AGENDA ITEM No.9

To:	Place Directorate
From:	Adrian Davis
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Subject:	Transport & Poverty: Background Paper

Summary

- Access (or lack thereof) to employment and education opportunities and to essential services and facilities required to fulfil basic needs is a dominant theme in all the theories which link poverty and social disadvantage with transport.
- Many welfare recipients live in 'job-poor' neighbourhoods far from employment for which they are qualified
- Job-poor neighbourhoods requires compensating good quality time-efficient transport and also low price access in order reach suitable employment locations
- The lower the income of a household the more probable it is that women within the household will experience greater transport deprivation as compared with men.
- Use of the transport system to meet basic needs should not place undue burden on people in terms of their monetary and time budgets, their physical and mental capabilities, and anxiety levels.

Background

The research for this report is drawn from a range of studies from across the developed world in the peer reviewed English language literature from 2000. It has been acknowledged in the literature relatively recently that research addressing poverty and transport is under-researched.[1] In addition, that which exists is mostly focused on developing countries and that a significant volume of all peer reviewed literature addresses rural transport and poverty, accessibility and inaccessibility. Nonetheless, the evidence cited has been drawn on is with a view to the particular issues facing a UK urban local authority.

Mobility and increased access to transport are two of the most important global forces for the alleviation of poverty. It is stated that poor people suffer from measurable deficits in nutrition, health care, education, and opportunities to work for money. Those deficits are almost invariably correlated with deficits in physical mobility: the ability to travel from one place to another or to bring goods, such as food, medicine, educational materials, and building materials, from one place to another at an affordable cost. In addition, mobility can also be restricted by strictures placed on people by others, such as families, or by the religious and social norms imposed by the communities in which they live.[2]

Transport is simultaneously viewed within the literature as a mechanism that creates or maintains the conditions of poverty and as a mechanism which can reduce poverty: clearly, the particularities of each urban situation and each pattern of urban mobility have to be taken into account in defining the relationship between transport and poverty in

[1] Sanchez, T. 2008 Poverty, policy, and public transportation, *Transportation Research Part A*, 42: 833-841.
[2] Wachs, M. 2010 Transportation policy, poverty and sustainability. History and Future, *Transportation Research Record*, No. 2163, 5-12,

each location as there is no one universal pattern.[1] There is also no universally accepted definition of transport poverty. However, the term generally is used to refer to the situation where **households or individuals are struggling or unable to make the journeys they need in order to gain the access to people goods and services etc...** It is of note that many on low incomes have car availability whilst some on higher incomes who do not have access to a car may be transport poor due to the poor quality of public transport. Thus, income per se is not in all cases the arbiter of transport poverty.

There is increasing evidence of 'transport poverty' and the ways in which this compounds the many other difficulties associated with living on a low income. Poor transport options limit access to employment and social support networks, and to health, recreational and sports facilities, restricting both quality of life and 'life chances'.[2] Poverty in the transport sector has been described as a complex phenomenon, related to various issues like pricing, accessibility or coverage. It appears in different forms and in different areas, and it can be generated by a mixture of social, economic, network and service or operation factors. Transport poverty has wide ranging affects, among others influencing different areas of economic production, job market and housing.[3] The forms of transport poverty are different and appear differently in every region, suburb or city. The forms can be classified as primary and secondary ones. Primary ones are direct phenomena or impacts having strong connection with the presence or lack of transport services, and infrastructures. Secondary ones are additional elements resulting from the impacts of the primary forms of mobility poverty.

The primary forms can be classified in five different groups, according to Ekés:

- Poor time coverage: The farther away a transport area is from cities and the more we consider the off-peak hours or weekend time, services become generally less regulated, connections are ad hoc or partial.

- Territorial coverage gap: cities and rural areas often have the problem of the lack of network presence. In cities generally concerns steer interventions to address those areas where density is low, or geographical barriers make mobility unfeasible.

- Affordability (financial accessibility) gap: If fare communities, transport associations are developed, affordability conditions may be met. Higher distances in rural areas mean more expensive mobility costs, and increasing prices mean the decreasing chance of affordability to services.

- Accessibility gap: Direct exclusion from mobility or more difficult access to public transport can appear when complex accessibility conditions are not fulfilled due to non-barrier-free vehicles, platforms, pavements or other surfaces of transport systems.

- Lack of information: information and info-communication are very important channels of the mobility process. When information is not provided, not accessible,

[1] Grieco, M. 2015 Poverty mapping and sustainable transport: A neglected dimension. *Research in Transportation Economics*, 51:3-9.
[2] Hamilton, K., Jenkins, L. 1997 A gender audit for public transport: A new policy tool in the tackling of social exclusion, *Urban Studies*, 37(10): 1793-1800.
[3] Ekés, A. 2015 Forms of Mobility Poverty As Indicators of Social Equity, European Transport Conference, http://abstracts.aetransport.org/paper/index/id/4767/confid/20 accessed 23rd December 2015.

not passenger friendly or false or else physically missing, can provoke ad hoc or permanent inconvenience, exclusion.

