

Providing transport for social inclusion within a framework for environmental justice in the UK

Karen Lucas

Transport Studies Group, University of Westminster, London, United Kingdom

1. Introduction

As in most western societies, both car ownership and use in the UK has progressed from a minority form of transportation for the privileged few to become the main way in which the majority of people now travel. The average UK citizen travels 10 times the distance in a year than they did 50 years ago, although the number of trips and the time spent travelling has remained roughly the same (RAC Foundation, 2002). In the period 1999-2001, 63% of all trips were made by car, compared to 6% by bus, but one in four households still did not have access to a car. However, even for these households, 17% of all trips were made by this mode, compared to 51% on foot and 20% by public transport (Office for National Statistics, 2004).

Transport policy makers generally describe this increased car ownership and use in positive terms, pointing to the new opportunities that this increased mobility has provided and the wider choices people have about where they live, work and play (Department for Transport, 2004a). It has been argued that car ownership has been a great liberator for women, having a role to play in their increased participation in the labour market. It also allows many older drivers to maintain their independence for longer.

What is evident is that cars have allowed the average UK citizen to carry out far more activities in a day and to travel far greater distances than they did fifty years ago. On the downside, however, increased car dependency has encouraged dispersed and car-orientated patterns of development, reduced the viability of other modes, significantly contributed to poorer local environments and has a role to play in the exclusion of already disadvantaged sectors of the UK population (Lucas, 2004). In fact, in many parts of the country it is now virtually impossible to carry out basic daily activities without a car.

This paper critically evaluates the policies that are currently emerging to address the problem of transport exclusion and poor accessibility in the UK (Social Exclusion Unit (SEU), 2003; DfT, 2004b). It identifies some key barriers to the delivery of more socially inclusive transportation, as observed through pilot study research for the Department of Transport, with eight local transport authorities in the England (DfT) (Halden and Lucas, 2003). It moves on to highlight some potential tensions between this social agenda for transport and the Government's newly released framework for the delivery of sustainable development, which places strong emphasis on reducing climate change and achieving environmental justice within and between nations (HM Government, 2005).

2. Background

Despite the policy rhetoric of integrated transport and land use planning in the UK, many new major developments continue to be located in out-of town and dispersed locations through various loopholes in the planning regulations. In tandem, many neighbourhoods have lost local shops as the big retailers have taken over their customer base. For example, between 1991 and 1999, the number of households living more than a 27-minute walk from a shopping centre doubled from around 40% percent to 90% of all households. Similarly, in 1991, approximately 72% of households lived within a 27-minute walk of a doctor's surgery, whereas this had dropped to 40% by 1999 (Lucas et al, 2001).

Providing transport for social inclusion within a framework for environmental justice in the UK

Hospitals and health services are being rationalised into fewer, larger units serving wide areas and located in places that are difficult to reach without a car. Many post-16 colleges are in places that are virtually impossible to access by public transport. Added to this, the new flexible 14-19 curriculum, which is currently being introduced in many UK schools, means that pupils are no longer receiving their education at a single site. This requires many students not only undertake home to school travel but also travel considerable distances between lessons.

While the problem is usually described in terms of land use planning, solutions are rarely within the powers of local authority land-use planners to effect. Many planning decisions are taken out of their hands by the private sector and other more powerful public sector agencies with an influence over location decisions, such as the health and education sector. Most of these do not include transport and accessibility as essential criteria in their location assessments. As such, planners are regularly forced to bow to the pressures of other more compelling considerations, such as private profit, job creation and value for money. Deficits in local services are also rarely identified by local development plans and there are few mechanisms for directly addressing a lack of essential services within local areas through the land use planning system.

