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Transport in a sustainable urban future

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Introduction

Transport is acknowledged as a vital ingredient of any credible strategy for the sustainable city because of the key role it plays in promoting economic development, quality of life and wellbeing. Yet managing urban transport effectively, given its complex and intersecting economic, environmental and social impacts, is also precisely the kind of 'wicked problem' that policy makers consistently find hard to resolve (Docherty and Shaw, 2011a; Conklin, 2006; Rittel and Webber, 1973). Many of the reasons for this are longstanding and emanate in particular from the dominance of the private car in meeting the demand for mobility, which has built up over many decades in the developed world, but which is now being reproduced at a much higher pace in the fast growing cities of the Pacific Rim and elsewhere (Newman and Kenworthy, 1999; Lyons and Loo, 2008). Although it has undoubtedly transformed our patterns of travel and consumption, concerns over the limitations and externalities of private car transport – primarily traffic congestion, environmental degradation and social exclusion – have for many years stimulated various initiatives designed to mitigate these externalities (Feitelson and Verhoef, 2001; Knowles et al, 2008). The conflict between the car, long promoted by neoliberal voices as a potent weapon of the free market and individual liberty, and competing visions of a more 'public' transport system based on collective modes such as the bus and train, and active travel by walking and cycling, has been played out over many years. Nowhere has this conflict been more intense than in cities, as it is here that the problems such as congestion, poor local air quality and mobility deprivation are often at their most intense (Cahill, 2010; Docherty et al, 2008).

Since the aftermath of the previous major global economic crisis in the 1970s, the macroregulation of transport has been shaped by the rise of neoliberalism and policy themes

derived from it, such as the notion of city competitiveness in the 1990s and 2000s (Jessop, 2002; Keeling, 2009), and the impact of three decades of neoliberal-inspired governance continues to shape contemporary debates on what a sustainable future might look like (Docherty et al, 2004; Jessop, 2002; Siemiatycki, 2005; Grengs, 2005; Keeling, 2009). In the late 1970s/1980s, transport was something of a pioneer in implementing the radical new neoliberal political economy. Transport networks and services were successively deregulated and privatised in order to open them up to the rigours of competition and reduce the state's requirement to intervene, both in policy and financial terms. But since the nascent 'environmental turn' of the early 1990s, governance networks have re-engaged more actively with the transport sector, attempting to ameliorate the various problems of car-dominated mobility patterns. After the millennium, intervention has increased further as cities and regions around the world became convinced of the need to improve - drastically in many cases - their transport systems in the pursuit of economic competitiveness in a globalising economy in which cities compete intensely for resources of all kinds. Despite the lack of any properly conclusive evidence base demonstrating the links between transport investment and economic growth (see Banister and Berechman, 2001), the boom years of the 2000s generated huge investment programmes in urban transport, especially in areas such as new light rail and metro networks. These investments not only (at least rhetorically) tackled the resilient issues of environmental and social disbenefits of the car, but were also stylish additions to the urban realm, and were immediately attractive to policy makers across several disciplines from civil engineering to planning and urban design. They were a tangible, visceral example of the new modernity, bringing together sustainable development, international brand image and city marketing in a sleek high technology form (Docherty et al, 2009; Kaufman et al, 2008; Lawless & Gore, 1999).

In this chapter we start with a consideration of how the debate over the role of the car and related policy perspectives have shaped the development of city transport systems over the last 20 to 30 years. We then explore what the uncertain conditions of the post-financial crisis

economy might mean for urban transport and its contribution to the sustainable city of the future. In exploring these themes, we highlight how concerns over the impacts of mass carbased mobility evolved into a wider examination of transport's position at the heart of various sustainability debates throughout the 2000s, and how public transport in particular became a laboratory for broader experiments in marketisation, private sector financing and service delivery that have been subsequently applied across many areas of urban economic and social life. It is undoubtedly the case that the financial crisis and subsequent recession have revealed significant weaknesses in many of the assumptions about how transport infrastructure and services would be developed in future, especially in heavily marketised economies such as the UK. Indeed, the process of marketisation, and the restructuring of urban governance that has accompanied the broader response of the state to the challenges of globalisation, add further barriers to action for policy makers seeking to effect change in pursuit of contemporary objectives such as carbon reduction and distributive justice (Marsden and May, 2006; Shaw et al, 2008).

