

Wedded to the car: women, employment and the importance of private transport

Lynn Dobbs

This paper draws on primary research undertaken in the North East of England (NE) to explore the importance of private transport in allowing women to access employment. It outlines the evidence base which exists to consider the impact of mobility on social exclusion. It then analyses the links between women, transport and the labour market, women's transport choices, and the relationship between women's access to private transport and their employment position. It concludes by arguing that access to private transport is a key factor in determining women's economic inclusion, and that the development of sustainable transport systems may have serious gender implications. © 2005 Elsevier Ltd. All rights reserved.

1. Introduction

The links between transport and social exclusion are well recognised within UK policy. Indeed, it is increasingly accepted that access to transport is a key issue in tackling unemployment, poor skills, low incomes, poor housing, high crime, bad health and family breakdown (SEU, 1998; PIU, 1999; DETR, 2000b; SEU, 2001). It is also acknowledged that the links between mobility and labour market participation are of central importance, and that the transport infrastructure has not adapted to changing patterns of work or to the diverse needs of individuals and communities within both rural and urban communities (PIU, 1999; DETR, 2000b; SEU, 2001; DfEE, 2002).

In identifying these links the Government has made a commitment to provide better quality transport to combat poverty and social exclusion, and it has put in place a range of policies and funding streams to provide easier access to jobs through improved transport links (DETR, 1998; DETR, 1999; DETR, 2000a). Transport partnerships have also been established across the country with a view to assessing current provision and local need and addressing these issues in the most appropriate way. Many of these policy developments recognise that women's transport use and requirements are different to men's, and that there is a need to take account of women's specific needs in planning and provision (TraC, 2000; DfT, 2001; DPTAC, 2002; DfT, 2003).

2. The evidence base

2.1. Identifying the impact of transport deprivation on social exclusion

An effective evidence base is being developed to support current innovations in UK policy. Indeed, since the 1990s, as the political and policy-making environment has become much more open to considering the links between access to transport and social exclusion, there has been a gradual shift within the research community away from the previous tendency to ignore or sideline social issues towards exploring social trends, mobility and travel patterns (Heiser, 1995; Root et al., 1996; Glaister, 1997; Howarth et al., 1998; Terry, 2000; Kenyon et al., 2002; UEL, 2002).

This has culminated in a new focus on identifying the impact of transport deprivation on social exclusion. Numerous studies have sought to identify the impact of transport deprivation on individuals' access to jobs, education and training, health care, housing, and other key services and activities, and on the way in which poor transport can play a significant role in increasing isolation in some areas and neighbourhoods by separating individuals and communities from social activities, families and friends (Leyshon and Thrift, 1995; Lee and Murie, 1999; Kenyon et

al., 2002:212; SEU, 2003). Other research has focused on identifying barriers which are likely to restrict mobility, and this has led researchers to point towards a situation in which a range of interrelated factors, including the nature of the transport system, geographical isolation, economic factors and psychological issues are preventing certain groups in society from participating in the economic, political and social life of the community (Heiser, 1995; Church et al., 2000; Imrie, 2000; TraC, 2000; Gaffron et al., 2001; Jain, 2001; Hine and Mitchell, 2001a; Hine and Mitchell, 2001b; Hine and Greico, 2003). Attention has also centred on the way in which the transport profession excludes groups from involvement in the planning and design of transport operations and management (Grieco et al., 1989; Hamilton and Jenkins, 2000; Hodgson, 2003).

2.2. Taking account of gender

The work undertaken thus far has gone some considerable way towards establishing frameworks that will help policy-makers tackle disadvantage. However, although there is clearly a governmental and agency commitment to consider women's needs, the evidence-base that currently exists to support this commitment is not yet fully developed. This is surprising because at first sight there is a wealth of data which considers women's transport disadvantage and which seeks to understand women's mobility. During the 1970s, 1980s and early 1990s analysis centered on exploring women's access to transport and the impact of their gender role on their travel circumstances. The work of Pickup (1984) and the findings of the Changing Places Report of the GLC Women's Committee (GLC, 1986) which explored the links between transport and women's socially defined, multiple roles were particularly influential. Other analysis also explored gender differences in travel patterns, the position of women in social structures and their subsequent travel needs (Focas, 1989; Grieco et al., 1989; Hamilton and Jenkins, 1989). There was also a focus on women's actual or perceived vulnerability (Atkins, 1989), and on the way in which the structure of the built environment and the transport infrastructure excludes women (Castells, 1978; Huxley, 1988). Taking this further, there has been a particular focus on the way in which the transport system, particularly the dominance of the car is organised around 'men's interests, activities and desires' ultimately 'restrict[ing] women's confinement to the home and immediate locality' (Wajcman, 1991). The underlying assumption of all of these studies was that 'women's travel circumstances and their social role are inseparably inter- linked' reflecting wider gender inequalities in society (Pickup, 1984).