3. Social exclusion and accessibility

A recent Social Exclusion Unit (SEU) study (Social Exclusion Unit, 2003) collated a wide-body of research evidence to demonstrate that transport and land use policies in the UK have interactively worked to systematically create and reinforce social exclusion. The study identified that transport is a significant barrier for many jobseekers and has also been linked with low participation in post-16 education and college dropouts. It found that getting to hospital is particularly difficult for people who have to rely on public transport, leading to failed health appointments and associated delays in medical interventions.

3.1 Car availability

An ONS Omnibus survey for the study, unsurprisingly confirmed, that the most significant difference in people's ability to participate was based on car availability within households. For example, 31 per cent of people without cars indicated a difficulty with travelling to hospital compared to 20 per cent for the whole sample. Similarly 16 per cent of people without cars found it difficult to get to a reasonably priced food shop compared with 6 per cent of the entire sample and 18 per cent had difficulties visiting friends and family compared to 8 per cent of those with access to a car. The problem is more severe in some parts of the country, particularly in more rural areas. For example, a survey in one market town found that half of respondents without a car had never visited a dentist compared with 15 per cent of those with a car (Countryside Agency/Yorkshire Forward, 2001).

3.2 Reduction in the viability of other modes

Part of the problem is that mass car-ownership, combined with a deregulated bus network and ever escalating fare levels has made public transport a non-viable option for most people (particularly when compared with the decreasing costs of owning and running a car). In 1950, buses and coaches accounted for 40% of total UK passenger transport.

Providing transport for social inclusion within a framework for environmental justice in the UK

Bus deregulation has encouraged competition on the more profitable routes but many services on the less commercial routes have experienced a cutback in service levels (particularly in the evenings and at weekends) and in some cases services have been withdrawn completely. Public transport networks have also largely failed to adapt to new land use patterns and irregular working hours, meaning those that rely on them have less opportunity to access key activities and amenities.

More traffic has also meant less safe and more polluted local environments, so that many people, old and young alike, are afraid or find it undesirable to walk and cycle. One of the biggest social changes in childhood in the last 50 years has been parent's unwillingness to allow their children to walk alone for fear of accidents or assaults. On the basis of these observations, it is possible to assert that despite its perceived benefits, increased car use has eroded opportunity and choice for a large proportion of people living in the UK.

3.3 A worsening situation

The changing age structure of the UK population also means that the accessibility problems we are currently experiencing are likely to get worse over time. By 2020, the number of over 50 year olds in the UK population will have grown from the current 20 million to a projected 25 million, meaning that by this time over half of all adults in the population will be over 50, and the number of over 65 year olds will have reached 12.5 million.

Older people tend to make less trips overall and the proportion of trips made by car also declines significantly from age 60. It is recognised that this is partly a cohort effect, as many of today's elderly population, particularly the women, have never driven a car. Nevertheless, many older people will reach the stage where they are no longer able to drive and due to their housing location may well find themselves without an alternative viable means of transport.

In general, women tend to outlive men, which implies that the number of women within the population will also be higher. Disabilities and long-term illnesses are also most concentrated amongst this sector of the population. Migration also affects the age structure of the population, both in terms of those who move out of areas and those who are left behind, meaning that the geographical spread of these population changes will be felt differently in different parts of the country. For example, older people are more likely to retire to coastal areas and in smaller market towns and villages, whereas bigger cities, particularly in the south east of England, are attracting younger people.

4. Accessibility planning

The SEU study has helped to raise these transport and accessibility concerns with a number of key government departments. As a result, it is now increasingly accepted across government that poor transport has an important role to play in moving people from welfare into work, reducing health inequalities, raising educational attainment and participation in post-16 education, crime reduction and promoting neighbourhood renewal. Furthermore, in response to its findings, the UK government has put in place a new framework for *accessibility planning* at the local level of policy delivery.

Local transport planners are to lead the process as part of the development and delivery of their 2006-2010 Local Transport Plans (Department for Transport, 2004b). They are to work in close liaison with land use planners and other key service providers and agencies that can have an influence on peoples' accessibility, for

Providing transport for social inclusion within a framework for environmental justice in the UK

example Primary Care and Hospital Trusts, Local Education Authorities, Learning and Skills Councils, Social Services, the business sector and key employers. They are also required to validate their action plans with the local communities and key sectors of the population that are currently experiencing transport poverty in their areas.

