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NOTE:

The Greater Manchester 2040 project is a demonstration of work in progress in a complex political situation, so this report and all related materials for the moment are:

FOR DEMONSTRATION PURPOSES ONLY & NOT FOR PUBLICATION.

1) THE GM2040+ PROJECT

Greater Manchester was invited by the UK Foresight Programme at the Government Office for Science, to explore the long-term prospects for the city-region, with implications for policy.

A collaboration was set up to carry out a Foresight exercise - '**GM2040+**'. With funding from Government Office for Science (GOS) and the Greater Manchester (GM) Local Enterprise Partnership, the project involved New Economy and the Institute of Innovation Research at the University of Manchester. This report is the result of the main event, a Foresight workshop in November 2014, together with desk study and consultation throughout the project.

Context

GM2040+ is a spin-off from the UK national project on the 'Future of Cities', run by the Foresight Unit at the GOS, as on <https://www.gov.uk/government/collections/future-of-cities> and <https://futureofcities.blog.gov.uk/> GM2040+ also has links with parallel projects in Liverpool, Bristol and Newcastle, and a Future of Cities Network is now running to enable mutual learning.

Some very topical policy initiatives came up during the course of the project. In late 2014, 'Devo-Manc' set up the devolution of substantial powers to the GM Combined Authority. Then in early 2015, the 'Devo-Health' proposed that the entire NHS budget within GM be devolved and run locally, with huge implications for services and governance. The first issue was debated within GM2040+, but the second issue on health services will need a future round of Foresight.

Objectives

This project aimed to explore the 'Future of Greater Manchester', building on the national Foresight on Future of Cities, with 4 main objectives:

- develop 'Success Scenarios' which link visions to actions, to help GM to 'survive & prosper in a turbulent future'.
- link these scenarios to current policy / business agendas in GM (economic, social, environmental, urban etc).
- help to build capacity for foresight and strategic intelligence in GM, for policy, business and civil society organizations.
- include perspectives from other social groups such as youth (in progress as of March 2015).

Methods

We adapted standard futures methods to fit the main goal of developing ‘success scenarios’. So the method focused on a stakeholder workshop which took place in November 2014. Before and after, we drew on background study and consultation including –

- a) drivers of change, drawn from the UK project and tested with an online survey:
- b) alternative future scenarios, as adapted from other projects including the global climate change assessment of IPCC:
- c) other recent futures / foresight type exercises in GM.
- d) recent developments in the study of ‘transitions’ and ‘pathways’.

Scope in space and time

Clearly the local authority boundaries of GM are not the whole story: we looked at the functional geography of Greater Manchester, which covers the AGMA 10 authorities, together with links to the wider city-region / ‘Economic Development Area’.

For the timescale, the UK national program takes a 50 year horizon to 2065. However at the city or city-region level, a 25 year horizon is much more relevant to policy, in areas such as urban planning, transport and infrastructure, climate change and other issues. Hence the horizon of 2040, and the working title “GM2040+”

A working agenda: problems, opportunities & implications

Overall, the main thrust of all this is very topical:

- GM has great potential: to be a leader among world cities of its size, in many areas that create community, cultural, economic and environmental prosperity and well-being. The success scenario below sets this out in practical terms.
- GM has massive challenges: in the legacy of early industrialisation and de-industrialisation, and in the highly skewed development of the UK space. GM as a whole beyond the prosperous core, struggles with inequality and dependency, low skills and productivity, poor quality built environments, and in the near future the impacts of climate change.
- The current GM ‘Devo’ agenda offers many opportunities - but also risks - in the context of shrinking resources, organizational flux, lack of evidence and strategic intelligence.
- The implication is that GM could and should do more in ‘joined up thinking’ – one participant reporting publicly that each department in each area seems to work in its own ‘silo’. GM will need to build its capacity to think longer-term: to understand the inter-connections of complex problems: and to generate more integrated solutions for a wider cross-section of stakeholders.

