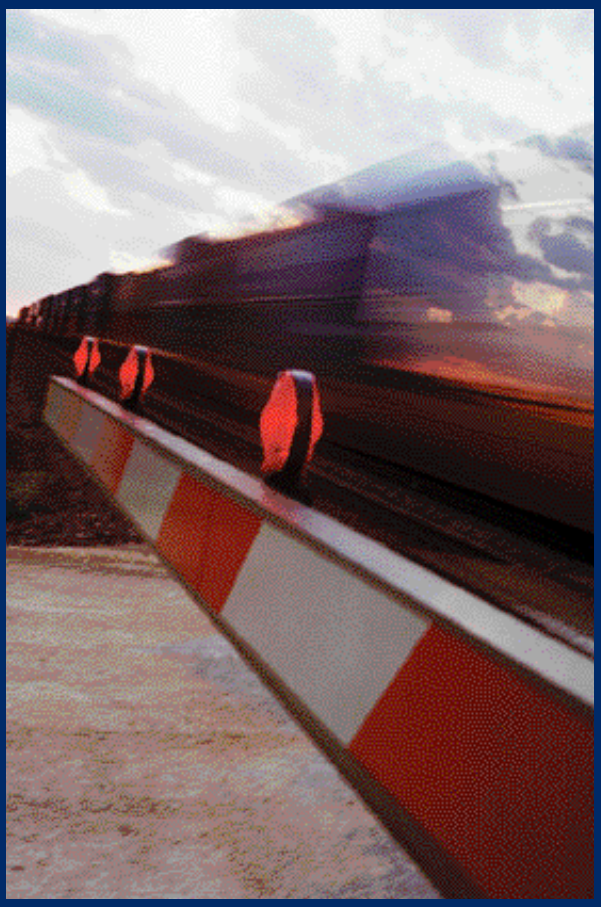
FIA Foundation
for the Automobile and Society

Transport & Social Exclusion
A survey of the Group of Seven nations



Summary Report

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FIA Foundation
for the Automobile and Society

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The seven national papers, of which this document is a summary, are available for download free of charge from the FIA Foundation website at www.fiafoundation.com

Foreword

The automobile has been a motor for positive social change and economic growth. Millions have benefited from the opportunities enabled by access to a car.

Our industrialised societies are now structured around the car. The locating of essential services such as schools and hospitals, entertainment and shopping and work is often based on the assumption that the majority of people are able to access them by car.

Yet there is a significant minority of people who are excluded from the best that society has to offer, and poor access to mobility is often a key factor in their exclusion.

It is important for the overall cohesion of societies that transport policies do address the mobility of the minority who are not benefiting from access to the car. For those of us who believe that the car provides many positive benefits to society it is doubly important that we do not forget those for whom those advantages do not flow, people who are locked out of the car society and also very often bear the disproportionate brunt of the negative impacts of the car on their human environment.

In order to better understand the extent of political response to the role lack of access to transport plays in exacerbating social exclusion, the FIA Foundation commissioned a survey of the public policy stances taken towards transport and social exclusion in the Group of Seven industrialised nations.

This independent survey, co-ordinated by Westminster University and including contributions by experts from universities or research organisations from all seven countries, explores the extent to which the concept of social exclusion and the links between transport and social exclusion are accepted and recognised, and examines the transport policies being put in place to promote greater social inclusion, so that the rich rewards of mobility can be shared by all.

David Ward
Director General
FIA Foundation

Key findings of the survey

On the link between transport and social exclusion:

- access to a car, particularly outside of major cities, seems to be essential to full participation in economic and social life in modern industrialised societies;
- lack of access to a car is the main transport factor in the social exclusion of low-income households and other marginalised groups;
- even for families without cars, the share of public transport trips is lower than the share of trips by car;
- improving public transport in isolation is no longer an adequate solution to the poor accessibility experienced by low-income and marginalised groups;
- dispersed land uses, changing work and lifestyle patterns and the closure of local amenities, increasing car dependence, has exacerbated the problem of poor access for non-car owning households.

On the public policy response in the Group of Seven:

- in general, the impact of poor transport on social exclusion and the consequent effect for national welfare agendas in the G7 countries is not well analysed or addressed by national policies;
- the USA has the longest record of policy responses to issues of transport and social exclusion, with a specific Transport Equity Act and federal policies that are mainly focused on 'welfare to work';
- improving access to work is also the main social goal of transport policies that seek to reduce social exclusion in France;
- of the survey countries, the United Kingdom seems to be alone in attempting to make connections between poor transport amongst low income groups and other inequalities such as low educational attainment and poor health;
- in Canada, despite strong social programmes, there is little national effort to co-ordinate local transport planning or address transport related social exclusion problems;
- Germany, Japan and Italy have developed specific policies to address mobility problems of disabled, older mobility impaired and isolated populations, but have tended to overlook links between transport and social exclusion as it relates to low income and minority populations.

Introduction

The persistence of poverty and disadvantage amongst some social groups in even the most affluent and advanced industrial societies and its 'knock-on' effects, such as unemployment, poor educational achievement, high crime rates, social segregation and low voter turn-out is an increasing focus of the policy agenda of these countries. Poor transport and accessibility has been identified as an important contributing and reinforcing factor in the reduced participation of excluded groups and communities.

In response to the growing body of research and policy development in the UK and the relative paucity of international comparisons, the FIA Foundation invited the Transport Studies Group (TSG) at the University of Westminster to undertake a scoping study to compare the position of the G7 countries in relation to transport and social exclusion. The intention was to build on previous UK research (e.g. DETR 1999; DETR 2000; Hamilton et al, 1999; Lucas et al 2001; TRaC 2000) and the work of the UK Government's Social Exclusion Unit recent study of the links between transport and social exclusion in the UK (SEU 2002; SEU 2003) in order to make a contribution to the ongoing policy development both nationally and locally in the UK, whilst also helping to raise the profile of transport and accessibility within the welfare policy agenda elsewhere and to disseminate good practice more widely between nations.

This is a summary report of Phase 1 of the work, which involved the preparation of seven nation specific papers, which were presented by their authors at a seminar in London on 3rd and 4th April 2003. A second phase of the work is proposed to identify innovative and transferable transport and non-transport policy driven initiatives that can contribute to more socially inclusive transport systems. This commenced in January 2004 and will report in Spring 2005.

Aims and objectives

The main objectives of the Phase 1 work were to:

(i) compare the extent and diversity of form of social exclusion across the seven countries and different national approaches to the problem;

(ii) Examine the ways in which the transport policies of the seven countries recognise and alleviate or accentuate the problem.

The aim was to provide an overview of findings with headline conclusions, based on a review of published and grey literature and existing data tabulations in each of the seven countries.

Methodological approach

The method was entirely based on the identification and synthesis of existing data, research, policy information and practical examples of projects in each of the seven countries. The authors were asked to explore the wide-range of issues relevant to the study of transport and social exclusion in their national context. Given the volume of recent research in the UK on the links between transport and social exclusion, and TSG's involvement in this work, it was proposed that a report on the UK situation should be prepared first, to act as a template for the other participants. The papers were prepared under five key headings:

1. Understanding the concept of social exclusion

2. Making the links between transport and social exclusion

3. What is the problem?

4. How does this contribute to social exclusion?

5. How has the situation occurred?

6. Practical initiatives, opportunities and risks

All the national papers are available for download from the FIA Foundation website www.fiafoundation.com

From the outset it was recognised that determining the extent, severity and precise location of the problem of poor transport and making evident the outcome of this in terms of social exclusion in order to make international comparisons would be problematic. Part of the problem is a general lack of disaggregated statistical data within the different nationally available datasets, but even where this is available it is often impossible to know whether one is comparing like with like. Secondly, the surveys that collect data on transport (mainly National Travel Surveys) concentrate on documenting people's travel behaviour, but do not explain why that behaviour occurs so that it may be possible to identify that different sectors of the population behave differently, but not why this happens or the consequences for their quality of life or well-being.

A further problem is that all the surveys are usually based on samples of the population, which systematically tend to under-represent low-income and socially disadvantaged groups because of lower response rates among these groups. In many instances, only very small numbers of these groups are represented within the sample, which makes the data insufficiently robust to undertake statistical analysis. The unit of analysis can also present difficulties in obtaining a complete picture. While data is available at the

individual level in some instances, most surveys use the household as the main unit of analysis. This means that differences within households remain hidden; for example, household members may have differential access to the household car but the data effectively masks these inequalities within households.

Another feature of the national datasets is that they are usually not spatially disaggregated, so any differences in behaviour cannot be attributed to a specific geographical location. It is therefore often impossible to determine whether one city, town or region is more affected than another and inferences have to be made about area-based travel patterns on the basis of crude proxy measures, such as type of area e.g. urban, rural, metropolitan.

