TRANSPORT VISIONS
The Young Professionals' Perspective
A Network sponsored by the EPSRC, the Rees Jeffreys Road Fund and the DETR

TRANSPORTATION REQUIREMENTS

A summary of the second report from the Transport Visions Network

This is a summary of the second in a series of reports to be produced by the Transport Visions Network. The Network is a novel venture to project the views of young professionals into the debate concerning the future of transport and its role in society. It is comprised of individuals who are aged 35 or under from universities, consultancies and public authorities both in the UK and overseas. The series of reports will cover eight different topics and aims to build up a coherent vision for the future of transport. Each report is produced through a managed process of discussion involving e-mail debate, a face-to-face workshop and the writing of the report with input from an editorial board.

The first report in this series, Society and Lifestyles, considered a myriad of issues and trends that are shaping or have the potential to shape the way we live in the future and our travel needs. In later reports the Network will explore possible solutions to current as well as emerging transport problems set against this backdrop. In acknowledging that the future is not predetermined but is ours to shape, later reports will identify developments we would like to see and perhaps those we should guard against. However, before this can be pursued it is important to agree upon the guiding principles for such future development. This report might be deemed, in effect, to be a statement of Transport Visions Network policy - an advisory framework within which to subsequently pursue specific visions for the future of transport. The report sets out twelve Transportation Requirements that have emerged from extensive discussion and debate.

For each Transportation Requirement the report includes contextual material and a summary of related Network discussion. Preparations for this report coincided with the publication of the Government's 10 year spending plan *Transport 2010*. The report assesses the extent to which current transport policy (as outlined in Transport 2010 and the Transport White Paper in particular) is compatible with the Transportation Requirements proposed. This summary now presents each of the Transportation Requirements in turn.

1 There should be an equitable distribution of access to a range of key real and virtual destinations that support people's quality of life.

One of the five key transport objectives underlying current UK transport policy is to promote accessibility to everyday facilities for all, especially for those without a car. Definitions of accessibility vary and the very nature of accessibility itself appears to be changing, as increasingly goods and services can be accessed by individuals or groups without recourse to physical movement. Accessibility in virtual space through advances in technology is defying familiar principles of distance, nearness, or spatial interaction. Fundamentally, for people to exist they must already have an adequate level of accessibility to all the key real and virtual destinations that they need to reach. The quality of that existence is at the heart of the issue and it is the role of transport professionals, society and the Government to set quality standards and work towards them.

2 The absolute level of resource use for transport activities should be controlled and the resource efficiency of mobility should be maximised.

The expressed aim in the Transport White Paper is *"to increase personal choice by improving the alternatives (to car use) and to secure mobility that is sustainable in the long term"*. The horizons of our travel desires continue to expand, as they have done over the course of history. If our current patterns of mobility are having a damaging effect on the environment then one solution would be to limit mobility. However, such a policy would face significant opposition. There is a public view of

personal mobility as a fundamental human freedom. In addressing concerns about growing levels of mobility, a key aim instead should be to achieve sustainable levels of energy and resource consumption. If this can be addressed then increasing levels of mobility might become more acceptable. The argument to reduce car-based mobility could then become less clear-cut when, in future, such mobility uses energy derived from renewable sources. Irrespective of the means of propulsion associated with different modes, other resources (including land take) are still likely to be consumed. There is also the problem of disposal of the consumed resources, e.g. rubber tyres and petrochemicals, at the end of their life cycle. Whilst efficiency of mobility should be maximised, accessibility to local key services must also be maintained.

3 Users should pay the full internal and external costs of transport and these should be made transparent. Where appropriate, transport uses or users providing external benefits should be subsidised.