The key aims for accessibility planning are to ensure that local decision-makers have improved information on the areas where accessibility is poorest and the barriers to accessibility from the perspective of the people who are living there. It is also designed to create a more transparent, integrated and equitable process for transport and land use decisions. Transport planners are being encouraged to 'think out of the box' and work more collaboratively with their partner agencies, so that a wider range of solutions to accessibility problems can be identified and greater value for money achieved through their combined and synchronised efforts.

The guidance identifies that the process of accessibility planning should entail:

- Assessments of local need against a set of predefined national indicators to identify and analyse accessibility to the key services;
- Option appraisal and identification of existing and potential financial and other resources across the partnership agencies (e.g. land, staff time, information, etc.) that may be available to address the problems that are identified;
- A joint action plan which sets out how transport and land-use planners, those involved in the location and delivery of other local services, and other relevant local bodies will improve the gaps in accessibility identified by the needs audit; and
- Implementation and monitoring to ensure that delivery is consistent with objectives and that future plans can build on success and learn from failure.

5. The pilot studies

Prior to producing its guidance on accessibility planning, the DfT commissioned an 11-month pilot study to develop, test and refine this methodology in a practical setting.

5.1 Methodology

Eight local transport authorities were selected, largely on the basis that they were willing, and had the capacity, to participate in an intensive schedule of research activities over a short period of time. Most were already actively engaged in policies and strategies to reduce social exclusion through transport interventions and, thus, saw the research as an opportunity to further their policy development in this area.

The case studies were also selected to represent different types of geographical areas e.g. rural, suburban, urban, a range of administrative structures (e.g. unitary, metropolitan, county) and partnership affiliations (e.g. health, education, business sector, etc.). One rural and one urban authority was selected to pilot accessibility planning in relation to each of the four key activities identified by the SEU report, namely work, learning, healthcare and food shopping.

The study was delivered in five separate but iterative stages, as follows:

- Stage 1 developed joint working arrangements, reviewed previous work, and made recommendations on datasets and a menu of national and local

Providing transport for social inclusion within a framework for environmental justice in the UK

accessibility indicators to assist authorities in identifying areas and groups with poor accessibility.

- Stage 2 worked hands-on with the pilot local authorities to assess local needs, including testing and refining accessibility analysis approaches and consultation to enable local authorities to identify groups and areas experiencing problems.
- Stage 3 worked hands-on with the pilot authorities and other key local stakeholders to identify existing and potential resources that could be used to improve accessibility within the pilot area. The aim was to assess whether, and how, these resources could be used more effectively to meet identified accessibility needs and gaps
- Stage 4 liaised with the pilot authorities and other key local stakeholders in the development and agreement of a local accessibility action plan, to address problems identified by the needs audit.
- Stage 5 developed and recommended ways to improve and promote co-ordination and partnership working between local service providers; and to identify lessons learnt, potential barriers to implementation and examples of good practice to inform DfT's future guidance.

5.2 Key findings

The research was able to identify a number of key factors that will be likely to affect the future success of accessibility planning in its national rollout in 2006. The most pressing of these were:

- Appropriateness of the methodology
- Cross-sector partnership working
- Scope, cultures, skills and institutional arrangements
- Finance, resources and political will

5.2.1 Appropriateness of the methodology

Gathering the data and carrying out the initial assessments of accessibility was both a time consuming and frustrating process. The research found that even the larger and relatively well-resourced pilot authorities do not hold the data to support a comprehensive behavioural model reflecting all relevant lifestyle factors, service delivery and attitudes to transport. However, modelling techniques demonstrated that these data deficiencies are not necessarily a barrier to robust identification of accessibility deficits in terms of key activities within local areas or for monitoring the impact of interventions, particularly where changes are being considered over time or when population groups are being compared.