Understanding the concept of social exclusion

The UK experience suggests that understanding social exclusion as a policy concept can be problematic, as attested by the plethora of early UK policy and academic literature addressing definitions. The UK Government tends to describe social exclusion in direct relation to the linked problems it associates with the phenomenon, namely high unemployment, poor skills, low incomes, bad health, high crime environments, poor housing conditions and family breakdown (SEU, 1998). In her paper, Lucas (2003) describes social exclusion as arising from a set of inter-relational processes, originating from fundamental structural changes to the economic, employment and social organisation of advanced industrial societies, which results in systematically induced changes to the social order and the creation of new social boundaries.

Mandanipour et al (1998) find that the concept relates specifically to the values, processes and actions of key delivery agencies, organisations and institutions within any given society. These have the effect of systematically excluding certain individuals, groups or communities from the benefits of their policy decisions and practices. The implication of this conceptualisation of the problem is that the emphasis of resolution primarily rests with the social agencies that are responsible for policy delivery, rather than the individuals affected. Governments must identify ways in which they can successfully intervene to ensure greater participation by and inclusion of socially disadvantaged groups within society. Morally, there are decisions to be made over the type of behaviour and values that should be valorised within that society and the extent to which the State should intervene to protect individuals, groups and communities against certain prevalent negative values which could disadvantage them, such as racism, sexism and homophobia.

The other national papers suggest that social exclusion is generally understood to refer to people's inability to adequately participate in society. The papers do not particularly dwell on the underlying causes of social exclusion, but suggest that the problem is multi-faceted and goes wider than a problem of poverty per se, to embrace the ways in which people are effectively 'locked out' of the social, economic and political mainstream. Nevertheless, material deprivation and lack of income are important aspects of most approaches to social exclusion, and the concept has resonance with earlier debates on the nature and causes of poverty.

Making the links between transport and social exclusion

All seven of our papers recognise the important role of transport in relation to social exclusion, particularly in the context of participation and quality of life in the highly developed and mobile societies that are represented, although all seven are at different stages in terms of policy recognition of this problem. For example, the concept of social exclusion has received relatively little attention in the German academic and political debate, in part, because until very recently the existence of poverty in Germany was denied by the Federal Government, which believed that the well-functioning social security system avoided this problem (Hemming and Borbach, 2003). More recently, the issue of poverty has risen up the German political agenda and in 2001 the Federal Government published its first national report on poverty and health, but, as yet, this analysis does not include consideration of transport and accessibility issues. This mirrors the UK position in 2000, when the UK Government's National Strategy for Neighbourhood Renewal did not include transport as a relevant policy area (Lucas, 2003).

Both Italy and Japan appear to be in a similar policy position to that of the UK pre 1997, where the accessibility problem is described largely in relation to the lower mobility of elderly and disabled populations. This is a reflection of the problems that are likely to occur as a result of their rapidly aging societies and the so-called 'demographic gap' that will be experienced more acutely by these two countries if their current population trends are not reversed.

The Italian paper (Gentili, 2003) is also heavily concerned with the mobility needs of women. It identifies that, by adhering to traditional gender roles and striving to live up to the ideals of modern society, Italian women, more than men, have to manage and combine complex transport needs in transport chains. They usually have to escort children to school, shop, assist their parents, as well as undertake journeys to and from work. This often generates illness and stress with negative feedback on family, social and particularly working relationships. In Italy, women are also more affected by negative transport externalities.

In Japan, there are no specific set of policies to address social exclusion with regard to transport services and this issue is addressed within policies relating to the elderly, the disabled, depopulation, and environmental protection (Imanishi, 2003). The rapid advance in concentration of population in urban areas and depopulation in rural areas has also resulted in depopulated areas composed mostly of an elderly population who do not have drivers' licences. Rapid motorization has meant a decline in public transport services in rural areas, raising a challenge for government to take measures to provide low cost services such as community buses and welfare buses in these areas.

It is clear from both the Canadian and US papers that the term social exclusion is not widely known or understood in the North American policy context, despite their active policy welfare agendas. In Canada, social exclusion is primarily associated with poverty, physical disabilities and

immigrant populations (Litman, 2003). Transport professionals are more likely to use the term basic mobility, which refers to transport to access goods, services and activities that a community considers essential or as having a high social value. Although Canada generally has strong social programmes, there is little national effort to co-ordinate local transport planning or address transport-related social exclusion problems. Most solutions to this problem are implemented at the local level, resulting in diverse types and quality of policy initiative.

The US paper (Kennedy, 2003) demonstrates that there is considerable policy resonance between the US environmental justice agenda as it relates to transportation and the transport and social exclusion agenda in the UK. The US policy agenda significantly predates that of the UK and there is a raft of practical interventions that have been put in place over some 10 years to help address environmental injustice as it relates to transport. These include a Federal requirement to assess and address the unequal impact of all state spending on transport on low-income and minority communities, Community Impact Assessment (CIA) to ensure the human environment's voice or voices are heard during the transportation planning and implementation phases of projects, policies to control air pollution from road traffic and Federal funding programmes to provide transport for assisting individuals from welfare to work. The latter includes car pooling, van pooling, new bus routes, connector services to mass transit, employer-provided transportation and transportation services to suburban employment centres and is intended to establish an "all inclusive" and regional approach to job access.

From the seven papers it would appear that France and the US have the most experience in terms of the practical delivery of projects to address the transport needs of socially excluded people, although the main policy emphasis is primarily on providing access to employment as part of a wider welfare agenda. France is probably the most advanced in its analysis and understanding of social exclusion as both an area-based problem and at the level of individual participation in mainstream society. On the transport policy side, the main attention is focused on public transport provision. The arrangements made for funding and organising public transport in France are quite different to those in the UK.

It would appear from the UK paper (Lucas 2003) that both policy and research analysis is some way in advance of Germany, Italy, Japan and Canada in making evident the links between transport and social exclusion and there is a more comprehensive national policy agenda to address the problem. This appears to be more far reaching than is the case in the other G7 countries, including France and the US, because it considers a wide range of different social groups and their activity needs. The paper identifies that the UK Government is committed to an integrated programme of transport and social policy reform aimed at addressing the transport barriers that prevent socially excluded people from accessing, not only jobs, but also education, health care, healthy affordable food and leisure and cultural activities.

What is the problem?

All seven papers identify the dramatic growth in both vehicle numbers and the distances driven as a primary factor in reducing the opportunities of people without cars to access key goods and services. Car ownership is now the norm within most households. While most people have generally benefited from this wider availability, the travel choices of people without cars have been gradually eroded, whilst at the same time the need to be more mobile has increased. The papers are in agreement that, to a lesser or greater extent depending on the national context, this situation has arisen from a number of linked and mutually reinforcing phenomena, namely:

- low car availability in low-income households;
- changing land use patterns;
- declining public transport services;
- the cost of transport;
- mobility constraints and low travel horizons and expectations; and
- exposure to pollution, accidents and community severance.

From this list it is immediately possible to identify that the problem is multi-dimensional arising from quite complex interactions between the location of services, the personal circumstances of the individuals and access to transport. These interactions are reinforced or ameliorated to a lesser or greater extent in response to the wider context of the financial, legislative and regulatory framework.

Car availability

The US clearly has the highest levels of motorised travel of the seven countries (see Figure 1). Although car ownership in the US is rapidly approaching saturation point (with more than one vehicle for each driver), there are still significant numbers of low-income households without a car. Transport systems and land use patterns have become increasingly car-oriented, and the quality of travel alternatives (walking, cycling, public transit and other non-automobile options) has more seriously declined than elsewhere. As a result, transport inequity may be more pronounced for non-drivers here than elsewhere, but differences between the US and the other six countries are declining as patterns of car ownership and use in Europe, Canada and Japan begin to catch up (Figure 1). In Japan, the widespread adoption of cars has occurred much more rapidly than in European countries. Few Japanese owned cars until the mid-1960s,

whereasapproximately 70% of households now own a car. This compares with 75% of households in Germany, 79% in both the UK and Canada and 82% in France.

All seven papers emphasise the low car availability of low-income households as a major factor in their inability to access goods and services and participate fully in everyday activities (see Figure 2).

