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# **TRANSPORT AND SOCIAL EXCLUSION: A G7 COMPARISON STUDY**

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## **Background**

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 a major focus of the policy agenda in these countries. Poor transport is increasingly being recognised as a barrier to employment and other key activities and, thus, an important contributing and reinforcing factor in reduced social participation and social exclusion (SEU 2002; SEU 2003).

In large part, the problem has arisen because there has been no robust, transparent and accountable framework for assessing whether people are able to safely and affordably access the places they need to go. National surveys collecting data on transport (mainly National Travel Survey) tend to look at people's travel behaviour but do not explain why this behaviour occurs or its outcome for quality of life. At the level of local delivery, Public Transport Executives and other transport authorities produce transport plans for their areas, but in Europe, are not usually directly required to undertake analyses to assess whether people, especially those without cars, can access key services. As a discipline, transport has tended to be more concerned with mobility (how extensive and fast the transport network is) rather than accessibility (how well it connects with activity patterns). The distribution of costs and benefits arising from the transport system tend not to be analysed at either the local or national level.

The flip-side to this problem is that the key local agencies responsible for providing the facilities and services that people need to access do not tend to consider whether these are being provided in places that people can reach without cars. Providers of services do not consider transport access to these services to be their concern. Most local transport authorities in Europe receive Government grants to subsidise public transport services where these are considered 'socially necessary', but the formulas used to assess this varies from place to place and country to country and is far from comprehensive in its application. Little attention has been paid to the transfer of knowledge and experience from one local or national context to another.

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. The monitoring or analysis

that has taken place on these initiatives does little to assess the contribution of such measures to social inclusion outcomes.

The paper aims to synthesis the position of the seven member states in these two respects in order to assess whether there are lessons which can be transferred for future policy and practice both at the national and EU level of transport decision-making.

### **Aims and objectives of the research**

In summer 2002, the FIA Foundation invited the Transport Studies Group (TSG) at the University of Westminster to undertake a yearlong scoping study to compare the position of the G7 countries in relation to transport and social exclusion. Phase 1 of the work has involved the preparation of seven nation specific papers, which were be presented by their authors at a seminar in London on 3<sup>rd</sup> and 4<sup>th</sup> April 2003. 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;
- (iii) Identify innovative and transferable transport and non-transport policy driven initiatives that can contribute to more socially inclusive transport systems.

### **Understanding the concept and making the links**

The nation papers suggested 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 consideration 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 key aspects of social exclusion, and the concept has resonance with earlier debates on the nature and causes of poverty.

All seven papers recognised the import 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 they represent, although all seven are at different stages in terms of policy recognition of this problem.

## What is the problem?

There has been dramatic growth in both vehicle numbers and the distances driven in all the G7 countries, even Japan. This has meant that car ownership is now the norm within most households, but while most people have benefited from the wider availability of cars the travel choices of people without cars have been gradually eroded, whilst at the same time the need to be more mobile has increased. There was general agreement in the seven scoping studies that the problem is multi-dimensional arising from quite complex interactions between land-use planning and the location and delivery of services, the personal circumstances of the individuals and their access to transport services. 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 of each nation state.

### ***Car availability***

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.

#### **Percentage of non-car owning households by 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 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 minority households 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 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 income (Imanishi, 2003). The result on population distribution in Japan was that the rural areas became depopulated while the cities became overcrowded.