As if this were not enough, the financial crisis and the stern austerity measures being introduced to deal with its aftermath could bring the era of high spending on urban transport – which was a key part of many cities' competitiveness strategies in the 2000s – to a juddering halt. Transport is often one of the first areas of government spending to be axed in times of financial retrenchment, since it is associated with significant capital expenditure, and is rarely as politically toxic as cutting back on investment in health and education. Given that transport infrastructure provision has been increasingly underpinned by private finance that may no longer be readily available, the potential for network development and standards of service provision – already exposed to the harsh economic logic of deregulated operating environments – to decline further becomes very clear indeed. But the prospect of a sustained spending squeeze lasting a decade or more is something altogether new for the sector in modern times, and will likely necessitate very significant realignment of policy objectives for transport. The investment patterns of the last decade have been embedded in a rhetoric

focused on growth and competitiveness rather than consolidation, retrenchment and genuine sustainability, and substantial reductions in state expenditure on both capital and revenue support will mean that policies will increasingly have to focus on getting the most from existing infrastructure and services. Rather than development plans being fixated by 'the new', the thorny problem of managing demand will once again come to the fore.

Transport and the reproduction of cities

It is difficult to understate the extent to which transport has determined the shape of today's cities. The underlying morphology on which urban societies, cultures and economies combine to form the cities we inhabit is created by the transport technologies available to each generation that reshapes and reproduces the urban system. From the classical Italian hill town built to celebrate the pedestrian and the meeting place, through the great metropolises of London, Paris, New York and Tokyo that grew along their expanding underground railway networks to motor cities from Los Angeles to 21st century Shanghai, each urban place owes much of its character and identity to its transport system. The classic definitions of the city focus on the spatial concentration of economic, social and cultural processes in a node of production, exchange and interaction, the unique local combination of these generating the dense and diverse places we know as cities.

Urban transport, and the policies and governance structures and processes that reproduce it, can be usefully analysed through these two inter-related perspectives of space – the territory across which economic systems extend – and the places formed by complex social and cultural interaction (Hanson, 2004). This is because each of these perspectives has traditionally implied a different set of objectives and priorities for the development and management of the urban transport system. Those perspectives prioritising economic development focus on the need to supply as much physical mobility as possible in the urban system so that industrial production and key enabling systems such as the labour market can function as efficiently as possible (Glaeser, 2004, Laird et al, 2005). More recently, as many

cities have revitalised themselves as centres of the service and consumption economy, these concerns have been translated into policy priorities including the maximisation of urban road and rail network capacity. The aims have been to extend and deepen the diversity and 'thickness' of the labour market, and tackle traffic congestion through infrastructure improvements or – more exceptionally – the introduction of congestion charging to minimise delays and their cost to the economy (see below). The latest incarnation of this approach delves more deeply still into the complex network effects of transport systems by pursuing the additional 'agglomeration economies' claimed to result in the cities with the very densest infrastructure patterns (Graham 2007; see also Preston 2008).

The alternative normative view of the role of urban transport systems, to facilitate the city's role as a place of social and cultural creativity, has an equally long heritage. Perhaps the most celebrated work in this regard – although not itself a 'transport' analysis – is Jane Jacobs' (1961) seminal *Death and Life of Great American Cities*, in which the rapid rise to dominance of the car in cities formed and shaped according to earlier transport technologies was identified as a key underlying determinant of their decline in vitality. Half a century on, urban places, from old neighbourhoods to the largest city centres, have been exposed to successive waves of car-oriented development such as out-of-town business parks and shopping centres that have undermined their viability. These experiences have generated a substantial literature making the connections between the quality of the urban realm, the importance of pedestrian activity in sustaining neighbourhood economies and social networks and how public transport facilitates this (Hass-Klau, 1993; Logan and Molotch, 2007).