Figure 1: Car ownership in the G7 countries

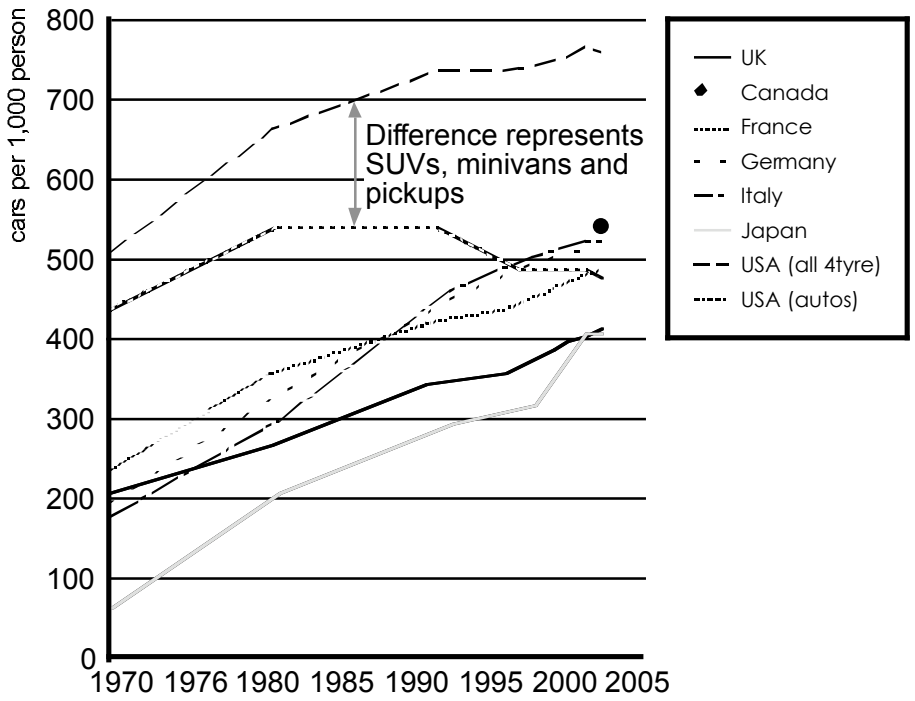


Figure 2: Percentage of non-car owning households by income and country*

	All households	First quintile	Second quintile	Third quintile	Fourth quintile	Fifth quintile
Canada	21	53	23	12	8	7
France	23	58	29	7	4	N/K
Germany	25	51	22	19	4	3
UK	28	65	43	19	10	5

* These figures are not strictly comparable as the French and German percentages are based on net household income bands. This data is unavailable for Italy, Japan and the US.

It is also noted that older people, people with disabilities, women and ethnic minorities are less likely to have a driving license and are more likely to live in households without access to a car.

Changing land use patterns and declining local services

In the US and UK, rising car ownership combined with other economic and socio-demographic changes, has meant an increasing shift of both populations and industrial and economic activities from the centre of cities to edge-of-town or out-of-town developments. This has encouraged more dispersed land use patterns and travel intensive lifestyles and participation in an increasing proportion of education, employment, commercial and other activities is now virtually impossible without a car.

This phenomenon appears to be less pronounced in mainland Europe, although there is still some evidence that considerable land use dispersal has occurred despite policy efforts to concentrate developments in urban areas and more integrated land-use and transport planning. In France, even though the central city continues to maintain the majority of employment activity, there is a dispersal of activity from the centre to the suburbs, especially in the largest urban areas and a growing volatility of employment (Orfeuil, 2003). As a result, commuting distances continue to grow (around 14km in 1999), as a result of a mismatch between workers and jobs.

Although Canada has one of the lowest national population densities in the world, the majority of the country's population is located close to the southern border, in a few large urban regions. As a result, most Canadians live in urban communities, which tend to be more multi-modal than in the U.S., with high levels of per capita public transit use. However, with increases in car ownership, a growing proportion of the Canadian population lives in car-dependent suburbs (Litman, 2003).

In Japan these migration trends are in reverse. During the period of high growth in the second half of the 20th century, many young people moved from rural areas to seek employment in the cities where there was a lot of economic activity and they could earn higher wages. The effect on population distribution in Japan was that the rural areas became depopulated while the cities became overcrowded. Although the pace has slowed, even today there is a tendency for the population to concentrate in the cities so that approximately two-thirds of the population lives in urban areas. In 1995, 64.7% of Japan's population lived in an area covering just 3.24% of Japan's land. Conversely, 35% of the population lived in the 97% of the country's land that falls outside these urban areas, resulting in an extremely low population density in rural areas (Imanishi, 2003).

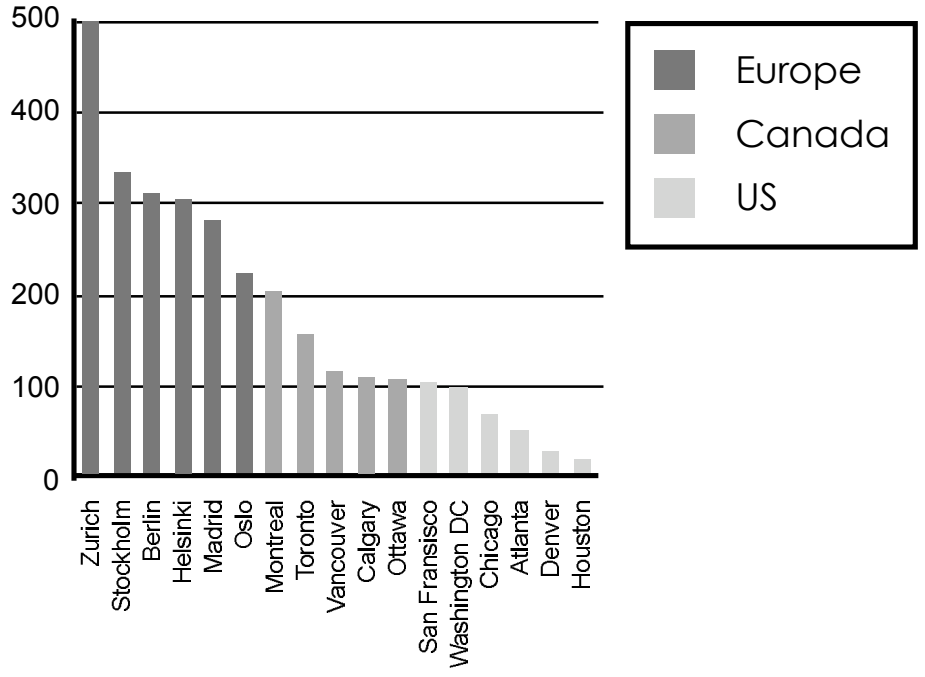
Within urban areas the 'flight' of local services from deprived areas has exacerbated the problem of poor accessibility to a lesser or greater extent in all G7 countries, except Japan. In the UK, many deprived communities now lack even basic amenities such as a general food store, or a doctor's surgery. The facilities that are available are often of poor quality and the goods they provide can be over-priced. High crime and fear of crime in these areas make them unattractive to businesses and customers alike (Lucas, 2003).

Although the problem is generally perceived to be less pronounced in mainland Europe, the French paper also identifies that the location of residences and amenities in France is more and more directed by the middle and upper class populations, for whom cars are generally available. Supermarkets and hypermarkets now account for 66% of all food sales in France, despite resistance from specialist food stores, and half of France's 36,000 communes now have no shops (Orfeuil, 2003).

Declining public transport services

In many cities, the increasing use of private motor vehicles has been accompanied by a reduction in the number of public transport users. European cities tend to have higher public transport trip rates per capita than Canada, which in turn has higher levels of public transport use than the US (Figure 3).

Figure 3: Annual public transport trips per capita in selected cities



Source: McCormick Rankin 2002 (in Litman)

A certain level of demand is required if public transport, such as railway and buses, is to continue operating on an economically sound basis. In the countries where the provision of public transport is largely reliant on the commercial sector, as is the case in the UK, the coverage, frequency and quality of services have tended to decline. The UK paper suggests that bus

deregulation in the UK has resulted in effective monopolies as the bigger operators have swallowed up the smaller companies that won first round tenders when the national monopoly was split up and privatised. In the absence of competition, services are run to meet minimum standards and non-commercial routes are often withdrawn from service altogether or at certain times of the day (Lucas, 2003).

This decline is less evident in the countries where public transport is largely funded by the national or local government. Nevertheless, there is evidence that public transport services are finding it increasingly difficult to compete with the private car even for those on the very lowest income. In Japan, regional railways were successively withdrawn from service from the mid-1980s, resulting in the disappearance of railways from depopulated rural areas. Although railways were replaced by bus services, these have also become uneconomic due to a drop in patronage caused by a decline in the population. This has resulted in the scrapping of some routes and cuts to the frequency of services (Imanishi, 2003).

Germany is also in the process of reducing the overall length of the rail network and shutting down many rail stations, especially in rural areas in both the old and new (Eastern) states, so public transport in rural areas is losing its backbone with negative impacts for accessibility in these areas. Despite these developments, the German paper questions whether a general decline in public transport in Germany could be claimed, as network coverage overall is good and does not appear to be any worse in deprived urban areas. Nevertheless, public transport frequencies are not sufficient during night times and in fringe areas (Hemming and Borbach, 2003).

In France, the system of funding public transport is quite different from that elsewhere. Local authorities define an area where one company operates under an area-wide franchise, pay for the services they want (partly through a special tax on companies and partly of their own volition) and fix the level and structure of fares as well as the pattern of rebates. A comparable situation prevails nationally at the level of ‘departments’ and in the regions. Here, although the supply of public transport continues to improve, competing with the speed and comfort of the car is difficult and more and more trips are only possible by car. This means that the costs of providing a given service increases as the cost coverage from fares is decreasing in relation to the development of services, particularly in low-density areas (Orfeuil, 2003).

