

Infrastructure planning and spatial planning: Current relationships in the UK

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Abstract

There have been discussions in a range of contexts of the links between spatial planning and actions on major infrastructure. Here this relationship is framed by considering the political, ideological and geographical drivers of state policies and actions in the spatial planning and infrastructure fields. The empirical focus is a study of current large scale spatial planning activities in the UK over the last decade or so, largely within England. Analysis of these cases shows the importance of understanding planning and infrastructure together, given that the emerging initiatives on infrastructure and in big spatial planning are very much connected.

Introduction

There have been varied explorations of the relationship between spatial planning and public policy on infrastructure, especially big infrastructure. Schematically this relationship may be seen as taking three forms: infrastructure dominating planning, infrastructure one of a balanced (if changing) set of inputs to planning, or infrastructure not seen as important compared with other dimensions. For the first a study of Netherlands planning (WRR 1999) suggested that infrastructure was taking over planning, replacing previous emphases on housing or agricultural or environmental concerns. Herce (2013) argued that urban development has always historically been led by key infrastructure systems, that is to say that not only was planning often dominated by infrastructure concerns, but that urban development always took its main cue from infrastructure drives. For the more balanced relationship, a recent study suggested that certainly infrastructure was a big element of Dutch planning, but saw a tandem approach with water management and housing (Priemus 2017). Certainly an integrated approach of some form would always be the preferred approach from within planning thinking (Stead and Meijers 2014). Neuman's historical studies (Neuman 2009, 2014) also saw infrastructure as one core element in planning's era of emergence in the nineteenth and early twentieth centuries and argued that reconnecting to the field would be a sensible way for planning to re-find its former importance. In contrast much academic writing on planning has taken relatively scant interest in the role of infrastructure, at least up to the last decade or so, seeing social, economic and environmental dimensions as the main components to be balanced in an integrated approach.

There has been consideration of the planning-infrastructure relation across different planning scales (Morphet 2016), including the national (Marshall 2012) and the European, where possible drivers have been the Trans European Networks programmes (Marshall 2014a), as well as, more normally, at city regional scales (Neuman and Smith 2010). Neuman's approach is particularly relevant to the discussion here, as he was basing his analysis and recommended approach largely on US experience, where the roles of state and private sector are often nearer neoliberal ideals. By neoliberalising is meant the drive to reduce the force of public planning and steering by means of budget cuts and reorientations, deregulation across many areas, including planning itself, and privatisation in its many forms (Harvey 2005). The forms and extent of neoliberalisation of the state affect the nature of the planning and infrastructure relationship. The US and the UK are both seen as leaders in neoliberalisation, in economic policy, but also in the specific fields most important for planning and infrastructure matters, including tax policy, privatisation, and systems of regulation. This drive saps the strength of planning systems and changes the framing conditions of all related fields in favour of the private sector. The literature on the variants and degrees of neoliberalisation points to the need to examine different national contexts and policy sectors

(Brenner et al 2010). Analysing the approach of recent UK governments provides an input to the understanding of how the intertwining of infrastructure and planning is evolving, within a neoliberalising context.

This paper therefore adds to the debates on the infrastructure – planning relation, and explores them by means of a study of emerging practices in the English part of the UK. The contribution of the paper lies in the particular focus on recent changes in the field analysed, that is in state infrastructure policy and in initiatives in England in “big planning”, seeing infrastructure and spatial planning *together*, not as discrete areas of activity and interest. Wong and Webb (2014) is one discussion in this area, but it has not been the focus of much recent academic work, which has often concentrated on more local scales, or discrete areas of policy like transport or other sectors. This means that the real spatial planning by the state is overlooked, overshadowed by areas (equally important) such as localism or deregulation. The paper is exploratory, not presenting a fully theorised explanation. It examines the tendencies visible in England, pointing to directions to be developed and themes to be expanded. The propositions are that the links between large scale spatial planning and infrastructure policy are underexplored, that these links are in part ideologically conditioned, particularly by ongoing neoliberalisation processes in the UK over the long term, and that the specific forms need to be analysed in relation to English political and geographical particularities.

The main empirical focus is on four recently developing state infrastructure policy initiatives in England. Two initiatives are in the work of the National Infrastructure Commission (NIC), on the National Infrastructure Assessment (NIA), and the Cambridge to Oxford Arc. The third is the equally recent strategic work of Sub-national Transport Bodies (STBs), particularly that of the most advanced, Transport for the North (TfN), with strong dimensions of economic and spatialised thinking embedded within it. The fourth, HS2, for new high speed rail lines, is quite different, as it has been developing now for over a decade, and it is the largest and most powerfully impacting infrastructure project in the UK in the present period. All four are nevertheless work in progress, and illuminate the evolving relationship between infrastructure policy making and spatial planning.

The paper therefore represents a reflection on the continuing evolution of UK state policy towards spatialisation, especially in relation to big infrastructure systems. This is within an era in which neoliberalised approaches to public planning remain dominant, intensifying since 2010 in their depth and range in the majority of policy fields (Ellis and Henderson 2016, Lord and Tewdwr-Jones 2013, 2018). The key developments examined here are within the English part of the UK. Inclusion of Scottish infrastructure policy making within the account would vary the argument significantly, and the Wales government is also taking an increasingly distinctive approach with its gradual assumption of more powers on planning and some infrastructure sectors.

Infrastructure and spatial planning – exploring the relationship in England further

State policy on infrastructure

Governments in the UK have had a distinctive approach to policy on infrastructure, with some continuity over several decades, but with a neoliberalising tendency visible through the years since the 1980s (Marshall 2012). This has been determined in large measure by the ideological commitments of successive governments. Privatisation of key infrastructure sectors laid the foundations for subsequent policy, which was moved on by New Labour innovations on planning reform in the 2008 Planning Act, alongside other infrastructure

policy related measures as varied as the 2003 Aviation White Paper and the 2008 Climate Change Act.

This set of policy directions was then continued by the post 2010 governments, again with innovations, such as a gradual turn away from sustainability as a key factor in energy and transport policies. An even stronger priority has been given to what are conceived as economic matters, essentially making the activities of private profit seeking actors less constrained by collective, especially government, action. This is often described as favouring “growth”, and may be considered from a critical economics point of view to be only lightly if at all connected to genuine and sustainable prosperity (Jackson 2017). But headlining growth in an undefined way is a fundamental ideological stance, shared often across a wide spectrum of actors (including for example many local authorities). Alternative economic policy approaches are available, changing what growth would mean (IPPR Commission on Economic Justice 2018).