Contemporary analysis has also addressed the issue of women and transport. For example, a number of studies looking at transport and social inclusion have made reference to important gender differences in the way in which men and women travel (Church et al., 2000; TraC, 2000; Gaffron et al., 2001; Hine and Mitchell, 2001a; Hine and Mitchell, 2001b; Kenyon et al., 2002; Hine and Greico, 2003; SEU, 2003). Other analysis has been more gender focused and has looked specifically at women's travel and their transport needs while also exploring a range of socioeconomic and organizational issues that are likely to affect women's travel patterns and their subsequent social inclusion (Allen, 1994; Coleman, 2000; DfT, 2000; Hamilton and Jenkins, 2000; Reid-Howie, 2000; Root, 2000; SEU, 2002; UEL, 2002).

However, although a number of these studies have sought to collect new data to identify and explore the factors which affect women's experience of public transport, the work undertaken has tended to focus on women's family responsibilities, on their traditional caring role and on their subsequent need to access shops and services (Blumen, 1994). As a result there has only been limited reference to the links between gender, transport and employment, and very little focus on the way in which transport is central to women's negotiation of the interface between home and work. There is also a tendency, either implicitly or explicitly, to categorize women as

deprived of access to private transport, and relying heavily on walking to work or using public transport. Thus, attention has not yet focused on the true nature of women's usage patterns, the reasons for their transport choices, and the likely impact of their variable access to public and private transport. This suggests that there is a need to extend the evidence base and to develop new conceptualizations better able to address the current links between gender, mobility and employment (Hill, 1996).

3. Method

The research reported in this paper draws on data from an in-depth study undertaken in the NE from January 2003 to January 2004 (Dobbs et al., 2004). The study sought to look at women as a group, not in comparison to men but in terms of their own travel patterns. In doing so, it made contemporary links between women, mobility and social exclusion, by collecting data in relation to women's journey to work patterns and the barriers and constraints which face them in travelling to paid employment.

In order to embrace the full diversity of women's experiences, the study involved extensive consultation with women across the NE. A questionnaire was sent to 36,000 women aged between 16–59 in the NE. 32,000 of these questionnaires were sent by post to women randomly selected from a database derived from the electoral register and screened to exclude women aged 60 or over. 2000 were distributed to women aged 16–19 via schools and training organisations, 1000 to women involved with local SureStart projects and 1000 via Jobcentre Plus. The questionnaire was designed to explore women's perceptions of the area in which they live, their current travel patterns, access to public and private transport, perceptions of the transport infrastructure, the links between mobility, employment and domestic responsibilities and future employment and travel needs. 2904 questionnaires were returned representing an overall response rate of 11.6%.¹ The characteristics of respondents were compared with data from the 2001 Census (see Table 1). The geographical location and ward IMD ranking of respondents' place of residence, and the age and highest level of qualification of respondents were broadly representative of the NE female working age population.

This quantitative data was complemented by undertaking 35 focus groups with 383 women from across the region in order to examine in detail their transport experiences and needs. This involved 24 groups totalling 278 participants with women from a range of employing organisations (selected to ensure representation in terms of geographic location, size and sector), and 10 sessions involving 105 participants with women that do not work (including unemployed women and women currently looking after home and family).² Although the study generated a huge range of data, this paper only considers women's relationship to private transport. In order to simplify analysis it also treats women as a homogeneous group, while recognizing that anomalies in women's mobility, activity patterns and attitudes to travel.