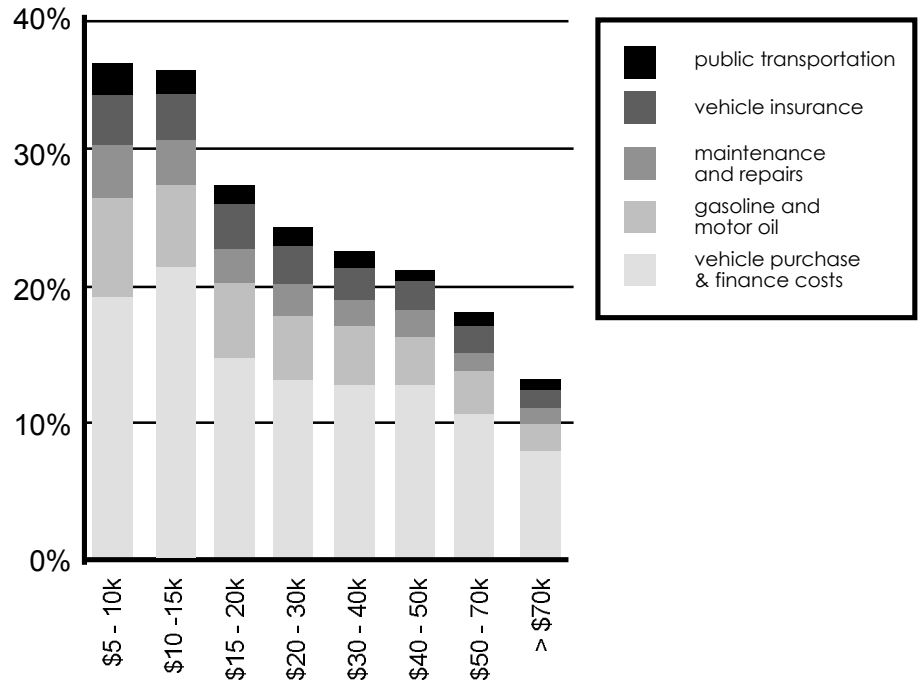
The federal government is much less involved in planning and funding personal transport in Canada. Provincial governments manage major highways. Local roads and most transit services are funded and managed at the local level. As a result, amelioration of transport inequities is primarily a concern at the level of local transport planning, and sometimes by provincial agencies dealing with special client groups or communities (Litman, 2003).

The cost of transport

A number of the papers note that the rising cost of public transport fares in comparison to the relatively stable or even declining costs of owning and running a car has served to make the car a more affordable and attractive option over time, even for people on very low incomes. For example, the cost of public transport in the US is three times the cost of driving. The German paper identifies that poor people spend more of their income on public transport than on vehicles or fuel. The share of expenditures for private vehicles in the highest net-salary group in Germany is more than six times as high (6.1 %) as the share in the lowest income group, below 1%.

Both the UK and Canadian papers identify that on average low-income households spend a greater proportion of their budget on motoring than more wealthy households. In the UK, expenditure on motoring accounts for 24% of the expenditure of car driving households in the lowest income group, compared to 17% in the highest quintile. In the US, households in the lowest two income categories devote about a third of their total income to transport expenditure, mainly cars, whilst the average household spends approximately 18% and this declines to just 13% for the highest income household (see Litman and Figure 4). This indicates that transport costs in the G7 countries tend to be regressive with respect to income.

Figure 4: Percentage of US household income spent on transport



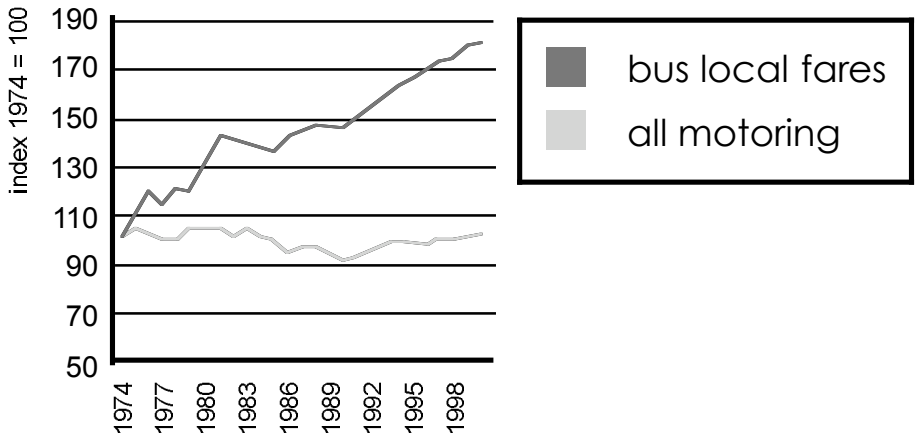
Source: US Consumer Expenditure Survey 2000, Bureau of Labour Statistics

The French and Japanese papers note that low-income earners also face difficulty in being able to afford the cost of obtaining a driver's license. A look at car ownership according to income level shows that the lower the income, the lower the ownership rate becomes. This is in part because of the over-representation of older people, particularly women in low-income categories, but is also indicative of the high cost of driving lessons and vehicle insurance (Orfeuil, 2003; Imanishi, 2003).

The Canadian paper emphasises that transport decisions also affect household costs and affordability in various ways (Litman, 2003). Households often face a trade-off between housing and transport costs: in many cities in the developed world, lower-cost housing is located in car-dependent areas at the urban fringe where travel costs are higher. As a result, lower-income households face a choice between high housing costs or high transport costs. Transport costs can therefore impose a significant financial burden on some very low-income households. This is a common problem in many parts of North America. This can affect social inclusion directly (by making it difficult to afford transport) and indirectly (by reducing the amount that a household can afford to spend on other activities, such as food, housing, education, etc.). This problem is not always evident in the travel data.

Nevertheless, the cost of driving has stayed constant or even decreased in most G7 countries, whilst the cost of public transport fares has steadily risen. The UK paper notes that the rising cost of public transport fares in the UK has made the cost prohibitive for many low-income households. Local UK bus fares have increased by 80% in real terms over the last 25 years, while motoring costs have remained broadly constant (Figure 5).

Figure 5: UK bus fares and motoring costs



Source: SEU 2002 in Lucas 2003

As the UK paper points out (Lucas, 2003), unaffordable driving costs combined with poor and expensive public transport provision means that often people on low incomes simply cannot afford to get to the places they need to go, whether this is to work, or to the hospital or the shops. At other times, it means that they have to walk unreasonably long distances, and often in unfavourable and stressful circumstances, to carry out their daily activities. This can inhibit the geographical extent of job search activities and work travel patterns, while time constraints are identified as particularly important for women, given the 'double burden' of their domestic role and employment responsibilities.

Mobility constraints and low travel horizons and expectations

All the papers note that there is generally a high ratio of older people and mobility impaired people, living in low-income and non-car owning households, who must rely on walking or public transport as their main source of mobility. The Japanese paper identifies that approximately 30% of older people leave their homes as little as just two or three times a month. The design of vehicles, footways and stations make them inaccessible not only to people with physical difficulties but those escorting small children in pushchairs (Imanishi, 2003).

The papers suggest there is a greater awareness of the special transport needs of groups that have physical mobility constraints among the G7 countries and all offer some special provision for these groups by law. Increasingly, urban bus networks are being equipped with low floor vehicles and ramps facilitating the access of wheelchair users to public transport, although the provision of these vehicles tends to be less comprehensive or even non-existent in more rural areas. In Japan, making public means of transport barrier-free is being promoted on the basis of the Transport Accessibility Improvement Law that came into force in November 2000 (Imanishi, 2003). In the UK, the 1995 Disability and Discrimination Act introduced a requirement for all public transport to be fully accessible for disabled people, but full compliance does not have to be achieved until 2050.

Most countries also offer fare subsidies or even free transport to mobility-impaired and registered disabled travellers. For example, German law provides seriously handicapped persons with free travel in public transport or a full or major tax reduction for their private car. People with a registered disability and all people over the age of 65 in England are eligible for a free bus pass, which entitles them to half price travel on public transport in their local area. The papers also identify a wide range of subsidised transport measures and bespoke services targeted at people who are unable to access mainstream public transport services. Despite these initiatives, many barriers to travel for people with disabilities still remain.

The question of low travel horizons is less explored by the papers. However, as the French paper notes, for some sectors of the population, the question of competence is key. This embraces poor visualisation and mental mapping problems and poor knowledge of space and network of relations. Low literacy rates and language difficulties can also reduce people's ability to access information about the transport system, which has an impact on its use by some groups, in particular people with mental disabilities and immigrant populations. In all instances the data on the travel behaviour and needs of ethnic populations is either non-existent or extremely limited, but there is a general recognition that both language and cultural barriers serve to significantly constrain the travel behaviour of those who find it difficult to communicate in the national language of their country of residence.

