

Abstract

This article analyses the transport policy record of the 2010-2015 Conservative-Liberal Democrat Coalition and 2015-16 Conservative majority UK governments. We argue that the style of policy making under these administrations departed significantly from that of previous decades, which had been characterised by the ascendancy of specific technical disciplines and decision making norms about how transport planning should be carried out. Our key contention is that despite abandoning the idea of a single, overall narrative for transport policy, these governments (perhaps unwittingly) gave new life to broader debates about what transport investment is actually for and how investment decisions should be made. We interpret this as a shift away from the longstanding idea of a 'deliberate' strategy of intervention to a more 'emergent' approach, which raises important new questions about the future of transport policy both in terms of the objectives it seeks to realise and the relative influence of professional/technical and political actors in the policy process.

Introduction

For more than 50 years, UK governments of all political persuasions have published a succession of documents heralding a brave new age of transport policy. Highlights include Buchanan's *Traffic in Towns* in the 1960s (Ministry of Transport, 1963), which correctly predicted how the insatiable demands for more road space arising from mass car ownership would impact upon historic towns and cities; *Roads for Prosperity's* 'biggest road building programme since the Romans' in the heady days of the 1980s economic boom (Department of Transport, 1989); and the immodestly titled *A New Deal for Transport*, which promised a transformation that would "give transport the highest possible priority" (Department of the Environment, Transport and the Regions (DETR), 1998) such that its accompanying £180bn *Ten Year Plan* would "deliver radical improvements for passengers, motorists, business – and all of us as citizens concerned about congestion, safety and a better environment" (DETR, 2000).

The contradiction in all of this is that despite a plethora of highly ambitious policy statements, Britain's transport system remains underdeveloped compared with those of other major European economies because Ministers of whichever party have all-too-often been unable to turn policy rhetoric into action (Table 1). The collapse of the Blair government's *New Deal for Transport* demonstrates this especially well. Despite deliberately referencing Roosevelt's massive public works programmes of the 1930s, the *New Deal* and its ambitious delivery programme actually failed to deliver very much at all on the ground. Instead of light rail in 25 cities across the country, only one new system

and the extension of one other were actually achieved; congestion charging failed to move beyond London despite ambitions to have systems operating in eight cities by the end of the *Ten Year Plan* period; the domestic rail network had to be rescued from a maintenance crisis rather than expanded and improved (Preston and Robins, 2013); and south east England's runway capacity constraints remained unaddressed (Bentley, 2014). By the end of the *Ten Year Plan* period in 2010, what had started out as the most ambitious strategy to transform transport for several decades had been comprehensively "de-railed" (Grayling, 2004; Headicar 2009; for an extensive review of why the New Deal fell apart see Docherty and Shaw, 2011).

TABLE 1 HERE

The 1997-2010 Labour government's legacy was not only that many of its proposed infrastructure schemes and congestion charging were not delivered. Perhaps a more important consequence of the *New Deal* – one that was almost certainly unintended – was that its persistent non-delivery fuelled an already-existing policy tradition (Orr and Vince, 2009) of scepticism about large-scale infrastructure spending. Road building, increasingly under attack for simply inducing new traffic and not providing the expected economic returns (Royal Commission on Environmental Pollution, 1994; Crafts, 2009), became politically toxic with the environmental protests of the mid 1990s (Doherty, 1999), and then formally an 'option of last resort' in Labour's very first statement on transport in government after the 1997 election (DETR, 1997). Added to this,

the Party's u-turn on recreating a 'publicly owned, publicly accountable railway' combined with the weak powers afforded to the new Strategic Rail Authority made it clear that Labour in government had little real commitment to promoting better rail infrastructure. By the end of the 2000s, even accounting for some revision of its early anti road-building stance (Shaw et al, 2006), such was Labour's general lack of interest in delivering anything of note in transport that Ministers were reluctant even to embrace 'softer', non engineering-led initiatives such as *Smarter Choices* and *Cycling Demonstration Towns* capable of achieving quite substantial congestion reductions at extremely modest cost (see Cairns et al, 2008).

David Cameron's Liberal-Conservative Coalition government formed after the May 2010 UK General Election therefore took office at a time when the very idea of a comprehensive policy for transport in Britain appeared dead, and early signals in the Coalition Agreement gave little hint of an impending change in approach. Extending to no more than half a page, the twelve bullet point summaries addressed the most important policy challenges in the vaguest of terms ("We will make Network Rail more accountable to its customers"), whilst also detailing quite specific actions for those populist issues close to the hearts of some of those who had just voted the administration into office ("We will stop central government funding for new fixed speed cameras") (HM Government, 2010: 31). It is clear from this and the Coalition's other early statements that Ministers had few if any clearly defined policy objectives for transport beyond fuzzy statements about improving the railway and ending the so-called 'war on

the motorist' (see Monbiot, 2005), both narratives that consistently play well amongst Conservative core support. Whilst this may have reflected differences in approach to transport policy between the Coalition partners, it did afford incoming Ministers the opportunity to bring about a significant break from previous practice by assembling their transport policy in an issues-led manner over the first few years of the new government (see House of Commons, 2011).

Objectives, scope and analytical approach

Our article examines key transport decisions made by the Coalition and its immediate successor government, and assesses what their potential longer term implications might be. Our core objective is to explain why, under the Cameron administrations, a fundamental shift in policy formulation occurred, with the longstanding ascendancy of some particular technical disciplines and methodological techniques facing robust political challenge for the first time in several decades. In turn, this has ramifications for which projects get built and which do not, and the relative influence and power of professional/technical and political actors in determining spending priorities, a theme of ongoing interest in the policy literature (see Neuhold et al 2013).

In theoretical terms, we wish to make a contribution to redressing the shortfall in the amount of academic work on transport policy that addresses the first principles question of what the *objectives* for transport policy actually are, and how these are decided upon. In their review of 100 articles on transport policy, Marsden and Reardon (2017: 243) noted that “only four focused on the ‘ends or

aims' of policy; the goals, objectives or settings". Here, then, we attempt to understand what these authors call 'the logics at play' in transport policy by moving beyond the sectoral literature on policy making and governance in the transport domain and applying key ideas from the mainstream strategy literature to analyse the changes in approach under the 2010-16 governments. In presenting our findings, we first examine how Ministers re-evaluated the role and purpose of surface transport infrastructure investment. We then move on to explore the implications of this revised thinking for transport project appraisal, using the planned High Speed 2 (HS2) railway as an example. In this context, we consider how one legacy of the Cameron administrations' shift in approach might, albeit unwittingly, be to present a new life for transport policy given the opportunities that arose to rethink how we decide which investments to pursue, and why. Our conclusion interprets the Coalition's approach to transport in broader terms as an 'emergent' strategy (Mintzberg and Waters, 1985) focused on capturing the best (political) opportunities for delivering infrastructure, replacing a rather more 'deliberate' strategy with its grand plans for multimodal integration and sustainability that never came to pass.

Methodologically, our paper addresses Marsden and Reardon's (2017) finding that only 10% of the 'policy' papers they reviewed actually reported engagement with policy makers, by augmenting primary documentary research with context and insight from a series of interviews with 20 senior policy actors (ten senior civil servants in the UK and Scottish governments, as well as current and former Ministers, policy advisors to government departments, academic

commentators on transport and public policy development more generally and senior leaders in private sector transport operating companies). All of our respondents were identified through an initial 'purposeful' sampling approach (Baxter and Eyles, 1997) with additional 'snowballing' (Crang and Cook, 2007) where appropriate. We interviewed some individuals more than once. Given the potential sensitivity of the material, most of the interviews were noted rather than recorded, and where we present direct quotations these have been checked with the source and anonymised.