2) DRIVERS OF CHANGE

As a starting point, GM2040+ tracked systematically the key 'drivers of change', which are likely to shape the future of GM in the period up to 2040. In practice things are complex: there are many inter-connections between global and local effects (e.g. climate change): or national policies with local opportunities (e.g. devolution): or a technology transition with disruption all round (e.g. social media). The project defined 21 drivers, adapted from the national 'Future of Cities', and filtered for relevance to GM. Each shows a mix of external forces and internal responses:

SOCIAL & COMMUNITY DRIVERS

Demographic change: Population growth and structural change: growing share of elderly and "100+": changing family patterns: growth of single-person households. **Inequality trends:** Growing enclaves of deprivation alongside enclaves of wealth: challenges to social cohesion: possibly leading to new forms of social enterprise & self-help. **Health & lifestyle:** Continuing pressure / restructuring of health service: advances in biotechnologies (genomics, stem cells, prosthetics, etc.): links to lifestyle, food etc.

TECHNOLOGY & INFRASTRUCTURE DRIVERS

Digital revolution: Continuing growth & power of Information Technology, including internet of things, wearable computers, AI & robotics, augmented reality, social media & 'Generation Y'.

Materials & manufacturing: "Reinvention" of manufacturing: new materials, 3d printing, nano-technology, robotics, bio-mimicry: 're-shoring' & new business models: re-use / recycling etc.

Transport & communications: Urban mobility / accessibility transition: smart integration / geo-location, electric shared / driverless cars, cycle / walking, HS2 / HS3, virtual reality etc.

ECONOMIC & EMPLOYMENT DRIVERS

Globalization: Rise of emerging economies as major producers and as mass markets. Changing division of labour, global value chains, offshoring, new forms of regional specialization. **Economic restructuring:** Continuing shift from industry towards services & finance: growing power of investors / corporations over local economic affairs, governance, infrastructure etc. **Work & livelihood:** Rising insecurity & decline of traditional / formal jobs, rise of freelancing, changing work-life balance: increased automation, polarization of workforce & career structures.

ENVIRONMENT & RESOURCES DRIVERS

Global climate & resources: impacts of climate change, incl. flood, drought, heat, storm: insecurity of resources (energy, water, food, materials): indirect impact of migration & conflict. **Local environment:** Trends in air and noise pollution: pressure for urban climate adaptation, flood

protection etc: increase in urban food, greenspace & biodiversity, healthy living etc. **Energy & low carbon transition:** pressure on energy system: new energy production, storage, distribution, harvesting: radical solutions in buildings & industry: carbon budgets & markets.

POLICY & GOVERNANCE DRIVERS

Multi-level & devolved governance: trend of partial devolution to GM & other city-regions, elected Mayor etc: changing relations between regions / nations of UK & EU. **Private-public balance:** Continuing public deficit & austerity pressures: privatization of formerly public assets and public services: responses in new public-private-community partnerships. **Trust in governance & society:** Growth of political distrust / alienation, extremist parties: responses in activism, digital governance, crowd-source participation & investment.

CULTURE & VALUES DRIVERS

Lifestyles & well-being: Diversification of lifestyles, rise of identity politics & new forms of community: changing work-life balance, social enterprise & community networks. **Migration & diversity:** Continuing migration trends: internationally / within UK: and both inward / outward: leading towards urban 'super-diversity'. **Education & skills:** Demand for new workforce skills, technical & social capabilities: potential responses in new forms of education / training, e.g. online, blended, lifelong learning.

URBAN DEVELOPMENT DRIVERS

North-south & regional balance: growth & overheating of London and Southeast: potential responses e.g. new regional distribution: rural migration & shrinkage of industrial areas. **Urban development & regeneration:** continued growth of regional centre / HE / airport axis: decline in town centres & polarization of urban areas: new forms of area & local regeneration. **Housing & community:** growing housing stress, supply / demand market failures: transient neighborhoods & communities: potential responses in new forms of housing design, tenure & finance.

3) ALTERNATIVE FUTURE SCENARIOS

Each of the 21 drivers of change involves uncertainty – so the next step is to cluster the uncertainties into alternative scenarios. GM2040 adapted a scenario framework from existing sources, including UK government, the IPCC (Inter-governmental Panel on Climate Change), and in GM as used for a EU project on urbanization (www.plurel.net). It's based on two main axes of 'either-or' possibilities:

- The future could be more top-down, centralized and globalized: **OR** it could be more bottom-up, decentralized and localized. (This is very topical with the debate on devolution for GM).
- The future could be more private sector and market focused: **OR** it could be more public sector and community focused.

The combinations of these generate 4 scenarios, shown here with both technical and more creative titles. The national picture is then played out with likely implications for GM.