There is some anecdotal evidence in the papers to suggest that some low-income groups would prefer to carry out their activities within their own neighbourhoods and are reluctant to travel to places further afield. This is not only based on choices about the cost of travel but also lack of familiarity with the transport system and the wider area, as well as more deep-seated parochial attitudes in some instances. For example, a French study identified that on a 'no charge day' on regional public transport some young people took the train to the regional capital, but chose to stay in the train station.

Exposure to accidents, pollution and community severance

As the UK paper identifies, on average, poor people undertake nearly twice as many walking trips as the rest of the population. They are also much more likely to live in urban areas near busy roads and as such are far more exposed to pedestrian accidents and traffic pollution. Children in the lowest social class grouping are five times more likely to be involved in a road accident as pedestrians than those in social classes I and II (SEU, 2002 in Lucas 2003).

In Germany, children coming from lower social classes and foreign children (especially Turkish children) are about twice as likely to be involved in a road traffic accident as other children of the same age. Bad living conditions near main roads without playgrounds or free space for children are seen as the main reason for this situation, however, family problems such as illnesses of the parents or a broken home (after conflicts or divorce) also cause a higher rate of child accidents. German studies have found that the more children a family has, the higher the accident rate is for them and that the youngest child of the family is most in danger (Hemming and Borbach, 2003).

The German paper also argues that children suffer a high health risk from air pollution because they are smaller than adults and inhale a bigger relative share of pollutants, with negative impacts especially on respiratory

tracts. In the UK, the Acheson report on health inequalities identified that poor people are more likely to be exposed to air and noise pollution from traffic because of their proximity to busy roads (Lucas, 2003).

It is estimated that 95% of carbon monoxide (CO) in US cities is derived from traffic (Kennedy, 2003). Tighter emission standards mean allowable emissions of CO from cars has reduced to 4% of the amount allowed before legislative controls, and the introduction of tougher standards for other toxic pollutants has resulted in steadily improving air quality in urban areas, with total CO emissions in the US at about half the level of 1970 despite rising traffic. However, because a large percentage of low-income and minority populations live in the centre of cities, where concentrations of pollutants are highest, the effects of relatively high mobile source air toxins has had visible adverse health effects.

Traffic noise can also be a major factor in depression and stress related illnesses, as well as more generally negatively affecting people's quality of life. Noise from traffic is highest near trunk roads or highways. More than two thirds of German people claim to be disturbed by traffic noise (Hemming and Borbach, 2003). Health impacts of noise are sleep disturbance and disease of the cardiovascular system. Again, German studies have found that children especially lose power of concentration and the ability to learn, so disadvantaged children bear cumulative risks. Zoning laws in Japan allow residential buildings to be located in commercial districts, and many people live along busy arterial roads. In recent years, measures have been taken to protect the environment for the residents along roadways when new roads are developed in residential areas; this includes installation of buffer zones and noise barriers, which meet the standard for noise and air quality. However, most roads were developed prior to the introduction of these laws, and many residents still live in areas of poor environmental conditions.

Another problem identified by some of the papers is that of past road building programmes where infrastructure has cut through deprived areas and effectively severed the communities that live there. The German paper also identifies that the problem of deteriorating neighbourhoods could have serious consequences for the psychological and social well-being of people living there (Hemming and Borbach, 2003). In particular, children suffer from the break up of families and are disproportional victims of accidents, malnutrition, long-lasting diseases and insufficient clothing. Conventional measures like child benefits are not target-orientated enough. The risk of falling ill, having an accident or becoming a victim of violence is twice as high for poor people as for those higher up the income scale. Moreover, life expectancy is about seven years shorter.

In recognition of this problem in the US, the Federal Government passed an Executive Order 12898 in 1994 to attempt to address the disproportionately high and adverse human health or environmental effects of its programmes, policies, and activities on minority populations and low-income populations

within its territories. Although Executive Order 12898 is not law, many transportation agencies across the US over the past decade have embraced quantitative and qualitative impact assessments for minority and low-income communities as an added dimension to their programmes and this has resulted in positive outcomes (Kennedy, 2003).

How does poor transport access contribute to social exclusion?

The papers identify that, in general, the impact of poor transport on social exclusion and the knock-on effect for national welfare agendas in the G7 countries is not well analysed or addressed by national policies. The UK SEU report 2003 seems to go furthest in this respect through its sector by sector analysis of the effects of poor transport on access to work, healthcare, education and other key facilities that support a reasonable quality of life in advanced industrial societies. The UK paper notes that poor transport amongst low-income and socially excluded populations has a serious cost implication not only for the individuals that are affected and the vibrancy of the communities in which they live, but also for the wider economy and the State. A lack of transport means that individuals can become cut off from employment and education and training opportunities, perpetuating their low skills base and inability to secure a living wage. Poor access to healthy affordable food, primary and secondary health care and social services exacerbates the health inequalities that are already evident amongst low income groups, further reducing their life chances. People can become housebound, isolated and cut off from friends, family and other social networks. This can seriously undermine their quality of life and, in extreme circumstances may lead to social alienation, disengagement and, thus, undermine social cohesion.

Access to work

In the US paper, Kennedy identifies that lack of transportation is often the largest challenge welfare recipients face in their transition from welfare to work. Two-thirds of new jobs in the US are in the suburbs. However, a large percentage of welfare recipients live in rural or central cities. Existing public transport does not provide adequate linkage to suburban job opportunities, serve weekend and evening riders, or the rural areas. Data from the Urban Institute's National Survey of American Families show that twice as many welfare recipients with cars were working than those without cars. Historically, federal transportation funds were used to reimburse clients for transportation costs rather than provide transportation services. Welfare reform now requires the use of transportation services and a more systemic approach to link these services to existing and proposed transportation infrastructure. Employers also need to be included in providing transportation services.

In France, the policy focus also appears to be primarily on the problem of poor access to work. Orfeuil (2003) identifies that, as a result of the dispersal and short contract nature of much employment, the proportion of jobs easily accessible by public transport has decreased. Although, there is not a sharp increase of shift-working, the nature of these jobs has tremendously changed, for example, night work was mainly in the major industries, and special buses or van services were organised. Today, night jobs are in dispersed locations and predominantly in the service sector where shift patterns are more flexible and where no transport services are organised and where it is anyway difficult to match services to work patterns.

The German and Italian papers note that women with children are particularly affected by this problem. This is because women still retain most of their childcare and household responsibilities, which are difficult to combine with work duties without a car.

Access to education and training

Only the UK and German papers raise the possibility that poor transport could be a contributing factor in the low-educational attainment of children from lower social classes. The circumstance of school transport is different in the two countries. In Germany pupils normally attend the school nearby and parents are not totally free to choose a school independent from their house location as they are in the UK. In both cases, municipalities have to pay for travel costs to the nearest available school, but in the UK this only applies to journeys of over three miles for children over eight years of age. Part of the problem in the UK is that parental freedom of choice has meant that wealthier parents choose to send their children to high performing schools, while children living in deprived areas usually attend the nearest school to their home because of a lack of available transport and restrictive home to school transport policies. The German paper notes, however, that despite their 'nearest school' policy more affluent parents find ways around the system by sending their children to confessional schools (and other private schools) or by moving to a suitable area of residence.

The UK paper also notes the cost of travel as a significant barrier to the take-up of post-16 education in the UK. UK studies have shown (SEU, 2002) that travel costs are the biggest expenditure associated with post-16 education and found that one in every five students had considered dropping out of their studies because of the burden of these costs. Six per cent of students have missed college at some point during the academic year because they could not afford the cost of transport. Six per cent of 16–24 year olds have turned down the offer of training or further education because they are unable to get to the educational establishment offering them a place.

Access to healthcare

Reducing health inequalities between rich and poor people in developed countries and between developed and developing nations is a major feature of the world health and sustainable development agenda. A number of the papers note the harmful effects of road traffic on vulnerable sectors of the population, as identified in the previous section. The UK and German papers go further to suggest that a lack of adequate transport can also reduce the opportunity to take-up medical services, resulting in increased cost to healthcare providers due to failed appointments and delayed interventions.

A UK Omnibus Survey (SEU, 2002) found that around 31 per cent of people without access to cars in the UK find it difficult to travel to hospital and 7 per cent of them had turned down appointments in the last year because of a lack of transport; a third of older people attending doctors and health care centres in London experienced difficulties getting there. A German governmental survey in the federal state Schleswig-Holstein came to the conclusion that 94 per cent of people above 64 years of age and with regular access to a car could reach a hospital within 30 minutes, whereas just 0.14 per cent would need more than 60 minutes. Conversely, only 69 per cent could reach a hospital within 30 minutes by public transport and 8.26 per cent would need more than 60 minutes (Hemming and Borbach, 2003).

Quality of life issues

The UK paper notes that poor access to healthy affordable food and a reduced ability to socialise and visit friends and family can also act to reinforce and perpetuate ill-health. This, combined with the disproportionate impact of road traffic accidents and poor air quality on low-income groups, all contribute to continuing health inequalities. The Japanese paper identifies the negative quality of life effects of older people being stuck in their own home as a result of poor transport and the French paper points to the social under-development of young people.

