

Traffic growth issues	Relevant Factors / Evidence	Some Implications
Continuing increase in the desire to travel	<p>The latest National Travel Survey¹ shows that although the number of journeys made is relatively static, journey length has increased more markedly. More than 80% of journeys were made by car. Road Traffic Forecasts² published in 1997 estimated that traffic volumes on UK roads would grow by 38% between 1996 and 2016, with a 60% increase anticipated between 1996 and 2031.</p> <p>Car ownership is continuing to increase¹ as a result of increasing GDP, decreasing vehicle purchase costs and changing living arrangements. However increasing car usage is recognised to be unsustainable and efforts are being made to influence choice of travel mode to favour sustainable transport.</p> <p>DETR (HETA) is developing a multi-modal National Transport Model for use in the review of the 10-year Plan.</p>	<p>Travel forecasts will need to become more sophisticated to take account of all modes of transport, not just private vehicles. General traffic growth forecasts will become more disaggregated, and multi-modal forecasting techniques will become more widespread.</p> <p>As the use of sustainable modes of transport increases, specific infrastructure provision may need to be made for them.</p>
Increased traffic congestion	<p>The majority of traffic congestion occurs in urban areas, and costs a significant amount of money in terms of delays, late deliveries etc. Congestion has been estimated to cost in excess of £19bn per year³ and, in London alone, congestion cost nearly £2bn in 1997⁴. There is an increasing belief that the cost of congestion should be borne by those specifically contributing to it rather than the general population and charging users to travel in congested areas and/or at congested times is gaining public acceptance.</p> <p>Over the next 20 years we face dramatic increases in traffic. Left unchecked, car traffic could grow by more than a third and van and lorry traffic is forecast to grow even faster.</p>	<p>'Smartcard' technology is being developed such that road users can be charged without the need for traditional methods (such as toll plazas).</p> <p>Since most congestion occurs in the morning and evening peak periods, peak 'spreading' is likely to become more widespread as drivers stagger their journeys.</p> <p>As road congestion increases, other modes of transport may become more attractive, contributing to a modal shift. Park and Ride schemes may become more important.</p> <p>ITS will become more widely used in order to make better use of the available roadspace, to manage demand and to encourage modal shift.</p> <p>Unless something is done, there will be more traffic jams not only in cities but also in country towns. Rush hours will become longer.</p>
Travel Plans	<p>Since journeys to work are responsible for a major part of congestion at peak times, major employers are being encouraged to implement Travel Plans to reduce by 10% the total number of people commuting to and from work, alone by car⁵. Many Local Transport Plans commit the relevant local authority to encourage major employers to produce Travel Plans.</p> <p>School travel plans are also being encouraged^{5 6} to reduce the number of children travelling to school by car. Safe routes to school are being established with walking initiatives also being promoted⁷ including the 'walking bus'⁸.</p>	<p>Travel Plans are being increasingly adopted which may lead to a slowing of traffic growth.</p> <p>Travel plans depend on voluntary actions, so their effectiveness may be less than for mandatory schemes.</p> <p>School travel plans will make the 'school run' less common with the numbers of children walking, cycling and travelling by bus increasing. This may influence children's perception of these modes of travel when they are old enough to consider purchasing a car.</p> <p>Good monitoring will be required in order to quantify the effects of Travel Plans and to disseminate good practice.</p>
Health	<p>Up to 24,000 people die prematurely and a similar number are admitted to hospital each year because of air pollution, a significant amount of which is generated by road transport⁹. Air pollution results in various respiratory problems and a deterioration of building facades. The annual National Health</p>	<p>The expected gains in vehicle emissions due to enhanced engine and tyre performance will more than offset the increase in emissions through traffic growth for each vehicle.</p> <p>Tax changes to support the use of smaller/more environmentally friendly</p>