The regeneration of major cities has also stimulated renewed interest in the interaction of transport systems and larger urban agglomerations over the last 20 years. Cities have rediscovered the importance of their central cores and other key public places in attracting service sector investment and the kind of 'creative class' (Florida, 2005) that works in high

value sectors, and in contributing to wider ideas of quality of life and wellbeing. The potential for better transport to act as a catalyst for this – especially by reducing the impact of traffic and rehabilitating places of aesthetic, historical and/or cultural merit – has never been higher (Gärling and Steg, 2007). Across the world, cities have switched transport investment away from the car towards other modes, particularly urban rail, and there are now many celebrated examples where transport investment has been targeted at re-engineering the city to make it a more vibrant, diverse and socially inclusive place (Haywood and Hebbert, 2008; Shaftoe, 2008).

Transport – a trailblazer for neoliberalism

For the first 70 to 80 years of the 20th Century, there was a widespread consensus across developed nations that the peculiarities of transport – the high capital cost of infrastructure, the desire to create integrated networks rather than competing freestanding routes and so on – necessitated a strong state involvement in planning and operating transport systems. Spurred on by the insolvency of many private railway companies across Europe, the "acute and wasteful competition" between many private transport operators (Barker and Robins, 1974: 211) and developing analyses of the welfare benefits of effective transport, which drew on the spirit of municipalism that had underlain public works in housing and sanitation in 19th century cities, new institutions and structures of governance emerged to regulate and control transport operations. At the urban scale, London led the way with a series of reforms that culminated in the creation of the London Regional Transport Board (LRTB) in 1933. The LRTB was designed to create a unified transport network for the wider London region, and in so doing support the further extension of the Underground by ensuring it was coordinated, as opposed to in competition, with the bus network (Bagwell, 1988).

Government and municipal control of the management and operation of transport steadily extended through the Second World War until the 1960s, including the notable milestones of the establishment of the Régie Autonome des Transports Parisiens (RATP) in Paris in 1948

and the Metropolitan Transportation Authority (MTA) in New York in 1968, which both amalgamated several bus and rapid transit operations in a new public authority similar to the London model. These and subsequent further governance reforms, including the creation of city-regional transport authorities in many provincial conurbations across Europe, and the significant investment in new public transport infrastructure ongoing throughout the 1960s and early 1970s, had in mind particular social policy objectives. In the US especially, but also increasingly across much of Europe, rapidly rising car ownership and post-war development planning structures were targeted at the 'outmoded' environments and mobility patterns of the dense, public transport-dependent industrial city. These were to be replaced by new edge-of-town locations for housing, employment, retailing, health, education and other public services served almost entirely by road. Such developments led to a "very uneven" distribution of travel choices between those with and without access to a car (Schaeffer and Sclar, 1975). Extending the reach of governance to control and integrate the public transport network to create a real alternative to the car was paramount.

The second half of the 1970s, however, saw a collapse in transport investment in many countries as governments struggled to adjust to new financial realities and cut public spending quickly to cope with rising levels of debt. The subsequent rise to pre-eminence of the great neoliberal economic experiment in the aftermath of the energy crisis and related recessions is well documented (see for example, Harvey, 2005), but what is perhaps less widely acknowledged is that transport played an leading role in the roll out of neoliberal reforms – the "marketisation transition" (Docherty and Shaw, 2011b) – demonstrating their veracity and impact across various dimensions of regulation and service delivery before their application more generally across the economy (see Headicar, 2009).

Transport was a particularly appropriate laboratory in which to test the "kind of operating framework or 'ideological software'" of neoliberalism (Peck and Tickell, 2002: 380) because of the growing importance of the state and its social policy objectives in the sector running up

to the 1970s crisis. At the level of high ideology, neoliberals focused early attention on transport since it had become one of the strongest expressions of the 'welfare' state, exemplifying the notions of welfare economics and the public good: the very idea of collective, 'public' transport was anathema to their own ideals of reduced state intervention, the promotion of market forces in order to encourage competition, and normative values of enterprise and individual self-reliance. Instead, transport was to be treated the "same as any other good, subject to market forces and the rigours of competition" (Sutton, 1988: 132). The dominance of the private car as it exists today was assured in this period after governments, led by the US and UK, elevated the car from its role as a provider of flexible personal mobility as part of a wider transport system to a symbol of prosperity, individual autonomy and indeed the free market itself (Chatterjee and Dudley, 2011).