In the face of public opinion that we already pay too much for transport, the concept of as yet unpaid externalities needs to be brought to the fore. Congestion, air pollution, climate change, noise, vibration, injuries, danger and the loss of freedom for non-motorised road use are all examples of externalities. If the amount an individual pays for travel (the marginal personal cost) is smaller than the sum of the cost of their own journey and the costs they impose on others (the marginal social cost), then transport is priced inefficiently. The Network broadly supports the concept of 'internalising the externalities' of the transport market. In this way, the charges that each individual faces for a journey should reflect the private cost to them and the costs or benefits to society as a whole of their trips. There are serious difficulties in deciding how to quantify external costs, reflected in the range of values that have been obtained in studies to date. This is one reason we do not yet fully pay external costs, although it is not an argument against trying to determine them or ultimately adding them to the total cost an individual should pay. In determining full external costs, defining the benefits that society derives from a trip is also a difficult task. Society may more easily accept transport costs if it knows why it is paying them. Transparency is important.

4 In the provision and operation of transport systems the adverse effects on the environment should be minimised according to agreed principles and targets.

The environmental impacts of transport have been recognised for many years. Road transport is the third largest source (after industry and homes) of end user emissions of the greenhouse gas CO_2. CO_2 emissions are directly proportional to the fuel consumption of a vehicle. Strong links between the environment, urban design and land-use planning are also evident. Better location of facilities and improved accessibility has the potential to reduce the need to travel, particularly by private motorised modes of transport. Reduced land-take for roads, reduced land-take for parking and reduced severance through lower traffic levels will all help to reduce the negative environmental impacts of travel. The Network supports the idea of working towards targets in achieving environmental improvements, at least until the possibility of internalising all of the costs of transport becomes a reality, in which case targets will not be required.

5 There should be discrimination and prioritisation between different types of trips and activities.

Since our transport systems primarily serve the purpose of enabling the movement of goods and human participation in activities, thereby supporting the functioning of society, it seems reasonable that they should be designed and managed accordingly. In particular, transport supply should be managed in accordance with consideration of the relative importance of different trip purposes. Much of current transport policy is concerned, ultimately, with attempting to balance total transport supply and demand within an area. There is less direct concern about the relative importance of different types of tripmaking or about the prospect of attributing priority to the transport needs of different activities in terms of either total travel, time of travel or mode use. The Network considered at length the notion that some trips are necessary whilst others are desirable and that the former might be prioritised over the latter. However, the principal difficulty is one of how to determine what constitutes a necessary trip or distinguishes it from a desirable one. A genuinely participatory

democratic debate would be needed (in accordance with Transportation Requirement 11) to establish the relative priorities which the public might want to assign to different types of trip or activity.

6 Transport should not exacerbate the adverse effects of lifestyle on health and safety and should aim to reduce these effects wherever possible.

We have been slow to recognise the impact that decisions about transport, land use and infrastructure have on health. Alongside impacts from air quality and road traffic accidents, car dependence encourages a sedentary lifestyle. It is tempting to lay the blame for certain health and safety problems on transport and yet, whilst transport might contribute to or exacerbate such problems, it is not solely to blame. Modern lifestyles and the pressures associated with individuals who are cash rich and time poor lead in turn to stress, tiredness and aggression. Such problems can eventually manifest themselves as a traffic accident, a confrontation between motorists or a child having an asthma attack. Transport is intrinsically linked to lifestyles and yet it should be possible to develop transport systems and policies so that they become part of the solution rather than the cause of health and safety problems.

7 Electronic and other non-mobile means of communication should be considered as transport options and treated accordingly in policy and practice.

Electronic communication now pervades our everyday lives and has the capacity to profoundly impact upon the operation of our transport systems. A home computer with Internet connection is no longer priced beyond the reach of the majority of the population. Indeed, the virtual mobility afforded by such technology can prove considerably cheaper to the individual than the price of motorised mobility and yet the former can also enhance accessibility enabling the individual or household to access information, goods, services and communities on-line. If joined-up-government is a vision to be realised then the Network believes that transport policymakers must do more than acknowledge that electronic communication will affect transport. There must be an explicit inclusion of electronic communication in transport policy making and expenditure. By arguing that electronic communication be considered as a means of transport it is envisioned that decisions might in future be made whereby provision of more virtual capacity might be promoted ahead of investment in physical capacity, e.g. road building.