4. The study area

The study was designed to create transferable results in two directions. First, so that regions not included in the primary data can learn from experiences in the NE, particularly in relation to the way in which women's access to private transport impacts on their economic inclusion. Secondly, to offer a framework for considering the likely impact of new transport policy measures on women across the UK. Within this context the NE provides a useful case- study for analysis. The region has dispersed rural and urban communities with very different patterns of economic activity, and although there are some areas of affluence, particularly within the

gentrified suburbs near large Metropolitan centres, on most economic, labour market and social indicators the NE significantly under-performs relative to other UK regions. This makes it useful region in which to explore the impact of transport on social exclusion. As in the rest of the UK, planning changes have produced some tensions for women's travel circumstances in relation to suburban development and there has been a reduction in local retail provision, and the dispersal of jobs, new schools and retail services to urban fringe locations. The transport infrastructure has not been fully responsive to these changes. NE roads are in a relatively poor state of repair (DTLR, 2001), significant lengths of main trunk roads remain of single carriage status (DfT, 2002) and although there is a well developed internal highway network most of the main trunk roads lead to Tyneside and some other areas are poorly served by main roads. There is also limited parking in regional centres and market towns, although in most cases there are adequate parking facilities in 'out of town' developments and business parks. Likewise, although much of the region is well served by public transport, some communities and neighbourhoods do not have links to nearby services and areas of economic activity (NEA, 2002). There are also poor transport links between some rural areas and urban areas, and there is limited transport integration of services across the region.

It is also clear that women's position within the NE labour market has changed fundamentally over the last five decades. Traditionally, the region's heavy industrial economy relied on a male dominated workforce, and women, played a relatively marginal role in the paid economy. The gender division of labour has been challenged over time as women in the region, as elsewhere, have gained paid work as a result of economic, social and educational change. However, although 67.1% of women are officially economically active (ONS, 2003b), women in the region, as in the rest of the UK, still carry most of the burden of family care. It is also clear that women are not integrated into the labour market as well as men. In this sense, many women are confined to part-time, low paid work (ONS, 2003a) which often involves shift work and is of a temporary nature (TUC, 2002), and many of them are likely to be working within the unprotected environment of the informal economy (Pederson, 2003). They are also disadvantaged in the labour market when they return after taking maternity leave or career breaks (TUC, 2002). Gender segregation also persists across and within industries and the glass ceiling still appears to continue at the upper echelons of employing organisations (ONS, 2003b).

5. The relationship between women, mobility and the labour market

The study shows that the reasons why women travel in the NE are complex. Table 2 shows, not unexpectedly, that there is a heavy emphasis on escorting children and dependent relatives, and on trips to undertake household shopping. 18.9% of women take children to/from school or other activities on five or more days per week and overall 34.4% undertake this sort of journey at least once a week. They also escort disabled and/or elderly adults and undertake household shopping, although both of these activities tend to be undertaken on a weekly basis rather than a daily basis. Looking at the picture overall 22.9% of women travel to support their domestic responsibilities on five or more days per week and a total of 71.3% undertake these activities at least once per week. This suggests that travelling to escort children and family and to undertake shopping is important for women, and lends an element of credibility to the idea that women's travel is essentially of a private nature.

However, the narrowness of this approach comes into sharp focus when women's journeying in relation to employment, education or training is taken into account. In this respect, 52.1% of women travel on five or more days per week to paid work and 76.2% travel to work on at least one day per week. A significant proportion of women also travel to education or training on five or more days per week (6.5%) or on a weekly basis (16.6%). Indeed, taken together, we are faced with a position in which 55.3% of women are travelling to engage in economic activity that is not connected to their domestic responsibilities on a daily basis and a total of 93.6% of

women travel to undertake these activities at least once a week. Women travel rather less frequently to undertake social or civic activity. Very few travel on five or more days per week to undertake sport or entertainment activities (2.3%), or to visit family or friends (2.6%). However, there is evidence of less frequent travel and looking at the picture overall 67.3% of women travel to undertake social or civic activity on at least one day per week. This demonstrates that although women do travel to undertake domestic and social or civic activity, they are much more likely to undertake this activity on a weekly or infrequent basis and most of their regular daily travel is about accessing paid employment, education or training.

6. Women's transport choices

When considering women's use of different forms of transport it becomes clear that women have variable access to public and private transport. However, it would also seem that the picture is complex and that it needs unpacking to fully understand the extent of women's mobility.

