

Industrial Strategy Consultation

● Response from the Royal Geographical Society (with IBG)

The Royal Geographical Society (with IBG) is the learned society and professional body for geography and geographers in the UK. Our 16,000 Fellows and members are drawn from the breadth of the geographical community, including many from research, higher education and school teaching sectors, and from professional geographers in the public sector, business and industry.

In particular for this consultation we have consulted widely among the economic geography research community, and with geographic information specialists. Their expertise has informed the Society's response, which is set out below.

1. Does this document identify the right areas of focus: extending our strengths; closing the gaps; and making the UK one of the most competitive places to start or grow a business?

There is broad agreement with these areas of focus, with caveats as set out in the points below. **Each of the areas represents a major challenge to policy, implementation and delivery.**

1.1 Many attempts have been made over the past 50 years to address some of these issues, without marked success. **Fundamental to achieving the aspirational step change set out in the Industrial Strategy is significant and sustained commitment, both in terms of policy direction and resourcing, over many years (i.e. several election cycles).** We recognise that this will require some difficult choices over the foreseeable future given the other resourcing pressures that are likely to arise from ageing, healthcare, social welfare, pension provision and defence.

1.2 We can see **potential areas of conflict between the objectives** themselves, especially when investment decisions will be made largely by private enterprise. In particular, it may well be the case that continuing forces of globalisation are reflected in further growth and development within London and the southeast, that reflects the strengths of our capital city as a global city and one of the most competitive places in the world to start or grow particular forms of business, but which will inevitably increase the gap between the capital and other regions. In addition, it is not entirely clear how aims to create a more equal, fairer society are being squared with the goal to ensure global competitiveness. Thus, there will need to be some trade-offs and the need for that should be made clear from the start.

1.3 The geography community welcomes the emphasis on place that runs through parts of the Green Paper, but suggests that **'place' should be developed more fully as an integrating theme.** It is clear to us that no attempt at closing gaps in growth and economic development between areas of the UK can be achieved without explicit recognition of the extent of difference that exists between and within regions, cities and rural areas; and without having the capacity for place-specific suites of initiatives or interventions.

1.4 More could be made of the expertise of human geographers, and economic geographers and geo-spatial analysts in particular, in developing the evidence base for regional and place-based approaches to economic growth in the UK and other countries. Similarly, the geography community could play a valuable role in shaping and evaluating spatial policy flowing from the Industrial Strategy.

2. Are the 10 pillars suggested the right ones to tackle low productivity and unbalanced growth? If not, which areas are missing?

The pillars would appear to be a reasonable starting point, **but with some serious caveats**, as follows:

2.1 Our responses suggest that a much **better understanding of the underlying drivers of the UKs relatively low productivity**, in comparison with some of its neighbours and trading partners, needs to be established, if interventions are to be successful.

This also includes the drivers of the clear spatial dimension to productivity differences. (Most of the cities in northern Britain had lower than average UK labour productivity in 1971 and 2014 while most of those in the south enjoyed above average UK labour productivity in both years.)

2.2 While the 10 pillars contain many of the building blocks to be effective, **more attention needs to be given to the development of an integrated approach**. There is a danger that the 10 pillar approach will focus on each pillar as a silo without considering the many and complex interrelationships between each of these activity areas and the added value that can be gained from an integrated approach to policy and delivery. For example, attracting and retaining the talent and investment for globally-competitive places requires the necessary physical and digital connectivity, housing and environment to make these places work and be desirable.

2.3 There is an urgent need across industry, government, and in local and regional institutions **to widen the capacity and increase the capability for data analysis and management**. The capacity to connect, integrate and analyse data is rapidly changing in an era of 'Big Data' and will continue to develop for the foreseeable future. This will not only drive new knowledge-based activities, such as smarter transportation networks and responsive and resilient cities, that are integral to the Industrial Strategy itself; but it will also enable new research and innovation opportunities in the digital economy.