In general, more time periods need to be modelled to cover different times of the day and days of the week, and improvements to quality of the input data is also required. Even with these changes, caution will need to be exercised when interpreting the results. There is a danger planners could end up replicating the 'black-box' thinking that has typified decision-making in the past. Whilst they are useful as an initial way of identifying potential 'at risk areas', it is essential that models do not replace the type of bottom-up and participative decision-making recommended by the SEU study. However sophisticated the model, it will be unable to identify people's actual activity patterns or other 'softer' barriers to access such as low travel horizons, cognitive and mental mapping abilities, which can often be more of a barrier than the availability and timing of transport services.

Providing transport for social inclusion within a framework for environmental justice in the UK

The persistent lack of fares data was a major problem in determining whether the available transport is affordable. This shortfall in information should be relatively easy to address, but many transport authorities appear reluctant to make the necessary calculations. It was unclear why this is the case. It was also clear that different 'time-windows' needed to be modelled to match the available transport with destination opening hours, particularly in rural areas where services are less frequent.

5.2.2 Cross-sector partnership working

The SEU report rightly identifies that improving local transport is only part of the solution to poor accessibility and that transport, land use and service sector planning and delivery planning decisions need to be integrated. This requires not only effective partnership working between the different sectors but also concerted and integrated action on their parts. Both within the pilot studies and in other parts of the country where this approach has been tried, co-ordinators are reporting difficulties in linking up with decision-makers in other key delivery sectors and convincing them of the value of accessibility planning in the context of their own delivery agendas. Even amongst highly supportive organisations, cross-sector working can be perceived as threatening to established administrative structures, or simply a lower priority.

In the pilots, the clear evidence of the need for accessibility planning provided through the local assessments of need helped to build consensus around some policy priorities. In this way, the pilot authorities were able to successfully engage professionals in the non-transport sectors and encourage them to think more clearly about how delivery of their own key policy objectives is affected by transport and accessibility. Practical examples of success provide a platform on which to build further joint working, supported by further research and practical delivery. It is important to note, however, that the pilot authorities are already leaders in the field of accessibility planning and had volunteered to participate in the pilot study. For other authorities and non-transport stakeholders, the case for accessibility planning will need to be made even more strongly. Trying to open these closed doors can be both costly and time consuming.

5.2.3 Scope, cultures, skills and institutional arrangements

The pilots demonstrated that the scope of accessibility planning, even when constrained to a single activity type (e.g. health visits), is potentially unwieldy. All pilots, therefore, reined the process back to a practical level, based on available staff and other resources. However, this desire for pragmatism and visible progress dictated that agendas were heavily dependent on the pre-existing policy interests and expertise of the steering group members, rather than actual evidence of need amongst the population. This raises considerable concern about how far the original SEU objective of an evidence-led approach to local decision-making will be followed in practice and how far decisions will be based on pre-existing cultures of decision-making within a given authority.

It became clear at a very early stage in the research that the whole process of accessibility planning requires careful and skilful management. Three main skill requirements were apparent in the pilots, namely:

- i) Knowledge management - how to efficiently identify, gather, collate and analyse data from a wide range of sources and the knowledge of procedures and cultures within the different organisations that need to be involved in accessibility planning;

Providing transport for social inclusion within a framework for environmental justice in the UK

- ii) Activity management - champions with a particular interest and responsibility for a relevant activity (e.g. someone holding a relatively senior position within the local area health authority who recognises the value of accessibility planning to their organisation and with the power to make decisions and push actions forward).
- iii) Community involvement expertise - effective public engagement and with affected groups and communities and their participation in any decisions about what actions are vital to the successful outcome of projects.