Since 2010 there has also been an intense stress on cutting state spending. Within this programme, infrastructure spending has been partially protected, primarily for transport (mainly road building and the proposed high speed rail HS2)ⁱⁱⁱ. Other sectors, especially local government, have been cut back by historically unprecedented proportions. The ministry dealing with local government saw a cut of just over 50% from 2010-2011 to 2015-2016 (Gray and Barford 2018). Extensive study now exists of the resulting “austerity urbanism” (for example Hastings et al 2017).

However there is another side of the post 2010 governments, marked by pressing on with the preferred projects, including Crossrail, HS2, road building and airport expansion. There have also been institutional innovations such as the making of “National Infrastructure Plans” from 2010 onwards (these being more lists of projects than real plans, Fischer 2012) and then the creation of the National Infrastructure Commission in 2015, in order to generate an evidence base for future investment into the long term. We therefore see a mixed picture, with the UK government in many ways presenting a classic example of neoliberal state cutback and stress on accumulation above social redistributive or sustainability considerations, and certainly with no national spatial strategy for England or the UK, as has long been seen as desirable by academic and policy observers (Wong 2002). But there has also been a proactive element of fresh ways of thinking about and planning future infrastructure investment, most evident since 2015. So whilst planning is indeed overall encased in the UK within a neoliberalising state (Allmendinger 2016), there are significant lights and shades within this process, which have potentially critical significance in relation to infrastructure.

Spatial planning

On the other side of the relation, spatial planning has been undergoing a more complex shift, with less continuity over the last decade or so. Haughton et al (2010) provide a convenient historical vantage point to look both back on the era of territorial management which they researched, and forward to the current situation. I note particularly two features of the New Labour era of strategic, regional and national planning in the UK and Ireland which this team analysed. First was its fully multi-scalar character (including the EU scale). Second was the emergence of all sorts of less formal, in-between or fuzzy or soft space planning, in contrast to the quite extensive battery of statutory and formal planning existing in all these jurisdictions at that period. Parts of these features have survived through to the very different present time, but transfigured by changes. Planning outside statutory plans remains in varying forms, but within a landscape of broadly cut back and less multi-scalar planning, with the abolition of all regional institutions in England in 2010, and now the winding down of EU

influences on planning. This sits alongside a stronger centralised territorial direction (given the weaknesses of sub-national public authorities in England) represented by key ministries and agencies: Highways England, Network Rail and the Department for Transport (DfT), the National Infrastructure Commission since 2015, the Department for Business, Energy and Industrial Strategy (BEIS). There is nevertheless some discussion as to whether changes to the National Planning Policy Framework in 2018, alongside emerging work by combined authorities, may point to some return or reinvention of strategic and spatialised planning (Morphet 2017, Riddell 2018). I do not pursue this dimension here, but its impact up to the present seems limited in most parts of England.

Spatial planning has changed, there being far less in England overall since 2010. This resulted especially from the culling of regional and regeneration institutions and budgets in 2010-2011 (Swain et al 2012). But this left a vacuum, something not liked by most developers, who wish to minimise risk. So the initiatives described here can be seen as the gradual search for ideologically and politically acceptable ways to fill that vacuum. An analysis by a highly experienced planner described initiatives in England in relation to this vacuum, identifying an “off-piste” planning system in operation, consisting of a swathe of uncoordinated activity by numerous disconnected agencies (Lock 2018).

The relationship between state infrastructure policy and spatial planning

The relationship between infrastructure and spatial planning may be seen as having ideological, political and geographical components.

Ideologically, the tensions can be seen in the varying postures of governments in relation to both sides of the relationship, with planning unpopular with Conservative governments, at least in its traditional British manifestations, and with an evolving new approach to infrastructure policy, both private sector and state driven, over the last two decades. On infrastructure Labour and Conservative approaches have shown significant overlaps.

Politically, the need to keep certain sectors and electorates happy with government directions has also pressed certain elements of infrastructure policy, such as support for Crossrail and HS2. A useful way to think about these ever evolving political landscapes lies in the discussion by David Wachsmuth of infrastructure alliances. Wachsmuth was researching the behaviour of big coalitions of cities and regions around large infrastructure projects in the US, and came to the conclusion that the best way to analyse this politics was to scale up the growth coalitions concept invented to describe US city politics in the 1970s (Logan and Molotch 1987, Wachsmuth 2017). Thus an infrastructure alliance is, like the growth machine on which Wachsmuth has modelled it, a coalition of public and private interests pressing for certain infrastructure investments which will, they hope, help to secure growth for their region. Wachsmuth found numerous infrastructure alliances to be active – he identified 171 such multi-city economic development partnerships in 2013 in the USA. The precise mechanism he presents, in relation to supply-chain expansion, is not one I find useful in the UK case, but the idea of governments obtaining the support of local elites by promoting infrastructure projects is one that fits well in much of what follows.

Geographically, there is a material base to big infrastructure and spatial planning, of any kind, which needs to be borne in mind. This is of course filtered in part through geographical or spatial imaginaries (Marshall 2012, 2014b, Allmendinger et al 2015, chapter 10), but here the direct force of geography is stressed. Two dimensions of this are mentioned here. One is size - England is small. This affects consideration of all development, and especially the policy making around big infrastructure. For example the search for water for the booming nineteenth century cities had a strongly driven geography – sources in Wales for Birmingham

and Liverpool, in English mountainous areas for Leeds, Manchester and Sheffield, reservoirs and boreholes to aquifers for London. High speed rail has been discussed within a context of relatively small distances between the core cities at least of England. Airport expansion always hits up against the question of whether it would be possible to satisfy some southern English demand by expanding midlands airports, even though the consistent resistance to this argument is striking. The building of HS2 will change the time geography of England dramatically, and could have been taken into account much more fully by the Airports Commission of 2012-2015 (Davies 2013, 2015).

The other geographical dimension is (partly connected to size) the intense contestation of all territories around England, but with some variations between the richer south and the rest. Much of this can be seen as being class based, with parts of the country held by those with high incomes and with historically protected spaces and landscapes defended very strongly, normally by the Conservative Party, the historical owner of these zones (Allen et al 1998). Other areas, like the nuclear power zone of west Cumbria (Blowers 2017), have tended to be more willing to accept generally unwanted land uses. This intensity and its variation are critical factors in the political geography (the geopolitics, Subra 2007), of both major infrastructure and the choice or non-choice of possible areas for new settlements.