Traffic growth issues	Relevant Factors / Evidence	Some Implications
	<p>cost has been estimated at £23 billion per year.</p> <p>On average, 38% of all hydrocarbons, 74% of carbon monoxide and 48% of nitrogen dioxide emissions are transport-related. As traffic growth increases, emissions will also increase.</p> <p>Obesity and coronary heart disease may also increase⁵, if people drive more rather than walking or cycling.</p>	<p>vehicles would assist in improving air quality (variable VED rates are now in place).</p> <p>Interventions to improve road safety will be required to ensure that casualty rates do not increase.</p>
Environment	<p>Increases in traffic flows lead to higher noise levels on and adjacent to the highway network, causing greater nuisance and possibly some health problems¹⁰ for those living nearby.</p> <p>Traffic noise causes nuisance to people both on the street and in adjacent buildings. The economic cost has been estimated at around £3 billion per year.</p> <p>Since it is a function of traffic flow, community severance may also increase, leading to fewer crossing opportunities for vulnerable road users.</p>	<p>The link between health and noise nuisance is as yet unproven and so the effects of noise increases cannot be fully quantified.</p> <p>Increased severance will lead to increased exposure to the risk of an accident, and possibly the demand for a greater number of formal crossing facilities. In turn, these could delay traffic and contribute to congestion.</p>
Restrictions on traffic growth	<p>The 1997 Road Traffic Reduction Act requires local authorities to measure existing traffic levels and to set targets for either reducing this or slowing the rate of increase⁶, based on local conditions. There is scope to achieve some reductions in traffic volumes, and price or non-price measures can be used¹¹.</p> <p>The analysis carried out for the 10-year Plan and the assessment of the Road Traffic Reduction Act tested a number of policies for public transport improvements on traffic growth.</p> <p>Increased use of the Internet will encourage the growth of home shopping and teleworking⁷, thereby reducing the need to physically travel to retail outlets and workplaces in future.</p>	<p>Although the Internet may reduce personal travel, the trip reduction will be offset by an increase in the growth of delivery vehicles.</p> <p>Estimates of likely impacts of teleworking vary considerably.</p>
The need to travel	<p>Several remarkable rates of growth set the 20th Century apart in the course of human development. They include growth in population, mobility, degree of urbanisation and information flow. Population growth shows signs of becoming sustainable, the growth in mobility does not.</p> <p>Travel is an essential part of daily life in the modern world and one that is valued highly. The average household in the UK now spends approximately 15% of its total expenditure on travel and 84% of that is on car ownership and use. This is about the same amount that is spent on housing and only slightly less than is spent on food, thus reflecting the high priority attached to personal mobility.</p> <p>During the 20th Century, the motorised movement of people and goods both increased more than one hundred fold while the total population increased fourfold.</p>	<p>Traffic congestion imposes large costs on society. A congestion cost to road users of £19 billion per year has been estimated as the value of time and material resources wasted as a result of traffic congestion.</p> <p>Measures to reduce congestion, such as the implementation of new cordon charging infrastructure or improvements to public transport, may also involve substantial costs and in some cases the costs of the “solution” may outweigh those of the problem.</p>