We should be clear that the scope of our analysis is UK government policy in respect of 'national' surface transport development. We do not cover the vexed issue of airport capacity as this would be another paper in itself (see Le Blond et al, 2016; Vogel and Bates, 2015). Nor does our work address the increasingly complex arrangements for development of transport at a local and regional level through the 'devolution' of certain responsibilities to new Combined Authorities and elected Mayors, and the creation of (non-elected) Local Enterprise Partnerships across England. Further, many aspects of transport policy are devolved to the Scottish Parliament, National Assembly for Wales, Northern Ireland Assembly and Greater London Authority. Although some of the specific policy issues we explore in the paper (e.g. roads) apply to England only, others (HS2) have cross-border implications, while overall government macro-economic policy, which underpins most investment priorities, is 'reserved' on a UK-wide basis. We therefore refer to 'Britain' throughout in the interests of legibility. Finally, as our specific focus is on the

changing strategic mindset underpinning the UK government's approach to transport investment, we do not explicitly address the issue of the spatial patterning of investment choices, although this clearly remains an important research agenda in its own right given the scale of the choices we examine (see Schwanen, 2016).

The Chancellor dons a hard hat

The first 18 months of the Coalition's term involved a considerable amount of thinking out loud on what to do about transport infrastructure investment. In June 2010, five weeks after taking office, the deputy Finance Minister announced a series of substantial cuts to government spending, including the £1.1bn upgrade to the A14 in Cambridgeshire, the largest planned road project at the time. The following week, the Chancellor's Emergency Budget announced the creation of Infrastructure UK, a new agency with a remit to cut the costs of infrastructure delivery and draft in as much private sector money as possible (HM Treasury, 2010a). The *Comprehensive Spending Review* (CSR) and accompanying first *National Infrastructure Plan* (NIP) in October 2010 set out this agenda in more detail (HM Treasury, 2010b, 2010c). Although committed projects were largely safeguarded, they were quite openly framed as "projects that deliver greater benefits in return for their costs". Overall, the cuts were regarded as swingeing and, taken together with the Department for Transport itself being asked to find some £300m per year in savings from its own operating budget (*The Independent*, 2012), it seemed as if transport would rank even lower in the domestic policy agenda under the Coalition than it had

under Labour.

But in contrast to other areas of government spending, the period of austerity for transport turned out to be rather short lived. As soon as Autumn 2011, exactly one year after the Coalition's first CSR, large parts of the transport budget were restored to levels at or near those inherited by the new government (pteg 2013a; 2013b). Particularly striking was that 2010's £1bn-plus cuts to the Highways Agency's strategic roads programme was almost entirely reversed. Overall, whereas in 2010 the June emergency budget and October CSR had envisaged real terms reductions in capital spending in pursuit of broader fiscal consolidation objectives, the 2011 Autumn Statement switched around £5bn from current expenditure to capital. This set the tone for the remainder of the Coalition's term, with significant new capital expenditure directed to the railways and trunk roads network across England (Tables 2 and 3).

TABLES 2 AND 3 HERE

What lay behind this quick change of mind? There are several clear examples of an evident shift in underlying outlook between the 2010 and 2011 *Autumn Statements* and NIPs. Whilst the preamble to the 2010 NIP agonised over the condition of the UK's ageing infrastructure and how modernisation could be afforded given public spending cuts and the extremely high level of costs in the British construction sector, the 2011 document was much more bullish:

“Infrastructure networks form the backbone of a modern economy and are a major determinant of growth and productivity... However, historically the UK’s approach to the development of these networks has been fragmented and reactive... To remain globally competitive, the UK needs to address these failures and develop an infrastructure capable of supporting a dynamic, modern economy” (HM Treasury, 2011: 5).

The senior policy makers and observers in and around Whitehall we interviewed were in no doubt that the government’s *volte-face* was down to the Chancellor of the Exchequer himself. Whilst the public record of the time hints at this, including the challenge in his 2011 Autumn Statement speech that Britons should “see what countries like China or Brazil are building, and you’ll also see why we risk falling behind the rest of the world” (*Financial Times*, 2011: unpaginated), one of our respondents put it more colourfully: “Go into the Crossrail¹ tunnels at night and it’s George Osborne you’ll find in a hard hat and hi-vis jacket” (see *The Guardian*, 2015 about ‘George the Builder’). Indeed, Osborne has subsequently revealed that he had been grappling with the dilemma of finding the large, quick savings in public expenditure demanded by the Coalition’s manifesto whilst at the same time planning ahead: “in my first week in office I rejected the Treasury’s proposal that we shouldn’t go ahead with the Crossrail project... no country thrives if it doesn’t build for the future” (Centre for Policy Studies, 2016, unpaginated).

¹ Crossrail is a £15bn project increasing central London’s rail capacity by 10% with a new east-west tunnel through Docklands, the City and the West End connecting to the wider south east commuter network.

The importance of this shift in philosophy should not be underestimated. There is clearly *some* path dependency at play as the unintended consequences of the previous Labour government's decisions left much less scope for reducing transport capital expenditure as quickly as the Coalition had initially intended. Particularly important here is the funding structure in the rail industry: Labour retained and reinforced the privatised industry's five-year funding cycle based on a regulatory 'Control Period', which effectively locked the Coalition into Labour's spending plans. These had remained necessarily generous because of the collapse of infrastructure owner Railtrack after a serious train crash at Hatfield in 2000, and its subsequent replacement by Network Rail.

But the Chancellor's normative position that major infrastructure is essential for reasons of global economic competitiveness is altogether more important and profound than a tactical switch in the face of practical accounting difficulties. Successive governments' inability to deliver much of their planned transport investment can be explained in part because the Treasury and many other influential voices advising Ministers did not really believe in the fundamental utility of this kind of expenditure: indeed, Treasury mandarins had even been rather proud of the fact that they had avoided the same levels of transport capital expenditure as those European economies regarded as Britain's peers (Docherty and Shaw, 2011). This also meant that in periods of political- or economic difficulty there were few elected or civil service champions prepared to defend such expenditure on major infrastructure as was actually planned.

In deciding to pursue a much greater focus on infrastructure investment, the Chancellor appears to have come to his own conclusion about the conflicting claims made in the British transport infrastructure debate over the preceding 20 years: for every government report such as the *Eddington Transport Study* (Eddington, 2006) emphasising the marginal returns of much new large-scale domestic infrastructure investment in a mature transport network, there were others (Canning and Bennathan, 2007; Crafts, 2009; Egert *et al.*, 2009) that continued to make the case for investment in transport infrastructure as a worthwhile and important element of any economic policy in pursuit of growth (see also Holmgren and Merkel, 2017). In this context, the Coalition's post-2011 approach to transport infrastructure investment was really quite ideological, both in the domestic political sense of rejecting the preceding government's *New Deal* and its downplaying of the importance of capital investment, and in terms of adopting Michael Porter's elaboration of nation states being in competition with one another (Porter, 2002; Furman et al, 2002). In effect, Osborne was embracing the normative position that substantial transport infrastructure investment was required to maintain national economic competitiveness.