A review of transport and poverty has reported that most evidence on the impact of poverty on mobility and the relationship between transport and poverty relates to disadvantaged groups and those vulnerable to social exclusion rather than individuals or households living in poverty per se.[1] **Access (or lack thereof) to employment and education opportunities and to essential services and facilities required to fulfil basic needs is a dominant theme in all the theories which link poverty and social disadvantage with transport.** This contrasts with views of policy makers who often assert that the greatest barrier to entry into the workforce by unemployed people is the lack of the skills necessary to fill the available jobs.

In addition, **the World Bank points out that the urban poor may choose less accessible housing locations because this best serves their overall interests** (in terms of availability of shelter, access to activities, and so on).[1] Their high mobility needs, and the heavy burden of transport costs that results, is thus a symptom of their poverty rather than its cause. In such cases, high actual transport expenditures cannot automatically be interpreted as evidence of the unaffordability of transport.

Public transport and transport poverty

Empirical studies on public transport affordability have generally concluded that 'affordable public transport can provide a significant boost to the poor's mobility'.[2] In the US and Europe, research on transport expenditure has evolved in the context of concerns about the broader social exclusion effects of the lack of affordable transport for households captive to the car. More recently, transport and housing expenses have been analysed together, in a more explicit acknowledgment of the complex trade-off between residential location, travel distance and travel mode, and the way this affects transport costs. Studies show how peri-urban households incur the highest combined transport and housing costs in US cities – a fact that may put home ownership (and the wealth creation opportunities that may follow) out of reach for many low-income families.[3]

In addition, for women, because they are far more likely to be in part-time employment, and to be making social visits to families and friends, they travel off-peak more often than men; and because of women's fear of violence and aggression they are far less willing than men to travel after dark. Thus, their accessibility needs are constrained by public transport systems designed to largely service peak periods, and separately through personal safety concerns. The authors, writing in 2000, suggested that failure to produce a public transport system which meets women's needs is a matter not only of exacerbating social exclusion and environmental pollution: it is a commercial disaster. Women are far and away the prime users of public transport, especially of buses.[4]

[1] Gannon, CA & Liu, Z, 1997. Poverty and transport. Discussion paper, TWU Papers TWU-30, World Bank, Washington, DC.
[2] Bryceson, DF, Mbara, TC & Maunder, D, 2003. Livelihoods, daily mobility and poverty in sub-Saharan Africa. Transport Reviews 23(2), 177–96
[3] Venter, C. 2011 Transport expenditure and affordability: The cost of being mobile, *Development South Africa*, 28(1): 121-140.
[4] Hamilton, K., Jenkins, L. 1997 op cit.

Spatial mismatch and social exclusion

The geographical distance between home and work makes job search difficult and imposes high commuting costs on low-wage workers who are least able to afford these expenses. This then, defines spatial mismatch. A UK study for the Joseph Rowntree Foundation concluded that those young people with no internet at home or who rely on public transport are likely to be at a disadvantage in terms of successful job search.[1] Much of the spatial mismatch research is drawn from the US where the hypothesis was first developed. In the context of recent welfare reform efforts, researchers have examined strategies for attracting jobs to inner cities, dispersing inner-city residents to suburban job growth areas, and creating transport connections between inner cities and suburban job-growth areas. However, little has been done to estimate the extent of potential commute of non-workers who are expected to become active workers as a result of welfare reforms.

Research shows that mean commute time of non-workers is likely to be substantially lower than those currently working.[2] Welfare recipients face a number of obstacles to making the transition from welfare to work. One is their geographical separation from employment opportunities: **many welfare recipients live in `job-poor' neighbourhoods far from employment for which they are** qualified (relatively and sometime absolutely in contrast to past commute experience). It is unlikely, for example, that low-skilled workers will accept minimum-wage jobs that require round- trip commutes of 50 miles or more, because the time and expense of commuting will significantly reduce or even exceed wages from employment. Hence, employment requiring long commutes is only viable if there are offsetting benefits such as higher wages. Otherwise, nearby jobs would be the more desirable choice and, for some workers, the only viable economic option.[3] **So, job-poor neighbourhoods requires compensating good quality time-efficient transport and also low price access in order reach suitable employment locations.**

Riley notes that surprisingly, evidence from the UK suggests that neither the availability of private transport nor the number of bus services in an unemployed worker's postal address district significantly influences travel-time decision. Results from research in Edinburgh suggest that policies that enhance the importance of public transport at the expense of private transport are unlikely to reduce mobility and flexibility in the labour market.[4] **Affordability of transport is important but other aspects such as time, household responsibilities (including escort trips) and the physical and mental capabilities required to make use of different transport options also need to be considered.** Additionally, the limited frequency and timetable constraints of public transport can make it difficult for people to coordinate work, childcare and other activities. This is a particular challenge to women and their mobility needs as is noted below.