- **'Global enterprise' ('BIG BUSINESS')** scenario: most of GM is run by multinational corporations. This includes a 'franchised' Mayor and local government, where decisions are made with 'Big Brother' style celebrity-crowd-sourcing. The Manchester Axis (Media City-Centre-Universities-Airport) grows rapidly, bringing huge wealth to its workers but sucking investment out of declining areas, which supply an army of low-cost labour. Digital technology accelerates so that today's latest smart phones are museum pieces.
- **'Local Enterprise' ('LITTLE BRITAIN')** scenario: most public services in GM are privatized and run by local /regional firms. Local government is reduced to a 'charity fundraising' role, dependent on local philanthropists. Technology innovation slows down as investment and markets are localized. Towns such as Bolton, Oldham etc, cut loose from Manchester, and try to re-invent local civic pride, but on a shrinking shoestring.
- **'Global Community' ('SMART GOVERNMENT')** scenario: GM is now the thriving centre of a 'Northern Arc' with a polycentric city-region from Liverpool to Newcastle, a global hub to rival London for finance, professions, education, culture etc. Development pressures on urban and rural areas are eased by a wide network of high speed rail / transit / driverless roadways etc, with large reinvestment in deprived & declining areas. Technology innovation is focused around the 'future internet of things'.
- **'Local Community' ('LIVEABILITY')** scenario: many people in GM downshift and drift away from the city centres, in search of liveable neighborhoods, ecological lifestyles, third age co-housing, and ethnic cultures. New communities take root, both in forgotten corners of the inner city, and in urban fringe / rural areas of Cheshire, Lancashire and the South Pennine hills. Technology is more focused on recycling and autonomous systems. Economic growth in GDP is lower, but 'quality of life' factors might be higher.

4) TOWARDS A 'SUCCESS SCENARIO'

With a range of future possibilities on the table, the next questions are – what are the ambitions of GM? And how, in the face of uncertainty and challenge, could they be achieved? For this we developed a 'success scenario', to explore what is 'preferable and plausible' for the wider community of GM. The workshop method set up 5 sub-groups: each explored the most crucial drivers of change: a comparison of GM with others: a general vision / ambition: and then 'exemplaries' of possible actions to achieve it. In very brief summary:

'Success' issues and ambitions

Governance and policy: concerns on public trust, limits of democracy, and rolling back the public sector in the face of austerity. With the recent 'Devo' programme, GM seems to be leading the way, but there are tensions within the city-region. General ambitions aim towards a more fully-fledged devolution in GM as the UK's most forward looking city-region, and work towards a new kind of governance which is more participative, IT-enabled, and joined-up.

Social and cultural: there are issues on demographic ageing, changing lifestyles, and rising inequalities. GM was thought to be 'above average' in responding to these issues. Ambitions for GM aim for a culture of diversity and inclusion of young and old: strengthening education and skills development: and opportunities for livelihoods in the social economy.

Environment and energy: as GM is less exposed than most to climate impacts, we focused here on a visionary concept for the 'circular economy' and the 'low carbon transition'. There are many barriers and challenges, such as the public love of air travel and resistance to low carbon transport, funding energy infrastructure and efficiency, and the general context of materialism and social inequality.

Economic development: GM is upbeat in its prospects, building on its position as (arguably) the UK's second city: however there are issues on industrial image, low skills and productivity, brain-drain to London, and wider questions on work-life balance and the meaning of prosperity. General ambitions aimed for a future knowledge economy with 'triple helix' of universities / policy / business: and looked for ways to spread the prosperity more widely around the city-region.

Built environment: industrial legacy leaves a rather problematic building stock and urban public realm, and GM was deemed below average in its spatial vision and planning capacity. Future ambitions for the built environment aim for housing and transport to be high quality, inclusive and integrated, but there are over-arching questions on how to achieve the vision – should it be democratic public investment or free market enterprise?

'Success' Pathways

The final step is to look for the bigger picture: to explore the ambitions and their inter-connections, test against uncertainties and challenges, and map out strategic 'pathways' towards success. To do

this we step back from details which depend on unforeseeable events: we focus more on strategic opportunities, in the form of ‘system pathways’, i.e. directions of travel and opportunity. These system pathways aim to build underlying qualities such as: resilience to pressures: creative innovation: learning and collaboration: joined-up governance and strategic intelligence.

Governance and policy pathways:

We should improve the **capacity of governance** for strategic learning and thinking, and widen the scope of participation in governance. Much more than the current version of devolution, there is potential for a radical rethink on how decision-making and public services could work, in an age of social media, cultural diversity, third sector providers, global supply chains and so on.