Identifying the reasons for poor transport access

Drawing on the findings of the SEU study (SEU, 2003), the UK paper suggests that it is possible to identify a number of key factors which have contributed to the problem of poor access to mobility (Lucas, 2003), namely:

- poor recognition and analysis of the problem;
- uncoordinated and 'piecemeal' policy responses;
- failure to apply a 'whole systems' approach;
- deregulation and regulatory barriers;
- under-funding and poorly targeted resources.

Poor recognition and analysis of the problem

In the French paper Orfeuil finds that,

> *the lack of a global view on the interrelationships between exclusion and poverty on the one hand [and] transport system and mobility on the other hand … is the reflection of a lack of knowledge in society itself.*

This general lack of knowledge is brought about because the diversity and complexity of the situations that bring about exclusion make it difficult to translate them into statistics, which are always useful tools and preliminaries to action. For example, estimates of the number of homeless people in France vary by a factor of three. This is combined with poor organisation of the knowledge that does exist, for example, when travel surveys do not identify deprived areas as a parameter for analysis.

A second problem he identifies is poor recognition of the 'system effects' of mass car ownership over time. More and more people can and have secured the benefits of the car, but there is insufficient recognition that modern lifestyles and the framing of land uses requires greater car use. The main origin of the process is the improvement of the quality of the network and insufficient policy recognition that improved road networks contribute to the problem because they give greater freedom to individuals in their residential choices and contribute to the lack of attraction and viability of other modes.

Hemming and Borbach (2003) find that in Germany these problems are intensified because social exclusion connected with the field of transport is not a serious topic of enquiry. They suggest this may be due to a strong pressure to solve the current political problems of the German social system, like the crisis of the health insurance system or of pension fund insurance,

(and also the basic problem of unemployment), which concern a majority in society. As a result, the problems of minority groups and a specific issue like social exclusion and transport do not feature in the general political agenda. Another potential factor is that poor or excluded groups do not have a strong lobby representing their interests.

Uncoordinated and 'piecemeal' policy responses

In the UK, although the Department for Transport (DfT) is responsible for the development and delivery of transport policies, a number of other Departments also provide the funding for specialist transport services, such as non-emergency patient transport, social service transport and home to school transport. The agencies responsible for the delivery of these specialist transport services, such as Primary Care Trusts, Learning and Skills Councils and the voluntary transport sector are often not directly involved in or engaged with the wider local transport planning process and do not usually liase with each other. This results in duplication of provision, fragmentation and gaps and anomalies in the services that are provided.

In addition, local transport authorities in the UK receive Government grants to subsidise public transport services where these are considered 'socially necessary', but the formula used to assess need varies from place to place and is far from comprehensive in its application. The result is that some rural areas are without services altogether and even in urban areas, many communities lack routes that link them to key sites like the hospital, schools and employment locations. Furthermore, where initiatives have been introduced to tackle some of these shortfalls in transport provision, e.g. Dial-a Ride services, they often only serve certain sectors of the population and also do not provide comprehensive coverage. Some local authorities have been successful in securing additional funds to improve services for travel poor communities, but again this is uneven between areas and regions and usually based on successful competition rather than carefully assessed need.

Failure to apply a 'whole systems' approach

A number of problems arise from the 'silo mentality' of policy decision-making at the level of national, regional and local government. For example, in the UK when a health provider is making a decision about where to locate a new hospital or whether to close down an old one, this is not taken in the wider context of employment policy or environmental policy or transport policy, but only in terms of the cost efficiencies that might be realised for health delivery. It is usually cheaper to locate on a green-field site and popular with the general public to provide large car parking facilities at these sites. The provider is not required to take account of the environmental implications of this decision or to consider how people without cars will

access the service. It is very difficult for local planners to reverse these higher level decisions where public transport access is inadequate and even harder for local transport planners to secure the funding to provide adequate public transport to address the shortfall.

Those responsible for planning the public transport system tend not to think about the door-to-door journey experience of passengers. Crime and fear of crime is often cited as a major deterrent in using public transport, especially by older people, women and some ethnic groups. On the whole, however, public safety while walking to and waiting for public transport is not considered part of the responsibility of the transport provider.

Deregulation and regulatory barriers

The SEU report (SEU, 2002) finds that since bus deregulation in the UK in 1985, local transport authorities have little control over the provision of mainstream public transport services. The evidence suggests that operators are increasingly focusing their attention on core commercial routes and leaving local authorities to support peripheral routes and off-peak services, at an escalating cost. The 2001 Association of Transport Co-ordinating Officers survey demonstrated an average 21 per cent increase in the cost of re-tendering services in 2000 (SEU 2002). In 2000/1, the UK Government spent over £1 billion in revenue support for buses but the cost of tendered services is still rising.

A number of regulatory barriers also impede the effective delivery of public transport services and tend to promote maintenance of the status quo rather than innovative solutions to the problems that have been identified. For example, flexibly routed and demand responsive services are unpopular with operators because they can be difficult to register with Traffic Commissioners. Various licensing arrangements around taxi-buses, taxis and community transport services can also be problematic.

Under-funding and poorly targeted resources

Although the UK Government's 10 Year Transport Plan promises a substantial increase in the transport budget, this is heavily skewed towards rail passengers (40%), a mode not heavily used for the type of local journeys that people experiencing social exclusion need to make.

Special grants to provide new services are often time-limited and usually cannot be used to reduce revenue costs or prop-up existing services. They are granted on the basis of 'challenge bids' and often do not reach the places that are most in need because of a lack of institutional capacity to bid for them. Similarly, many of the concessionary travel schemes that are on offer are available to all travellers in a certain category (e.g. people over 65,

school children living over 3 miles from the nearest suitable school) regardless of their ability to pay. Those who may be most in need of concessionary travel because of their low income status (e.g. unemployed people, lone parents) often do not qualify for any assistance.

Practical initiatives and policy opportunities

The papers identify a number of targeted practical initiatives that have been introduced at either the state or local level to tackle the problem of poor transport and accessibility amongst low-income and excluded populations. These range from new laws and measures to make public transport barrier free, to the operation of special welfare or community buses, to schemes to reduce the cost of travel for low income groups, to community impact assessments of transport infrastructure projects.

Innovative transport concepts in German rural areas

In general, public transport is worse in rural parts of Germany than in the cities or agglomerations and worst in peripheral rural areas with very low population density. People without a car in these areas are excluded from social life if they do not use informal networks, for example car-sharing, car-pooling or shopping. Women and elderly people seem to be especially affected. Children living in these areas are brought to school by specific bus services, but often lack services to gain access to recreational locations and after-school activities. One specific problem is long-distance driving to discotheques of young people during the weekend, with accidents on the way back. In order to bridge the existing gap between regularly scheduled public transport services and private transport by car, innovative transport concepts for the rural areas have been developed since the 1970s in Germany. The most recent are:

- organised hitch-hiking schemes (car-sharing, car-pooling)
- collective taxi operating on-demand (in German: Anruf-Sammeltaxi)
- 'ride-on-demand' (Anruf-Linienfahrt) or taxibus
- civil bus services or citizens' bus services ("Bürgerbus")

The "Bürgerbus", the civil bus services, play a considerable part in rural transport. Civil bus services are scheduled services operated by non-profit organisations with voluntary bus drivers. These services aim to fill the gaps left by regularly scheduled public transport. Due to legal regulation, vans (8 seats) are used instead of full-size coaches, but the maintenance of the vehicle is usually supported by a regional public transport provider.

Special services to meet the needs of women and people with disabilities in Italy

The Italian paper (Gentili, 2003) identifies the need to develop a programme of transport services designed especially for the needs of women for their home to work travel (especially considering the complex trip chains of women). Long terms goals are to:

- standardise integration of the female needs into mobility management measures and services;

- provide information and services to support women to be mobile in a sustainable way and create a positive image of an energy efficient and sustainable lifestyle;

- reassure women and win them as multipliers;

- motivate young women to interest themselves in jobs in traffic and transport related fields.

The city of Rome leads a group of cities attempting to support mobility for woman. Among the initiatives for women was “CARPOOLER ROSA”, which raised a lot of interest in the initial stage. The Roman Agency for Mobility (ATAC spa) is deeply involved in Mobility Management activities and there is a good commitment at the policy level to launch a new pilot initiative. The City of Parma has recently undertaken a local initiative called “DINAMICA DONNA”, a survey on women’s mobility demand aiming at identifying optimal solutions for their regular and irregular trips.