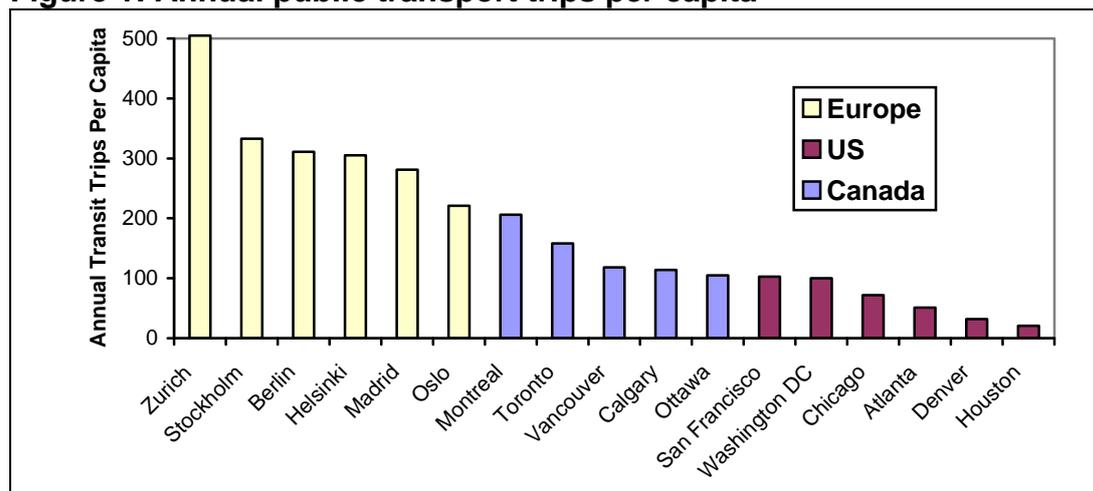
The ‘flight’ of local services from deprived urban areas has exacerbated the problem of poor accessibility to a lesser or greater extent in all G7 countries. In the UK, many deprived communities now lack even basic amenities such as a general food store, or a doctor’s surgery. The facilities that are 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 identifies that 36,000 communes now have no shops (Orfeuill, 2003).

***Declining public transport services***

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 has resulted in effective monopolies as the bigger operators have swallowed up the smaller companies that won first round tenders. In the absence of competition, services are run to meet minimum standards and non-commercial routes are often abandoned altogether or at certain time of the day (Lucas, 2003).

This decline is less evident in the countries where public transport is largely funded by national or local governments. Nevertheless, public transport services are finding it increasingly difficult to compete with the private car.

**Figure 1: Annual public transport trips per capita**

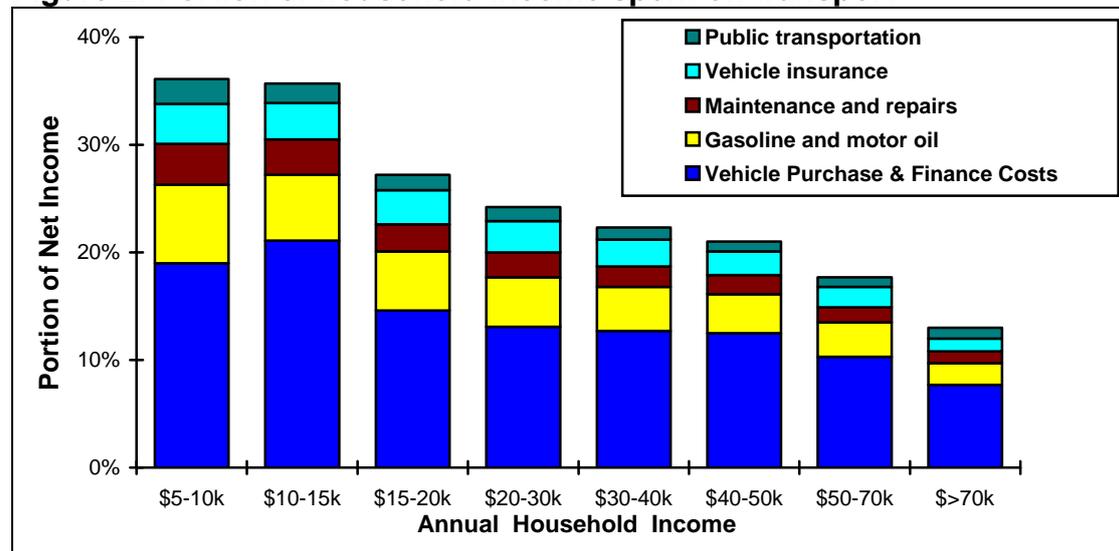


Source: McCormick Rankin 2002 (in Litman, 2003)

## The cost of transport

A number of the papers note the rising cost of public transport fares in comparison to the relatively stable or evening 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 (Kennedy, 2003). 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% (Hemming and Borbach, 2003). 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 (Litman, 2003). This indicates that transport costs in the G7 countries tend to be regressive with respect to income.