The pilots demonstrated a huge variation in both the capacity and skills to deliver accessibility planning both within transport authorities themselves and the other stakeholder organisations that they are required to involve. Support structures have now been set-up to address some of these skills deficits, including a national help-line and the development of a web-based tool kit, but it will be some time before some of the less pioneering authorities are able to bring themselves up to the level of capacity that is required.

Over-reliance on transport authorities to deliver solutions, many of which may be seen as inappropriate to their current policy function, may also be problematic. For example, the pilots identified that in many instances, at least in the short term, people experiencing accessibility difficulties may need to drive cars and that community transport, car-clubs and car-sharing options should be explored. These types of micro and individualistic solutions are generally seen as inappropriate for local transport planning officers to engage with.

5.2.4 Finance and political will

One of the biggest concerns of the local authorities participating in the pilots was how they are going to be able to deliver the necessary step-changes in provision needed to address the accessibility gaps they identify. The public purse clearly cannot (or is reluctant to) extend itself much further than what has already been committed to transport spending over the next ten years. The greatest proportion of this will go to the highway and rail maintenance programme and by-pass projects and new high-speed commuter rail links, which realise very small journey time savings for large numbers of people who already have good access to transport.

Another problem is that most of the current funding is short in duration and focused on capital, rather than revenue spending. This means that new services have been set-up, which people have come to rely on in order to access jobs, education, healthcare, etc., only to be removed when the funding runs out. Many initiatives are also reliant on volunteer drivers and support workers, which are often in shorter supply than the demand for their time.

A final issue is whether there is really the political will both locally and nationally to deliver the accessibility planning agenda. Transport has never been seen as a particularly important political issue in comparison to, for example, health and education.

6. Wider implications for sustainable development and environmental justice

The introduction of accessibility planning in the UK represents, for the first time, a huge opportunity to ensure a more socially just system of transport spending and delivery in the UK. However, to fully achieve this, it needs to be complemented by

Providing transport for social inclusion within a framework for environmental justice in the UK

measures to restrain the exponential increases in road traffic that have been witnessed over the past decade.

Grayling (2004) suggests that, theoretically, achieving a socially just and environmentally sustainable system of transport delivery should be entirely compatible. In practice, it requires policies that balance effective fiscal, planning and 'soft' measures to control excessive mobility and over-reliance on car-based travel whilst improving accessibility through adequate and targeted investment of sustainable modes. In the UK, any attempts to introduce car-restraint measures (for example, the Fuel Tax escalator and congestion charging) have met with strong public disapproval and protest, resulting in a political reluctance within both national and local government to challenge the public's love affair with the car.

There is a strong rhetorical policy emphasis on the introduction and enforcement of measures that will provoke changes in people's travel behaviour running through most of the latest government guidance documents. Closer inspection of delivery strategies, however, reveals an approach that still primarily relies on the removal of barriers to non-car based travel and the better provision of viable alternatives to enable people the opportunities to make better travel choices.

Despite considerable research into 'what works' in terms of the actual delivery of a visible and sustained step-change in transport in the direction, there is still an insufficient evidence-base to identify what, in practice, is needed for people to alter their lifestyle choices to a sufficient degree to actually make a difference in road traffic levels. There is also very little understanding of the relationships and interactions between transport and economic growth, how this is translated into levels of economic vibrancy to facilitate social progress and the impact of catering for this on the local and global environment.

6.1 Technological innovation: opportunities and risks

There is a high level of expectation within both the UK Government future transport strategy (DfT, 2004a) and its latest framework for the delivery of sustainable development (HM Government, 2005) that technology innovation will solve most of the environmental risk associated with car-based travel. This appears to avoid consideration that new cars cost much more money and so are usually out of the price range of most low-income households. This means that fleet replacement will be slower than it ideally could be and that some of the environmental benefits that could be realised will be undermined by the growth in second-hand car ownership from this sector.