6.1. Access to transport

At first sight it would seem that women have excellent access to private transport. 86.7% of women reported that their households have access to private transport, going some way towards supporting the theory that travel patterns in the region have become increasingly dominated by car ownership (DfT, 2002), while also suggesting that women have benefited from this trend. However, although these levels of access appear high, as previous analysis suggests, women are often 'second in line for the car' and can often only have the car 'if he does not want it'. The picture is also clouded by the fact that women also obtain access via external family and community networks even when their household does not have access to its own private transport. In order to overcome this methodological problem women were asked to identify the level of access they have to private transport. 29.1% of women reported that they have full access to private transport, 16.7% share private transport and have access when they need it and 21.2% share private transport and have equal access with their partner or another household member. A further 16.7% of women are able to obtain access to private transport when their partner or another household member does not need it, and 13.3% have no access or very limited access.

On the other hand, the vast majority of women in the NE are reasonably well served by public transport in terms of distance to the nearest service and frequency of local services. Indeed, National Travel Survey data shows that 98% of households in the NE live within 13 min of public transport with services at least once an hour (ONS, 2002a). Taking this further, the postcodes of the women in the study were categorised in relation to the ward in which they live using the definition of accessibility levels in the North East Regional Transport Strategy (NEA, 2002). The women also provided information about how long it takes them to get the nearest bus, metro or train stop/station. Looking specifically at the women involved in the study, 82.3% of women live in areas with four or more public transport services per hour, 14.2% have between 1 and 3 services per hour and only 3.6% of women live in areas which do not have hourly services. Likewise, 97.4% of women live within 13 min walk of the nearest bus stop.

6.2. Transport usage patterns

Given that women have rather uncertain access to private transport and relatively better access to public transport, it would seem reasonable to expect that women's travel to work might be characterised by a heavy emphasis on walking to work which is close by and, in terms of motorised travel, by a focus on public transport rather than private. The issue of women walking

to work is borne out in the study with 16.6% walking to or from work. Likewise, women's access to private transport does appear to be reflected in their usage patterns. 74.3% of women's journeys to work take place using private transport. On the other hand, women's use of public transport is rather more contradictory. Indeed, although the vast majority of women have access to public transport, only 26.9% use this form of transport to travel to work. They may very well use public transport on an intermittent basis, certainly using it, as current analysis would suggest, more than men, but it does not dominate their travel to work patterns.

6.3. Women's travel choices and their access to private and public transport

This would suggest that women are not using public transport even when it is available and this is confirmed when women's travel choices are considered within the context of their access to private and public transport. Table 3 shows that 90.0% of women with full access to private transport travel to work using this method. However, it also shows that their use of private transport decreases when they share private transport, falling to 15.7% when their access is very limited. Table 4 presents us with an interesting pattern of links between women's access to and use of public transport. It shows that although there is some correlation between access to and use of public transport, high percentages of women with good or excellent access to public transport are still using private transport to travel to work.

6.4. Women's transport choices and income

It is also clear that women's use of private transport cannot be explained away by income. Indeed, although Table 5 shows the use of private transport increases in line with household income, it also demonstrates that women in the lower household income brackets are still more likely to travel to work by private transport. In this respect, although many women in the study referred to the difficulties of meeting the cost of private transport, they also suggested that the 'could not travel to work without a car' and that 'the overall benefits of a car outweigh its costs'.

7. Understanding the importance of private transport

In order to understand the reasons why women are choosing private transport rather than public transport to access employment even when they have apparently high levels of access to buses, metros and trains, and despite household income levels, the women in the study were asked to consider a number of factors. These relate to spatial issues, the flexibility and time needed to negotiate domestic responsibilities, vulnerability and travel confidence.

7.1. Negotiating the spatial links between home and work

The study shows that while the vast majority of women have access to public transport with stops close to their home with levels of frequency that appear to offer accessible transport, this does not necessarily mean that the public transport which is available allows them to negotiate the spatial links between home and work. In this respect, although 16.6% of women walk to work, they are increasingly recognising that they need to travel to access appropriate job opportunities and related services such as childcare. Only 27.0% of women feel that they have a good range of jobs in their immediate neighbourhood and 77.1% of women are prepared to travel five or more miles to undertake employment. It is also clear that, while the need to travel to find work is particularly pertinent for women living in peripheral urban areas and in isolated rural areas, the need to travel to find work has been exacerbated for women across the region as a whole by the increasing tendency for jobs to be developed in business centres and callcentres away from women's homes, and away from unserved travel corridors. Likewise, in

relation to childcare only 20.2% of women feel that there is a good range of childcare facilities in their immediate neighbourhood. They also refer extensively to the way in which jobs and childcare are 'rarely close to each other' making travel arrangements more complicated in many instances, and to the way in which this is being compounded by the need to travel further to access employment.