8 Land use efficiency should be maximised and net land take by the transport system minimised.

Principles applied in land use planning can help to promote better transport systems. The Government's ten year spending plan for transport reiterates the message of earlier planning policy guidance, namely that the role of planning policy is to produce more sustainable and less dispersed patterns of development which should help reduce the need to travel. The effects of land use on travel patterns are well studied. The Network considered this relationship from the opposite point of view. In our pursuit of faster access to more places there is the need for more road space and easier access to the road network. This leads to lower building densities, pushing destinations further away. This further increases the demand for more roadspace. The pursuit of speed leads to us trying to chase destinations that are getting further away – 'ever increasing circles'.

9 The reliability of the transport system and its operation should be regarded as a fundamental system management goal.

The reliability of our transportation systems is a matter of fundamental importance for transport users and therefore measures that seek to specifically target the improvement of reliability have the potential to strongly influence travel choices. When considering a journey, individuals have different priorities in terms of the different attributes of travel. Some people will value cost more than time whilst others will value reliability more than security. Nevertheless, reliability features highly at a collective level. It might arguably hold the key to improving the effectiveness of traffic management. Reliability facilitates prediction of conditions on the transport network. Many traffic management initiatives are aimed at developing responsive systems in an attempt to cope with unreliable and unpredictable conditions. Substantial research and development has been invested in the pursuit of real-time information and telematics. Yet consider what has given rise to the need for such 'solutions' - the transport system is unreliable. In a perfectly

reliable transport system scheduled time and real-time would become one and the same. It might therefore be argued that to tackle reliability is to prevent the problem, whilst providing real-time information is only an attempt to alleviate the problem.

10 Transport should not exacerbate problems of social participation and should aim to reduce these problems wherever possible.

According to the Countryside Agency "*social exclusion is multi-dimensional, describing what happens when people are unable to participate in the civic, social, economic and cultural opportunities that most take for granted. It incorporates a range of experiences, relating, for example, to income and poverty, education, employment, health, housing, access to services, and relationships within families and with the wider community*". There are different ways in which transport policy can play a part in promoting social participation. It can, for example, facilitate social inclusion by providing for a reduced need for physical mobility and also encouraging greater use of non-private motorised transport. Nevertheless, people who are not considered to be socially excluded may experience similar accessibility problems to those who are considered to be socially excluded. For example, a busy parent taking their child to school. Addressing the impacts of the socially included majority, whose travel behaviour has the greatest impact on traffic congestion, remains of substantial importance. Society's travel patterns should be tackled as a whole and not divided into socio-economic groups.

11 Stakeholders should play an integral role in the entire life cycle of problem identification, solution formulation, implementation and evaluation.

The Network considered how best to involve the public in transport policy development. There are two viewpoints. The first is that consultation is important because the stakeholders have first-hand experience of local transport problems and without their input the solutions may not be well founded. Participation in decision making is also important so that stakeholders share ownership of the decisions affecting their lives and are keen to ensure they work. The second viewpoint is that people have a tendency to defend the way of life they know. They cannot be expected to fully appreciate the need for change and to come to terms with the time needed for change to happen and achieve benefits. By taking heed of their views there is a risk of having misguided policies. Consultation should not be devalued by unnecessary use or by becoming a method of abdicating political responsibility. The second viewpoint reflects a wider debate about the role of government in a democracy – whether its job is to follow public opinion or to lead it. This question is particularly relevant in the case of issues like transport, where there are apparent contradictions between people's personal preferences ("I want to drive my car") and their collective or political preferences ("I wish the government would do something to reduce the number of cars on the road"). The Network believes that the involvement of stakeholders is required in the full life cycle of solution development with the implication that the process is circular not linear.

12 Transport users should be enabled and encouraged to make fully informed choices.

The increasing volume of information present in our lives suggests that information should have an important role in the future development of transport systems. The importance of information in terms of planning and executing journeys is well recognised. Yet this is not its only role. People make many lifestyle decisions that constrain their travel opportunities. The implications of these decisions need to be brought to people's attention through information. In general, people only consider alternatives at certain points in time, for example, when they start a new job. In a good transport system information should be accessible to everyone. Using the information should be optional but it should be available. Users should be encouraged to make informed rather than misguided choices.

To obtain the full report:

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