

Government Office for Science

## **Foresight Future of Cities**

### Understanding current city foresight practice

Supporting Paper for 'Foresight for Cities: a resource'

Corinne Swain

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**Ove Arup & Partners Ltd**  
13 Fitzroy Street  
London  
W1T 4BQ  
United Kingdom  
[www.arup.com](http://www.arup.com)

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# 1 Foresight for Cities supporting paper

This paper offers a snapshot of the ways by which the future is considered in current city-regional planning practice. It synthesises some of the contextual research undertaken for the Foresight Future of Cities ‘Foresight for Cities: a resource’ report. It identifies some of the evidence and tools most frequently used to think about the long-term future of cities. It also acknowledges the challenges of thinking longer term. Observations draw on discussions, interviews and workshops held with city authorities and partner organisations throughout the project.

## 2 Characteristics of current practice

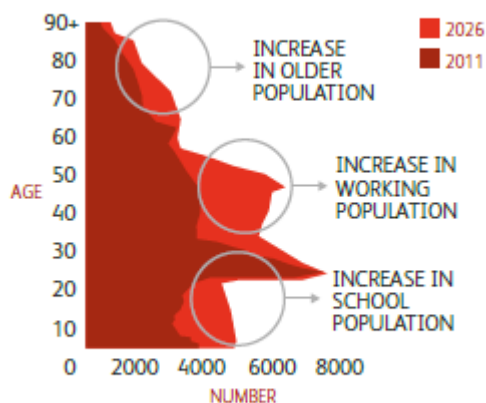
### 2.1 Most thinking is mid-term

Those involved in planning, economic development, transport and environmental planning are used to thinking 15-20 years ahead to feed into statutory processes, particularly in the preparation of the following plans (in England):

	<b>Statutory Local Plans</b>	<b>Strategic Economic Plans</b>
<b>Spatial scale</b>	Local authority, but can be joint	Local Economic Partnership (LEP)
<b>Plan horizon</b>	Vision and strategy for 15-20 years ahead	Vision and strategy to 2036
<b>Emphasis</b>	Housing provision – scale and location	Priority infrastructure needs for economic growth <ul style="list-style-type: none"> <li>• to influence European funding bids, &amp;</li> <li>• allocation of local transport funding</li> </ul>
<b>Limitations</b>	Variable integration with neighbouring areas, despite a ‘duty to cooperate’	Variable robustness of evidence and integration with local plan housing targets

Other types of mid-term strategies include:

- economic development strategies, setting out a vision and priorities;
- local transport plans, setting out strategy and delivery priorities, although their production is discretionary; and
- other types of transport strategy e.g. promoting active travel.

*Cardiff 's population will grow*

Mid-term trends may also be analysed in preparing shorter term 'Corporate' plans to influence budget allocations within Councils, and Health and well-being strategies, to influence commissioning priorities across the NHS and Councils.

*The Council is facing a greater demands on services*

Source: Cardiff Corporate Plan 2014-17

## 2.2 There is limited consideration of alternative futures

Perhaps the most common use of scenarios is in relation to projecting the likely level of future jobs, often broken down by sector, using data sources such as the annual Business Register and Employment Survey<sup>1</sup> and the decennial Census. Labour market studies will also consider supply side data from sources such as the Labour Force Survey<sup>2</sup> (labour market data is available on an area basis through the Nomis website (<http://www.nomisweb.co.uk/>)). Such work may feed into both local plans and strategic economic plans. Employment projections often involve the preparation of a 'business as usual' trajectory, and one or more variants generally on a more optimistic basis. Few consider more pessimistic assumptions, and there is at present no exercise at the national level that aggregates the outputs of such local forecasting exercises to gauge their plausibility.