Project delivery and appraisal

As successive governments prior to the Coalition had demonstrated, it is one thing privileging investment in transport projects at the rhetorical level but quite another to deliver them on the ground. In their efforts to achieve the latter, the Cameron administrations made two distinct breaks from the practice they had

inherited. The first of these was the move back to a mode-by-mode approach to the way in which transport policy is formulated and delivered. Not only had Labour's *New Deal* failed to result in much infrastructure investment, but Ministers had also found the challenge of delivering a suite of multi-modal transport initiatives beyond them. This was most strikingly demonstrated by the collapse of the so-called *Multi-Modal Studies* (MMSs) where integrated packages of schemes were disaggregated to the point that only a few long-desired road schemes were actually taken forward (see Shaw et al, 2006). As one of our interviewees put it, the incoming Coalition deemed Labour's failures with the MMSs symptomatic of the broader problem that the desire of many in the transport sector for a genuinely multimodal approach to policy making and planning was impossible for government to deliver in reality.

As such the Coalition set about developing its policies and investment plans for inter-urban transport development, acknowledging that the delivery arms of the transport sector are, and will likely remain, organised in a modal structure (primarily road and rail) with the view that achieving better delivery requires greater discipline and focus *within* these silos rather than between them (Table 4). We have already seen how rail had benefited from being 'quarantined' within a tightly defined, medium-term funding settlement, and the Coalition effectively 'cloned' aspects of this approach and applied it to trunk roads in England. An arms-length infrastructure owner, Highways England, was created and charged with developing a network enhancement plan for a regulated four-year funding cycle – the 'Road Period' – almost exactly mirroring the Control Periods under

which Network Rail operates.

TABLE 4 HERE

Rather than revisit arguments from the 2000s about the role of roads relative to other modes, the *Road Investment Strategy* (DfT, 2014b) produced to cover the first road period considers the assets that Highways England has inherited, how these assets perform from an operational perspective (based on metrics such as journey time and reliability, safety and user satisfaction) and sets out how a series of interventions – junction improvements, traffic management schemes, dualling and some new bypasses – would help improve performance. Over time, these will coalesce to create a better network with a hierarchy of routes based on quality of service criteria. Indeed, such is the clarity of purpose of the *Strategy* that the impact of HS2 on the road network merits only a single paragraph in a document of some 120 pages.

The second break from the past came about as a result of how the Coalition's shift in positioning shone a light into the complex debate over how different transport interventions perform according to the standard appraisal methodology of calculating their Benefit:Cost Ratio (BCR) and therefore *which transport schemes should be built and which should not*. In reframing the narrative about the value of transport infrastructure investment in much more broad-brush, narrative terms than the technical language of BCRs, the Chancellor exposed an important shibboleth of transport policy in the UK,

collectively the hegemony of a particular kind of transport economic appraisal in decision making, the real world limitations of this analytical approach and the frequent tensions between its outcomes and political imperatives.

Cost Benefit Analysis (CBA) was first adopted for transport in Britain for the appraisal of roads projects in the 1960s (Worsley and Mackie, 2015). The basic idea of CBA is to determine whether or not any given scheme will provide value for money, by comparing its cost of construction and maintenance over a given period (usually 30-60 years) with the monetary value of the benefits it is likely to realise. Most of this monetary value is assumed to derive from time savings realised by the scheme's implementation, on the basis that some or all of the time we spend travelling is somehow 'lost' to the economy (see Wardman et al, 2015). The output of any given appraisal is expressed in modern language as a BCR.

It is obvious that this number is deceptively simple and few would claim the technique is perfect. While it is *relatively* straightforward, if not exactly uncontentious, to estimate the cost of building and maintaining a scheme (Stopher and Stanley, 2014; although see also Flyvberg et al 2003) and by how much the direct operating costs of vehicles might change, it is more problematic to account for costs and benefits that have no intrinsic monetary value. How much is a shorter journey time really worth to any given individual on any particular day? What about to the economy as a whole? How much is saving a life worth? Countless stated choice studies have estimated how much people

would be willing to pay for such things (see Bates et al, 2001; Hensher, 2001; McFadden, 1998) although these are by no means flawless and in any event fail to address the crucial point that the relationship between travel time saved and empirically verifiable economic growth in a given area is much less clear-cut than often portrayed (see, for example, Wenban-Smith, 2010; Mullen and Marsden, 2015; Vickerman, 2017).

Although CBA retains influential supporters (see, for example, Worsley and Mackie, 2015) and there have been advances in moving beyond a narrow focus on user benefits (Vickerman, 2017), it is no surprise that CBA's reliance upon monetisation as a means of appraising the characteristics of a scheme or policy has been heavily critiqued (Ackerman and Heizerling, 2004; Mokhtarian and Handy, 2009; Hickman and Dean, 2017). Indeed, critiques have sharpened further as concepts such as journey quality and utility – it is easier than ever in the ICT age to spend time 'on the move' productively (Lyons, 2015) – and the impacts of commuting stress on health and wellbeing gain more attention (Lyons, 2016). Aware of such criticisms, the Labour governments of Tony Blair introduced a *New Approach to Appraisal* (NATA) that recognised the need to ascribe more weight to qualitative judgements in the appraisal process (Walton and Shaw, 2003). Whether or not this made the appraisal process any more or less robust is open to question – NATA retained CBA “as one, perhaps the key, element” of its appraisal framework (Vickerman, 2000:9) – although, interestingly, our interviewees revealed the view the most important function of BCR calculations was not necessarily the meaning of the figures *per se*, but

their role in negotiations between the Treasury and the sponsors of particular transport projects vying for investment. Especially in times of austerity, BCRs retain credibility because they can be presented as an impartial means of deciding which transport schemes should and should not go ahead². At present, schemes with a BCR of 2.0:1 are categorised by the DfT as ‘high value for money’ (those over 4.0:1 are ‘very high value for money’) and are most likely to be in the frame for funding.

Unfortunately, the simple ranking of projects by BCR, even in the impossible scenario that these numbers could be made to be perfect, would still be problematic. Sir David Higgins, who chairs the company set up to manage the delivery of HS2, Britain’s new high speed railway due to open in 2026 (see below), told a House of Lords Inquiry:

“[Cost-benefit analysis] is meant to be a method of rating various infrastructure projects against other infrastructure projects to determine which is the most important. What would be nice, of course, would be to have a national transport strategy against which to measure that; that would be a discipline that would improve the whole debate on how you analyse individual projects. We do not have that today” (EAC, 2015: 12)

² It was also suggested that the apparently strong evidence base underlying BCR figures – strong in the sense that it generates numbers which act as “signs and signals” (Vollmer, 2016) that can reassure politicians – provides Ministers in the Department for Transport with useful ammunition to deploy during Spending Reviews compared with other departments that don’t use CBA and thus could be portrayed as ‘analytically lagging’.

Even where such a strategy is supposed to exist, such as under Labour following *A New Deal for Transport*, in the much less rational world where transport policy meets transport politics, such discipline in how projects are analysed and selected can never be guaranteed. Söderbaum (2006) makes the point that BCRs can mask questionable assumptions and ideological orientations surrounding the methods that calculate them. Indeed, it is instructive to consider how BCRs have been manipulated, overlooked or altogether ignored when they stand in the way of the approval of ‘favoured’ interventions, especially big and expensive ones close to the hearts of the most senior politicians (see Eliasson *et al.*, 2015). One well-documented illustration is the £500m per year – or £30bn over a standard 60 year Treasury appraisal period – English Concessionary Fares (ECF) scheme that provided free bus travel to the over 60s and disabled people. This was never subjected to any kind of CBA, as reported by a senior civil servant: “We have not tried to do an assessment in economic terms of the benefits of it. As the Minister has said, it is essentially a political decision for wider reasons” (House of Commons, 2008: Q443).

