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The car as a safety-net: narrative accounts of the role of energy intensive transport in conditions of housing and employment uncertainty

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Introduction

Policy discourse on sustainable travel has focused on persuading people to make less use of private motor vehicles, and instead to choose to use shared or public transport, walking or cycling or simply travelling less as a means of reducing demand for transport energy and space intensive mobility. This discourse has been framed by transport research dominated by theories drawn from economics and social psychology in order to describe travel behaviour and to develop measures intended to encourage behaviour change (for instance, see discussion in Avineri 2012; Metcalfe and Dolan, 2012; Marsden et al., 2014; Vij et al., 2013) Those theories explain travel demand and behaviour primarily in terms of individual choice (including theories of classical and behavioural economics, and social psychology). .

This policy approach, and its underlying theoretical basis is increasingly criticised on both descriptive and normative fronts from perspectives of other academic and practitioner approaches to understanding transport and travel behaviour (Marsden et al., 2014). One such challenge is found in work on social exclusion and transport which maintains that the dominant policy approach does not sufficiently take account of how some activities and needs are especially important for people to be able to live to a decent standard and to participate in society (recognising open questions about defining needs in this category –e.g. Mullen and Marsden, 2016). This work emphasises how some forms of travel will be required to meet these needs or conduct these activities. If people are prevented or dissuaded from undertaking this travel then that should be a matter of concern to society. Further, the sorts of travel required for these activities or needs is unlikely to be easily given up precisely because it is important, and so measures which do seek to change demand for this travel are likely to be ineffective (see Mattioli and Colleoni, 2016) as well as potentially unjust.

This chapter develops the challenges social exclusion research presents to the dominant policy approaches to understanding and changing travel demand. In doing so the chapter provides new insights into ways in which transport policy focused on a rhetoric of individual choice may be exacerbating hardship and exclusion, and may also be counterproductive as a means of realising policy ambitions to change travel behaviour because it ignores factors which are locking in car-ownership and associated high levels of energy intensive travel. An analysis of interviews with people in the north of England, identifies relationships between travel needs and behaviours (in relation to often inter-related factors including journey timing, time spent traveling, ability to plan travel, and decisions on travel mode) and uncertainty and insecurity in housing, employment and education. We find that uncertainty about where people live and work, and about when they need to be at work, creates conditions which encourage people to maintain or acquire a car where that is possible for them. The pressure is such that people will keep a car even where the financial resources required exacerbate households' difficulties in paying for other basic needs. For those without a car, these conditions of uncertainty can restrict opportunities and contribute to hardship. In contrast, security and a level of control over housing and employment, can contribute to providing conditions in which people are more able to, and sometimes do, live without access to a private motor vehicle. We argue that the structural approach adopted in social exclusion and transport research provides a plausible and normatively defensible approach to understanding this travel demand and to assessing measures intended to alter demand. However we make a case for a significant extension to the ways in which social exclusion research has considered travel needs. Work on transport related social exclusion is concerned with how people's choices are constrained by the systems they live in (Lucas et al., 2016). While our research recognises the relevance of structures, it extends attention from the structural context in which travel occurs, to questions of the implications for demand and changing demand, of uncertainty about how that context might change for people.

Our findings have significant implications transport policy intending to change travel behaviour and reduce transport energy. They add to the weight of criticism of dominant approaches which treat it as sufficient or effective to explain demand primarily in terms of

choice (these are discussed in more detail below). Moreover they indicate that housing and employment policy and practices are creating conditions which encourage more rather than less travel by car. As we explain in later sections, that the sorts of uncertainty affecting many of our participants are becoming increasingly prevalent. So their influence on transport and policy objectives are potentially large. While car ownership need not necessarily equate to increased travel, or to increased travel by motor vehicle (as opposed to active travel), travel statistics suggest that there is in practice a connection. In England, households with access to a car travel longer distances (average 4,580 miles/person/year) and make more trips (average 280 trips/person/year) than those without car (DfT, 2016, Table NTS0702). This broadly holds across income groups. While car ownership and distance travelled varies with household income (see DfT, 2016, NTS0703 and NTS0705), there appears to be little variation across income quintiles for the number of trips per person for each car to which a household has access. Moreover distance travelled by each person per household car is actually higher for the lowest two income quintiles than for the third quintile, and is close to the distance for the fourth quintile.[i]