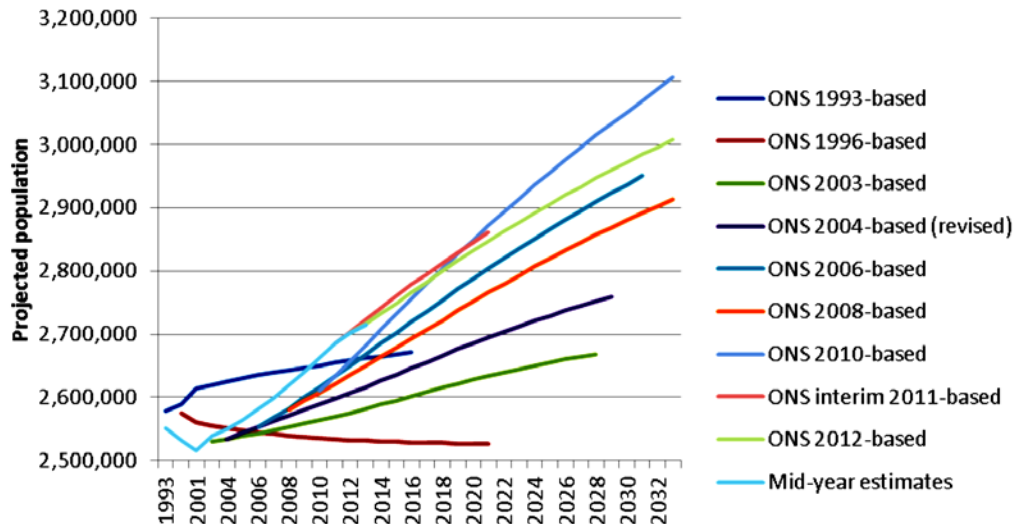
By contrast, planning for housing as undertaken through local plans, starts uniformly with the latest household projections produced by the Department for Communities and Local Government (DCLG). These are in turn premised on the most recent sub-national demographic projections produced by the Office for national Statistics(ONS). Although there is some discretion for individual local authorities to take other local evidence into account in setting their housing targets (subject to testing by a Planning Inspector during examination of local plans), this system reinforces existing trends. Locations that have accommodated large increases in population over the past five years are expected to provide for high levels of housing over the plan period. Based on current projections that relate back to 2012-based data, this means that housing targets are significantly higher in the South than the North of the UK, and higher in the metropolitan areas than beyond their boundaries.

<sup>1</sup> <http://www.ons.gov.uk/ons/guide-method/method-quality/specific/labour-market/business-register-and-employment-survey--bres-/index.html>

<sup>2</sup> <http://www.ons.gov.uk/ons/about-ons/get-involved/taking-part-in-a-survey/information-for-households/a-to-z-of-household-and-individual-surveys/labour-force-survey/index.html>

ONS demographic projections however are subject to frequent change. Following the 2011 Census, new projections are currently on two-yearly cycles with interim updates. Household projections sometimes appear more than one year after the related population release. As a result, figures for future population levels at the local level can be subject to considerable fluctuations. This presents practical difficulties in keeping plan content aligned with projected population levels, and sometimes requires a draft local plan to be changed before it can be examined.

### Population projections for Greater Manchester



Source: *Greater Manchester Spatial Development Framework, Stage 1 Initial evidence on growth, Greater Manchester Combined Authority & Association of Greater Manchester Authorities, consultation document Sept 2014* - [https://www.greatermanchester-ca.gov.uk/downloads/file/17/greater\\_manchester\\_spatial\\_framework\\_consultation](https://www.greatermanchester-ca.gov.uk/downloads/file/17/greater_manchester_spatial_framework_consultation)

It is possible to relate projected population and housing numbers to expected levels of economic growth. A few of the UK's cities have the capacity to make use of such modelling either in-house or through an associated organisation, with the areas of Greater London and Greater Manchester being the most common. The majority of the UK's cities no longer have in-house research and intelligence functions, however, and rely on commissioning economic projections and/or models to align housing and economic growth targets from commercial forecasting houses.