ATAC Spa also operates a service for people with disabilities. At the heart of the service is a mobility centre, delivering the following activities:

- call centre: users can telephone to book/request the service;

- off-line planning: operator-based vehicle and bus driver scheduling to meet users’ requests;

- vehicle location (using a GPS system);
- on-line planning: operators, using the GPS system, modify schedules to meet users’ requests;

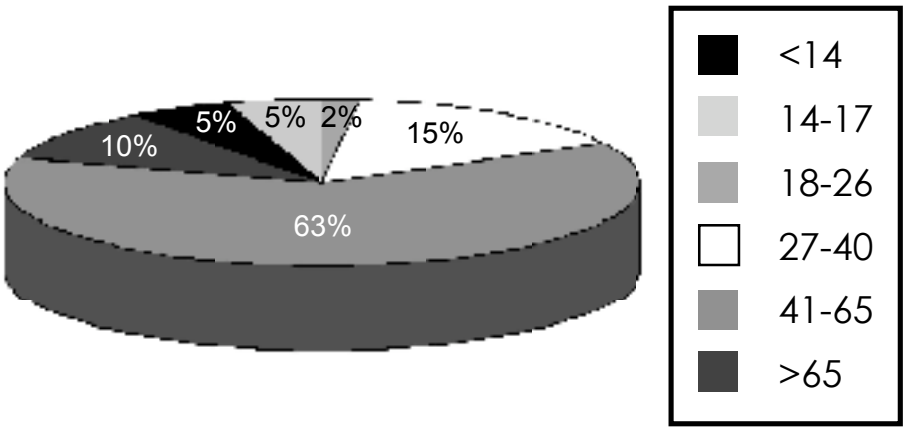
- telephone information on demand.

Three operators take turns during the day to manage the mobility centre. The service is provided using ten vehicles “M1 IVECO” (with 8 seats) and ten bus drivers. Users pay around 6 euros per month.

In 2000 ATAC spa carried out a survey on the mobility of disabled people under the ISCOM Project . Figure 6 shows the profiled users.

Most users (63%) are aged between 41 and 65 years and the main reason for using the service (57%) is for going to work; 6% of requests are for going to school. Because of this, 63% of transport requests are concentrated in the 7:30-9:00 time band (similar to regular public transport) making difficult to meet other requests in this time period (and to find other resources for disabled services).

Figure 6: ATAC disabled service – profile of users by age



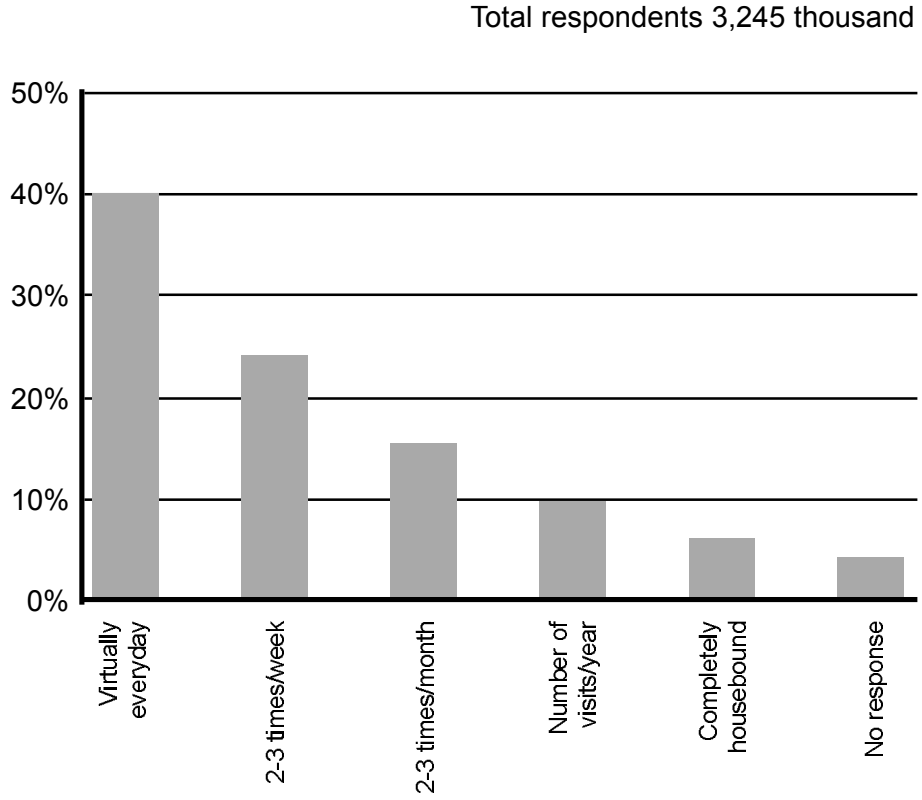
Making transport barrier free, available and affordable for disadvantaged people in Japan

In Japan there are 3.2 million people aged 18 and above who are disabled (8,200 aged under 18). Those who have a physical disability make up the largest single group, accounting for 54% of all disabled persons. Approximately 30% leave their homes as little as just two or three times a month (see Figure 7).

Making public transport barrier free is now being promoted on the basis of the Transport Accessibility Improvement Law that came into force in November 2000. Guidelines concerning public transport, passenger facilities and cars were established. In addition, measures such as making walking space barrier-free by levelling sidewalks and developing overhead crossings with elevators are being promoted. Community development measures address the aging society, for example by promoting barrier-free conditions in buildings and on the transport systems, and practising disaster prevention with a focus on sites with facilities most likely to be affected by disaster. Various measures have been implemented in order to address the improvement of the environment for the residents of areas with poor environmental quality.

In small cities and rural Japan, community buses are used to ensure a means of transport in areas where bus services are inconvenient. Close links are formed between these community buses and the lives of the local residents, and they also contribute to the formation of local communities. In some areas, carpooling taxi services are in operation by using 10-seat vehicles.

Figure 7: Number of trips by disabled people, Japan 2001



Source: Results of Survey of Disabled Children and Adults (conducted on June 1, 2001), Ministry of Health, Welfare and Labor, August 2002

For example, the present state of community bus operation in Fukui Prefecture is as follows:.

- services operate in 14 cities, towns and villages, including Fukui City, out of a total of 35 local bodies in the prefecture;
- fares are low and range from ¥100 to ¥300 per trip. There are also routes on which users aged 60 or older may travel free of charge;
- routes with a high number of services operate about 20 services a day, and those with infrequent services operate about twice a day.

Welfare buses are a type of community bus operated mainly by city, town and village bodies that do a circuit of welfare facilities to ensure that the elderly and the disabled have a means of getting around.

For example, the present state of welfare bus operation in Fukui Prefecture is as follows:

- of the 35 cities, towns and villages in the prefecture, 13 operate this kind of service;
- although some local bodies operate both community buses and wel fare buses, most choose to operate either one type or the other;
- there is no charge;
- routes with a high number of services operate about ten services a day, and those with infrequent services operate about twice a day.

Local bodies also provide economic assistance to people disadvantaged in their access to transport, such as the elderly and the disabled. For example, Setagawa Ward in Tokyo Metropolis provides:

- a subsidy for the cost of obtaining a driver's license;
- a subsidy for vehicle modification;
- welfare taxis and subsidy for vehicle fuel costs;
- operation of taxis with hoists;
- services for transporting persons with mobility problems;
- wheelchair rental.

The Tokyo metropolitan government provides the following assistance.

- fares for Metropolitan buses are half price for disabled persons and those possessing a special pass;
- a "Silver Pass" costing ¥20,540 a year is available for persons over aged 70, which may be used for Metropolitan buses, Metropolitan government-operated subways, Metropolitan trams and private bus services within the metropolitan area.

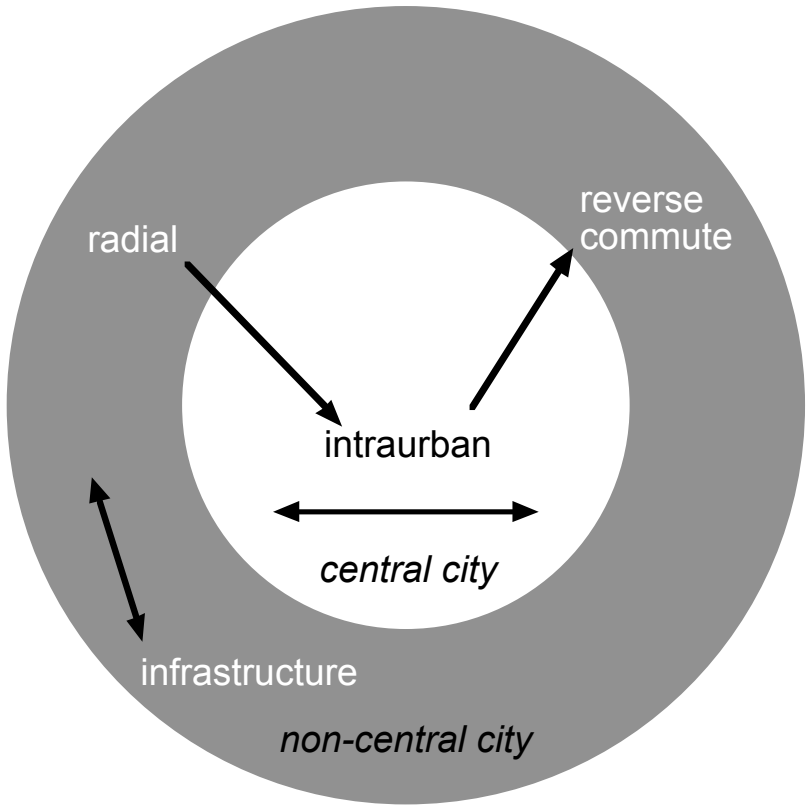
US Job Access and Reverse Commute Programme (JARC) and Community Impact Assessment (CIA)

Under the last US Federal Transportation Bill, the Transportation Equity Act for the 21st Century, $750 million over five years was authorised to assist States and localities in developing public transport services aimed at linking welfare recipients to job access and other related services through the Job Access and Reverse Commute Grant Programme (JARC).