Choice and context

As we have argued elsewhere, ideas of individual choice are central in three of the most prominent theories of travel behaviour and change. These theories are classical economics, behavioural economics and social psychology (Marsden et al., 2014). The idea of choice varies in each, and it is worth briefly describing these differences and the basic commonality between them. Classical economics, which is still the dominant theory of behaviour in transport policy, holds that people choose how to travel according to a self-interested, rational decision which at any given point is based primarily on cost and time (Avineri, 2012). This approach is then extended to explain individuals' broader travel decisions as influencing and being influenced by their choices about where to live and work (e.g. Kim et. al., 2005; Dubernet and Axhausen, 2016). Behavioural economics presents itself partly as a response to

what its advocates view as classical economics' unsubstantiated assumptions about behaviour and rationality. Behavioural economics maintains that a variety of other factors influence decision-making, including loss aversion (Oliver, 2012), social norms, and sometimes the way in which a choice is framed (Gowdy, 2008). As might be expected, approaches other than behavioural economics which also draw on social psychology treat social norms, as well as other attitudes as influencing travel choice (Shove, 2010). Each of these theories recognises that context (i.e. norms or cost or time) matters in influencing choice (a point noted in Shove, 2010). The theories also maintain that people are influenced by the 'nature' of their thinking, so they either think as 'self-interested' beings who follow a particular view of rationality, or they (also) think in a way which reflects attitudes. On these terms it might be argued that these theories are barely focused on choice at all and in fact leave fairly little room for choice. However that would be to misunderstand them. In each case they focus on individuals making decisions, and then say something about the sorts of factors which might influence those decisions. If the theories are then used to try to promote change, they may suggest altering one or other of those influencing factors – such as cost, framing or social norms. It is this focus on the individual and their decision-making which characterises the sense in which choice is central to these theories.

Social exclusion and transport poverty research challenges this focus on choice in explaining behaviour, and consequently criticises the idea that trying to persuade people to alter their travel choices is a reasonable or effective way of bringing about change. This work tends to begin from a descriptive and a (sometimes implicit) normative concern about whether people have access to, can afford, and can use the travel that they need to meet important needs and engage in important activities (Lucas, 2012; Lucas et al. 2016). As we have said above, this is predicated on a position that there are some needs and activities which are required for a reasonable quality of life and level of social participation. That of course does not tell us much about what those needs or activities consist of, or how they can be met in different circumstances, and there is significant dispute on these points (for a range of approaches see Beyazit, 2011; Lucas, et al. 2016; Martens, 2016, Mattioli, 2016; Mullen and Marsden, 2016; Walker et al., 2016). However it is feasible to identify very broad

categories of needs and activities with which social exclusion research is concerned. These include, but are not limited to employment; education; housing; healthcare; family and social relations. Much of the work on transport and social exclusion to date has emphasised availability and affordability of transport from (often low income) residential areas to services, employment, education, and so on. This body of research has brought attention to problems caused by the environments that they have to move around. For instance, it has identified harm to health and welfare of low income women, who for reasons of affordability, may walk in areas which are polluted and have high traffic volumes (Bostock, 2001). The idea of choice may appear in work on transport poverty and exclusion, but it tends to be in the sense that choices are constrained by conditions and circumstance (Lucas, 2012). Those conditions are not considered to be a matter of choice (e.g. it is not assumed that people exercise some sort of free choice to live in inaccessible neighbourhoods or to subsist on low incomes).

As we have already suggested, focusing on social exclusion potentially presents a practical and a normative challenge to measures designed to change travel behaviour through economic incentive or persuasion. Yet it could be countered that those affected by transport poverty and social exclusion tend be people with low or relatively low incomes. So perhaps t measures intending to reduce use of private cars would have little relevance here as this group will also tend not to have access to private vehicles. However this is not always the case, and 52% of households in the lowest income quintile have access to at least one car (DfT 2016, NTS0703).

He has also found, in Germany, the likelihood of people saying they cannot afford to own a car varies according to the availability of public transport and other aspects of accessibility in the area in which respondents live. The indication is that people will maintain a car even when they struggle financially to do so, because of its importance in enabling them to get on with everyday life (Mattioli and Colleoni, 2016). From this perspective, it can be pointless (and probably offensive) to ask people to choose conditions which enable less travel by car (e.g. to choose to live in a more accessible area), and unreasonable to ask for change in other, already restricted behaviours, such as decision on travel mode.