Spatial options are routinely assessed in the preparation of local plans when considering what land to allocate for new housing and major employment sites. In practice, such options are generally variants of the same theme rather than radically different propositions. Computer models are predominantly used to simulate the future implications of alternative transport interventions, particularly in identifying priorities for devolved transport spending within the strategic economic plan process.

## 2.3 Few cities explore their longer term futures

Thinking longer term is more common in exploring the implications of climate change than in planning, e.g. the three emissions scenarios produced as part of UK Climate Projections, termed UKPC09<sup>3</sup> for the 2020s, 2050s and 2080s. Resilience planning also looks to the longer term e.g. the 100RC programme<sup>4</sup> funded by the Rockefeller Foundation, to which Bristol was an early contributor.

At the start of this Future of Cities project few cities had considered their future role over the longer term, with a few exceptions largely initiated outside statutory processes. Sustainability West Midlands<sup>5</sup>, for example, engaged with the longer term context through identifying drivers of change, albeit resulting in a published vision relating to 2020.

The tools commonly used to structure long-term planning exercises have strong traditions rooted in the field of project management, such as SWOT analyses (Strength, Weakness, Opportunities, Threats). Less frequently local authorities have considered change within frameworks such as STEEP (social, technological, economic, environmental and political) or PESTLE (adding legal).

But perhaps the best-known examples of cities thinking longer term are as follows:

### Examples of long term visions at the start of the Future of Cities project

#### Glasgow 2061<sup>6</sup>

Very thorough citizen involvement at the neighbourhood level in 2011 created "Glasgow's vision to provide citizens and institutions with the mindset, capacity and power to create and take opportunities" over the next 50 years. Although the strategy was never finalised, it provided a clear statement of core values and targets which has influenced subsequent strategies.



<sup>3</sup> Met Office. 2009. *UK Climate Projections*, available from <http://ukclimateprojections.metoffice.gov.uk/21679>

<sup>4</sup> 100 Resilient Cities. 2015. *Rockefeller 100 Resilient Cities*, available from <https://www.100resilientcities.org/>

<sup>5</sup> Sustainability West Midlands. 2006. *A low carbon vision for the West Midlands in 2020*, Forum for the Future for Sustainability West Midlands and Advantage West Midlands, available from <http://www.sustainabilitywestmidlands.org.uk/resources/a-low-carbon-vision-for-the-west-midlands-in-2020/>

<sup>6</sup> Glasgow City Council. 2011. *Glasgow 2061 consultation summary*, available from [https://www.glasgowconsult.co.uk/UploadedFiles/GCC\\_2061\\_A4%20Full%20Version%20Online.pdf](https://www.glasgowconsult.co.uk/UploadedFiles/GCC_2061_A4%20Full%20Version%20Online.pdf)

### One Planet Cardiff 2050<sup>7</sup>

A clear vision and set of actions to transition from a three planet city at 2010 to a one planet city at 2050. The vision contained quantified targets for energy, waste, transport, food, water, greenspace, and translated into a delivery plan 2013-17. It was articulated in a very accessible way through a website, festivals and events.



## 2.4 City foresight is used internationally

City foresighting has been used by many major cities around the world to anticipate future trends and to set new directions, including Barcelona, Lyons and Singapore<sup>8</sup>. A greater degree of self-governance, the availability of open data platforms, and more locally responsive town planning systems may have assisted its application. Given that these advantages are now within the grasp of particularly the largest UK cities, there is an incentive to learn from such experiences and integrate them into British thinking. City networks such as Rockefeller's 100 Resilient Cities, ICLEI Local Governments for Sustainability<sup>9</sup> and World Cities Network<sup>10</sup> may provide learning channels for this.

There may also be lessons from background studies undertaken by national government that have instituted a supportive policy for their national system of cities, such as Germany, Italy, France and Poland<sup>11</sup>. Scenario testing has also been undertaken at the European level, e.g. the three alternative territorial images of Europe by 2030 conducted through the ESPON programme<sup>12</sup>.