There are ways around this dilemma but they require forethought and policy intervention. One way to ensure that technology benefits everyone would be to target the innovation on public transport and community owned fleets, providing economic incentives to service providers for the uptake of new cleaner vehicles. A second option could be to consider the introduction of zero-emission car clubs with attractive incentives for encouraging people to switch from car ownership and reduced rates for low-income households, particularly those living in areas poorly served by public transport. Attractive trade-in offers attached to low-cost car loan schemes have also helped to remove old cars from the fleet in some other EU countries, e.g. Eire.

It is also important to think more widely about the opportunity to create employment through the design and manufacture of low-emission vehicles and other technological innovation. This could have a significant impact on social exclusion if properly

Providing transport for social inclusion within a framework for environmental justice in the UK

targeted at unemployed people through specialist training programmes. Production centres could be located in deprived areas, especially those suffering from the decline of manufacturing and heavy industry, through location policies and planning. Clearly, targeted local employment policies and training support programmes would be needed to ensure that new jobs opportunities were taken up by local people in these areas. Companies operating Corporate Responsibility Agreements with communities and other local stakeholders have already achieved this in some instances.

6.2 Pricing policies

One of the potential ways available to both national and local government is to price people out of their cars by increasing petrol prices through higher fuel duties or through the introduction of parking levies, tolls, congestion charging and other fiscal measures. It has been noted that these are likely to hit those on the margins of car ownership the hardest and, whilst very effective in reducing their car use and suppressing the latent demand for car ownership and use amongst low-income households, these policies are socially regressive (Ekins and Dresner, 2004).

Not only is this undesirable within a society that aims to promote social progress for all sectors of society and arguably, promote progressive universalism, if pricing policies are not cognisant of and responsive to the travel needs of people at the margins of participation, they could force people into inactivity and disengagement from society. This will not only have dire consequences for the economy, but can also lead to civil unrest (e.g. the petrol protests) and even criminal activity (e.g. current levels of unregistered car use).

Advocates of pricing policies suggest that in the long run equity is not an issue, as the money from charging will go towards improving public transport and thus benefit those on the lowest incomes. However, Ekins and Dresner (2004) identify that all the pricing policies which are currently being proposed are likely to adversely affect a small percentage of low-income motorists. They recommend that congestion charging at levels that could both provoke reductions in traffic and secure the funds to sufficiently subsidise public transport alternatives would be particularly detrimental to low-income motorists living in urban areas. Their study identified that the least detrimental measures currently available would be to increase fuel duties alongside abolition the Vehicle Excise Duty. A suggested alternative, which they have modelled as the least detrimental, would be to introduce a Domestic Tradable Quotas (DTQs) scheme applied to both motor and air travel.

7. Conclusion

Over the past five years, academics, consultants, national and local policy-makers and practitioners in the UK have collaborated and pooled their knowledge to pioneer a programme of research to make evident the links between transport and social exclusion. Their combined efforts have resulted in a new local government responsibility to undertake assessments of local accessibility to key activities and services. On the basis of these assessments, local transport authorities and other key local stakeholders must deliver area-based action plans to address the problems that have been identified.

Accessibility planning has the potential to become a major influencing factor in the decision-making process both within central and local government in the UK. A key benefit of the method is that it allows consideration of the needs of minority groups whose demand for transport may be suppressed within the market due to a number

Providing transport for social inclusion within a framework for environmental justice in the UK

of deterrence factors, such as inability to pay, fear for personal safety and so on. At the national level, it will allow the Government to comprehensively and systematically assess the extent and severity of the problem of poor transport and, hopefully, lead to a fundamental review of transport spending in the UK. At the local level, it will provide transport planners with a robust tool to consider the effects of changes in the transport system on people's access to opportunities such as employment, shopping, health services, social support networks, recreation, etc. It will demonstrate how transport impacts are distributed across geographical areas, population groups, trip purposes and modes of travel. This will allow gaps in the transport network to be identified and for the contribution of new services to overall equality of opportunity to be evaluated.