Although mass car ownership undoubtedly facilitated structural adjustments in the labour and housing markets and in other economic domains that stimulated enhanced productivity (Meyer and Gomez-Ibanez, 1981; Pucher and Lefevre, 1996), the rapid growth in car use in the 1980s and 1990s also brought a range of negative externalities associated with 'unrestricted mobility' - especially environmental and social costs - to the fore (see Cahill, 2010; Sheller and Urry, 2006). From the neoliberal perspective, the inevitable social consequence of rising car ownership and use - that public transport services would reduce was an appropriate outcome given that it both stimulated innovation in the services that remained, and (more importantly) reduced the requirement for public subsidy of the transport system. The downside to this marketisation was that public transport networks were reduced in scope, frequency and quality to the extent that vulnerable and disadvantaged groups that depend on them most – e.g. the elderly, the young, the unemployed and the infirm – became increasingly 'mobility deprived' (Lucas et al, 2006). The fact that these groups tended to be over-represented in particular urban communities, and that the vicious circle of the decentralisation of economic activity to car-friendly fringe sites further reduced the demand for public transport in urban cores, contributed to the well-documented 'hollowing out' and

social polarisation of many cities. This renewed calls for a more interventionist approach by government to safeguard at least some degree of equity in transport provision (Le Grand, 1991; Buchan, 1992; Torrance, 1992).

The 'New Realism' and beyond

It was against this background of steadily rising car ownership and use, social and neighbourhood decay and the escalating concerns of congestion and pollution that the first robust challenges to the 'great car economy' gained traction. One of the most notable was the development of a policy prescription known as the "New Realism" (Goodwin et al, 1991) that took as its starting point that it was in cities that the problems of the car were most keenly felt. The New Realism put forward both a number of propositions about the structural nature and importance over over-reliance on the car, and also what could be done about it. Most important was the analysis that the demand for mobility would outpace whatever the actual capacity to expand the transport system through investment in new infrastructure might be. As a result of this, increasing traffic congestion and the longer and less reliable journeys it brings about were inevitable, which would first undermine the claimed benefits of the car in terms of its facilitation of enhanced mobility, but also go on to erode quality of life, damage the local and global environment, and (eventually) constrain economic growth.

Many governments took the New Realism to heart (at least rhetorically) in the early 1990s, spurred on by the alignment of two important political trends. The first of these was a cluster of events – including the 1987 UN World Commission on the Environment, the 1989 European Congress of Ministers of Transport and the 1992 Rio Earth Summit – which together represented the coming of age of the environmental movement, the adoption of environmental concerns such as climate change into the mainstream of politics and the key contribution of transport and especially the car to these concerns (see, for example, Baumol and Oates, 1988; Pearce et al., 1989; Ison et al, 2002). The second was budget-related. The UN's 1987 'Brundtland Report' explored the economic consequences of environmental

pollution, noting there had been "a growing realization... that it is impossible to separate economic development issues from environment issues... and environmental degradation can undermine economic development" (World Commission on Environment and Development, 1987: 3). But it was the short term economic issue of another deep recession that precipitated real policy change. In the UK, an ambitious programme of road building, championed by the ideologically-driven neoliberals of the Thatcher-led Conservative government in 1989 as the "largest... since the Romans" (Department for Transport, 2007: para 1.7), was to largely disappear under the aegis of her successor John Major.