The need for speed

Tellingly, the Cameron governments’ final Secretary of State for Transport, Patrick McLoughlin, went so far as to state openly that BCRs had become less important than they had ‘traditionally’ been purported to be (*The Guardian* 2013, unpaginated). This shift was formally signalled in new DfT guidance on ‘Transport Business Cases’ (DfT, 2013), although the extent to which this

clarified the role of BCRs in project appraisal remained contested. By far the most controversial and illuminating example of this is HS2, a Y-shaped high speed rail network to be built from London to Birmingham and then north to Manchester, Sheffield and Leeds (Figure 1). The project is phased in two stages with the first constructing the line to Birmingham and a junction with the existing railway to the north, and the second completing the Y to Manchester and Leeds. At the currently estimated outturn cost of more than £50 billion in 2015 prices, it is the single most expensive transport project in the UK for a generation at least.

FIGURE 1 HERE

Two critical factors combine to produce the very modest calculated BCRs for HS2. First is the sheer scale of the price tag given the very high civil engineering cost base in the UK, which means the denominator of the benefit:cost equation is challenging *per se* (HM Treasury, 2010c; Department for Transport and Office for Rail Regulation, 2011). Second is the role of the value of time as the most significant variable driving the benefit side. Even with a design speed of 400 kilometres per hour (significantly above most continental high speed lines), HS2 struggles to deliver enough time savings to generate a convincing BCR. Worse still, whilst the core assumption underpinning the monetisation of time savings – that travel time is productive working time ‘lost’ to the economy – might have been truer in the 1960s, it is patently not the case in the 2010s when people have any number of opportunities to be productive

throughout their journeys. Thus although the Foreword to the *Strategic Case* for HS2 states that “The new north-south railway is one of the most potentially beneficial... infrastructure projects on the planet” (DfT, 2013: 1), the BCR for this project of such declared import is currently calculated for the whole Y network at 1.8. If the postulated wider economic benefits such as productivity gains are included this rises to 2.3, still way below that of many other (less glamorous) projects but magically high enough to attain the ‘value for money’ status necessary to pass the DfT’s primary BCR test (see NAO, 2013).

It is perhaps unsurprising that numerous experienced commentators described the decision to pursue HS2 on value for money grounds as marginal at best, with one memorably suggesting that “it does violence to the English language to describe a benefit cost ratio of 2.3 as ‘high value for money’” (EAC, 2015: 101). The House of Commons’ Public Accounts Committee went further, criticising the DfT’s appraisal methodologies directly for generating “decisions based on fragile numbers, out-of-date data and assumptions which do not reflect real life” (PAC, 2013: unpaginated). HS2, in other words, demonstrated spectacularly the limit of government’s ability to reconcile – or at least gloss over – politically unfortunate outcomes of the economic appraisal of transport infrastructure investment. It laid bare how Ministers themselves have become unconvinced by the traditional technocratic arguments around the monetisation of discrete benefits and are instead seeking to reframe the agenda (see Schön and Rein, 1995) to one in which the decision is overtly aligned with their more ‘strategic’ goals of economic growth, productivity and international competitiveness

(Porter, 2000):

“HS2 will generate jobs, help rebalance the economy between north and south, and provide a platform for the country’s future prosperity. It’s a statement about the UK’s ambition to be a world-class economy in the 21st century” (DfT, 2015: Appendix 3).

While we applaud the apparent move away from hiding the messy contradictions of economic assessment and political desires in the policy equivalent of the ‘smoke-filled room’, the adoption of a strategic narrative for transport infrastructure investment approaching a ‘just do it’ or ‘build it and they will come’ attitude to transport infrastructure investment also raises some obvious questions. Political honesty is refreshing, but spending upwards of £50bn on a scheme on the basis that it is ‘good to have’ will not strike many people as evidence-based policy making (see What Works Centre for Local Economic Growth, 2015). And if (strong enough) political intent trumps established economic method when it comes to *grands projets*, it becomes appropriate to ask whether what’s good enough for the biggest infrastructure investment in a generation is good enough for all the others, and in turn whether other transport policies and strategies should be revisited in a similar manner.

Implications for British transport policy

For us at least, reports of the ‘death’ of British transport policy accompanying

the Labour government's demise in 2010 were anything but exaggerated. The Party's bold vision of a national, integrated strategy for transport turned out to be over-ambitious in and of itself, but it was also the last in a long line of similarly grand yet undelivered plans stretching back decades. At the same time, the 50-year search for the Holy Grail of a genuinely comprehensive benefit:cost methodology to justify interventions within such strategies was no nearer fruition, and the role of BCRs in project appraisal had been publicly undermined by Ministers. Still, beneath the once-in-a-generation sized project of HS2, we wonder if the Cameron administrations' range of discrete project interventions, organised by individual transport mode rather than on a multimodal basis, represent a *de facto* national infrastructure delivery plan. In adopting a different mindset with regard to what transport investment is 'for' in the first place, what the limits of traditional appraisal might be in evidencing this purpose, and a focus on strategy emerging as the outcome of successful project delivery, did the Coalition – quite possibly unwittingly – breathe new 'life' into the transport policy debate just as it had appeared completely moribund?

If so, there will be many questions arising about why we invest in transport, how we determine our policy priorities and thus what particular projects to build. With regard to the first of these, the Coalition's priority was predicated on the belief that transport investment would play a significant role in boosting the economy. How far will environmental or social imperatives continue to assert themselves, and if so in what particular guise? Or, if the narrative about large scale transport investment being good for growth and international competitiveness survives in

the short term, how long will it be until the lack of compelling evidence for this proposition – something first pointed out officially to Whitehall twenty years ago (see SACTRA, 1996) – is remembered?

In relation to policy priorities, although there are clearly opportunities to be grasped from the legacy of the Cameron governments' decisions, there are also significant risks. Chief amongst these is the danger of “strategic drift” (see Johnson, 1988), which occurs when organisations that are highly focused on project delivery and whose wider strategy is built incrementally fail to adapt to changes in the context for their operations. One obvious example of this is the potential for the different organisations involved in delivering ‘on the ground’ transport projects – Highways England, Network Rail and so on – to react in a manner that is contradictory or inefficient to emerging transport trends such as vehicle automation or ‘peak car’ (see Goodwin and van Dender, 2013; Docherty *et al.*, 2017). Also, just because successive governments have failed to deliver transport policy on a multimodal, integrative basis doesn’t mean that this is not in fact required (Docherty and Shaw, 2011). An approach to strategy based on each transport mode may be more likely to ensure that money is actually spent on the schemes that are put in policy documents, but it privileges infrastructure ‘solutions’ and is no guarantee that the resources directed to transport overall will really deliver the benefits such investment is expected to achieve.

In thinking about what projects should be built, the role of BCR in transport scheme appraisal is bound to be subject to further scrutiny. A better way of

deciding between infrastructure schemes in future might be to follow Sir David Higgins' advice and determine – perhaps through the National Infrastructure Commission, another of Osborne's creations – which interventions are most likely to achieve the stated aims of public policy more generally (see also Metz, 2008). This is an approach that the devolved Scottish Government has largely adopted since developing its *National Performance Framework* of economic, environmental and social objectives in 2007 (Scottish Government, 2011). Interestingly, the Scottish Government has for many years downplayed the importance of BCR figures, regarding them as only one of many pieces of information informing decision making, particularly since schemes north of the border tend to perform less well in BCR terms due to the relatively large distances and low population densities involved. Such re-establishment of political ownership of infrastructure spend is perhaps a necessary condition when the mood is to build in the tens of billions rather than tens of millions of pounds, but it also opens up the scope for a wider range of critique and challenge to spending decisions and priorities than was the case when the 'black box' of benefit:cost ruled.