The study

We conducted 45 interviews, between 2015 and 2016, with members of the public living in West Yorkshire and Greater Manchester (in the north of England) who have gross annual of household incomes up to £35,000 or up to £25,000 for a family with a single adult. The incomes approximate to the median income at the fifth decile from lowest of households consisting of two adults and one child, and one adult and one child respectively for 2015-16 (HM Treasury, 2015). West Yorkshire and Greater Manchester are both comprised of one major city (Leeds and Manchester) several smaller cities and numerous small towns. The interviews sought to understand not just how people travel now, but how mobility, affordability and availability of transport has affected their lives. We recruited people with a mix of car and non-car ownership from a range of urban, peri-urban, and rural areas since we were interested in exploring how neighbourhood location and accessibility might influence travel and the impacts of transport. Participants were also chosen to have between them a mix of housing tenure types (social housing tenants; private rental tenants; owner-occupier) to allow some investigation of whether the different conditions attaching to different tenures seemed to influence travel or its impacts.

The interviews were unstructured to allow a more natural discussion, although there was a topic guide and each of the interviews covered all topics. The topics then were as follows:

- How the person travels for everyday activities such as work, education, caring, leisure;
- Whether the availability of cost of travel impacts on their ability to take part in activities;
- Whether life and everyday activities are affected by road safety, or noise or air pollution from traffic;

- How has transport affected them in the past, for instance, has availability of transport influenced employment, education, or housing?
- What might be the implications for participants of changes in transport policy or costs – e.g. fuel price changes?
- How do the costs of domestic energy affect everyday life?
- Does housing tenure have implications for costs of domestic energy?

We do not seek here to describe the scale in society of issues we discuss. What we do is identify phenomena influencing the lives of some of our participants and which are therefore potential areas for policy intervention, and as we shall discuss in what follows there are reasons to think that these factors are quite widespread.

Findings: mobility needs in contexts of housing and employment uncertainty and stability

Our participants revealed strong inter-relations between travel availability, travel and thinking about travel on one hand, and uncertainty and changes in housing, employment and education on the other. In this section we categorise findings in terms of those travel and employment uncertainties and then travel and housing uncertainties. As we show in the discussion, the findings in each can influence one another, and the availability and affordability of vehicles can impact on welfare, quality of life and hardship across these categories. Following this we describe the quite different situations of a few participants who find themselves in situations where they find they have no need for a car.

i. Employment, uncertainty and mobility

Participants revealed some major concerns about travel and its impact on work, and on progression with work. These fall into two broad categories, the first of which is an ongoing lack of available transport to get people to what is fairly steady work in terms of location and

tenure, and the second is difficulties associated with uncertainty about the location and timing of work.

For some people in work, reliance on often unreliable public transport can be a source of stress. One participant described the experience waiting for the (late) bus to work as:

> 'you just start getting anxious… have I got an alternative, can I get a taxi, well how much money have I got in my purse, I haven't got any money and I can't afford a taxi. I've bought a bus pass for the month because that's what I can afford." (Helen, 40s, private rented housing)[ii]

The difficulty of traveling without a car presents a direct barrier to progression at work. Helen also described how her commute to her work as a teaching assistant takes her an hour and a half each way by bus (two buses each way), and that she has to add another half hour in order to make sure that she is not late when the buses do not run to schedule (as frequently happens). The journey would be thirty minutes by car. The length of this commute is a barrier to attending the meetings and training needed to gain promotion at the school. Moving house to be closer to work is not viable for this participant in the foreseeable future as she rents from the council and had difficulty in securing the house that she does have which is suitable for herself and her family. For another woman, travel to her former work was not a particular problem but she felt that not having her own car meant:

> "I missed out on pay rises and things like that because I didn't drive … I could sit on the phone on sales day while the others will be driving around industrial estates and stuff and you seemed to get more business if you were meeting people face to face rather than just on the phone" (Charlotte, 30s, social housing).

This was among the reasons this participant gave for learning to drive despite a personal reluctance to do so.

Travel difficulties for those in work or education are often created because location and hours change. In some cases the change occurs once or twice, when an employer or a school moves, or when hours change. This move can be, and for some participants has been, a benefit since work moved closer to home, although even in these cases there was uncertainty brought about by the prospect that the location would be moved again. However

where a move occurred, it could mean that a commute which had been relatively easy on foot or by bus was now very difficult and time consuming (e.g. Thom, 60s, private renting). Further the availability, or acquisition of a car, was for three participants, crucial in enabling them to manage the journey when workplaces moved (Gilly, 50s, home owner; Yasmin, 30s, private renting; Tina, 60s –before retirement).