In many ways the Major-led Conservative governments (1990-1997) created the conditions for a deeper debate about the future direction of transport policy, and the value of 'alternative' approaches such as the New Realism, to flourish. Although hesitant at first given the Conservatives' historic commitment to the car, Major's administrations found their way towards a more sustainable approach to transport by adopting the recommendation of the Royal Commission on Environmental Pollution (1994) to raise the price of petrol steadily, with the aim of doubling its cost in real terms in order to reduce road traffic levels. At the same time a limited revival of light rail in several English cities was sponsored, and construction began on the first new Underground line in London since the 1970s (Knowles and White, 2003; Wolmar, 2004). New *Planning Policy Guidance* on transport was introduced in 1994 which for the first time sought to limit car-dependent development on the urban fringe and reduce the need for people to travel more generally (Headicar, 2009).

Similar trends were apparent in other countries: in France, the updated *Plans de Déplacements Urbains* (PDUs – Urban Development Plans) legislation from 1996 made it obligatory for each urban area in France with a population exceeding 100,000 to adopt a PDU. These are explicitly designed to reduce the impact of road traffic and improve the quality of public transport, to the extent that France is now a world leader in urban public transport development, with over 20 new tram systems and 6 new metro systems being built

since their introduction (Tricoire, 2007). Even in the United States, the most car-dependent nation of all, light rail seems to be enjoying something of a renaissance, with new or extended systems pursued in sprawling Western centres such as Seattle, Portland, Denver and Los Angeles.

The competitiveness agenda

A central theme in this book is the profound shift emerging from the 'boom' discourses that positioned revitalised cities as the key knowledge-intensive nodes of a truly globalised economy in the 1990s and 2000s, to the 'bust' – or at least austerity – debates that increasingly characterise post-financial crisis urban policy. For transport, this has already led to something of a rupture in the seemingly self-reinforcing narrative that placed transport and the 'connectivity' it generates between and within places at the very heart of the notion of urban competitiveness (Docherty et al, 2009). The so-called competitiveness agenda, which attempted to reconcile the seemingly discordant aspirations to maintain or even enhance rates of economic growth, whilst at the same time reducing the impacts of this growth on the environment, impacted upon urban transport policy in a number of ways.

Many regional economists and city governments have focused on the traditional idea of the urban 'asset set' as the key to growth. This 'asset set' is the bundle of 'physical', 'human' and 'soft' resources ranging from land and property, the labour pool and its skills base, the governance and regulatory environment, to quality of life factors such as the artistic, sporting and cultural environment, to explain city competitiveness. The challenge for cities in the era of the competitiveness paradigm was therefore commonly framed in terms of improving this 'asset offer' so that they become more attractive places for people to live, work and invest (Begg, 2001). Transport plays an important role in many of these asset sets. As already noted, the transport system "links people to jobs; delivers products to markets; underpins supply chains and logistics networks; and is the lifeblood of domestic and international trade" (Eddington, 2006: 11). But it also plays a critical role in defining quality of life in the city, and

the extent to which citizens are able to access the cultural and other services that are argued to be of such importance in explaining the relative level of competitiveness between different cities (see, for example, Banister and Berechman, 2000; Porter and Ketels, 2004).

The emergence of the competitiveness paradigm, at a time when the economy was recovering from the early 1990s recession, combined with the environmental and social cases for shifting the balance of investment away from the car - especially in cities with their heightened exposure to problems such as congestion, local air pollution, community severance and so on. In many places this generated an urban transport policy that remained focused on substantial infrastructure construction, but one in which new roads were replaced (or at least augmented) by new public transport schemes. With more financial resources at their disposal, governments again became re-engaged with transport development, not just in terms of infrastructure construction but also in terms of re-regulating public transport services to achieve better integration between modes and between transport and other areas of public policy such as planning (Hull 2005; Williams, 2005) and public health (Lopez and Hynes, 2006; Ming Wen and Rissel, 2008). This reflected the "changing connections and inter-relations between social, political and cultural factors" (Painter, 1995: 276) characterising the shift to more complex patterns of governance in line with the public-private alignment rhetoric of 'the third way' (Giddens, 2000). At the sub-national scale, powerful urban governments with strong leaders and mandates were able to maximise the impact of the investment bubble by applying complementary policies aimed at changing travel behaviour and re-invigorating the urban realm, with the radical greening and road space reduction of key radial roads in Paris (since copied in New York), and London's globallysignificant Congestion Charge scheme perhaps the best examples.