Together these ideological, political and material geographical dimensions form a frame within which the interrelation of big infrastructure decision making and spatial planning is played out, over varied temporalities and spatialities. It is important to understand *together* the 2010-11 cutting back of spatial planning and the increased force of (some) infrastructure policy making in central government, with shrinking budgets targeted on particular projects of governments, above all road building, airports, and nuclear power stations, plus the high speed rail project and off shore wind farms. Analysts need to understand how these two transformations, in spatial planning at the above local scale, and in infrastructure drives, relate to each other. It is important to consider whether a newly configured spatial planning is being formed in the wake of some elements within infrastructure state policy making. To advance this consideration, I now present four vignettes which will highlight the infrastructure and planning relationship. They are clearly only a subset of all the topics which could have been chosen for this purpose, but the subset does illuminate important features of the post 2008 or 2010 period. I start with a commentary on just two aspects of the NIC's work since 2015. The analysis is based on extensive review of publicly available documentation on each sector or project.

The impacts of two parts of the work of the National Infrastructure Commission

The National Infrastructure Assessment

The NIC has had an eventful first period of life since its foundation in October 2015, with changes in the UK government and and in leadership of the Commission. But it produced its first National Infrastructure Assessment (NIA) in July 2018^{iv}, as planned, following a draft published in October 2017^v.

The discussion in the Treasury Parliamentary Select Committee at the time of the publication of the draft NIA gave insight into the thinking of NIC leaders. Present giving evidence were Lord Adonis (who resigned as chair in December 2017), Sir John Armitt, and the Chief Executive Phil Graham^{vi}. Most of the discussion was about transport, from Heathrow's expansion downwards to city region or even more local levels. At Q49 in the transcript, for example, Adonis argued the long term necessity to coordinate three massive rail projects, so that they all were completed at the same time in the early 2030s. This was long term mega-project state planning on a grand scale, the great majority likely to be publicly funded. One

project, HS2, is committed, and programmed to open in two stages, the second in 2033. The other two, for Crossrail 2 for the London conurbation, and a package of big rail schemes in the north of England, often referred to as HS3, are by no means committed, and seen as likely to stretch government finances if done at the same time as HS2. But what emerged from Adonis's argument was an integrated conception of economic, transport and urban development for Britain stretching decades into the future, and with some emphasis on low carbon necessities (often not a primary theme for the present UK government). A similar approach was taken to Adonis's passionate advocacy of the expansion of Heathrow, though here the argument, whilst presented as nationally beneficial for all regions and interests, had more of a pro-business tone than on other issues. But the same very long term and state led and coordinated thinking was present on this airports issue, and to an extent in discussion of city region issues.

Another feature of Adonis's Select Committee performance was his emphasis on the political dimensions of infrastructure planning. Adonis repeatedly argued for the need to build political alliances, especially with city mayors and other business and council forces around the country, as well as with all the infrastructure ministers. He stressed (for example at Q55) the continued support of political and business leaders round the whole of England for HS2 and for the expansion of Heathrow, having evidently met many of these actors quite recently. He also stressed (at Q26) the strong relationship to devolution of powers and ideally spending capacity to sub-national actors.

The most interesting feature of the 2018 NIA is the way it takes on aspects of the city regional agenda, primarily the transport dimensions, but also in considering the role of infrastructure in "unlocking" housing sites. This led to the substantial Chapter 4 calling for transport investment within sub-regions, and for the linking of such investment with planning of housing and other infrastructure. To planners, this sounded very like a call for the reinvention of spatial planning, even though it was not phrased in those terms. The following quotations give a flavour:

"Unlocking growth in cities requires:

- developing integrated strategies for housing, employment and transport, to allow cities to grow and people to live and work where they want
- devolving planning and funding for urban infrastructure to all cities
- prioritising major upgrades for cities with the most growth potential and capacity constraints
- £43 billion of additional investment in urban transport by 2040" (NIC 2018a p70).

"Transport policy needs to be integrated with a clear strategy for where housing growth can be accommodated in and around cities, and where employment growth is likely to occur...City leaders should implement long term plans for their city-region reflecting their own economic and social priorities, based on their own local knowledge and accountability. These need to integrate transport, housing and employment. Other urban infrastructure, such as digital (see Chapter 1), electric vehicle charging (see Chapter 3) and flood resilience (see Chapter 5) also needs to be considered" (NIC 2018a p75).

So, both some of the textual content of the NIA and presentations by its leaders point to more spatially aware thinking than has been the UK government norm since 2010. The NIC subsequently moved to set up a joint work programme with the 45 larger towns and cities in England, in order to progress this chapter of the NIA, to develop ambitious urban infrastructure plans (NIC 2018b).

In addition to the work summarised above on the NIA, the NIC work on the Cambridge to Oxford Arc has stimulated interest in possible new forms of sub-regional spatial planning, as described next. At the macro regional or national scale, other possible emerging forms are described in the sections following after that, on the impact of big scale transport projecting, for a strategy from Transport for the North, and for HS2.

The Cambridge to Oxford Arc

The NIC was commissioned by government in late 2016 to carry out a study of the potential to improve the functioning of a “corridor” between Cambridge and Oxford, including Milton Keynes and adjoining areas, in particular the role of transport infrastructure (East West Rail and an Expressway) in opening up areas to housing and other development. The study was completed in autumn 2017, when the NIC issued a final report, suggesting how central government and above all local authorities and other local actors could take forward their proposals^{vii}. This has been seen by observers as a somewhat strange commission for the NIC, given that the schemes cannot be easily defined as nationally important infrastructure: the East West Rail line has been long written into future investments, and the issues around it are similar to the rest of the programming decisions in Network Rail and the transport ministry’s workload; the proposed Expressway is part of the work programme of Highways England, again to progress, if appropriate, in the normal way. The government argued that the corridor constituted a part of the national economy whose future success was critically important, and also put much of the justification of the study on the need to open up large new greenfield areas for housing in southern England, seeing this part of the country as a potentially suitable candidate, with the help of key infrastructure investment. The justification in other words was on what might be called national spatial grounds, looking somewhat like a state led spatial plan, however disguised and partial, perhaps with similarities to the 2003 Sustainable Communities Plan, which sought to promote growth areas in the Greater South East (ODPM 2003).