Figure 8 shows different types of commuting trips in the US. The JARC programme caters for the 'reverse commute' journey to work. Reverse commuting describes work trips of central city residents to suburban jobs, counter to the predominant direction of traffic flows and the 'radial flow' of traditional commuting from the suburbs to city centres (Cevero et al, 2002). Research in California has shown that, while reverse commuting is dominated by the car, low income reverse commuters are particularly reliant on public transport in order to reach their place of work.

Services provided through the JARC programme include car and van pooling schemes, new bus routes, connector services to mass transit, employer-provided transport and services to suburban employment centres. In 1999, the first $150 million was authorised for JARC and over 200 transit projects were funded in 39 states under the JARC grant programme in 2000. The intention is to establish an "all inclusive" and regional approach to job access.

Figure 8: Schema of commute submarkets within US metropolian areas



Source: Californian Department of Transport

Kennedy emphasises the growing importance of public involvement in transport decision-making in the US. Federal Highways Agency (FHWA) and Federal Transit Agency (FTA) policies on public involvement specifically state that:

> *"those persons traditionally under-served by existing transportation systems such as low income or minority households and the elderly should be explicitly encouraged to participate in the public involvement process"*

As such, there has been much more of an emphasis on early, proactive and continual citizen/public input into transportation decision-making with an emphasis placed on outreach to traditionally under-served populations in the US. Community Impact Assessment (CIA) analysis has increasingly been used to ensure the human environment's voice or voices are heard during the transportation planning and implementation phases of projects. Community Impact Assessment includes such approaches as community profiling, meaningful community involvement, consensus building, decision-making, education, training and implementation.

Canadian strategies to make travel more affordable

In addition to more general policies to redress the balance between car and public transport use in Canada, Litman identifies a number of ongoing Canadian strategies aimed at making travel more affordable for people who are transport disadvantaged, including:

- lower fares for transport services that tend to be used by disadvantaged populations;
- targeted transport service discounts and subsidies, such as need-based discounts for transit fares, taxi services, road tolls and parking fees;
- car-sharing and Pay-As-You-Drive vehicle insurance and registration fees, which makes vehicle ownership more affordable to lower-income households;
- ensuring that affordable housing is located in accessible areas, so households can save on both housing and transport costs;
- reducing parking and local taxes used to fund roads for households that own fewer than average automobiles.

Risks and barriers to delivery

Despite the practical initiatives and policy opportunities identified, there are still some significant barriers and risks that could undermine the delivery of the transport and social exclusion agenda, most notably:

- issues of funding – transport funding priorities both locally and nationally tend to favour large capital projects (whether major road schemes or high speed rail lines) that do not normally benefit those on low income. Many of the projects needed to give people on low-incomes better access to key services, such as providing low-cost fares or having additional staff at stations, are revenue intensive and do not attract mainstream funding;

- lack of a holistic approach to delivery - improving transport is only part of the solution. Transport, land use and service sector planning and delivery decisions need to be integrated if the accessibility needs of socially excluded people are to be properly addressed. This will require effective partnership working between transport professionals, other key government and non-governmental agencies, particularly employers, health providers and education bodies at the local level;

- institutional arrangements – traditionally transport planning at the local level has tended not to engage with the other agencies that can make an important difference to the experiences of people experiencing social exclusion or with these communities themselves. The culture, skills and capacities of transport planners are often poorly matched with this requirement;

- reconciling social concerns about transport with the wider transport agenda – a key aim of recent transport policy has been to encourage people to travel and use their cars less and walk, cycle and use public transport more. Much of the emphasis for transport and social exclusion is on getting people to travel more and often assisting them to buy and use cars to secure their greater participation in economic and social activities. This suggests that there may be a conflict between transport policies which aim to promote sustainable development through modal shift and reducing the need to travel, and those to promote social inclusion.

Conclusions

From the national papers, it can be seen that the subject of poor transport and access to key services clearly has resonance for all of the G7 countries, regardless of whether social exclusion is recognised explicitly as a policy concept. It is clear, however, that the problem is given greater policy recognition by some countries than others. Although Germany, Japan and Italy have developed specific polices to address the mobility problems of disabled, older mobility impaired and isolated populations, as yet, they have tended to overlook the links between transport and social exclusion as it relates to low-income and minority populations. The US is probably the most advanced in this respect, with the specific introduction of a Transport Equity Act and federal polices to address the transport problems of low-income groups at the state level. The main emphasis of the American agenda is on getting recipients of welfare benefits back into work, which is also a strong element of the French transport and social exclusion agenda. It appears that the UK alone is attempting to make the links between poor transport amongst low income groups with other inequalities such as low educational attainment and poor health.

There is general agreement between the papers that in the highly mobile and car-dependent societies under analysis, lack of access to a car is the main transport factor in the social exclusion of low-income households and other marginalised groups. However, it is also recognised that dispersed land uses, changing working and lifestyle patterns and the closure of local shops and other local amenities has served to exacerbate the problem of poor access for non-car owning households. Many of the papers suggest that even though declining public transport services and the increased cost of fares in comparison to the relatively stable and lower cost of motoring have contributed to the problem, improving public transport in isolation is no longer an adequate solution to the poor accessibility experienced by disadvantaged groups and communities.

As both the French and UK papers identify, even in families without cars the share of public transport trips is lower than the share of trips by car. The question is raised as to whether public transport services, however good, can hope to provide an adequate level of transportation to achieve social inclusion. The implication is that, in the context of G7 countries at least, in most cases a car is essential to full participation in economic and social life. This leaves the problem of how to offer adequate transport provision to the rapidly declining minority who cannot and will never drive in an economic climate where public finance for such services is in decline and the cost of provision is increasing. It also leaves unresolved some of the wider impacts of increasing car traffic on low-income neighbourhoods and the considerable problems associated with the disproportionate negative impacts of pollution on the health of vulnerable groups. Those who benefit least from the advantages provided by the car are also too often those who suffer the greatest disadvantages from traffic generated by other people's car trips.

Recommendations for further research

It has already been noted that currently it is difficult to make statistical comparisons on transport and social exclusion between nations because of a general lack of comparable data. It would be useful if national travel surveys could ensure a large enough sample and some standardised basic questions to allow data disaggregations by income quintiles, gender, age and ethnicity.

Further research is also needed to make evident the contribution of poor transport to social exclusion and in particular its effects on unemployment, ill-health, low educational attainment and quality of life more generally. At present, much of the information that is available is anecdotal or qualitative in nature and thus does not allow quantification of the extent or severity of the problem or its impacts on the wider welfare agenda.

More evidence is needed on what works to address the specific transport and accessibility needs of different groups of people experiencing social exclusion and to evaluate the cost of delivering such schemes and initiatives against wider cost savings to the State and the relative benefits they provide to the individual. More knowledge is also needed on the relative contribution of personalised and targeted travel training and advice schemes compared with improvements to traditional public transport services, the introduction of flexibly routed and targeted bespoke services, or the provision of private motor vehicles in addressing the problem. Greater emphasis should also be placed on transferring knowledge and disseminating information about these issues both within and between nations.

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Dr Jean-Pierre Orfeuil is a civil engineer and holds a PhD in statistical analysis. He was Head, Economics of Space and Mobility Division, at INRETS (The National Research Institute for Transport and Safety) from 1984 to 1998. He then joined the Institute of Regional Planning of the University of Paris XII. He is the Director of CRETEIL, a multidisciplinary research staff devoted to land use, transportation and environment. He is also the chair of the Institute for the City on the Move, a public-private partnership between a car manufacturer and several universities. His personal research fields include fundamental mobility analysis and policy evaluation in the economic, social and environmental dimensions of transport, and he is the author of several books.

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Lori Kennedy has seventeen years experience as a planner and manager of federal-aid transportation projects in the US. She is Director of Project Development for APAC Design-Build Group in Atlanta, Georgia, and was, until recently, Atlanta Regional Manager for Kisinger Campo and Associates. Lori Kennedy is Chair of the Transport Research Board Task Force on Environmental Justice and was Chair of the Transport Research Board Subcommittee on Environmental Justice between 1996 - 2001. She holds a Masters in Financial Planning from Georgia State University.

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