The first priority for such enhanced governance would be **joined-up thinking** and mobilizing the intelligence of all stakeholders: this calls for a combination of technical and human resources, with incentives through new forms of finance and value-added. Another priority is **local resilience**, in social, economic, political and technical terms. For instance it’s easy to say ‘go local’ for food, energy etc, but the reality is more complex, and more about collaboration and synergy between the local and other levels of the system.

Social and cultural pathways:

We should explore the potential for more **sustainable consumption and lifestyles** – a huge challenge, but there are ways forward. One starts with the urban high street, where traditional shopping is shifting towards more of a networked ‘experience’ and ‘interaction’, co-locating physical with virtual proximity: in this way it can be a physical hub for social interaction and cohesion in the community.

More widely, a social and cultural pathway to success raises many fine words – inclusion, prosperity, well-being etc. But within the limits of a democratic state as we know it, there are practical ways of renewing the social fabric: connecting the old and the young for mutual exchange: mobilizing the resources of isolated or disadvantaged communities: regenerating skills through social economy livelihoods.

Environment and energy pathways:

The ambition for a **circular economy** is not only about materials and energy, but about **finance and human resources**. It could start with a low carbon investment calculus, based on economic cost-benefit beyond the short term: including social and ecological values where possible (i.e. triple-bottom-line accounting and reporting). Investment in **renewable energy**, by public bodies, businesses or households, is then about dis-investment in fossil fuel energy: we should widen the **financial stakeholding** of energy infrastructure, beyond the large utilities to other kinds of mutual or community models.

Meanwhile the ‘carbon literacy’ program could enlarge to cover education, health, housing, transport, open space etc. (carbon emissions should be as *passé* as smoking was a decade ago). A

first test of this would be the **building retrofit** agenda: a governance / enterprise model is needed which can 'join the dots' between finance, technology, design / construction, social and cultural incentives.

Economic development pathways:

There is a realization that 'growth' is necessary but not sufficient, for a wider prosperity and well-being. So the economic and employment pathways look for ways to connect with this wider view: to spread the benefits to excluded social groups: to generate social investment where needed: to recapitalize small businesses who are starved of finance: and to connect with universities and other more global hubs of knowledge and expertise.

In practical terms new kinds of **business and financial models** are needed to improve the incentives and pathways towards re-investment, to unlock the financial power of pension funds, mortgage lenders, infrastructure providers etc. New models for social enterprise, community investment, cultural exchange and ecological stewardship are also there to be developed.

Built environment pathways:

Changing the **physical form and fabric** of the whole city-region is a long task, but some positive trends are in motion. For example the **20mph speed limit** in residential streets could have a positive effect (in addition to traffic safety) on green infrastructure, climate adaptation and quality of life, where it can be followed up with local social investment. Within public spending pressures, we need alternative ways to mobilize the energy, the needs and the resources of local communities to renew their neighborhoods and public assets.

For instance, **food projects** are springing up in many places: while the chances of feeding the entire city-region are small, there are many benefits in health, education, social cohesion and community development. **Low carbon transport** also depends not only on technology and markets, but on social and cultural factors. Spatial urban planning is crucial, but often slow moving: we can look for win-win synergies, which improve accessibility and mobility, combined with the low carbon shift.

5) RECOMMENDATIONS & NEXT STEPS

Overall, the above 'pathways' are preliminary sketches, to be explored in future rounds. These are likely to be in the context of the GM 'Devo' agenda, which brings many opportunities - but also risks - in the context of shrinking public resources, organizational flux, ecological pressures and social change.

The implication is that, whichever way the 'Devo' agenda goes, GM could and should do more in 'joined up thinking', and the resources and capacities which enable it. So the overall recommendations here flag up 3 practical strands of 'enabling':

- Build capacity in GM for longer-term thinking: a more mainstream and continuous Foresight program of strategic policy intelligence, with greater linkage into policy, business and civil society (of which this Foresight is but a small pilot).
- Build capacity for more integrated ('joined-up') investment for a wider community of stakeholders: including finance for social, cultural, ecological value-added and integrated supply-demand chains.
- Build capacity to stabilize and redress the widening gaps in the social fabric: balancing mechanisms for social inequality and demographic divisions, by promoting community enterprise and social livelihoods.

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