The result was to involve the NIC in an experimental approach to spatial planning, whereby a part of central government would oversee a whole tranche of English territory and its planning (normally to be left primarily to local councils, under the “localism” regime of post 2010). This was accompanied by the promise of extra resources for building roads and railways and contributing towards the conditions to make new settlements possible in the area. Locations were identified for such possible settlements, as well as suggestions on the management of the largely freestanding city regions of Oxford, Milton Keynes and Cambridge. Also, a new governing structure was proposed for carrying through this spatial planning, arguing for the necessity for institutional innovation, including a strategic partnership board for the whole Arc, and strategic statutory plans for the three main spatial blocks of the Arc, sitting above the local plans of the many local councils in the sub-region (see Figure 1). Some aspects were carried forward by a government response in late 2018 (HM Treasury 2018a), but there is a long way to go before this may lead to real change across the sub-region.

We may understand the NIC work on this corridor as a sign of the intention to reinvent spatial planning at this lower level, led by infrastructure investments coordinated by the state. However, if so, it is a very different kind of spatial planning from that existing under any previous spatial planning regimes (for example the structure planning, or regional planning eras).

INSERT FIGURE 1 ABOUT HERE

It is important to remember that this NIC project sits alongside a great deal of ineffective planning action in large parts of England since 2010, especially outside the metropolitan areas. For example the London Plan, the only powerful statutory above-local instrument which has continued to work after 2010 and which is being renewed under the current mayor, appears as a forceful planning tool within London, but beyond the borders of the GLA, it can only weakly discuss possibilities with the various shadowy groupings of the South East and East of England, as well as one by one with the dozens of individual authorities, to try to secure infrastructure deals and maybe commitments to take some of London's "surplus housing need"^{viii}.

Transport for the North – Strategic Transport Plan

Whilst the NIA points towards an infrastructure inflected planning approach, the Transport for the North (TfN) strategy (TfN 2018, 2019) is a blend of "economy and transport led" planning. But it does contain some spatial planning thinking^{ix}. This is not surprising, given that this macro regional strategy is somewhat nearer to the ground of normal local and strategic planning. It is also no doubt in significant part the work of professionals and politicians who were fully involved in the regional work of the 1990s and 2000s, in the three Regional Development Agencies and Regional Assemblies in the North (Swain et al 2012). TfN was founded in 2014-2015 as part of the then Chancellor of the Exchequer George Osborne's push to create a credible government presence beyond southern England, and particularly in the areas around Manchester. It then became a statutory Sub-national Transport Body in April 2018, under legislation enacted in 2016 – the first in England, likely to be followed by Midlands Connect^x. This represents continuing support in one government ministry, the Department for Transport, for elements of regional strategising. This linked with Osborne's interest in promoting the "Northern Powerhouse", the term invented in 2014 for the project to give central government support for efforts in northern cities to revive economies. TfN is modelled on Transport for London, the very successful body running the transport system in the Greater London Authority area, although for now it lacks the executive capacities and finance of TfL, being mainly a planning and promotional body. It does not run any transport systems, though it has already a say in the allocation of rail franchises in the north of England.

The Strategic Transport Plan (published in draft in January 2018 and finally in February 2019) builds on economic arguments and documents, especially the Northern Powerhouse Independent Economic Review (Transport for the North 2016), and rests on the idea that improved connectivity is a necessary element in the economic recovery of the North. This is now a shared belief across the infrastructure policy field, embraced by the NIC and the Treasury. This includes the idea that changed assessment of transport and other investment is needed. A "Rebalancing Toolkit" (Department for Transport 2017) is intended to support investments which might not normally be seen as worthwhile in standard Treasury cost benefit and financial assessments. Northern and Midlands regions hope that this will mean that more state investment will come their way in the coming decades.

The Plan is a long term strategy for transport investment, stretching to 2050. It has been put together by the "Northern Partners", largely the upper tier authorities and the business-led Local Economic Partnerships in the three northern regions. Its core is big scale transport investment, largely in road and rail, though with a strong emphasis on the "gateways" formed by Manchester Airport and the ports of Liverpool and Humberside, respectively the dominant air and sea locations in these regions.

There is a significant spatial planning component in the Plan. This is partly in the evolving analytical work. The 2018 draft proposed scenarios using classic planning method (2018 p 26), and deals with freight transport as well as people movement. It referred to a co-ordination deficit, and even said that “a move away from regional spatial planning has left a gap between integrated transport and spatial planning at the pan-Northern level” (p 28). This was explicit recognition of the impact of abolishing regional strategies in 2010, a rare comment in a public document. It considered the spatial structure of the northern regions, suggesting it differed from the rest of the country in having a “polycentric system of economic centres” (p 22). It put very great stress on the transformational nature of HS2 and how its impact can give maximum benefit, fully integrated with Northern Powerhouse Rail.

In prospective terms the final Plan is cautious in the two page section on Spatial planning (2019 p 152-153) and in a short section on how it proposes to work with partners on spatial planning and development (p 161). “TfN wants to build a collaborative and constructive relationship with the North’s 72 Local Planning Authorities” (p 152) and hopes that local plans will be aligned with the implementation of the Plan, promising to help authorities wherever possible. TfN wishes to continue to work collaboratively, for example in developing a Great North Plan (p 153). In part this will relate to the ongoing work on the seven “strategic development corridors” where it sees most of the biggest transport challenges being concentrated. The 15 page section on the corridors (four multimodal, three unimodal) in the final Plan remains rather impressionistic and it is clear that TfN is struggling with its limited powers, as it seeks to develop a transport and economy based approach to meeting the challenges of macro-regional or sub-regional planning (2019 p 126-141). Nevertheless this corridor work does, for the first time since 2010, constitute an attempt to re-engage intelligence on thinking about futures above the local level. The following section from the 2018 draft on the relationship with spatial planning suggests potential as well as limitations for the Plan:

“TfN wants to support local authority spatial and economic planning functions in developing an integrated approach to transport and land use planning that aligns with the TfN evidence base and long term Investment Programme.... It is envisaged that the Strategic Transport Plan and the long term Investment Programme will become more aligned with spatial land use plans, such as those around transport hubs, maximising the opportunities for economic growth and for users to access the transport network with good land use planning also contributing towards changing peoples use of the transport network, including shorter trips. Major, strategic investment can also support local growth plans, such as is the case around HS2 stations in the North” (TfN 2018 p 80).

Having highlighted the elements of spatialisation in this document, it is necessary to admit that the Plan remains essentially what it is intended to be: a sectoral plan for road and rail transport at the pan northern level, not a spatial plan with any integration, and also not an economic plan. We may assume that its creators do have aspirations in both these directions (an integrated spatial strategy and an economic strategy). The chairman of TfN, John Cridland, was director general of the Confederation of British Industry from 2011-2015 and pressed very strongly the importance of infrastructure for business, as well as being involved a great deal with environmental and social issues. He may be ambitious for TfN to extend its range of work.