2.4 As stated in Q1 response, the Green Paper is a welcome recognition that there is a need for an explicit geographical, place-based, dimension to national industrial policy and, equally importantly, recognises that places are in themselves different. However, 'place' is specifically identified in one pillar (i.e. pillar 9) and is also integral to another (i.e. pillar 10). **The role of place should be foregrounded more in the Strategy as a whole**. This is especially so given that there will be differences between local areas in terms of training needs, infrastructure investments required, existing strengths and the nature of challenges to be addressed. The Centre for Cities has taken this a step further, arguing that 'place should be the framework on which the various pillars are delivered and developed, rather than an individual component of the strategy'. Our respondents broadly agree with this if we are to strive for more balanced growth.

2.5 Our respondents have also identified the need to **extend/clarify the developing Skills Pillar (2)** in the following ways:

- **Explicitly include boosting skills of the future workforce through the social sciences**, as well as through STEM. This is to recognise the future needs for an imaginative, flexible and innovative workforce and the strengths that a social sciences training imparts in terms of:
 - (a) meeting the skills needs for further growth in some of the leading sectors in the UK, notably the creative, digital, financial, legal and marketing industries;
 - (b) providing, through geography in particular, training in data analysis and management; specifically geographic information and geo-spatial analysis and technologies (such as GIS and earth observation) that underpin much digital business development and service delivery; and
 - (c) meeting the needs for interdisciplinarity in the 21st century work place.
- Explicitly include the recognition of **training in entrepreneurship** within the skills framework.
- Recognise that in addition to improving basic and technical skills, our industrial future will depend on **the continuing supply of high calibre, well trained, flexible graduates across the breadth of arts, humanities, social science and STEM disciplines**. 80% of all graduate jobs advertised do not require a specific disciplinary background.

2.6 **Financial inducements to firms to locate in areas of policy interest are missing** (if only as ancillary tools). If by balanced growth we mean that areas of weakness in the provincial economy are to be brought more in line with well-performing areas, predominantly in the southeast, then it is difficult to see, in the light of most international practice, how there is no mention of financial inducement for enterprises to establish or expand in areas of weakness, whether statistically defined in advance (e.g. the “wards” of England defined for EU purposes) or those to arise from future major closures and automation. It would also be relevant for Government to assess whether/how granting financial aid (a) within defined areas, as by RDAs and the EU structural funding system, and (b) for movement between areas, as in regional development grants, (still operative in Scotland) have produced sustainable developments.

3. Are the right central government and local institutions in place to deliver an effective industrial strategy? If not, how should they be reformed? Are the types of measures to strengthen local institutions set out here and below the right ones?

3.1 To deliver this ambitious strategy, **effective inter-departmental working across government, and interdisciplinary approaches, will be vital**, given the wide ranging nature of the 10 pillars and their span across departmental responsibilities including BEIS; DCLG; Defra; DfE; Home Office and the Treasury. So, too will the right people, inside and outside government, with expert knowledge and understanding, to push these goals forward and to argue the case for resources. Both areas are yet to be developed.

3.2 Our respondents indicate that past experience suggests that **local development initiatives can often spark off intense competition between both areas and the agencies within areas**. Added to that, there already exists multiple institutions at the local level engaged in parts of this agenda, and new institutions being added (e.g. Combined Authorities / metro-mayors). Great care and leadership will be needed to ensure these multiple institutions work collaboratively and efficiently in delivering the Industrial Strategy agenda.

3.3 Many respondents argue that consideration should be given **to re-creating, in some form, a regional tier of co-ordination**, to integrate the different pillars in regional contexts, to ensure collaborative working between different agencies and to oversee strengthening of LEPs.

3.4 Several respondents have suggested that the **staffing and skills of the Local Enterprise Partnerships (LEPs) should be strengthened** with economic development expertise and geo-spatial data analysis skills, to cater for new kinds of enterprise and to ensure that these organisations can both work numerically and spatially (with demographic, economic data and geo-spatially referenced data) and communicate effectively with Combined Authorities, town planners, and the new Skills Institutes in their areas. There are concerns at the current levels of capability of many LEPs.