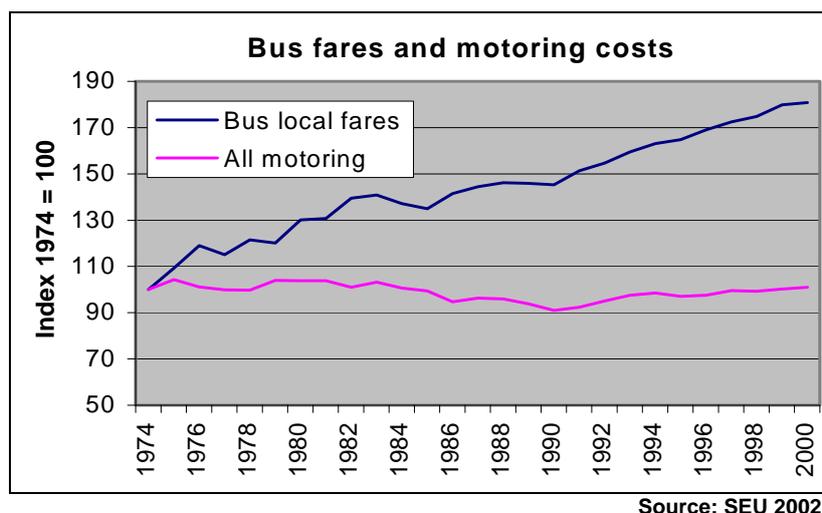
**Figure 2: Portion of household income spent on transport**



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

Nevertheless, the cost of driving has stayed level or even decreased in most G7 countries, whilst the cost of public transport fares has steadily risen. The US paper identifies that the cost of public transport in the US exceeds 50 cents per passenger mile, three times the cost of driving (Kennedy, 2003). The UK paper also 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, as demonstrated in Figure 3.

**Figure 3: Bus fares and motoring costs 1974-2000**



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).

### ***Mobility constraints and low travel horizons and expectations***

The papers suggest there is a greater awareness of the special transport needs of mobility constrained groups among the G7 countries and all offer some special provisions for these groups by law. Increasingly, urban bus networks are being equipped with low floor vehicles and ramps, which allow wheelchair access, 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. In the UK, the 1995 Disability and Discrimination Act introduced a requirement for all public transport to be fully accessible for disabled people, but this does not have to be enforced until 2050.

Most countries also offer fare subsidies or even free transport to mobility-impaired and registered disabled travellers. For example, Germany 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 the UK are eligible for a free bus pass, which entitles them to half price travel on public transport. 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, but as the French paper notes, for some sectors of the population, competence is a key question in transport exclusion (Orfeuill, 2003). This embraces poor visualisation and mental mapping problems, poor knowledge of space and network of relations, etc. Low literacy rates and language difficulties can also reduce people's ability to access to 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.

### ***Exposure to accidents, pollution and community severance***

As the UK paper identifies, on average, poor people undertake nearly double the walking trips of 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 Germany, children coming from lower social classes and foreign children (especially Turkish children) are about twice as much likely to be involved in an accident as other children of the same age. German studies have found that the more children a family has, the higher is the accident rate for them and the youngest child of the family is mostly in danger (MWM-TV, 1999 and Limbourg, 1994).

Besides the risk of road accidents poor people suffer a high health risk from air and noise pollution and community severance from road infrastructure. 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 programs, 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 assessing quantitative and qualitative impacts to minority and low-income communities as an added dimension to their programs (Kennedy, 2003).

### **Why is this important 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 in the UK 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.

### ***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 areas or central cities. Existing public transport does not provide adequate linkage to suburban job opportunities or serve weekend and evening riders or 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 primarily on the problem of poor access to work. Orfeuill (2003) identifies that even though majority of jobs are still concentrated in the central city, there has been a movement from the centre to the suburbs, especially in France's larger urban areas. Commuting distances have continued to grow and there is now a global mismatch between workers and jobs, and conflicts between a growing stability of the places of residence and a growing volatility of employment. As a result of this dispersal, the proportion of jobs easily accessible by public transport has decreased. Although, there is not a sharp increase of people 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 both 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. They are also more likely to work part-time hours and flexible shift-work patterns, which are mismatched public transport operating schedules.