HS2 and spatial planning

Britain has many infrastructure investments at any one moment, but only very few are extremely large and these are the ones that are claimed to be “transformative”. The Hinkley

Point nuclear power station and perhaps the Thames Tideway waste water scheme in London may qualify in terms of size, but neither would normally be called transformative, and certainly not in spatial or geographical terms. In the transport field, only the big rail schemes in London, above all Crossrail and Crossrail 2, the expansion of Heathrow airport, and HS2 (the high speed rail lines from London to Leeds and Manchester), are regularly cited in these terms. But the impacts of the London schemes, whilst very large, cannot be called national. The Heathrow expansion, whilst certainly nationally important, does not have the direct linear impacts of HS2 (Marshall 2018).

HS2 does potentially transform UK geography, in the sense of changing the accessibility of many places, and shifting the images and ideas of places. It can be argued that this transformative potential is why most political leaders have given it continuing support for a decade now, despite major crises in the UK. HS2 is a major destabiliser of spatial futures, an enormous stone thrown in a small pool (the UK is a small state seen in comparative terms, and this is even more the case for the territory most affected, England). It has been advanced and is now being implemented (bar some unpredictable further crises) without any wider spatial framing. Like the other mega-projects under way or proposed (described above), the NIC has to take HS2 as a given, even though in many ways that cuts out a big part of the future of Britain as up for discussion within the NIA.

HS2's history has yet to be written, but see Butcher (2018a, 2018b, 2018c). Another convenient and fully researched account can be found in Wikipedia articles^{xi}. The first thing to remember is that the key spatial decisions were taken rapidly after the effective conception of the project in 2007 (alternative schemas had been discussed for some years before). It was decided early on that a Y shaped route would deliver most for the money, not two separate lines and not a package of new lines around the whole country. That decision, to divide the line north of Birmingham, one line going to Manchester, one to Leeds, was absolutely critical in long term spatial terms, and governments held to that decision. So all discussion post late 2008 was checking if this was the right thing and then holding the line through changes of government and ministers and obtaining parliamentary approval, in 2017 (for the first phase). Another decision in 2008 would have generated different sets of losers and winners, particularly in linking in different ways to the existing rail system. The reason for the rapid decision was no doubt to have something formalised before the 2010 election, whilst the drive was down to the personal commitment and energy of Adonis as an unusually dynamic transport minister. Once that stage was reached, it proved exceptionally difficult for subsequent governments to back out of the commitment, given the political head of steam built up round the country for the proposal – in spite of some powerfully organised opposition groups, in many localities affected by the line.

However this is not to say that nothing happened below this headline decision. The second core feature of HS2 in subsequent years is an intensive process of national planning in interaction with a series of local arenas, whether against the scheme (above all in the Chiltern Hills, opposition bought off by extra money found for tunnelling), or in favour of the scheme. The supporters were everywhere from Birmingham northwards. Key decisions were where the new train stations were to be (generally and exactly) and how the arrival of a new high speed line was to be planned for in each city region, beyond the new stations. The number of cities to be served hardly changed from 2008-9 onwards, with the principle of few stops being largely maintained. But fights over exact station locations rumbled on in certain cases for years. Critical changes were also taken on timing, with the decision in 2015 to start construction of the line from Birmingham up to a new hub in Crewe in advance of the rest of the second phase (by 2027). For a big city like Liverpool not to be on the HS2 network was

felt to be intolerable: in 2016 the city of Liverpool offered to pay £2 billion towards funding a direct HS2 link into Liverpool city centre. So this is resembling French high speed line financing negotiation of recent years, where cities and regions have part paid for the later parts of the French system (though these places are comparatively rich compared with their UK counterparts, so there are big differences).

There is a contrast between the experiences of the East Midlands and Sheffield as to how to respond to this enormously important investment (as local elites saw it). In the East Midlands both geography and politics pointed to the advantage of siting the new station between Nottingham and Derby, not in a city centre but at Toton, an until now unknown urban edge of the Nottingham conurbation, from which Derby was reasonably accessible. The regional actors collaborated from the start on how to maximise the gain from the arrival of HS2 – even though this was an arrival two decades or more into the future, not the normal timescale of city politicians. The “East Midlands HS2 Growth Strategy” published by East Midlands Councils in September 2017 was the most developed example of the work being undertaken by councils in the region^{xii}. East Midlands Councils was the slimline body maintained after the regional abolitions of 2010, and a very significant part of its work ever since has been collaborative strategising around HS2. All the strategic authorities and Local Enterprise Partnerships in the region signed up to the document. It effectively constitutes a kind of sub-regional strategy for the area centred on Toton, as can be seen on the “Strategic Context Diagram” and the “East Midlands Hub Growth Zone Diagram (see Figure 2 and 3). New housing areas, areas of business and educational and training investment, integrated packages of investment in other rail, road and links to the East Midland Airport not many miles south of Toton: all these are related to this state investment expected to arrive in the early 2030s. A diagram showing the national context shows how regional strategisers and elites saw the HS2 project affecting their insertion into Britain and the wider world (Figure 4).

INSERT FIGURES 2, 3 AND 4 IN THIS SECTION OF THE PAPER

So in the East Midlands case the existence of HS2 gave an important cooperative focus for councils desperate for good news to be able to tell their electorates. It generated the need for spatial planning thinking, to work out how the new station and the new accessibility contours generated by HS2 as a whole would be best exploited for the common regional good. A kind of alliance of local and regional actors with central government was formed, around infrastructure.

The effects in the Sheffield region were much less positive. The 2013 decision to locate the new station north of Sheffield centre, in Rotherham council’s territory, generated years of acrimonious dispute, and was overturned in favour of Sheffield in 2016. During the days of regional governance up to 2010 Yorkshire had always had to balance the claims of different parts of the region, giving something to all big urban zones. The abolition of the Yorkshire institutions left scope for competitive city regionalism to flourish, in fact for the intensest form of parochialism, each council for itself. Leeds was able to keep away from the arguments to some extent, as the richest city and with an HS2 stop guaranteed in the city centre. Sheffield fought to get the HS2 stop in its centre, whilst Rotherham, Barnsley and Doncaster councils all favoured the Meadowhall proposal. The disputes ran on and affected seriously the proposals from around 2013 to set up a combined authority in south Yorkshire (Sandford 2018). An order to set up the authority was made in 2014, but at the time of writing the dispute over the membership and functioning was rumbling on, and a financing deal with central government had not been finally resolved, so trailing behind most other metropolitan areas.