Thus in the period immediately before the financial crisis, when the city competitiveness paradigm was at its most intense, urban transport was the subject of more policy attention and public investment than it had enjoyed for decades. The mindset of planners and

economic development organisations was focused on the notion of competition between places, with cities attempting to out-do one another on the quality and image of their public transport networks as part of their wider strategies to attract investment. The onset of recession would necessitate something of a re-evaluation of these strategies.

After the financial crisis – what kind of (sustainable) future?

In the immediate aftermath of the financial crisis, when states were frantically trying to find policy instruments that might prevent a deep recession from developing into a full-blown depression similar to that experienced in the 1930s, some governments actually increased their spending on urban transport in order to safeguard jobs and the viability of the construction industry. But as the medium-term policy imperative moves from providing financial stimulus to reducing debt levels and ongoing public expenditure, the extent to which such investment will continue is highly uncertain. Past recessions have hit transport hard, not only because governments – especially in the UK – have chosen to reduce public expenditure quickly with transport top of the list for cutbacks, but also because of the secondary economic effects that influence the financial viability of service operations.

As the economy shrinks, the overall tax take declines and the level of public support needed to cover increased social costs, primarily unemployment and other welfare benefits, rises. At the same time, rising unemployment means that fares revenue declines, with public transport operators facing a financial gap long after the economy has begun to grow again since the unemployment rate (and hence reduced travel, especially commuting) tends to lag any return to economic growth by several months. As a result, a vicious circle can be created in which public transport declines, making it harder for newly unemployed people to find alternative jobs, which depresses economy recovery further. If this pattern is followed for any length of time then the consequences can be severe: public transport becomes residualised as private operators can no longer afford to operate services commercially and the state is unable to provide anything more than a minimum 'safety net' service given the financial pressures

upon it. The end result is the kind of isolation of whole communities and the decline of economic, social and cultural activity that characterised the dying cities that Jane Jacobs (1961) wrote about.

Although any kind of forecasting for a complex area of public policy is difficult enough, the uncertain economic future, coupled with the divergent scenarios for environmental change that are even more apparent after the failure of the Copenhagen Climate Summit make planning for future urban transport especially problematic. Not least is the question of whether the economic recovery will be robust and resilient enough worldwide for a return to the 'business-as-usual' approach to growth and competitiveness. In the transport sector, the early exchanges in this debate are being played out in terms of how targets already adopted by various governments for carbon reduction in the first half of the 21st Century might be met (see, for example, Anable and Shaw, 2007).

Central here is the battle between proponents of 'conventional' notions of economic growth, many of whom now adopt a rhetoric that places climate change as a challenge for technological development to overcome in order to stimulate the next wave of growth, and those who see the scale of the potential crisis as a compelling reason to pose more fundamental questions about how society organises itself. For the first group, the key innovation in transport must be the 'greening' of the car through the widespread adoption of electric vehicles, a process that might (arguably) 'solve' many of the environmental problems of the contemporary car-based "mobility regime" (Kemp et al, 2011), but one which would entrench the social problems of highly polarised mobility as it does not address the problems associated with congestion. For the second, more radical group, the development of strategies and tactics designed to reduce and ameliorate carbon emissions is a truly crosscutting endeavour. Rather than 'just' greening the car, a large-scale reorganisation of the transport system is implied, including all modes in order to achieve gains in other domains

including land use planning, public health and community wellbeing in addition to environmental harm reduction.