For others, these changes far from being very occasional are quite frequent (e.g. Marion, 50s, social housing). This is especially, but not only, the case for people working in agencies or on zero hours' contracts (these are contracts between an employer and employee where the employee has no guarantee of set hours of work, or indeed of any work). Several people explained how they have lost work because of these difficulties. For instance, one former agency worker without a car described how she would often have to turn down work offered by an agency when it was not within an area that could feasibly be reached by bus (Helen, 40s, private rented housing). In another case, a participant also without a car, discussed the problems he faces with a zero hours contract for which he would be sent at short notice to multiple locations and often at times when public transport which would otherwise be available, was no longer running (Michael, 40, social housing). While his employer offers to cover costs of taxis, the expenses would often not be repaid for weeks and that causes financial problems. A further participant struggled to break into the career she sought as she had not had access to a car when she needed it. By the time she did get a car she had lost some opportunities which could have helped her begin to establish her career (Anne, 20s, living with parents). Having access to a car, does not necessarily remove difficulties presented by hours or employment locations which vary due to decisions of people other than the employees. However our study indicates that these difficulties can be greatly mitigated by access to a car or having family members who can provide lifts. This was a reason for some participants to retain a car despite finding the costs very difficult.

ii. Housing and moving home

Having been confronted with forced moves and housing uncertainty, a number of participants identified neighbourhood familiarity as important for a new home. Further, for many, fear and experience of eviction motivated a search for a new home with secure tenure. For people

in this position, questions of access to, and affordability of a vehicle can impact on ability to realise housing priorities, as well as on exposure to economic and other hardship.

Participants described their experiences of moving and searching for homes under a range of conditions. Some had previously owned their homes (or rather had mortgages), but have now lost those homes. In two cases, women reported that the loss of the home was because their former husbands had, without the women's knowledge, failed to pay debts on the home (Doreen, 40s, social housing; Shelagh 50s, private renting). Another was in the process of having her home repossessed as she had been unable to pay the mortgage (Jayne, 40s). Several, who were, and in some cases still remain, in the private rented sector had faced unexpected eviction notices from their landlord.[iii] Others who rent privately also move frequently, often around the same area, but appeared to think of this as something quite normal and expected at this stage of their lives (these are people in their 20s). A further participant lost a council home after the block of homes that she lived in was demolished, and while the council would rehouse her, she faced difficulties in finding a suitable replacement home from the council - her household includes relations quite distant by blood and they have found difficulties in being recognised as having housing needs as a family (Helen, 40s, private rented housing). Further reasons for moving range from relationship breakdown and sometimes getting out of a dangerous domestic situation, bereavement, wanting to move closer to family, overcrowding, poor conditions in the home they moved from, and cost.

Many people describing decisions made in the face of a need to move home, identified a priority of remaining in an area which they know and where they have established social networks. Geographical moves were also, for several people, motivated by a wish to be closer to family or friends. Experience of housing uncertainty also creates a strong influence on people's thinking about priorities. This became very apparent when people recall their thought processes when they were in what were often very difficult and stressful circumstances of being forced to move. One of the women who reported how she lost the home she owned after her husband failed to make mortgage payments described

> "I went into total meltdown. It was cost, where we would go, the area, I kind of wanted the same area but there wasn't anything. What there was, was not suitable. I'm not used to just

> living in anything. I wasn't accepting just anything. So that kind of went through my mind hence the fact that we're in private rental and not council" (Shelagh 50s, private renting)

The experiences of several people who were forced unexpectedly to leave a private rented house seemed to prompt them to prioritise finding a council or housing association home (both forms of social housing) which would which would bring security not available in the private rented sector. This is illustrated in comments by a participant who explained:

> "we'd had to move out of our last property because we privately rented and the guy who we rented it off had- I think he'd gone bankrupt or something but they gave us 2 weeks' notice to get out of the house. I think they were repossessing the house, that was it. … we didn't have any money to put a deposit down on another private rented and to be honest, I was worried about it happening again, I was like, "What if we get settled into another property-?" so yeah, we registered with the council and I think we had to live with my [extended family] for about 8 months and then we got offered this. So it wasn't by choice, it was just a better choice" (Charlotte, 30s, social housing).