### ***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, normally in Germany pupils 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 (over two miles for children under eight years). Part of the problem in the UK is that parental free choice has meant that wealthier parents can send their children to high performing schools long distances from their area of residence, while children living in deprived areas usually attend the nearest school to their home because of a lack of available transport and the legacy of 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 moving to a suitable area of residence, whereas poor parents do not have this luxury.

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 (see Lucas) that identifies travel costs as 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 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 and a third of older people attending doctors and health care centres in London experienced difficulties getting there (SEU, 2002). A German governmental survey in the federal state Schleswig-Holstein came to the conclusion that 94 per cent of persons at the age above 64 years and with regular access to a car could reach a hospital within 30 minutes, whereas just 0.1 per cent would need more than 60 minutes. 69 per cent could reach a hospital within 30 minutes by public transport. 8 per cent would need more than 60 minutes (Hemming and Borbach, 2003).

## **Quality of life issues**

The UK paper also notes that poor access to healthy affordable food and a reduced ability to socialise and visit friends and family can 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.

### **How has the situation occurred?**

In the French paper Orfeuil suggests 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.*

He suggests that this is brought about because the diversity and complexity of the situations that bring about exclusion make it difficult to translate into statistics. This is combined with bad organisation of the knowledge that does exist, for example, when travel surveys do not identify deprived zones 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 UK paper, drawing on the findings of the SEU study takes this analysis further, suggesting that, in the UK at least, it is possible to identify a number of key factors contributing to the problem, namely:

- Poor recognition and analysis of the problem caused by a general lack of robust and transparent assessment frameworks for evaluating accessibility to services by different socio-demographic groups
- Uncoordinated and 'piecemeal' policy responses with different government department responsible for funding and delivering different aspects of the transport system with little reference to each other or to actual needs of providers and users of services at the local level of delivery
- Failure to apply a 'whole systems' approach that is capable of balancing land-use, transport, public service delivery, user needs and economic efficiency. For example, 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.
- Deregulation and regulatory barriers of bus services in 1985 has witnessed operators increasingly focusing their attention on core commercial routes

and leaving local authorities to support peripheral routes and off-peak services, at an escalating cost.

- Under-funding and poorly targeted resources in an arena where the costs of tendering services are rising, transport spending is heavily skewed towards rail passengers and special grants to provide new services are time-limited and usually cannot be used to reduce revenue costs or prop-up existing services.

### **Practical initiatives, opportunities and risks**

The papers outline 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, such as the Japanese Transport Accessibility Improvement Law 2000, to the operation of special welfare or community buses, such as the German civil Burgerbus services, the welfare bus in the Fukui Prefecture in Japan and the ATAC Spa service for people with disabilities in Rome. All emphasise the increasingly important role of flexible and demand responsive services in meeting the transport needs of households without cars in the context of a modern society.

Kennedy also stresses the growing importance of public involvement in transport decision-making in the US as a method for addressing the needs and concerns of traditionally marginalized sectors of the population. 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.

Lucas (2003) identifies the new UK ‘accessibility planning’ agenda as offering local authorities a promising opportunity to raise the profile of the social costs of poor transport, but notes that there are still some significant barriers and risks that could undermine its delivery. Most importantly she identifies the willingness and capacity of key non-transport sectors at the local level to engage in policy action in this area when it is not considered to be an explicit part of their core delivery agenda.

## Conclusions

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 specifically recognised as a policy concept. It is clear from the presented papers that the problem is given greater policy recognition by some countries than others. Although Germany, Japan and Italy have developed specific policies 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 policies 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 act upon the evidence of links between poor transport amongst low-income groups and 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, public transport is no longer a viable solution to the problem. 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 for social inclusion. The implication is that, in the context of G7 countries at least, 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 the considerable and increasing problems associated with the negative impacts on health and social interactions of car traffic.

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## Notes

1. The author wishes to thank the authors of the seven nation papers, which were presented at a seminar at the University of Westminster in April 2000 and from which this paper heavily draws. The authors are duly cited and referenced below. Full copies of their papers can be downloaded from the FIA Foundation website. [www.fiafoundation.com](http://www.fiafoundation.com)
- 2.