If we assume that the impacts of the financial crisis and post-2008 recession are real and longstanding in terms of a diminution in the rate of growth seen in the 'boom' years of the urban competitiveness paradigm, then a number of critical policy questions for transport in cities emerge. Crucial here is whether the very notion of 'sustainability' itself will be reconfigured so that the roles of urban transport systems change significantly. 'Sustainability' is a slippery term, and has been appropriated by different interests to mean different things. As Bill Black noted over a decade ago, the early popular definition of sustainable transport derived directly from the Brundtland Report - that which could "satisfy current transport and mobility needs without compromising the ability of future generations to meet these needs" was problematic, since "there is no limit placed on 'future generations' and nothing is sustainable forever" (Black, 1998: 337). But then, as Wackernagel and Rees (1995: 64) argued, the "deliberate vagueness" associated with sustainability is "a reflection of power politics and political bargaining." This explains why many governments and others were keen to promote potentially contradictory ideas such as 'sustainable economic growth' and the choice of large infrastructure schemes as the means to address the problems of urban transport in the first place.

Equally, moving away from the rhetoric of 'sustainable growth' towards a more 'deep green' standpoint that elevates the protection of the environment above all other policy considerations is almost impossible in a democratic society: politicians (probably rightly) judge the impact this would have on people's lifestyles as too great an electoral liability. The challenge is therefore to work out how radical change in our consumption of mobility might be achieved in such a way that the opportunities of technological change are grasped, but that their promise of a future zero-emissions transport paradise is not converted into an excuse to avoid radical policy reform, pursue alternative approaches such as reducing the

need to travel in the first place, and/or shy away from tackling resilient transport-related policy problems such as community isolation in the interim.

Although this description of the scale of the challenge might suggest that transport's status as a 'wicked problem' is well deserved, there are many things that can be done to improve the situation. Critically in the context of recession and austerity, these approaches do not require large financial resources. Earlier, we noted how the urban transport policy prescriptions of the 'New Realism' grew up in the early 1990s against a background of rapidly increasing environmental concern and recession economics, conditions that are not dissimilar to those of today. The original thinking behind the New Realism was that first, there needed to be a recognition that the benefits of the car were beginning to be eroded by its externalities, and second, that urban transport policy should be about making cities better places in which to live and work, rather than trying to tweak existing policies so that problems such as congestion and pollution got worse more slowly. Given that the 'crisis of mobility' still exists, and is indeed made worse by the scale of the climate change challenge as contemporary scientific consensus understands it to be, revisiting the New Realism might well be the way to begin addressing the urban transport problem in the coming decade.

In practice, although there are myriad different urban contexts, locations and communities with their own distinctive local needs and cultures, the problem of transport in cities remains one of how to maintain the very real economic and social benefits of mobility, which is now dominated by the car, whilst making real attempts to tackle the social and environmental problems that we have outlined. Part of the reason relatively little of this happened in the 1990s and 2000s was because the scale of economic growth enjoyed over this period meant that expensive, high technology solutions such as new public transport infrastructure were affordable and therefore attractive to policy makers operating in the competitiveness paradigm. But if the post-financial crisis environment turns out to be one of real austerity, then the rhetoric of making the most out of existing infrastructure will have to be made real.

This means rediscovering and renewing the concept of accessibility, encouraging land use patterns that reduce the need to travel, and in so doing promoting public transport solutions and non-motorised travel such as walking and cycling.

Perhaps most controversially of all, this future vision is one in which cities will have to focus their finite motorised mobility resources – which may well decline in future if carbon-related or other policy imperatives such as energy security impose substantial constraints on our inherited travel patters – on those journeys that generate the greatest benefits. Defining which journeys deliver more benefits than others is inevitably a political minefield, and is why many attempts to rebalance the distribution of mobility between modes and across space and time have failed thus far. Nevertheless, with the financial and policy imperatives such as they are in the 2010s, the critical question of how mobility demands might be prioritised important will need to be revisited. In large part, 'alternative' policy prescriptions such as the New Realism did not falter because they somehow failed to live up to the trial of implementation; they did so because their focus on a broad range of policy measures, including unpopular elements such as road space rationing, charging and other aspects of behaviour change did not fit the 'boom' narrative of the period in which they were first tentatively tried out in the latter half of the 1990s and 2000s (Docherty and Shaw, 2011a).