4. Are there important lessons we can learn from the industrial policies of other countries which are not reflected in these ten pillars?

4.1 The best industrial strategies are **very long term approaches in which policy evolves** rather than experiencing radical changes, and enjoys a broad cross party support. They are also very place-sensitive combining a focus on sector and place-based approaches.

4.2 That said, comparisons are often difficult not in terms of generic goals but in terms of the way in which policies relate to the **social and economic cultures** in which they are embedded. For example, German banks have often operated in a very different way to British banks in their support of small and medium sized enterprises.

Other consultation questions

A number of points made by the geographical community and relating to the more detailed questions in the consultation follow. These tend to be individual responses that relate to particular questions.

5. What should be the priority areas for science, research and innovation investment?

Science investment should not simply concentrate on STEM areas. **It must recognise and support the important contribution of the social sciences** in, for example:

- Contributing to **research and innovation** – such as in the digital economy and the creative industries;
- Underpinning **data management and ‘Big Data’**, including geo-spatial data - as a research resource, in aiding the roll out of innovation, and in evaluating success;

- Contributing to research to **inform the implementation and delivery of the Industrial Strategy** itself, such as in understanding changing demographic, socio-economic, labour market, and employment trends in different regions; understanding of the drivers of productivity in the UK; and the responses of regional economies to new stimuli and new institutions.

A second priority area is to develop **more expertise in the commercialisation of innovation**, beyond those activities the government has currently invested in. To embed this from an early stage, it should be a core element incorporated into focused training at universities in relevant disciplines; and with independent, quality guidance available to entrepreneurs from other backgrounds since by no means all innovation comes from the university sector.

New funding streams to support world class clusters of research and innovation, either business or university led, in any part of the UK, would be helpful.

6. Which challenge areas should the Industrial Challenge Strategy Fund focus on to drive maximum economic impact?

While the Government cannot 'pick winners', the UK does have particular strengths (e.g. pharmaceuticals, motor vehicles, certain electronics, certain business services (including digital, geo-spatial, advertising, as well as finance) and areas such as fashion and design) that it should assist and from which it should promote branching into new and related activities. Government should also actively promote the development of the new technologies of the future (.e.g nano-technology), again by targeting specific centres and capabilities in the regions.

9. How can we best support research and innovation strengths in local areas?

Transformative policy will be required to address the long-standing regional and city-level imbalances in economic performance and productivity across the UK. Major institutional innovations are required, such as: properly funded and resourced regional centres of technological development and transfer, linked to local universities and incorporating local networks of leading firms; well-founded technical education institutes; local business banks; regionally-based venture capital and private equity markets; regional infrastructure strategies and funds. The aim should be to promote in every region, technologically innovative industrial ecosystems, networks and clusters, and to encourage the development of local supply networks and value chains.

10. What more can we do to improve basic skills? How can we make a success of the new transition year? Should we change the way that those resitting basic qualifications study, to focus more on basic skills excellence?

- Build a long term investment in the teaching profession at primary and secondary level, backed by cross party support for education policies such that policies do not radically shift with each election. Recent school curriculum overhaul and development (2011-2016) has been beneficial. Retain policies that combine excellence in knowledge-based AND skills-based learning – not either / or.
- For those that are more academic, sustain the English Baccalaureate as a target measure of achievement in core enabling subjects, including maths, science, English, geography or history and a modern foreign language, and which also leaves sufficient curriculum time for additional options.
- Create and sustain a high quality, clearly specified, technical education provision (and progression) that is viewed on a par with academic qualifications; for generations our technical education has been poorly conceived, poorly provided, and poorly perceived by employers. The core technical routes proposals are welcomed; but must accommodate change over time in technical skills needs.
- Ensure the 'transition year' not only provides basic support in English and maths, but also in digital skills, which will be essential workplace tools for everyone in the coming years.
- The loss of Education Maintenance Grants has made for serious difficulties of access to FE Colleges.
- Resource all maintained schools, academies, and FE Colleges effectively (more than at present).
- Dramatically improve the careers service and advice, for pupils of all abilities and aptitudes, such that everyone understands what basic skills are essential for work, and what options higher level skills open up.