Women are particularly critical of the way in which the current transport infrastructure provides them with the opportunity to negotiate these increasingly complex spatial links. Just over half (52.7%) of women feel that the routes available offer them the opportunity to travel where they want to go and only 35.2% feel that the links between different transport providers make it easy to travel. In addition, only 41.3% are satisfied with the timing of services and only 32.0% feel that services are punctual enough to rely on when travelling. This lack of confidence in the public transport infrastructure is stronger amongst those women that use public transport on an infrequent basis. However, it is also very much in existence amongst women that use the system on a weekly or more frequent basis. In this case although 60.4% of women feel that they can travel where they want to go, only 39.5% are positive about the links between different transport providers, only 49.6% are happy with the timing of services and only 36.5% feel that services are punctual. This suggests that women do not believe that public transport offers them the opportunity to travel to work to respond to the hours and shifts on offer, regardless of whether they are users or non users of public transport.

There is also a strong sense that women regard private transport as essential in terms of travelling to employment, and the extent to which women feel able to travel to places they want to go and as far as they want to go increases depending on the levels of access they have to private transport. When women have full access to private transport 51.3% of them feel that they can travel where they want to go and 50.7% feel that they can travel as far as they want to go compared to 15.1% and 13.8% respectively when women have limited access to private transport.

Many of the women in the study also suggest that it would be difficult for them to travel to employment if they had to rely on public transport. As the women themselves explained:

Without a car? It's impossible, I mean you do it, but if you haven't got a car it's really awkward.

Bus routes do not go direct to towns in this area. It means travelling to one town (in opposite direction) to connect with bus to other town you wish to go to. Timetables do not connect therefore long waiting for connecting service.

To me, transport is still geared to twenty years ago when people did work 9.00 to 5.00. All the companies around here are call centres and people work shift patterns - public transport just does not cater for them. I find it extraordinary that they have built this wonderful business park and want us to get to work out here but have not put the infrastructure in to help us get here.

7.2. Negotiating domestic responsibilities and travel to work

Women also appear to prefer to use private transport when travelling to and from work because it gives them the flexibility and the time to combine their domestic responsibilities with work. Many of the women in the study are juggling home, family and work with only limited support, and when they have dependent children or responsibility for older or disabled relatives the support services which are available to them (particularly in relation to childcare and social care) are not always adequate in terms of cost, location and opening hours. Moreover, although some

women report access to flexible working patterns, the vast majority of women are constrained by their working hours, both in the morning and the evening, forcing them to negotiate their travel at peak times and, ultimately, increasing their journey length.

Commentators have already identified the way in which women often trip chain in order to juggle this complexity (Rosenbloom, 1989; UEL, 2002). This was borne out in the study with many women referring to the way in which their journeying and subsequent access to employment is constrained by the need to drop off or collect children on the way to and from work (12.1% on five or more days per week and 20.4% on at least one day per week), and undertake household shopping (1.0% on five or more days per week and 6.3% on at least one day per week). However, although the process of trip chaining is clearly a dominant phenomena in some women's working lives, large percentages of women feel constrained not necessarily by the need to trip chain but by the need to be in the house in the morning to see family off to work or school (68.1%), and in the afternoon to undertake a range of caring and household responsibilities (56.6%).

When these constraints connected to women's home responsibilities are combined with inadequate childcare support and restrictive employment conditions, simplicity of journey and the time it takes to get to work become major factors in women's transport choices. Very few women feel that public transport lets them juggle this complexity. Indeed, women are concerned that the time public transport journeys take constrains their opportunities to travel to work, and women using paid childcare services also suggest that the time public transport journeys take can increase the length of time that they need to pay for childcare thus becoming too expensive to sustain.

Of course, women with access to private transport still refer to the complexities of juggling home and work. However, as Table 6 shows, they are much more likely to feel that they have time to travel if they have full access to private transport (21.3% compared to 8.5% without any access to private transport). Interestingly, women with shared access to private transport seem to feel that they have rather less time to travel than women without any access to private transport. This suggests that the complexities of juggling home and family along with shared access to private transport can increase time pressures on women rather than improve them.

Moreover, as the comments below suggest, women remain convinced that access to private transport is critical if they are to successfully negotiate the labour market.