These two examples show the actual working of spatial planning in the real sense – interaction with the powers that have money (here the central state) over key aspects of territorial futures. As these city regions are not prosperous areas, the politics in this period came down to a desperate fight for anything which might deliver jobs, in short or long term. Of course the rest of everyday planning continued, the making of Local Plans and the operation of the decision making system on planning applications. But in the absence post 2010 of any forum or vehicle for above-local spatial planning, the real planning at that level was very much clustering around infrastructure decisions and management. So HS2 is about real state management of territory, starting from transport infrastructure.

Concluding discussion

An evolving regime

In summary, in institutional and power terms, we can see a spatial planning and infrastructure regime which is central government led and dominated, even though there are distinct parts of central agencies and departments with somewhat differing approaches (NIC, DfT, MHCLG). This government leadership is articulated with an emerging set of sub-national institutions, including city region combined authorities and LEAs, and some proto/residual regional structures (TfN, Midlands Connect, remaining regional bodies like the East of England LGA, East Midlands Councils).

Political and ideological conditioning

The processes analysed here are deeply embedded in politics, often of a non-transparent form, about which normal citizens would know little or nothing. This is in spite of a certain culture of consultation in infrastructure agencies and many councils. Looking first at city regional level spatial management, one way to think about the political dynamics is in terms of infrastructure alliances. Central government has allied with local elites in many areas, to offer a picture of long term provision of required infrastructure, linked to more everyday planning concerns. The Northern Powerhouse, a flagship vehicle of Conservative government politics, is matched by equivalent manoeuvring in other regions. HS2 in some ways resembles one massive long term infrastructure alliance, complete with training colleges and supply chain organisations, with some gains spread around as much of the affected parts of the country (above all the midlands and the north) as possible^{xiii}. More broadly the old term growth coalition catches a great deal of the spatial planning and infrastructure relationship since 2010 in England. Growth is the preferred term for the “combined steering” that we may see as the current form of above-local planning in England, made up on the one hand by numerous local Deals (on housing, business and training, in particular), and of big infrastructure investments on the other hand.

This is the political and governing formula that has been found to fit the post 2010 era. It is nothing like the more conventional planning and spatial formulas of the 1990 to 2010 era, when regional planning and management, alongside coordinated regeneration investment schemes, were the chosen mechanisms. Now the system is managed in a more ad hoc and complex manner, allowing central government to dominate to an even greater extent than in the previous era, through a series of deals and negotiations with localities and key interest groups.

Turning to the national level, a kind of national spatial steering is evolving, which is strongly affected by the big infrastructure planning and policy led by central government. This approach is unlikely to be as effective as national planning (as in the Netherlands or Scotland,

both strongly infrastructure and economy inflected now), or as the package of Regional Spatial Strategies (if they had been developed and improved, not abolished in 2010). But as we can see in the case of the major choice on the Y shaped route of HS2, and also with the decision to expand Heathrow, key spatial decisions are made. The work of Transport for the North is partly at an intermediate level, but the decision whether to fully resource “HS3”, that is major rail improvements in the North, will be key to TfN’s prospects, a decision reflecting national level judgements.

The ideological framing no doubt requires an approach of something like this kind, because the post 2010 era is predominantly critical of planning and local government leadership, given the scale of public sector funding cuts (Gray and Barford 2018). So a particular politics and geographical management is likely to follow, once that ideological frame is set. Big infrastructure is left as one acceptable “supply side” card for governments to play, and the playing of this card selects strongly for a politics of the kind we have been analysing here.

Prospects

The NIC initiatives have a higher quotient of long term strategic planning embedded in their thinking, and so contain a challenge to the ideology of recent governments. The Cambridge to Oxford corridor initiative may be blocked by mobilised opposition, beyond the building sooner or later of the two intended transport projects, unless significant institutional innovations are made to enable progression. But the National Infrastructure Assessment presents the larger challenge. The full response to the NIA, in the form of a comprehensive National Infrastructure Strategy, was due to appear in 2019 (HM Treasury 2018b), but is now expected later in 2020. Its content will reflect the politics and basic ideological orientations of government, involving fundamental decisions on the role of the state, the importance of ecological and social considerations, and the understanding of future growth and prosperity. The NIA will be valuable in itself in any case, giving a far firmer base for decision making in the future.

So it can be argued that we are seeing a new search for state spatial coordination and management. This search is difficult because of the hamstringing of most more creative action by neoliberal ideology, with its aversion to more interventionist government action and higher public spending, but also because of the impacts of political processes of a more everyday kind and the pressures of hard to avoid geographical contours playing important roles. This search by government and other involved actors is only gradually advancing, but in the work of the NIC and potentially of Transport for the North (and perhaps other Sub-national Transport Bodies if given real resources and competences), there is significant potential for at least some useful dimensions of spatial planning being embedded in UK government practice (again). One way forward would be that proposed by the IPPR Economic Justice Commission (2018), which suggested the formation of four regional economic executives (for the North, Midlands, South East and South West), governed by representatives of local authorities, to steer higher level economy, planning and infrastructure issues for each large region. This would clearly build on the evolving work of the sub-national transport bodies, at least of Transport for the North, and would benefit greatly from the national level long term work of the NIA. Something of this kind would need some significant ideological shifts within governments. In the meantime it is important that planners and policy makers understand the relationship between strategic planning and infrastructure, to better develop potentials and expose problems. Neuman’s call (2009) for understanding the transformative potential of infrastructure makes good sense especially in present circumstances, certainly in the UK and also in many other contexts where planning is under attack and infrastructure is a favoured state policy instrument.