11. **Do you agree with the different elements of the vision for the new technical education system set out here? Are there further lessons from other countries' systems?**

The Society welcomes these proposals in general, BUT not the limited scope of Technical Institutes. Core training themes should not be restricted simply to STEM areas, but should include other relevant technical themes from across the social sciences.

Data skills and technologies should be one such theme, and embrace geo-spatial data (with GIS) as well as non-spatial data.

Further research to understand in detail the levels of STEM skills requirements of employers, where there is a gap, is to be encouraged. **With 80% of graduate jobs advertised not specifying a required degree (ie discipline studied), we do not support the sole focus of the Industrial Strategy being on STEM subjects.**

12. **How can we make the application process for further education colleges and apprenticeships clearer and simpler, drawing lessons from the higher education sector?**

A UCAS type approach is to be welcomed. However, the issue is perhaps not simply the application process, but to raise the quality, profile and status of Further Education colleges.

13. **What skills shortages do we have or expect to have, in particular sectors or local areas, and how can we link the skills needs of industry to skills provision by educational institutions in local areas?**

Addressing skills shortages in an area can be through enhanced local training and/or through increasing the attractiveness of the area to inward national movers. For example, place-sensitive approaches that explore the relationships between housing shortages and skill shortages in local areas are needed. The solution to a skills shortage might lie in housing intervention rather than the development of a set of skills policies. (This further reinforces the earlier point about integration across the pillars.)

27. **What are the most important steps the Government should take to limit energy costs over the long term?**

- Improve competitiveness within energy markets.
- Investment in infrastructure for affordable transport is as important for considerations of energy costs as those associated with domestic usage and should also be a focus for the steps taken in this area (Mattioli, 2015).
- Prioritise improvements in energy efficiency (particularly electricity and heat), for industrial processes, commercial building stock and housing. A large-scale programme of retrofitting housing stock should be a core plank of industrial strategy given the scale of the challenge and the domestic supply-chain opportunities.
- Set and maintain high energy efficiency standards for plant, equipment and products (particularly in the context of the UK's departure from the EU).
- Invest in demand side response and storage options that reward energy consumers for adjusting demand as a way of managing energy costs.
- Ensure the strategy on energy and green growth is integrated with the forthcoming Emissions Reductions Plan, and continues to remove high-carbon sources from the fuel mix to avoid exposure to higher carbon costs in the future.
- Enable better access by those least able to afford it to energy efficiency and micro-renewables as this would help to remove some of the burden of volatile energy prices from householders, particularly over the longer term. Those least able to respond to changes in energy costs or to afford sufficient energy usage are often not able to make any kind of upfront investment (even seemingly small lump sums) required to access efficiency and home energy schemes as they are currently designed (CSE, 2014). Focusing efforts on these groups is likely to be important to dealing with the socio-economic problems that arise as a result of higher energy costs over the long-term.

others to accommodating growth where it occurs. This pattern of funding, in conjunction with national infrastructure plans, must be consciously held in balance.

35. What are the most important new approaches to raising skill levels in areas where they are lower? Where could investments in connectivity or innovation do most to help encourage growth across the country?

The issue of connectivity demands a major reorientation in our thinking. The aim to boost the economy of under-performing areas such as the North calls for us to prioritise east-west as against north-south linkages. The Green Paper recognises this but it is addressed inadequately. The suggested upgrading of the A66 between Middlesbrough and Workington, for example, may well have merit in itself, but is not likely to generate significant extra growth. What is needed is a genuine prioritisation of the trans-Pennine links across the dense agglomeration of major cities between Liverpool and Hull. Key to this is the link between Manchester and Leeds that formed the original core of the Northern Powerhouse policy.