As a mother working full time I want to spend as little time as possible travelling to and from work as this reduces time away from home.

I find public transport extremely frustrating due to time wasted at bus stops and journey times. My journey to work takes 20–30 min by car—if I travelled by public transport it would take approximately an hour and 15 min on two buses.

Even though I am provided with an all-zone all year travel- pass as part of my 'other' job I would not consider public transport as a means of travel in the North East—because I haven't got time to wait for them, or waste time sitting on them.

Even though I've got a childminder I've got to get the kids there, then there's finishing work and then getting back to school and then coming out and if I'm working at the other end of the community and had to get a bus I would have to leave at least half an hour earlier to get to school so it would be a nightmare—that's why I love my car, I've put loads of weight on but I love my car.

7.3. Vulnerability

It is also important to consider the way in which access to private transport has a positive impact on women's perceptions of their personal vulnerability, and ultimately on their transport choices when travelling to work. Only 5.8% feel that their immediate neighbourhood has acceptable levels of crime and 4.0% feel that they have safe levels of traffic. They are also concerned about their own safety when travelling, especially after dark, and many of the women in the study also referred to 'no-go areas' in town and city centres and rural areas which they tend to avoid where possible.

Within this framework, public transport does not appear to provide women with the security that they need. On the contrary, women talk extensively about the problems of using public transport itself, suggesting that they are afraid of travelling on public transport and that they find stops and stations 'threatening and intimidating'. They also refer to the way in which public transport leaves them isolated within an increasingly hostile environment, essentially 'making it impossible for [them] to travel safely'.

That is not to say that the use of private transport is not without problems. Many women using private transport express concerns about the nature of car parks and the walkways from car parks to services and employment locations. There is also evidence to suggest that some women feel threatened when travelling in their cars by road rage and bag thieves. However, these concerns pale into insignificance when they are considered alongside those relating to public transport, and as Table 7 shows, women are much more likely to feel safe travelling during the day and at night if they access to private transport. 32.2% of women with full access to private transport suggest that they always feel safe travelling during the day and 15.2% always feel safe travelling at night. This is in sharp contrast to women without access to private transport where only 13.0% always feel safe travelling during the day and only 2.7% feel safe travelling at night.

The following comments show the strength of feeling that women have in relation to need to have the security of private transport in order to successfully negotiate economic activity. Bus stations and bus stops in more rural areas are in areas that are vulnerable to attack by people of all ages. This makes waiting for buses early in the morning and late at night uncomfortable. Bus stations such as Washington Galleries are unfriendly and a target for youths to hang around in; approaches are littered with blind spots which are unsettling especially in the early morning and in winter months. Stairwells are used as toilets and are ill lit with negligible visibility.

I couldn't possibly travel to work without a car—it is the only way I feel safe—especially at night.

7.4. Travel horizons

While these issues around safety and perceptions of personal vulnerability are clearly important, they do not necessarily allow us to see the full extent of the way in which women's travel confidence impacts on their mobility and the overall importance of the car in supporting women's access to employment. In order to achieve this there is also a need to consider the extent of women's travel horizons and their sense of independence when travelling. This issue is rarely picked up within current analysis, but it is an important issue if women are to travel to work outside of their immediate neighbourhood.

Table 8 shows that women with full access to private transport demonstrate much higher levels of travel confidence when travelling both to places that they know (5 1.2% compared to 19.1%

amongst women without access to private transport) and to places that they don't know (24.5% compared to 8.9% amongst women without access to private transport). Access to private transport also seems to impact on women's ability to find their way around. Here, 24.4% of women with full access to private transport suggest that they can always find their way around compared to 10.1% of women without private transport.

This suggests that women may be more likely to look for employment in areas with which they are unfamiliar if they have access to private transport. These themes are recognised by women without access to private transport who suggest that they are unlikely to consider employment outside of areas that they know. They also recognise that travelling by public transport does not allow them to increase their knowledge and familiarity with areas outside of their own neighbourhoods and usual travel routes. On the other hand, when women have access to private transport it seems as if their travel to work horizons are increased. As the women themselves explained:

Sometimes I go into the job centre and I see jobs in places that I haven't been to before. You don't get to know these places when you walk or travel by bus. I suppose I could think about them but if you don't know the area you don't think about working there—do you?