Further questions relate to the potential risks in central government's approach given the diversity inherent in the multi-level governance arrangements that have become established for transport overall (see Bache et al, 2015). The nature of transport and mobility means that national plans and policies inevitably have many and various interfaces with other plans and policies developed at different spatial scales. For example, it is one thing to be able to

move efficiently between major cities, but transport's contribution to economic growth, social inclusion and local environmental quality is especially obvious in cities and city regions where the density of activity and trip making is highest (Banister and Berechman, 2001; Centre for Cities, 2014). It is also in these places where the major negative externalities arising from transport (such as congestion, local air pollution and physical severance) are at their most acute, and therefore where local- and regional governance networks are keenest to develop detailed, deliberate strategies to deal with these problems (see Gray et al, 2017).

Concluding thoughts: an emergent, rather than deliberate, approach to transport policy

In working through the broader implications of the shifts in transport policy making seen under the Cameron administrations – Marsden and Reardon's 'goals and logics at play' – we are drawn to the strand of research literature that seeks to explain processes and outcomes of public policy decision making through the application of work in mainstream organisational strategy. Matheson (2009: 234) contends that the work of Henry Mintzberg is of "enduring value" as an analytical framework with which to approach the study of contemporary governance and policy making, or as he puts it, "the organization of decision making". Most importantly for our purposes, Matheson highlights Mintzberg and Waters' (1985) distinction between 'deliberate' and 'emergent' forms of strategy:

“In the deliberate mode, the formulation of strategy precedes its execution; in the emergent mode, the tasks of strategy formulation and execution are concurrent” (Matheson, 2009: 234).

This deliberate/emergent categorisation neatly describes the move away from the consistent production of detailed strategy documents to the “strategy through projects” (Young et al, 2012) approach of the Cameron administrations. On assuming office in 2010, the Coalition was evidently sceptical towards grand, ‘deliberate’ strategies for action. Instead of repeating the traditional mistake of having a strategy but limited delivery, Ministers came to focus on transport project delivery and were content to let the strategy emerge later. The combination of stubbornly high civil engineering costs and ongoing austerity in the public finances could very well have led to a situation in which a ‘do minimum’ approach to transport was adopted, but instead the Chancellor decided to pursue specific projects such as Crossrail and HS2 that support a worldview in which (transport) infrastructure investment is a critical component of national competitiveness (see also Kay, 2016). Crucially, HS2 was not couched in terms of a wider national ‘plan’ for transport that could fall apart under political attack, but was promoted as a freestanding government objective, finally receiving parliamentary approval in March 2016.

Beyond the specific decisions to pursue individual projects such as HS2 justified by particular political objectives, the longer-term implications of this shift in the organisation of decision making concern the relative power of different actors in

the transport policy process. Matheson (2009: 235) shows how deliberate strategies tend to emerge from “professional” and “machine bureaucracies”, structures that prize the management of consistent policy making approaches using “expert” or even “ideological” policy toolkits, such as CBA methodologies (see also Söderbaum, 2007). By contrast, emergent strategising gives more scope for action to politicians, but also to wider policy networks that are more likely to frame the objectives of policy action through collaboration and negotiation between competing interests, than would longstanding elite bureaucracies such as the British civil service (Docherty and Shaw, 2011).

Thus even if they did so unwittingly, the Cameron governments’ move towards a more emergent form of strategy development offers at least the prospect of new life for some key transport policy debates in the UK. An emergent form of policy making organisation presents the possibility for new or neglected voices to be given a hearing as part of a wider debate about what investment in transport is actually *for*. Moreover, as Bovaird (2005) points out, forms of governance that facilitate more pluralistic, networked forms of policy development can in theory at least be more successful “balancing mechanisms” between the objectives of the bureaucratic elite (e.g. building new roads that improve journey times and perform well in BCR calculations) and those more “public” issues characterising everyday life, (e.g. incremental improvements in local junctions and the pedestrian environment). Of course, these potential developments unfold in the context of the disappointing failure of successive British governments to deliver on their stated transport policy aims. It remains to

be seen if the putative new life we identify in this paper will lead to a sustained change in emphasis in British transport policy.

References

Ackerman, F and Heinzerling, L (2004) *Priceless: On Knowing the Price of Everything and the Value of Nothing*, The New Press, New York.

Bache, I, Bartle, I, Flinders, M and Marsden, G (2015) *Multilevel Governance and Climate Change: Insights From Transport Policy*, Rowman & Littlefield International, London.

Banister, D and Berechman, Y (2001) "Transport investment and the promotion of economic growth", *Journal of Transport Geography*, 9(3) 209-218.

Bates, J, Polak, J, Jones, P and Cook, A (2001) "The valuation of reliability for personal travel" *Transport Research Part E* 37 191–229.

Baxter, J and Eyles, J (1997) "Evaluating Qualitative Research in Social Geography: Establishing 'rigour' in Interview Analysis", *Transactions of the Institute of British Geographers* 22 505-525.

Bentley, D (2014) "Unravelling the UK airport capacity conundrum: A review of the main submissions made to the Airports Commission", *Journal of Airport Management*, 8(1) 14-22.

Bovaird T. (2005) "Public governance: balancing stakeholder power in a network society", *International Review of Administrative Sciences* 71(2) 217-228.

Cairns, S, Sloman, L, Newson, C, Anable, J, Kirkbride, A and Goodwin, P (2008) "Smarter Choices: Assessing the Potential to Achieve Traffic Reduction Using 'Soft Measures'", *Transport Reviews* 28(5) 593-618.

Canning, D and Bennathan, E (2007) "The Rate of Return to Transportation Infrastructure", in *Transportation Infrastructure Investment and Economic Productivity*, OECD, Paris.

<http://internationaltransportforum.org/pub/pdf/07RT132.pdf>

Accessed 07/06/2017.

Centre for Cities (2014) *Delivering change: Making transport work for cities Practical policy solutions to improving transport in cities*, Centre for Cities, London.

<http://www.centreforcities.org/publication/delivering-change-making-transport-work-for-cities/>

Accessed 07/06/2017.

Centre for Policy Studies (2016) *Margaret Thatcher Lecture 2016*.

<http://www.cps.org.uk/about/news/q/date/2016/07/18/margaret-thatcher-lecture-2016-rt-hon-george-osborne-mp/>

Accessed 07/06/2017.

Crafts, N (2009) "Transport infrastructure investment: implications for growth and productivity", *Oxford Review of Economic Policy*, 25(3) 327–343.

Crang, M and Cook, I (2007) *Doing Ethnographies*, Sage, London.

Department for Transport (2013) *The transport business cases*. DfT, London.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/85930/dft-transport-business-case.pdf

Accessed 07/06/2017.

Department for Transport (2014a) *Road investment strategy: investment plan*. DfT, London.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/408514/ris-for-2015-16-road-period-web-version.pdf

Accessed 07/06/2017.

Department for Transport (2014b) *Road investment strategy: strategic vision*. DfT, London.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/408514/ris-for-2015-16-road-period-web-version.pdf

Accessed 07/06/2017.

Department for Transport (2015) *2010 to 2015 government policy: HS2, high speed rail*, Policy Paper, London.