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i By big or major infrastructure, I refer here to the categories allocated to the National Infrastructure Commission in the energy, transport and water sectors, often called economic infrastructure, excluding social infrastructure like schools and hospitals, and small local or micro infrastructure.

ii The great British “practising academic” Peter Hall certainly brought planning and transport considerations together in his work, but that work largely predated the contemporary focus on infrastructure across sectors and his main stress was not on reflecting on relationships of this kind, as against involving himself in the real world possibilities. See Tewdwr-Jones et al 2014.

iii For a recent attempt to produce data in this complex field, see <https://www.ons.gov.uk/economy/economicoutputandproductivity/productivitymeasures/articles/developingnewmeasuresofinfrastructureinvestment/augusy2018>

iv <https://www.nic.org.uk/publications/national-infrastructure-assessment-2018/>

v <https://www.nic.org.uk/publications/congestion-capacity-carbon-priorities-for-national-infrastructure/>

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- vi <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/treasury-committee/the-work-of-the-national-infrastructure-commission/oral/73393.html>
- vii National Infrastructure Commission, 2017, *Partnering for Prosperity: A new deal for the Cambridge-Milton Keynes-Oxford arc*.
- viii See articles in the special section on strategic planning for London and the Wider South East in *Town and Country Planning*, 87, 10, 395-419.
- ix Strategic Transport Plan, draft published January 2018: <https://transportforthenorth.com/stp/> and Strategic Transport Plan, final published February 2019: <https://transportforthenorth.com/reports/strategic-transport-plan-2019/>
- x See the Midlands Connect strategy, largely on transport, published in March 2017: <file:///C:/Users/tcm2/AppData/Local/Microsoft/Windows/INetCache/IE/TXDS1LEI/midlands-connect-strategy-march-2017.pdf>
- xi https://en.wikipedia.org/wiki/High_Speed_2, with associated links on history of the project.
- xii East Midlands Councils, 2017, *East Midlands HS2 Growth Strategy World Class- Locally Driven*.
- xiii For information on the training colleges set up for HS2 in Birmingham and Doncaster, see <https://www.nchsr.ac.uk/> For the supply chain, see <https://www.hs2.org.uk/supply-chain/>

Figures for Infrastructure and spatial planning paper

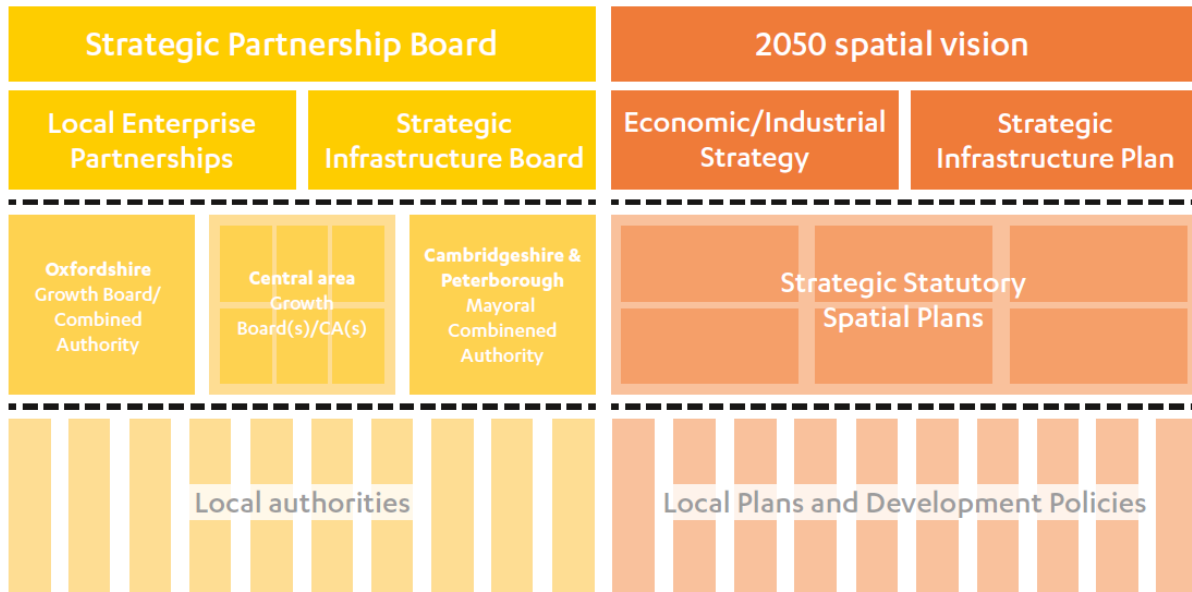


Figure 1 Arc-wide strategic planning framework and enabling governance
National Infrastructure Commission, 2017, *Partnering for Prosperity: A new deal for the Cambridge-Milton Keynes-Oxford arc*, p85.

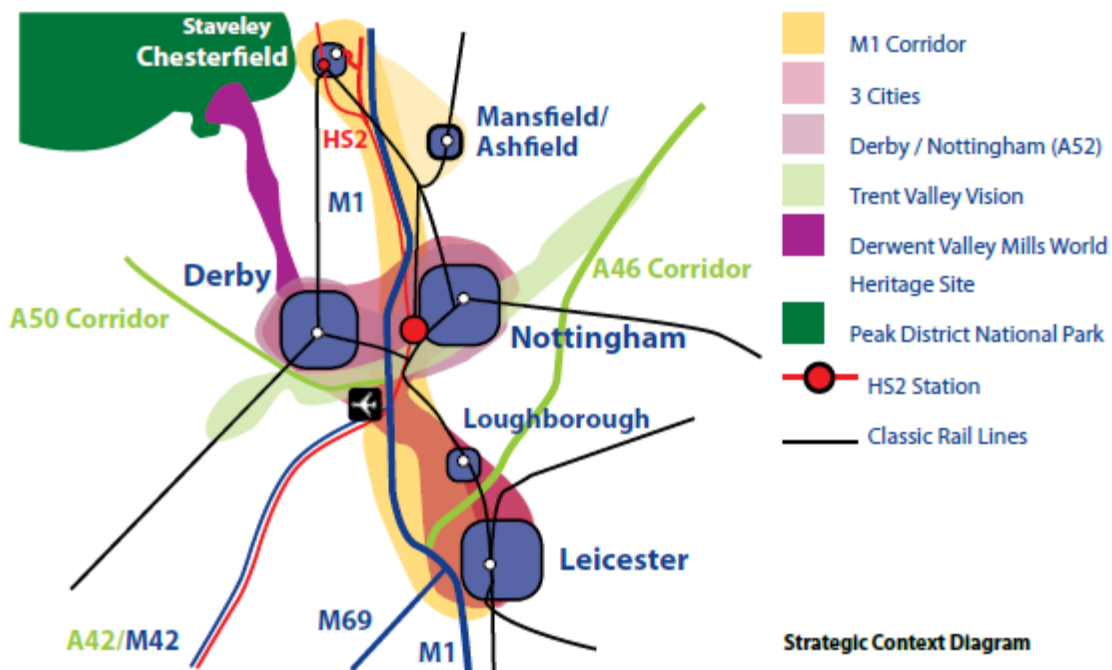


Figure 2 Strategic context diagram

East Midlands Councils, 2017, *East Midlands HS2 Growth Strategy World Class- Locally Driven* p17.

