms and it is clear that in recent years (and in particular following the Financial Crisis) reducing carbon emissions and being environmentally friendly has fallen down the Council's list of priorities (and growth has come up this list, setting the scene for obvious tensions between growing whilst reducing high-carbon energy demands). Access to environmentally-friendly energy services is likely to become more important over time as the availability of traditional energy sources falls, prices rise, populations increase and the need for environmentally-friendly energy becomes an imperative.

4. **Developing appropriate governance models to ensure economic vitality and establish the city's brand**
   Economic performance (especially in relation to growth) is, without doubt, one of Birmingham City Council's top priorities. It is also identified as one of the City's critical challenges by a number of ULB's Touchstone Group members. City governance is also one of Birmingham City Council's top priorities. The Kerslake Review captured the City's

governance challenges, with an emphasis upon the need for effective leadership and visionary thinking. The link between economic performance and City governance is less evident from the evidence mapping, but has been made explicit by some members of the Touchstone Group and is generally evident in academic literature. There is an apparent lack of confidence in Birmingham's policymakers to be able to create an economically vibrant city and there are clear knock-on effects upon attracting inward investment, new businesses and new residents and establishing the Birmingham brand. It is unclear if the Council has a clear and holistic understanding of how the City's economy is currently performing (and why) and how it would like for it to perform in the future (strategic vision). It is also unclear if the City has the means to facilitate movement to a future vision.

Quantitative Analysis Results Summary

The challenges identified from the quantitative analysis are summarised below. The results indicate broad challenge areas that, in combination with the evidence review, provide further insight into the interdependency of city services in Birmingham. The results are based upon examination of several data sources, including a data reduction technique to identify groups of indicators for urban living in Birmingham, and consultations with the ULB academic team and Touchstone Group.

There are three common themes across the challenge areas:

- A significant socio-spatial divide across the city. The central band, including the city core and to the eastern boundary, illustrates higher levels of deprivation and ethnic diversity than the north and south of the city.
- An apparent disconnect between the users of the city, both working populations and different resident groups, which raises questions about how well the city serves the needs and desires of users.
- Health and wellbeing is a common theme across the challenges. There is an inter-relationship between deprivation and economic wellbeing, urban form, connectivity and health. This theme connects the individual or household with the physical structure of the city.

The challenge areas and short descriptions are outlined below:

Challenge Area	Description
Economic Advantage, Equity and Healthy Households	There is a thematic link between economic advantage, housing, energy and health, which presents a wider framework for understanding and supporting more equitable growth across the city.
Healthy Living Environments and Community Prosperity	There is a distinct spatial band around the city core that reflects a transition zone into the core but is also a residential community with disadvantaged living conditions. The urban form and transport network need to be integrated in this zone to enhance the residential space.
A Connected and Liveable City	There is an indicative pattern between physical connectivity (internal and external) and the wellbeing of citizens. Access to local services and non-car based networks shape the relative 'distance' experienced by users of the city and could support community-based approaches to wellbeing.
A Prosperous Core	The zone around the immediate city core may be disconnected from the regeneration of various parts of the centre. Increased levels of negative liveability suggest the area is not integrated with the prosperity and brand of the city centre.
Integrating Urban Form and Natural Capital	The challenge area highlights disconnect between the natural and urban form of the city and the resident population characteristics.

Integrating Birmingham's Challenges

Although the challenges above have been identified as discrete challenge areas, there is considerable interdependency between the challenges and opportunities to integrate policy silos and city-users.

The evidence analyses and quantitative analysis identify four common critical challenge areas (in all or part) that are specific to Birmingham, as follows.

- Energy
- Health & wellbeing
- Transport & connectivity
- Economy

The quantitative analysis links 'health & wellbeing' to 'energy', 'health & wellbeing' to 'transport & connectivity' and 'health & wellbeing' to 'economy' in an apparent 'Birmingham nexus' (Figure 1 below). A nexus indicates a series of elements and it may be revealed that it is not a nexus but a plexus (a collection of elements within a system) or something else.
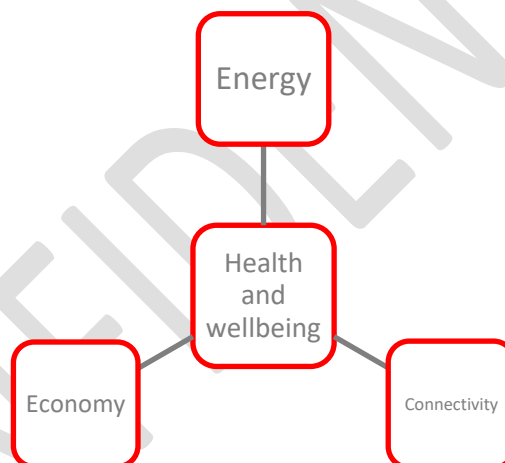

Figure 1: Birmingham Nexus

In addition, the evidence analyses strongly indicate that **governance and economic vitality** is a critical challenge area for the City. This is a cross-cutting challenge, although it has clear links with the 'economy' element of the Birmingham nexus. It is nationally recognised and is a high priority for the Touchstone Group.

It is proposed that the 'Birmingham Nexus' along with the 'governance and economic vitality' challenge provide the context within which the next phase of Urban Living Birmingham (Work Packages 2 & 3) will identify opportunities for end-user and open innovation for city services. Identifying lenses and/or areas of focus from which it is hoped innovation opportunities will arise is a useful way of narrowing Work Package 3. This will therefore form part of the Touchstone Group meeting being held on the 29th of November 2016.

One final point is that the 'citizen as co-creator of services' lies at the heart of Urban Living Birmingham, and hence WP3 should be shaped to identify opportunities for end-user and open innovation for city services. Our ability to do this will be one of the criteria on which we are judged in terms of the current project and our future potential to deliver profound impact in this space.