<https://www.gov.uk/government/publications/2010-to-2015-government-policy-hs2-high-speed-rail/2010-to-2015-government-policy-hs2-high-speed-rail>

Accessed 07/06/2017.

Department for Transport and Office of Rail Regulation (2011) *Realising the potential of GB rail: Report of the rail value for money study. Summary report*,

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/4203/realising-the-potential-of-gb-rail-summary.pdf

Accessed 07/06/2017.

Department of Transport (1989) *Roads for Prosperity*. Cmnd 693, HMSO, London.

DETR (1997) *New roads a last resort - Strang*, press release 216, Department for the Environment, Transport and the Regions, London.

DETR (1998) *A New Deal for Transport: Better for Everyone*, Cmnd 3950, Department for the Environment, Transport and the Regions, London.

DETR (2000) *Transport 2010: The Ten Year Plan for Transport*, Department for the Environment, Transport and the Regions, London.

Docherty, I and Shaw, J (2008) (eds) *Traffic jam: ten years of 'sustainable' transport in the UK*. Policy Press, Bristol.

Docherty, I and Shaw, J (2011) "The transformation of transport policy in Great Britain? 'New Realism' and New Labour's decade of displacement activity" *Environment and Planning A* 43(1) 224 – 251.

Docherty, I; Marsden, G and Anable J (2017) The governance of smart mobility. *Transportation Research Part A*. Available online.

Doherty, B (1999) "Paving the Way: The Rise of Direct Action against Road-Building and the Changing Character of British Environmentalism", *Political Studies* 47(2) 275-291.

EAC (2015) *The Economics of High Speed 2*, House of Lords Economic Affairs Committee, First Report of the 2014-15 Session, HL Paper 134, The Stationery Office Limited, London

Eddington, R (2006) *The Eddington transport study: the case for change*. Sir Rod Eddington's advice to the government. HM Treasury, London.

Egert, B, Kozluk, T and Sutherland, D (2009) *Infrastructure and Growth: Empirical Evidence*, OECD, Paris.

http://www.oecd-ilibrary.org/economics/infrastructure-and-growth_225682848268

Accessed 07/06/2017.

Eliasson, J, Börjesson, M, Odeck, J and Welde, M (2015) “Does Benefit–Cost Efficiency Influence Transport Investment Decisions?” *Journal of Transport Economics and Policy* 49(3) 377-396.

Financial Times (2011) *Road and Rail Projects to Receive a Boost*, 29 November.

http://www.ft.com/cms/s/0/1d996d02-1a8c-11e1-ae4e-00144feabdc0.html_axzz3tB0Z9wKu

Accessed 07/06/2017.

Flyvberg, B, Bruzelrus, N and Rothengather, W (2003) *Megaprojects and Risk: An Anatomy of Ambition*, Cambridge University Press, Cambridge.

Furman, J, Porter, M and Stern, S. (2002) “The determinants of national innovative capacity”, *Research Policy* 31(6) 899–933.

Goodwin, P and van Dender, K (2013) “‘Peak Car’ — Themes and Issues”, *Transport Reviews* 33(3) 243-254.

Gray, D, Docherty, I and Laing. R (2017) “Delivering lower carbon urban transport choices: European ambition meets the reality of institutional (mis)alignment”, *Environment and Planning A* 49(1) 226-242.

Grayling, T (2004) “Whatever Happened to Integrated Transport?”, *Political Quarterly* 75(1) 26-33.

The Guardian (2013) HS2 project has £3.3bn funding shortfall, warns spending watchdog.

<http://www.guardian.co.uk/uk/2013/may/16/hs2-rail-report-watchdog>

Accessed 07/06/2017.

The Guardian (2015) *George the Builder and the big Tory plan to fix Britain brick by brick*, 5 October.

<http://www.theguardian.com/politics/2015/oct/05/george-osborne-conservative-conference-speech-we-are-the-builders>

Accessed 07/06/2017.

Headicar, P (2009) *Transport policy and planning in Britain*. Routledge, London.

Hensher, D (2001) “Measurement of the valuation of travel time savings”, *Journal of Transport Economics and Policy* 35(1), 71–98.

Hickman, R and Dean, M (2017) Incomplete cost – incomplete benefit analysis in transport appraisal. *Transport Reviews*. Available online.

HM Government (2010) *The Coalition: Our Programme for Government*. Cabinet Office, London.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/78977/Coalition_programme_for_government.pdf

Accessed 07/06/2017.

HM Treasury (2010a) *Budget 2010*. HM Treasury, London.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/248096/0061.pdf

Accessed 07/06/2017.

HM Treasury (2010b) *Spending review, 2010*. HM Treasury, London.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/203826/Spending_review_2010.pdf

Accessed 07/06/2017.

HM Treasury (2010c) *The National Infrastructure Plan 2010*. HM Treasury, London.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/188329/nip_2010.pdf

Accessed 07/06/2017.

HM Treasury (2011) *The National Infrastructure Plan 2011*. HM Treasury, London.

http://webarchive.nationalarchives.gov.uk/20130129110402/http://cdn.hm-treasury.gov.uk/national_infrastructure_plan291111.pdf

Accessed 07/06/2017.

Holmgren, J and Merkel, A (2017) Much ado about nothing? – A meta-analysis of the relationship between infrastructure and economic growth. *Research in Transport Economics* 63, 13-26.

House of Commons (2008) *Ticketing and Concessionary Travel on Public Transport: 5th Report Session 2007-8*. HC84, The Stationery Office, London.

<https://www.publications.parliament.uk/pa/cm200708/cmselect/cmtran/84/84.pdf>

Accessed 07/06/2017.

House of Commons (2011) “Transport policy in 2011: a new direction?” *Research Paper 11/22*, 2 March.

<http://researchbriefings.files.parliament.uk/documents/RP11-22/RP11-22.pdf>

Accessed 07/06/2017.

The Independent (2012) *Did brutal cuts cause West Coast rail fiasco?* 15 October.

<http://www.independent.co.uk/news/uk/politics/did-brutal-cuts-cause-west-coast-rail-fiasco-8211008.html>

Accessed 07/06/2017.

Jørgensen, J and Mintzberg, H (1987) “Emergent Strategy for Public Policy”, *Canadian Public Administration* 30(2) 214–229.

Johnson, G (1988) “Rethinking Incrementalism”, *Strategic Management Journal* 9(1) 75–91.

Kay, J. (2016) “Investment opportunities abound but we must get over the barriers”, *Financial Times* 22 March.

<http://www.ft.com/cms/s/0/4c178634-ef97-11e5-9f20-c3a047354386.html> -
[axzz43oenv13b](#)

Accessed 07/06/2017.

Le Blond, P, Budd, L and Ison, S (2016) “Airport Planning and Development in South East England: Policies, Personalities, and Procrastination”, Paper #16-2002, *Transportation Research Board 95th Annual Meeting*, Washington DC.

Lyons, G (2015) “Transport’s digital age transition”, *Journal of Transport and Land Use* 8, 1-19.

Lyons, G (2016) *Uncertainty Ahead: Which Way Forward for Transport?*, Chartered Institute of Highways and Transportation, London.

<http://www.ciht.org.uk/download.cfm/docid/54DF664C-DDB3-4AEA-B5D50039CCF24E9C>

Accessed 07/06/2017.

McFadden, D (1998) "Measuring willingness-to-pay for transportation improvements", in Gärling, T, Laitila, T and Westin, K (eds) *Theoretical Foundations of Travel Choice Modeling*, Emerald, London, 339-364.