These priorities appear far stronger, and more important to people, than considerations about moving to a location where work and services are accessible without a motor vehicle. That is not to say accessibility was no concern. For some having to move, accessibility of schools by public transport or on foot featured prominently in decisions. Further, several participants without cars talked about the importance of remaining close to bus routes when they moved. However this factor was raised alongside discussion of the importance to them of remaining in a geographical area to which they are attached. Further, the person quoted above, also talked about how she and her family only sought council houses in locations where everyday travel would remain possible if the family had to give up the car. Again, for her and her family, this consideration sat under the priority of gaining the security of a council home following their experience of eviction from private rented housing. For some, matters of access to work are overwhelmed by family priorities. One person, without a car, moved from a place with good public transport links to his work, to a remote rural location in order to be with family, and with the result that he now frequently has to walk six miles (up and down Pennine hills) to get to work and back as there is not adequate public transport (Larry, 30s,

private renting). Likewise the teaching assistant mentioned in the previous section, accepted her three-three and a half hour commute to and from work by bus rather than move to a home which could not properly accommodate her family.

In summary, better access to work or other activities does not appear as the main priority in deciding where to move to once a move was forced. For those with access to a car, and for whom that car access was not at risk on grounds of affordability or illness, the priority of family over accessibility of work is not a cause of problems. For those without a car, or who felt that their continued ownership of a car was at risk, there were some cases where the move resulted in very difficult commutes. For others, concerns about accessibility acted as a constraint on realising priorities of moving to somewhere secure, or to a familiar location.

iii. Living happily without a car

While accessibility of employment and other (non-family or friend related) activities is not generally among the priorities of people thinking about where to move to, having moved some people found that they could live happily without a car. Some participants who had moved home and who had a car found that in their new circumstances the car was no longer needed, and became rarely used and was eventually disposed of. One such woman, with three children, moved into a new council house where she found travel to work and school relatively easy without a car. She identified that getting rid of the car does close down some activities, such as getting into the countryside, however she added:

> "But I found myself being more stressed when I had a car…I did more in terms of like the kids went to [several activities] and pretty much felt like we lived in the car quite a lot. And when I got rid of the car, they had to learn to get public transport and do that themselves. So I think I'm a lot less stressed. I read on the train and stuff" (Susan, 30s, social housing)

Two other participants also experienced a move to a place where they found the car was no longer needed in the way that it had previously been. For one family this happened when they moved to another private rented house in a new area (Hazel, 20s, private renting), and for a another participant this occurred after she bought a flat in an area she had settled on because it is close to family and feels relatively safe (Louise, 30s). For a further two participants, the

decision that a car was no longer needed, and had become more a burden than a benefit, arose from a combination of retiring and remaining in an area where many services are in walking distance, and where buses provide sufficient mobility beyond that (Tina, 60s, social housing; Anna, 50s, home owner).

Among those people who have moved to areas where they find they do not feel the need to have a car, there are differences which mean that some are more likely than others to return to circumstances where a car might again be important to them. For one, the woman who bought a flat in what turned out to be a relatively accessible area, the issue is that her current work will soon end and she does not know what her next work will be or how feasible it will be to manage without a car. For the family who moved to a private rented house, the uncertainty is around security of tenure and where they would be able to move to if evicted from their home. This insecurity is strongly felt by the family and illustrated by their reluctance, for fear of retaliatory eviction, to complain about their landlord's recent failure to keep the boiler in good repair which led to the family suffering carbon monoxide poisoning. For the two participants in social housing, there is no apparent uncertainty in their circumstances, and so no reason to think that they might feel they need to reverse their car free status. As a final note on living without a car, one participant, not previously mentioned here, moved into her council house 50 years ago, and before retiring had worked in two places both of which were local. For her, a car was never considered or wanted, and she described her commute:

> "My house was at the top of the street and I walked down and crossed…No problem… I knew everybody and everybody knew me" (Gladys, 70s, social housing)

Uncertainty, flexibility, and prospects for reducing travel by car

This study indicates the significance of understanding the conditions and circumstances in which people engage in the forms of travel that they do, and through which people can miss out on opportunities if they cannot access suitable transport. As with other work on social exclusion and transport, we have assumed that some needs and activities are more important

than others, and that travel needs to respond to, and enable, these activities. Specifically we have assumed that employment, education, and housing have a normative significance.