East Midlands Hub Growth Zone Diagram

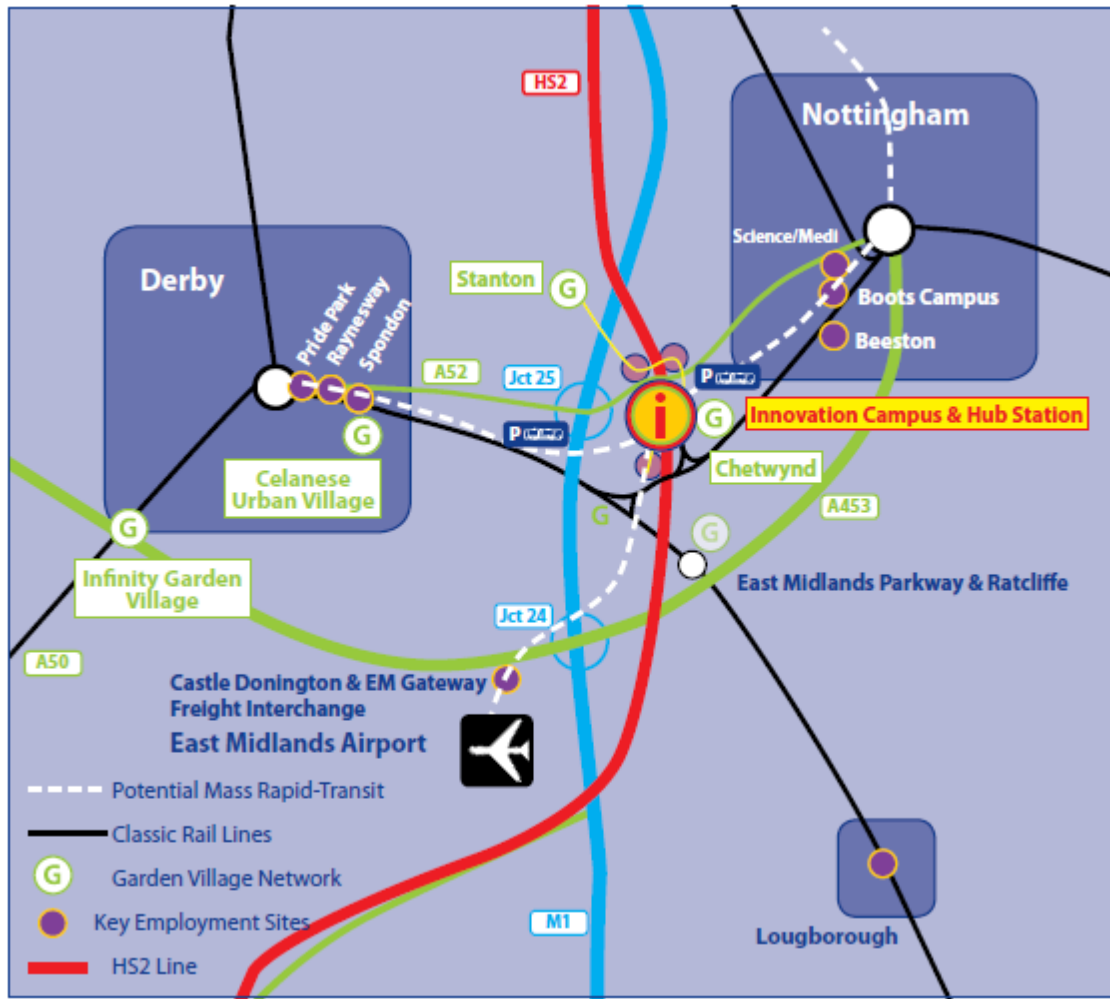
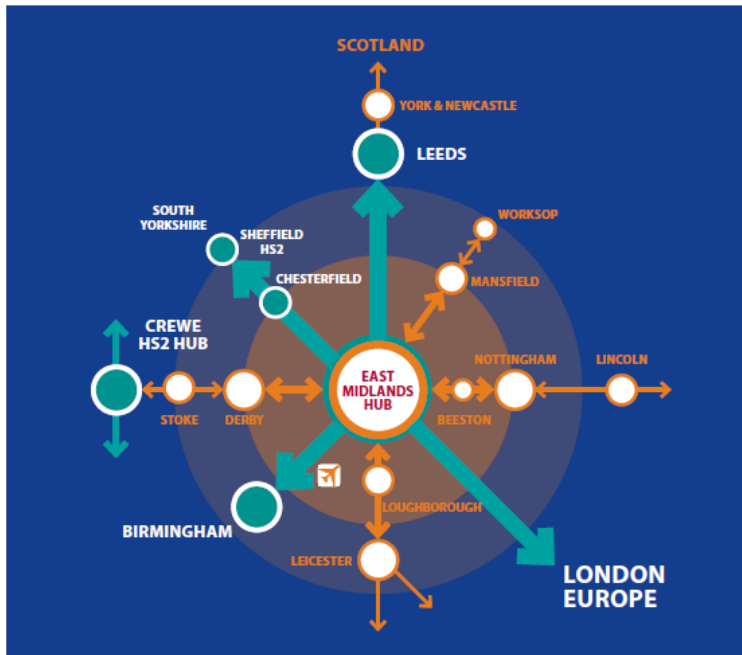


Figure 3 East Midlands Hub Growth Zone Diagram East Midlands Councils, 2017, *East Midlands HS2 Growth Strategy World Class- Locally Driven* p18.



3.1 National Context

HS2 will help to transform the position of our towns and cities within the UK and Midlands, making our local economies more competitive.

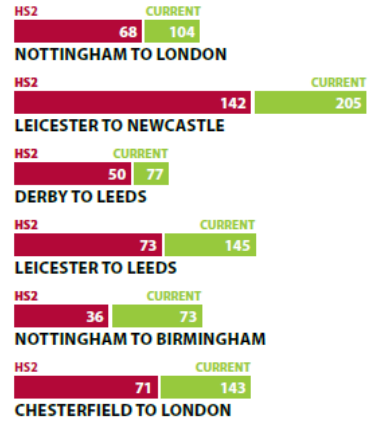


Figure 4 National context

East Midlands Councils, 2017, *East Midlands HS2 Growth Strategy World Class- Locally Driven* p28.