Marsden, G and Reardon, L (2017) "Questions of governance: Rethinking the study of transportation policy", *Transportation Research Part A*, 101 238–251.

Matheson, C (2009) "Understanding the Policy Process: The Work of Henry Mintzberg", *Public Administration Review* 69(6) 1148-1161.

Metz, D (2008) "The Myth of Travel Time Saving", *Transport Reviews* 28(3) 321-336.

Ministry of Transport (1963) *Traffic in Towns*. The Stationery Office, London.

Mintzberg, H and Waters, J (1985) "Of Strategies, Deliberate and Emergent", *Strategic Management Journal* 6(3) 257-272.

Mokhtarian, P and Handy, S (2009) "No Particular Place to Go: An Empirical Analysis of Travel for the Sake of Travel", *Environment and Behavior* 41 233-257.

Monbiot, G (2005) The anti-social bastards in our midst. Originally published in *The Guardian*, 20-09-05 <http://www.monbiot.com/2005/12/20/the-anti-social-bastards-in-our-midst/>

Accessed 07/06/2017.

Mullen, C and Marsden, G (2015) "Transport, economic competitiveness and competition: A city perspective", *Journal of Transport Geography* 49 1-8.

NAO (2013) *High Speed 2: A Review of Early Programme Preparation*. The National Audit Office, London.

<https://www.nao.org.uk/wp-content/uploads/2013/07/Full-Report.pdf>

Accessed 07/06/2017.

Neuhold, C, Vanhoonacker, S and Verhey, L (eds) (2013), *Civil Servants and Politics: A Delicate Balance*, Palgrave Macmillan, Basingstoke.

Orr, K and Vince, R (2009) "Traditions of Local Government", *Public Administration* 87(3) 655–677.

PAC (2013) *High Speed 2: A Review of Early Programme Preparation*. House of Commons Public Accounts Committee HC478, The Stationery Office, London.

<https://www.publications.parliament.uk/pa/cm201314/cmselect/cmpublicacc/478/478.pdf>

Accessed 07/06/2017.

Porter, M (2002) "Location, Competition, and Economic Development: Local Clusters in a Global Economy", *Economic Development Quarterly* 14(1) 15-34.

Preston, J and Robins, D (2013) "Evaluating the long term impacts of transport policy: The case of passenger rail privatization", *Research in Transportation Economics* 39(1) 14–20.

pteg (2013a) *The 2012 Autumn Statement: The Transport Number Crunch*. pteg, Leeds.

http://www.pteg.net/system/files/general-docs/Transport_number_crunch_Feb_2013_PA_amends.pdf

Accessed 07/06/2017.

pteg (2013b) *HMT 2013 Spending Review: The Transport Number Crunch*. pteg, Leeds.

http://www.pteg.net/system/files/general-docs/HMT_2013_Spending_Review_transport_number_crunch_FINAL.pdf

Accessed 07/06/2017.

Royal Commission on Environmental Pollution (1994) *Eighteenth Report: Transport and the Environment*.

<http://webarchive.nationalarchives.gov.uk/20110322143804/http://www.rcep.org.uk/reports/18-transport/1994-18transport.pdf>

Accessed 07/06/2017.

SACTRA (1996) *Transport and the Economy: Full Report*. Standing Advisory Committee on Trunk Road Assessment, London.

http://webarchive.nationalarchives.gov.uk/20050301192906/http://dft.gov.uk/stellent/groups/dft_econappr/documents/pdf/dft_econappr_pdf_022512.pdf

Accessed 07/06/2017.

Schön, D and Rein, M (1995) *Frame Reflection: Toward the Resolution of Intractable Policy Controversies*, Basic Books, New York, NY.

Scottish Government (2011) *An introduction to Scotland's National Performance Framework*. The Scottish Government, Edinburgh.

Shaw, J and Docherty, I (2014) *The Transport Debate*. Policy Press, Bristol.

Shaw, J, Hunter, C and Gray, D (2006) "Disintegrated Transport Policy: The Multimodal Studies Process in England", *Environment and Planning C: Government and Policy* 24(4) 575-596.

Söderbaum, P (2006) "Democracy and sustainable development--what is the alternative to cost-benefit analysis?", *Integrated Environmental Assessment and Management*, 2(2) 182-90.

Söderbaum, P (2007) "Issues of paradigm, ideology and democracy in sustainability assessment", *Ecological Economics* 60(3) 613-626.

Stopher, P and Stanley, J (2014) *Introduction to Transport Policy: A Public Policy View*, Edward Elgar, Cheltenham.

Schwanen, T (2016) "Geographies of transport I", *Progress in Human Geography* 40(1) 126-137.

Vickerman, R (2000) "Evaluation methodologies for transport projects in the United Kingdom", *Transport Policy* 7 7-16.

Vickerman, R (2017) Beyond cost-benefit analysis: the search for a comprehensive evaluation of transport investment. *Research in Transport Economics* 63, 5-12.

Vogel, B and Bates, J (2015) "Heathrow claims victory but the battle of Britain continues: the Airports Commission report has not ended the UK aviation capacity debate", *IHS Jane's airport review*, September, 6-9.

Vollmer, H (2016) "Financial numbers as signs and signals: looking back and moving forward", *Economic Sociology: the European Electronic Newsletter* 17(2) 32-38.

Walton, W and Shaw, J (2003) Applying the new appraisal approach to transport policy at the local level in the UK. *Journal of Transport Geography*, 11, 1-12.

Wardman, M, Batley, R, Laird, J, Mackie, P and Bates, J (2015) "How should business travel time savings be valued?", *Economics of Transportation* 4(4) 200–214.

Wenban-Smith, A (2010) Where's the evidence that time savings from new roads deliver tangible economic benefits? *Local Transport Today*, 541, 18.

What Works Centre for Local Economic Growth (2015) *Evidence Review 7: Transport*. WWCLEG, London.

http://www.whatworksgrowth.org/public/files/Policy_Reviews/15-06-26_Transport_Review.pdf

Accessed 07/06/2017.

Worsley, T and Mackie, P (2015) *Transport policy, appraisal and decision-making*. RAC Foundation, London.

Young, R, Young, M, Jordan, E and O'Connor, P. (2012) "Is strategy being implemented through projects? Contrary evidence from a leader in New Public Management", *International Journal of Project Management* 30(8) 887–900.

Figure 1: Proposed High Speed 2 routes.