Our findings also indicate the importance security and uncertainty have in explaining travel demand and especially locking people into car ownership, and in understanding hardship related to travel. In this we have extended previous work on social exclusion and transport, showing that it is not just structural conditions, but uncertainty and insecurity about changes in those conditions which matters both in understanding what people do, and where they face difficulties. The employment and housing uncertainty means that people live with the prospect of having to make complicated journeys over which they have relatively little control, and which can be the cause of substantial problems or lost opportunities. What we are seeing in part is behaviour that responds to, or anticipates, changing conditions. This includes acquiring or retaining a car in order to manage searches for work, or jobs with unpredictable locations or hours. It also involves undertaking difficult commutes which are a cost of having to moving and prioritising secure housing, or housing near family or a familiar location.

These findings identify what may be a significant challenge to policy objectives designed to reduce transport energy. As we have already indicated, the research challenges the effectiveness and fairness of policy approaches which try to alter travel behaviour by appealing to people to change their travel choices. In circumstances where people are already trying to manage uncertain housing or employment, messages about driving less are likely to be quite reasonably ignored, and by themselves, increases in costs of driving may just risk increasing hardship. Instead, uncertainty in housing and employment may tend to increase the distances people travel and the number of trips that they make because the uncertainty encourages car ownership. Conversely stability in employment and housing can open up possibilities for people to decide to give up car ownership. Our qualitative study in the north of England cannot itself show scale of the challenge presented to transport policy by employment and housing uncertainty. However research and reports on housing and employment trends indicate that the scale could be large. People are increasingly finding themselves in the private rented sector due to high costs of buying a house and scarce social

housing (Birch, 2015). In 2014-15, 19% of households in England were in private rented sector housing, compared with 11% in 2004-5 (DCLG 2016), and "76% of private renters had lived at their current accommodation for less than five years compared to 20 % in owner occupation and 39 % in the social rented sector" (DCLG 2016, p.2). Coupled with this there are high levels of employee flexibility in jobs meaning that people can be frequently looking for work, or in work that varies location and timing (MacInnes et al., 2015). A report by the Resolution Foundation found "32 per cent of the working age population (excluding full-time students) classified as *insecure* in 2014" where 'insecure' workers are those who are low paid, or part time workers, or in temporary work, or have not been with an employer for sufficient time to be protected by employments rights enjoyed by other employees (Gregg and Gardiner, 2015, p. 4). According to that report, the proportion of workers in insecure work has not greatly increased since 1994 (when it was 30%), however the authors find:

> "specific forms of atypical and often low-quality employment – including involuntary part-time and temporary working, less secure self-employment and zero hours contract working – have grown in prevalence" during and since the downturn. Relatively small groups of workers (compared to the overall workforce) are affected in each case. For example, only 4 per cent of workers are involuntarily part-time, only 2 per cent are involuntarily temporary employees and only 2 per cent are on a zero hours contact (with some overlap between these groups). But the implication is that a sizeable minority are facing particularly acute forms of insecurity."
>
> (Gregg and Gardiner, 2015, p. 5)

Housing and employment precarity present a substantial challenge to attempts to reduce energy intensive transport and related emissions, and to tackle loss of opportunity and hardship. Unless there is a radical shift in employment and housing policy and practice, then tackling this obstacle will require attention to developing a transport system in which a car is less important even where people need to make the quite complex journeys which may need to be planned at relatively short notice. This will involve developing existing ideas on how urban form, public transport and other mobility service provision can reduce reliance on motor vehicles (for instance Barbour and Deakin, 2012; Mattioli and Colleoni, 2016). Yet

because they diverge from patterns of fairly fixed journeys at fairly fixed times, responding to travel needs in conditions of uncertainty wit hour resort to probate cars is likely to create particular challenges for planning.

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[i] These estimates compare trips and distance for each income quintile (DfT, 2016, NTS0705) with the average number of cars per household for income quintiles, and assuming an average of 2.2cars/household for households with more than one car (DfT, 2016, NTS0703).

[ii] We use pseudonyms throughout

[iii] In England, many private rented sector tenancies are Assured Shorthold Tenancies (ASTs). With ASTs tenants can face eviction after 6 months without reason. The landlord only has to give the tenants two months' notice then gain a court order to lawfully evict the tenants. See http://england.shelter.org.uk/get_advice/eviction/eviction_of_private_tenants/eviction_of_assured_shorthold_tenants; http://www.legislation.gov.uk/ukpga/1988/50/section/21