Traffic growth issues	Relevant Factors / Evidence	Some Implications
Business demand	<p>The movement of goods, mainly by road, is a vital part of the production, consumption and import/export process of the economy. Almost all activities carried out at different commercial and industrial land uses rely, to some extent, on access by road vehicles. Social activities are also geared towards road transport, particularly private cars. Both factors make it difficult to encourage the use of alternative modes.</p> <p>Business is concerned about congestion undermining competitiveness. The CBI estimates the cost at £15 billion per year.</p>	<p>Quality partnerships – at a local level much can be achieved by co-operation between local authorities and freight operators on lorry routing and delivery hours, keeping lorries off unsuitable roads, and avoiding the most congested times of the day.</p>
Private vehicle ownership	<p>In Britain we have fewer cars than in most other countries in the European Union, but we drive more miles and use public transport less. Our roads are amongst the most congested. 3 in 10 homes in the UK do not have a car.</p>	<p>The convenience of the car travel is being eroded by congestion and driving itself is becoming more stressful.</p> <p>Need to avoid social excluding those households without access to a car.</p>
Road safety	<p>Every year around 3,500 people are killed and 40,000 are seriously injured on Britain’s road network. In total there are over 300,000 road casualties in nearly 240,000 accidents, and about fifteen times that number of non-injury accidents. This represents a serious economic burden; the direct cost of road accidents involving deaths or injuries is thought to be in the region of £3 billion a year¹².</p> <p>Increased traffic and speed have made streets feel less safe. Children are not as free as they were to play, or to walk or cycle to school on their own. 20 years ago, nearly 1 in 3 children between 5 and 10 years old made their way to school themselves. Now only one child in 9 does so.</p>	
Collective transport demand/supply	<p>Since privatisation, the rail network has experienced a 30% increase in passengers. However, public transport does not always meet the needs of those who rely on it. As motoring costs have fallen in real terms, bus and rail fares have gone up. Bus fares have risen by a third in real terms since 1980.</p> <p>Rural Bus Subsidy Grant is provided to local authorities for new or enhanced local bus services and has provided over 1800 new and enhanced services in rural England. Patronage has grown on these services from 10m in the first year to 16m journeys in 1999/00. The 10-year Plan for Transport and the Rural White Paper announced that the RSBG was to be increased and extended to provide for services in and around market towns¹³.</p>	
World Motorization	<p>If transport’s direct impact on the environment could be mitigated by the development of vehicles that emit no pollutants, we would still face challenges of world motorization. We would have the congestion of several billion vehicles rather than the present several hundred million. Several billion vehicles would embody and consume a very large proportion of the planet’s limited resources.</p> <p>Even if we could have mass motorization without congestion and with little energy and resource consumption, there could still be problems in the form of</p>	

Traffic growth issues	Relevant Factors / Evidence	Some Implications
	the adverse social consequences of high levels of motorised mobility. Up to a point the spread of mobility throughout a society seems to confer widespread benefits. With further increases in mobility – into a condition that some have called “hypermobility” – societies may become more polarised, more dispersed, more anonymous, less child-friendly, less culturally distinctive, less physically healthy, more crime ridden and less democratic.	
Social behaviour	A person’s attitudes, life style and tastes also influence aspects of their travel behaviour, such as car acquisition and use, and attachment to and dependence on the car. This is covered in more detail in the Social Trends factsheet.	

Other relevant factsheets:

Social, Housing, Community, Health and Education Concerns.

Environmental issues

Energy issues

Travel substitution

References

¹ Department of Environment, Transport and the Regions (2000) “National Travel Survey”

² Department of Environment, Transport and the Regions (1997) “National Road Traffic Forecasts (Great Britain)”

³ The Institute of Highways and Transportation (1997) “Transport in the Urban Environment”

⁴ Friends of the Earth (1997) “Congestion Costs London Households £695 Per Year” (press release).

⁵ Department of Environment, Transport and the Regions (1998) “A New Deal for Transport: Better for Everyone”

⁶ Department of Environment, Transport and the Regions (2000) “Guidance on Full Local Transport Plans”

⁷ Traffic Engineering and Control (2000) “Universities’ Transport Research Projects 1999”.

⁸ Friends of the Earth (2000) “Walking Bus: A Safe Way for Children to Walk to School”

⁹ Committee on the Medical Effects of Air Pollution (1998) “The Quantification of the Effects of Air Pollution on Health in the United Kingdom”.

¹⁰ Department of Environment, Transport and the Regions (1998) “Health Effect Based Noise Assessment Methods: A Review and Feasibility Study”

¹¹ SACTRA (1997) "Transport Investment, Transport Intensity and Economic Growth: Interim Report"

¹² DETR. "Tomorrow's Roads: Safer for Everyone: The Government's Road Safety Strategy and Casualty Reduction Targets for 2010".

¹³ DETR web-site (<http://www.detr.gov.uk>).