Buses go along the main routes and you get to know them. If I see a job that isn't on the route I wouldn't think about it- not so much because I couldn't get there—just that I don't know where it is and I don't know how to get there. When you have got a car you get to know more places and you are more likely to consider them as somewhere you might work.

8. The impact of private transport on women's labour market position

Given that women seem heavily reliant on private transport it seems reasonable to seek to ascertain whether women's use of the car is simply one of convenience and perception or whether women's access to private transport has an impact on their labour market position. Looking specifically at this issue, it appears as if women's relationship with the car is a lucrative one, and although there is a need to be careful about making assumptions of causality, it would appear that there is a strong correlation between women's access to private transport and their position within the NE labour market.

Table 9 shows that women in the study are more likely to be employed if they have full access to private transport (87.8% compared to 60.2% amongst women without access to private transport), less likely to be unemployed (0.4% compared to 9.4% amongst women without access to private transport) and when in work to be employed in a full-time job (54.0% compared to 35.9% amongst women without access to private transport). They are also more likely to have professional occupations (48.2% compared to 18.9% amongst women without access to private transport). Critically, women in the study with full access to private transport also have higher average weekly incomes (£263.22 compared with £150.90 amongst women without access to private transport) and a higher average hourly rate (£9.05 per hour compared with £6.57 amongst women without access to private transport)

It seems likely that this is a circular process and that private transport allows women to improve their access to and position within the labour market, and that this improved status allows women to increase their access to private transport. At the same time it appears that women without access to private transport or with restricted access to household cars have limited employment opportunities and this reduces their opportunities to access private transport and

their subsequent travel horizons. This point was picked up most forcibly by the women themselves:

It is worth buying the car even if you can't afford it, otherwise you can't get the sort of job that makes working worthwhile. If I didn't have a car I would have to take a job in this area. The pay would be dreadful and I could not afford the childcare. I can't afford a car so I can't travel very far to work, or pick the kids up on route. That means that I am scuppered in terms of getting a decent job.

9. Conclusions

Women's travel is characterised not by the way in which it links them with the activities associated with the private sphere of home and family as current theories and frame-works would suggest, but by the way in which it allows them to access the public sphere of paid work, education and training. Within this framework, men's control over car use in car owning households restricts women's access to private transport. However, women's travel to work patterns are still dominated by the use of private transport and, even when they have high levels of access to public transport, the use of private transport is essential in order to allow them to negotiate the complexities which face them when seeking to link home and work.

Many of these complexities have been exacerbated by the spatial mismatch between the areas that women live and the jobs and services which are available to them. Others are linked to women's social role reflecting wider gender inequalities in society relating to their household and childcare responsibilities, their vulnerability and their sense of independence when travelling. Indeed, private transport allows women to negotiate a range of gendered processes which affect their every-day lives. It allows them to travel to employment outside of their immediate neighbourhoods and existing travel corridors. It provides them with the opportunity to access employment within the time constraints and complexities of their domestic responsibilities, and it offers them an element of safety and security that is not available on public transport. Turning full circle it also increases their travel confidence and their travel horizons and, ultimately, their employment opportunities.

Access to private transport is therefore a key factor in determining women's mobility and economic inclusion. Taking this further it would seem that increased access to private transport improves women's labour market position. It is also clear that limited access to private transport has the potential to lock women into the low wage, low skilled low investment economy which offers few women the chance of improving their transport position and ultimately of challenging the cumulative and circular processes feeding their social exclusion.

The extent to which these processes impact on women are unlikely to be uniform but will depend on geographic location, age, class, economic position, ethnic origin, physical and intellectual ability. Further work needs to be undertaken to explore the impact of these variables. However, as policy-makers seek to develop more demand responsive transport systems and to encourage people onto greener, more sustainable transport systems it is clear that any failure to recognise the complexity of women's transport needs may be unhelpful for women and may have serious gender implications.

The answer to women's travel needs cannot simply be to increase the number of cars on the road. However, it is clear that there is an urgent need to develop a transport infrastructure which recognises and addresses these exclusionary frameworks, and provides women with a range of mobility choices. This can only be achieved by recognising and supporting women's need to have fair access to private transport to combine work and family life, and by developing a

flexible, reliable, efficient and safe public transport infrastructure that will offer viable alternatives. These changes to the transport infrastructure also need to be supported by mobility sensitive employment, and by childcare and schooling arrangements that allow women to travel to work.

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