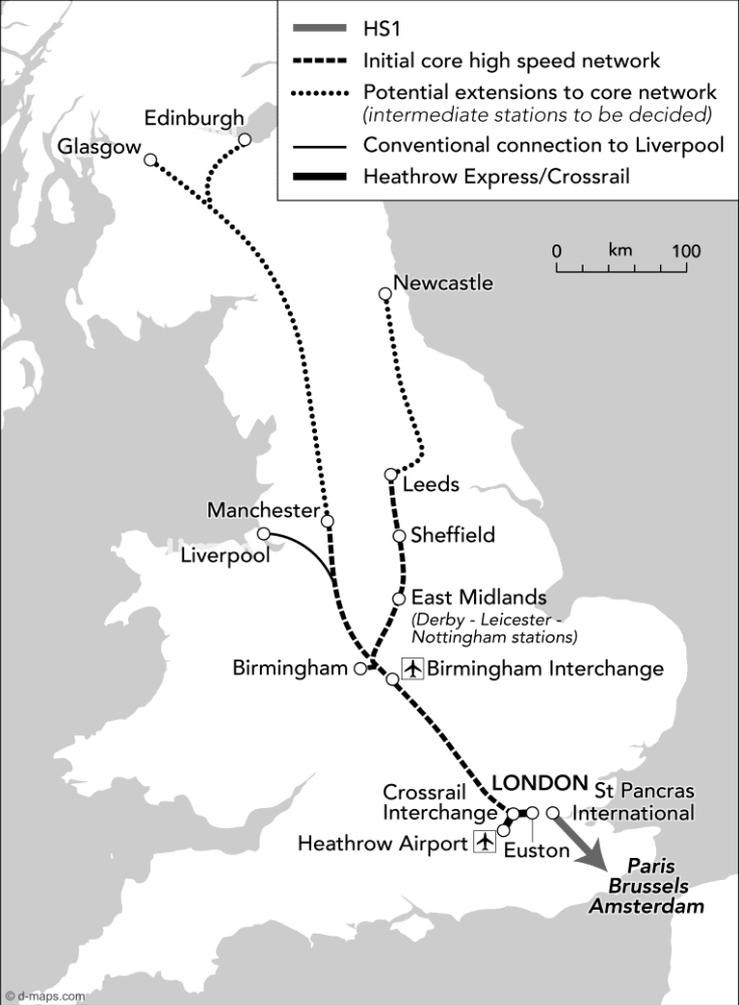


Table 1. Key transport infrastructure statistics of selected European countries. Updated from Shaw and Docherty (2014).

	GDP per capita 2015, PPP (Int. \$)	Population, 2015 (m)	Size (km ²)	Roads (000 km, 2013)	Expressways (000 km / % of all roads, 2013)	Rail (000 km / % electrified, 2013)	HSR (km operational/ km under construction/ km long term planning, 2017)	Tram / light rail (track km,2015)
United Kingdom	41,801	65.1	243,000	394	3.5 / 0.89	16.2 / 34.1	113/0/5443	308
France	41,017	66.5	552,000	102	11.8 / 1.2	29.0 / 54.2	2142/634/1786	692
Germany	48,042	81.7	357,000	644	12.9 / 2.0	37.8 / 59.4	1475/368/324	3061
Italy	37,217	60.7	301,000	488	6.8 / 1.39	16.8 / 71.0	981/67/1269	307
Netherlands	49,587	16.9	37,000	141	2.8 / 1.99	3.0 / 76.1	120/0/0	271

Table 2: Headline transport scheme commitments, 2014. Source: after DfT 2014a.

Strategic road
Resurfacing 80% of the network
Starting over 100 major projects, including smart motorways, widening and dualling to bring key routes up to 'expressway' standard
Rail
HS2
Crossrail
Thameslink
Inter-city Express Project
Electrification of Great Western, Midland and Trans-Pennine mainlines, and strategic local lines in the North of England
Rebuilding Birmingham New Street, Bristol Temple meads and Manchester Victoria stations
Northern Hub capacity improvements
Further developing the strategic freight network
Implementing ERTMS

Table 3: Road schemes identified to be taken forward by Highways England in 'Road Periods' 1 (until 2019/20) and 2. Source: DfT 2014a.

Region	Number of schemes	Cost (£bn): Period 1 Est. Period 2
Yorkshire and the North East	26	1.4
Under construction	4	
Early Period 1	4	
Late Period 1	13	
Period 2	5	6.5-15.0
<i>Smart motorway schemes</i>	4	
North West	17	1.5
Under construction	2	
Early Period 1	2	
Late Period 1	12	
Period 2	1	0.1-0.25
<i>Smart motorway schemes</i>	6	
Midlands	32	1.8
Under construction	7	
Early Period 1	8	
Late Period 1	13	
Period 2	4	7.0-15.0
<i>Smart motorway schemes</i>	10	
East	17	2.0
Under construction	0	
Early Period 1	2	
Late Period 1	13	
Period 2	2	0.35-0.75
<i>Smart motorway schemes</i>	1	
South East and London	31	2.2
Under construction	1	
Early Period 1	7	
Late Period 1	21	
Period 2	2	0.2-0.5
<i>Smart motorway schemes</i>	7	
South West	8	2.0
Under construction	0	
Early Period 1	1	
Late Period 1	6	
Period 2	1	0.25-0.5
<i>Smart motorway schemes</i>	0	
Total	131	

Table 4: Individual transport policies pursued by the Coalition. Source:

www.gov.uk.

Policy	Issues	Key features
Managing, improving and investing in the road network	Improving quality of the road network; Tackling congestion; Effective signage; Fair and effective local parking enforcement	Investing in strategic and local roads; 'Transforming' Highways Agency into a publicly owned company; Revising signage guidelines and promoting decluttering; Introduced <i>Civil Parking Policy Evaluator</i> ; Providing guidance to local authorities on coordinating street works
Making roads safer	Doing more to prevent deaths and serious injuries; Improving skills and attitudes of drivers; Providing better safety education	Addressing a loophole in drink driving legislation and adopting new drug driving legislation; Cycle and child safety campaign; Amending driver and rider training; Tightening up legislation on uninsured cars
Expanding and improving the rail network	Efficient rail services are vital for economic prosperity; Promoting modal shift to rail can help achieve carbon emissions reduction targets	Regulated rail fares capped at RPI+0; Fares and ticketing review; Targeted capacity improvements and electrification programme; Crossrail, Thameslink and IEP; Reviewing franchise process; Additional support for Community Rail
HS2: Delivering a new high speed rail network	Significant extra capacity needed on the railway network	Developing HS2 for delivery in two stages, the first of which (to Birmingham) to be completed by 2026
Promoting sustainable aviation	Ensuring airports and airlines provide the connections 'the UK needs to grow and prosper' while taking account of environmental issues and making sure aviation is safe and secure	New rail link to Heathrow from the West; Liberalising operations at Gatwick and Stansted; Davies Commission on SE England runway capacity; Updating aviation regulatory frameworks; Researching health and safety issues
Improving local transport	Promoting modal shift to public transport and walking / cycling for short journeys can help meet carbon emissions reductions targets	Launching a Better Bus Areas fund; Encouraging cycling; Promoting smart ticketing; Promoting alternatives to the journey

Making transport more accessible to all	Ensuring access to buses, coaches, transport and taxis is 'hassle-free'	Requiring these modes to be accessible to all through the Equality Act 2010
Providing effective regulation of freight transport	Efficient freight transport helps support the UK economy Proportionate regulation needed to promote safe and secure movement of goods while allowing costs and carbon emissions to be cut	Introduction of HGV road user levy for UK and foreign-owned vehicles over 12 tonnes; Trialling longer HGV trailers; Instituting Low Emission HGV Task Force
Reducing greenhouse gases and other emissions for transport	Contributing to achieving carbon emissions reductions targets	Investing in ultra-low emissions vehicle technologies; Clean bus technology fund and a small contribution to cleaner air in London
Managing the risks to transport networks from terrorism and other crimes	Protecting people and infrastructure and allowing efficient and effective operation of transport systems	Ongoing application of relevant legislation and regulations
Local Growth Deals; Supporting economic growth through local enterprise partnerships and enterprise zones; Giving more power back to cities through City Deals	Creating a balanced economy built on private sector job creation; Devolving power to cities / city regions, which contain around three quarters of the UK's population	Creation of 24 enterprise zones; Growing Places fund to support local infrastructure development; Local Growth Deals to devolve more control over public spending to Local authorities / Local Enterprise Partnerships