Challenging and politically controversial though such 'sophisticated policy mixes' (Eddington, 2006; Potter, 2007) might be, there are some examples of success that could point to pathway to an urban transport future with a more holistic approach to mobility management in pursuit of environmental- and social- as well as economic objectives. One of these is the thorny issue of road user charging, which is a potentially very powerful mechanism to reduce the levels of road traffic, and which can generate substantial revenues that can be used to improve transport infrastructure and services across all modes (Button and Vega, 2008).¹

¹ This is not to say that road user charging is without negative impacts, but discussion of these is beyond the scope of this chapter.

Although road pricing had been introduced elsewhere before, including in several Scandinavian cities and Singapore (ibid.), the London congestion charging scheme globally important because of both its scale and the fact that it was implemented in a society that had taken to heart the neoliberal messages of deregulation and individual liberty expressed through the notion of 'the right to travel', especially by car.

One of the key lessons of the London scheme is that level of the power and resources enjoyed by city governments is critically important if radical policies are to be successfully introduced. London was able to deliver a policy such as congestion charging because it had very substantial strategic capacity – that is the leadership, the finance, the powers, the technical know-how – to move effectively from policy formulation through to implementation (Mackinnon et al, 2008). Other UK cities that have tried to adopt London's model as a means of controlling traffic levels and generating resources for much improved public transport failed to win public support to proceed because they lacked these attributes and were unable to negotiate these political barriers to actually deliver a shift towards more radical policy directions (Gaunt et al, 2007).

The importance of the system of governance and its ability to coordinate and organise efforts to improve local transport systems should not be underestimated. It is quite clear that the ability of cities to mobilise their governing networks to plan, implement and manage important policy interventions – such as the provision of good public transport – is highly variable, with many continental European and some North American cities doing much better than their counterparts in the UK in this regard. In part this is because of the vagaries of local political cultures – witness the longstanding debate about the value of elected city mayors for example (see Elcock and Fenwick, 2007) – but it is also because British cities have remarkably little control over their own finances, and so their capacity to invest in costly assets such as their public transport networks, is limited (Docherty et al, 2009).

Devolution - the transfer of political power to a lower tier of government - was characterised by UK government as providing the opportunity for 'local solutions to local problems', and the potential for institutions close to the issues at the local and (city-)regional levels to actually implement difficult policy choices that seem beyond current central government is well documented (see, for example, Trench, 2007). Where it has been implemented, devolution has certainly led to some widely supported transport policy innovations, including the London Congestion Charge, the expansion of the railway network in Scotland and the introduction of universal concessionary fares first in Wales and then elsewhere.. Taking the idea of devolution further to move the focus of transport policy governance from the city scale to that of the local neighbourhood also opens up important possibilities to move travel behaviour further towards greater sustainability. Policies targeted at the neighbourhood scale, such as the support for 'Smarter Choices' in the UK - a set of policy tools including workplace and school travel plans, personalised travel planning, innovative marketing and ICT-based trip substitution - has been able to bring about quick and important reductions in car use by more than 10 per cent in demonstration towns (Department for Transport, 2005, Sloman et al, 2010). These approaches are important not just for the immediate reductions in car use that they bring about – showing that real modal shift is possible – but also because they play an important part in challenging many current mindsets about transport, which remain fixated by moving as many people as far and as fast as possible.

Whilst we do not argue against the utility of mobility *per se* – travel does indeed broaden the mind – this kind of more sophisticated mobility planning is likely to capture the greatest possible modal share for public transport services, offer attractive alternatives for those who do have a choice of how to travel, and improve overall urban social equity by directing the transport system towards enabling easier access to a wide range of personal needs. Given the scarcity of resources, the environmental imperative and the resilience of many urban social problems rooted in a lack of connection between individuals, communities and places of economic and social opportunity, such an approach has many attractions. But to do this

would require a shift away from the neoliberal-inspired narrative of transport policy as enabling individual choice in a free market of mobility, back to ideas of public value and management of the transport system as an instrument of welfare. It is on this territory that the urban transport debate of the next decade will be fought.

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