As with previous skills strategies, the issue of low skills is explained in the Strategy primarily by supply-side weaknesses, i.e. issues around the content of technical qualifications and the institutions that deliver them. In practice, it is well-established that in old industrial regions like the northeast and County Durham, issues of path-dependency mean that it is difficult to establish a substantial base of industries and businesses that operate at the higher value end of activities (e.g. R&D and design centres rather than assembly plants), and therefore create demand for high-level skills. In essence, a low-skills equilibrium cannot be solved purely through supply-side interventions; an issue that the skills element of the Industrial Strategy does not appear to recognise. Recent data from the North East Local Enterprise Partnership indicates that the supply of people with level 4 qualifications in the area is actually above demand at the present time, although there are shortages in particular skill areas and projections of shortages for the future.

While the industrial strategy is focusing on new technology and 'world-leading sectors' there is a danger that the more mundane parts of the economy are overlooked. Research produced to map out what is being called the '**foundational economy**' suggests that between 30% and 40% of employment is to be found in routinized, localised and often low-paid jobs in the private and public sectors. These jobs are the mainstay of local labour markets across the country and include activities such as cleaning, catering, food processing, retail, transport, utilities and welfare/social care. These jobs are often labour intensive with low levels of technological investment and innovation, very low productivity, and they tend to be very low paid and often sub-contracted. Projections suggest that some of these sectors are likely to see substantial employment growth over the medium-term.

The industrial strategy needs to include a focus on these jobs as they underpin the labour market across the country and are a major cause of inequality (in household incomes and wealth). There is a need for policies which focus on upgrading skills and developing career ladders in these sectors in order to help reduce low pay and in-work poverty. This includes focusing on skills of individuals in employment as well as the non-employed.²

36. Creating the right institutions to bring together sectors and places

The recognition of universities as important drivers of local and regional economic development and innovation is welcome. UK universities are already working to a great extent with businesses, city governments and the third sector. There is scope for Government to support universities to play a much bigger role in catalysing the processes of local social innovation however. There is growing evidence that the core tasks of research and teaching can be strengthened by working in collaborative partnerships with the local community. A number of universities in the UK have picked up lessons from the USA and developed Community-University Partnerships (CUPs) that focus on the reciprocal benefits of collaboration in relation to research and teaching.³ CUPs can co-produce solutions to pressing local problems and can strengthen the skills of graduates, with wider benefits for economic growth. The university can be seen as an anchor institution that can play a key role in nurturing the civic infrastructure of a geographical area. Greater encouragement could therefore be given to CUPs, with a small amount of investment to support individuals to build and sustain relationships between the university and local communities.

² For more information see summary from an ESRC project on *Harnessing Growth Sectors for Poverty Reductions*: <http://ppiiv.org.uk/files/2017/02/Growth-Sectors-Data-Analysis-on-Employment-Change-Wages-and-Poverty.pdf>.

³ Harney, L. and Wills, J. (2017) *Infrastructures for impact: Community-University Partnerships in the UK and USA*. London: Mile End Institute. Available from the author and/or the MEI website.



38. Are there institutions missing in certain areas which we could help create or strengthen to support local growth?

Geographical research over the last two decades has shown the economic significance of functional city regions and demonstrated that innovation and economic growth are essentially driven by and from city regions. Formal recognition of a key set of city regions combined with the steps taken to encourage devolution have together provided institutions with the ability to develop greater place-sensitive strategies at local and sub-regional scales. Therefore it is the key city regions that need to be given more support and encouragement.

The purpose of existing/new institutions needs to be clearer, so as to avoid confusion and competition between institutions (at local, regional and national scales).

Combined Authorities can potentially be important in supporting local growth, but at the moment their limited development means that large areas of the country will not be covered by them.

More radically, some of our respondents are of the view that the longstanding imbalances in economic performance and productivity across the UK require a rethink of the centralised economic policy-making machinery, that goes beyond the limited devolution of certain fiscal and policy powers to a small number of city regions, as currently underway.

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