Perhaps more importantly, accessibility planning will ensure greater consistency between transport and other public policy objectives including: land-use planning, housing, health, education, local regeneration and regional development. It will help to make evident the transport implications of other aspects of service delivery – especially the opening, closure and relocation of public facilities such as hospitals, healthcare services, schools, colleges – and the scheduling of services. Accessibility planning will also provide land-use planners with a consistent approach for assessing the impacts of new developments and make more evident the need for development control decisions to improve access to the transport system. As a result of its transparency, the method can also be used with communities to explain transport and land-use proposals in terms that they can easily be understood, for example in terms of journey time or cost. Equally, communities themselves can adopt the method to argue for new services and facilities in their areas.

Clearly, accessibility planning for social inclusion is still in its infancy in the UK and it will be some time before it will be possible to assess whether these aspirations for the method can be realised. The pilot studies demonstrated that 'the devil is in the detail' and that a great deal of political will is needed, both within central and local government and across all the relevant sectors, if the method is to really succeed in bringing visible and lasting changes to the way in which transport and land-use decisions are made.

The potentially undermining counterforce of a continuation of current trends in car-based travel in the UK combined with a seriously under-funded and fragmented public transport network are of considerable concern. The SEU study and subsequent pilot research for accessibility planning has demonstrated that, although not everyone experiencing social exclusion will have an accessibility problem, the lack of at least one car within a household considerably reduces the life chances of its members. This has the effect of forcing many low-income families to own and drive cars as their only means of guaranteeing inclusion in society. Those who are unable to drive (predominantly children, old people and the sick) are caught up in a vicious cycle of ever worsening public transport services, local shop closures and degenerating walking environments. This will always be the outcome of policies that fail to address unfettered car use; it is neither socially nor environmentally just nor financially sustainable. Therefore, whilst accessibility planning is a major step towards a more socially equitable system of transport delivery, it still has some way to go in ensuring that it is also an environmentally just one.

References

Countryside Agency/Yorkshire Forward (2002) *Bentham Moving On – an action plan for Bentham*

Providing transport for social inclusion within a framework for environmental justice in the UK

Department of the Environment Transport and the Regions, Scottish Executive, National assembly for Wales and department for the Environment Northern Ireland (2000) *Climate Change: the UK Programme* London: DETR

Department of Trade and Industry (2003) *Energy White Paper - Our energy future: creating a low carbon economy* London: The Stationery Office

Department for Transport (2002) *Planning Policy Guidance note 13 (PPG13)* London: DfT

Department for Transport (2004a) *The Future of Transport: a network for 2030* (Transport White Paper) London: The Stationery Office

Department for Transport (2004b) *Guidance on Accessibility Planning in Local Transport Plans* London: DfT

Ekins P. and Dresner S. (2004) *Green taxes and charges: reducing their impact on low-income households* York: Joseph Rowntree Foundation/York Publishing Ltd.

Grayling T. (2004) 'Social justice in and upwardly mobile society' in Foley J. (ed) (2004) *Sustainability and Social Justice* IPPR

HM Government (2005) *Securing the Future: delivering UK sustainable development strategy* London: The Stationery Office

Litman T. (2004) *The Future Isn't What It Used To Be: Changing trends and their implications for transport planning* <http://www.vtpi.org/future.pdf>

Lucas, K. Grosvenor T. and Simpson R. (2001) *Transport, the environment and social exclusion* York: Joseph Rowntree Foundation/York Publishing Ltd.

Lucas, K (2004) (Ed.) *Running on Empty: transport, social exclusion and environmental justice* Bristol: Policy Press

Office for National Statistics (2004) *Social Trends 34: 2004 Edition* London: ONS

RAC Foundation (2002) *Motoring towards 2050* London: RAC Foundation for Motoring

Social Exclusion Unit (2003) *Making the Connections: transport and social exclusion final report* www.socialexclusionunit.gov.uk