[11] Tunstall, R. et al 2012 Disadvantaged young people looking for work: a job in itself, York: Joseph Rowntree Foundation.
[2] Deka, D. 2002 Predicting commute time of non-workers in the context of welfare reform, *Journal of Urban Affairs*, 24(3) 333-352.
[3] Ong, P. Blumenberg, E. 1998 Job access, commute and travel burden among welfare recipients, *Urban Studies*, 35(1): 77-93.
[4] Riley, T. 2006 Use of non-motorised modes and life stage in Edinburgh, *Journal of Transport Geography*, 14: 367-375.

Women and transport poverty

Women experience more constrained access to employment than men. Women's greater domestic responsibilities coupled with their weaker access to household resources have significant consequences for their transport and travel status. **The lower the income of a household the more probable it is that women within the household will experience greater transport deprivation[1] as compared with men. Transport deprivation may take the form of women's use of 'slower modes' of transport, or it may take the form of women's journeys having multiple purposes and thus generating greater anxiety in the travel context as to whether all goals can be met within the schedule – denoted as 'time poverty'.** As neighbourhood-based facilities gave way to centralised welfare and urban services, women became the urban losers**.**[2]

The spatial distribution of labour market segmentation of female dominated jobs is more confined to certain urban locations, leading to a 'spatial entrapment' of female labour options. Women generally have smaller daily potential range behaviour than men in the same household due to personal constraints associated with domestic family responsibilities. For women often, social networks helped them find work in close proximity to their residence, reducing commutes, and facilitating other household responsibilities.[3] It has also been reported that disadvantaged older women in particular are characterized by limited mobility options and restricted everyday travel, which is concentrated to the local area even in deprived neighbourhoods. It can be seen as an outcome of cumulative disadvantage.[4] The attitudes of local employers and the characteristics of the neighbourhood economy may also limit opportunities for local job seekers.[5]

Wider impacts of transport poverty

There is evidence that those on low incomes, living in deprived neighbourhoods, are more adversely affected by the impacts of road transport than those living in more affluent neighbourhoods. These differences include an increased risk of road traffic injury, increased concerns about personal security, and higher exposure rates to air pollution. People without cars, those with disabilities, the elderly and school children are the most severely affected by severance. This combination of problems can exacerbate poverty by reducing access to key services such as employment, education and healthcare, lead to social isolation and reduce physical and mental well-being. Research from UCL suggests that such problems may be addressed by multiagency partnerships which should focus on environmental change to reduce the speed and volume of motor traffic, tackle poor parking and address anti-social driving behaviour. [6]

[1] NB to self - Needs a definition to demarcate from poverty
[2] Turner, J., Grieco, M. 2000 Gender and time poverty, the neglected social policy implications of gendered time, transport and travel, *Time and Society*, 9(1): 129-136.
[3] Boschmann, E., 2011 Job access, location decision, and the working poor: A qualitative study in the Columbus, Ohio metropolitan area, *Geoforum*, 42: 671-682.
[4] Giesel, F., Kohler, K, 2015 How poverty restricts elderly Germans' everyday travel, *European Transport Research Review*, 7(2): http://trid.trb.org/view/2015/C/1352166 accessed 23rd December 2015.
[5] McQuaid, R., Greig, M., Adams, J. 2001 Unemployed job seekers attitudes towards potential travel-to-work times, *Growth and Change*, 32: 355-368.
[6] Titheridge, H., et al, 2014 *Transport & Poverty. A review of the evidence*. London: UCL https://www.ucl.ac.uk/transport-institute/pdfs/transport-poverty accessed 11th December 2015.

Recommendations from the UCL study also include that in infrastructure planning & services, equity criteria need to be developed and implemented so that the needs of the poor are met. As the authors note, this could lead to a more inclusive provision of means of connectivity to currently marginal areas and populations, affecting particularly local infrastructure and complementary transport services. **Sustained travel assistance for job seekers is also needed as this is likely to make a significant difference to obtaining work and reducing benefit dependence.** Linked to the paucity of the research find for the current report, the UCL authors noted that there has been very little work to evaluate transport schemes to see how effective they are in addressing issues of poverty, partly because schemes are rarely set up specifically for this purpose. More effective monitoring and evaluation of such schemes is needed.

Considerations

Use of the transport system to meet basic needs should not place undue burden on people in terms of their monetary and time budgets, their physical and mental capabilities, and anxiety levels. Any negative environmental or societal impacts of such a system should be minimal, and should not be unfairly distributed to those worst off.

Some considerations arising from the above are:

- **Job-poor neighbourhoods requires compensating good quality time-efficient transport and also low price access in order reach suitable employment locations**

- **Public transport per se may not be able to address some access needs, eg for some women due to the need for time flexibilities as the result of childcare**

- **Sustained travel assistance for job seekers is also needed as this is likely to make a significant difference to obtaining work and reducing benefit dependence**

- **Affordability of transport is important but other aspects such as time and the physical and mental capabilities required to make use of different transport options also need to be considered.**