## 2.5 Extending central government's longer term thinking

Although a number of bodies and processes within national government look ahead to identify trends and anticipate change and shocks, typically, these only look up to the mid-term, such as the trends and disruptors work undertaken by the Horizon Scanning Programme Team, or the National Risk Register that assesses

<sup>7</sup> Cardiff Council. 2013. *One Planet Cardiff 2050*, available from [http://formerly.cardiff.gov.uk/content.asp?nav=2870,3148,6731&parent\\_directory\\_id=2865#/home](http://formerly.cardiff.gov.uk/content.asp?nav=2870,3148,6731&parent_directory_id=2865#/home)

<sup>8</sup> Kuosa, T. 2011. *Practising Strategic Foresight in Government: the cases of Finland, Singapore and the European Union*, RSIS Monograph No. 19.

<sup>9</sup> <http://www.iclei-europe.org/>

<sup>10</sup> <http://www.worldcitiesnetwork.org/>

<sup>11</sup> Dreyer, I. and Stang, G. 2013. *Foresight in governments – practices and trends around the world*, European Union Institute for Security Studies, YES.

<sup>12</sup> ESPON. 2006. *Scenarios on the Territorial Future of Europe*, ESPON Project 3.2, 2006, available at [http://www.espon.eu/export/sites/default/Documents/Publications/ESPO2006Publications/SpatialScenarios/espon3.2\\_60p\\_final\\_16-7-2007-c.pdf](http://www.espon.eu/export/sites/default/Documents/Publications/ESPO2006Publications/SpatialScenarios/espon3.2_60p_final_16-7-2007-c.pdf)

probabilities of natural disasters, terrorist attacks and other disruptors. These are used internally within Government and often not published.

There are a few longer-term systematic scans of the future at the national level, such as identification of global challenges and opportunities for Ministry of Defence over a 30 year future period<sup>13</sup>, as well as the Government Office for Science's Foresight programme that extends that horizon on specific thematic projects to a 50 year perspective.

Given their relevance to city-level policy and action, , there is value to be had from increasing the structured channels that link this national thinking to city-level considerations.

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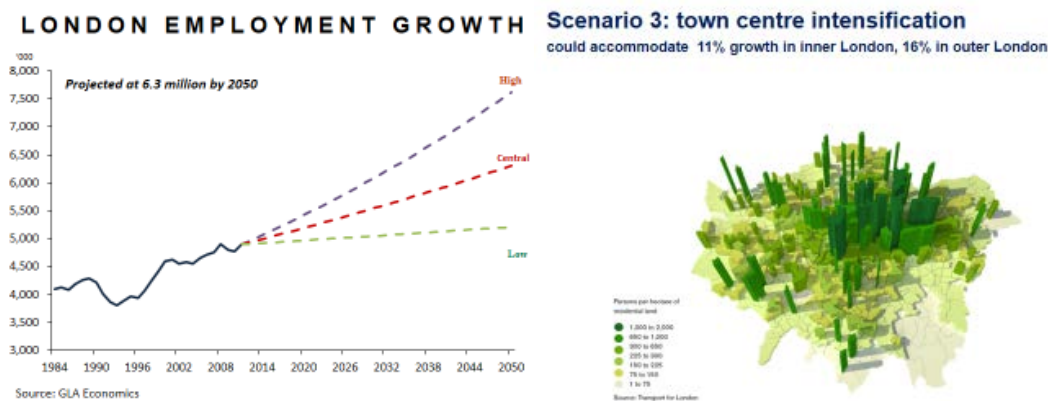
<sup>13</sup> Global Strategic Trends out to 2045, Development Concepts and Doctrine Centre, June 2014  
<https://www.gov.uk/government/publications/global-strategic-trends-out-to-2045>



## 3 Looking to the Future

### 3.1 Strategic infrastructure planning and analysis skills

During the lifetime of the Future of Cities project, there has been increasing interest in infrastructure planning at the city-regional scale. The most fully fledged example is the London Infrastructure Plan 2050<sup>14</sup>, which is a costed assessment of London's infrastructure needs in all the key utilities sectors, plus transport, housing and green infrastructure. It is underpinned by a quantitative assessment of alternative population and employment levels, and five alternative spatial distributions. Other initiatives include the development of a Greater Manchester Infrastructure and Growth Tool, and the preparation of an Integrated Infrastructure Plan for the Sheffield city region.



Source: London Infrastructure Plan 2050 background studies, using data from a) GLA Intelligence (2013). *Population and Employment Projections to Support the London Infrastructure Plan 2050*. November 2013 update, available <https://www.london.gov.uk/file/18859/download?token=sWnVMFSx>; b) GLA (2014). *London Infrastructure Plan 2050: Transport Supporting Paper*, available [https://www.london.gov.uk/file/18983/download?token=rNu0c\\_AE](https://www.london.gov.uk/file/18983/download?token=rNu0c_AE)

This revived interest in strategic planning mechanisms is leading to enhanced skills in data analysis for areas that extend beyond administrative city boundaries. For example, the Greater London Authority (GLA) is sharing its demographic and economic projections with authorities in its wider hinterland in an attempt to construct a consistent picture of growth pressures. More general access to data is also improving through open digital platforms, such as London's DataStore<sup>15</sup> and the Leeds Data Mill<sup>16</sup>. In some areas such as Newcastle<sup>17</sup>, local foresight initiatives

<sup>14</sup> <http://www.london.gov.uk/what-we-do/business-and-economy/better-infrastructure/london-infrastructure-plan-2050>

<sup>15</sup> <http://data.london.gov.uk/>

<sup>16</sup> <http://leedsdatamill.org/>

<sup>17</sup> See Chapter 8 in Newcastle City Futures. 2015. *Newcastle City Futures 2065*, <http://www.newcastlecityfutures.org/NewcastleCityFutures2065Report.pdf> for actions to create a Newcastle city region research and literature database

supported by the Future of Cities project have acted as a stimulus to re-establish mechanisms for collating data and research at a wider scale.

## 3.2 New institutional relationships

Some local authorities are reorganising internally away from service delivery departments e.g. highways and education towards the achievement of broader objectives such as sustainability. This recognises the interrelationship between cross-cutting policy areas like health, the built environment and active transport, which are often more easily brought to the fore in explorations of long-term development. Bristol Council has a Head of Futures post in an influential advisory role to the elected Mayor.

Major institutional change is on the horizon following city devolution processes, in part driven by the aim of achieving greater national economic output and enhanced competitiveness. Some cities are securing new powers over transport, economic development, strategic planning and healthcare and are beginning to engage with the business community, citizens, and other stakeholders in innovative ways. For example the London Infrastructure Delivery Board set up by the Mayor brings together representatives of all the relevant utility companies and transport operators to share data, coordinate construction impacts and align growth forecasts.

The challenge will be to marry the different practices, cultures and realities at local and central government levels and provide solutions consistent with new administrative perspectives on self-organisation for long-term planning (e.g. collaborative cities, corridor growth across boundaries). Partnership arrangements will be critical to this, with the potential for changing current mixes of public-private-civic involvement.

## 4 Summary

City foresight offers a means to forge new relationships in this space. It is therefore timely for cities to engage in longer term thinking.

Current challenges	Future opportunities
<ul style="list-style-type: none"> <li>– <b>Increasing capacity</b></li> <li>– <b>Mitigating risk when raising expectations in policy areas where city governments cannot influence</b></li> <li>– <b>Developing city research &amp; intelligence</b></li> <li>– <b>Enhancing skills &amp; data sets</b></li> <li>– <b>Navigating political time horizons and changes</b></li> <li>– <b>Addressing perception that big cities advantaged</b></li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Changing national-local government relationships</b></li> <li>✓ <b>Newly elected Mayors demonstrating vision</b></li> <li>✓ <b>Initiatives for managing risk</b></li> <li>✓ <b>More integrated approaches to policy development and service delivery</b></li> </ul>