

# TRANSPORT DISADVANTAGES: SOCIAL AND SOCIETAL PERSPECTIVES

## 1 Introduction

This chapter is the longest chapter in this book. I will introduce all the groups that can potentially face transport disadvantages. This will be done in 3.2. In 3.3. I will concentrate on two transversal themes, related to transport disadvantage, poverty and gender.

## 2 Transport disadvantages for specific groups

### 2.1 Children and adolescents

In this subchapter I will look at transport disadvantages for the youngest members of our societies, the children from age 0 to 12, and the adolescents, from age 12-18. Mobility has changed in recent decades for both specific groups.

#### 2.1.1 Children until age 12 ; loss of independent mobility

##### 2.1.1.1 State of art and first analysis

Something happened to the mobility of children in recent decades. Where in the past children were left to themselves and were able to play in the proximity with friends, in the fields, in the woods, this seems no longer to be tolerated. The Policy Studies Institute presented in 2015 data on children independent mobility, for 16 countries. They noted low levels of independent mobility, with the greatest restrictions for children under 11, and with significant concerns of parents for their children's mobility. This decline of children's independent mobility was fast, for example for England in 1971 some 80 % of children (age 7-15) were allowed to travel alone to places outside school , in 1990 this was 37 % and now a mere 20 % (Policy Studies Institute, 2015). Comparable figures for Germany were ; in 1990 70 % and now 45 %, and for Australia in 1991 ; 61 %, in 2012 32 % (Schoeppe et.al, 2016). As Holloway and Valentine (2000) state ; "*childhood has been increasingly domesticated*". Interesting case study figures are presented in Barker (2011) ,Fyhri et.al (2011), Mackett (2010) and Pont et.al (2009).

The following seems to have happened. For trips to schools most parents escort their children to the age of 11, and this is now often done by car, not giving children the option of active transport (walking or cycling). Outside the school times children are not left to play for themselves, but are escorted by their parents to hobbies and clubs. Many parents fear leaving children to play outside, and activities for them are organised, often again inside buildings. As a wrap-up for what happens Bjerkan and Nordtomme (2014) formulated; more people have access to cars, functions and activities are more spread geographically, children participate more in organized leisure activities, parents in modern households have less time and are thus more dependent on the car, parents have increased anxiety for traffic accidents and assaults and there are longer distances to both school and leisure activities.

Veitch et. al (2006) noticed that also the opportunities for independent outdoor play have become quite limited for children. The idea of "just playing outside somewhere" for children seems to have been lost. Far more time of children is now spend in controlled situations ; at home, in gardens of friends, or in organised leisure activities.

As Fyhri et.al (2011) explain the framework of everyday activities in families with children is characterized by a high degree of employment among the parents, both fathers and mothers, although

a relative large percentage of most mothers work part- time. Families with children are highly motorized (for example in the Netherlands in families with children there is a non- car ownership of only 3 %) and the easy access to the car makes car use almost obvious.

Escorting is the fastest growing travel category in the OECD countries. Escorting means driving people, mostly children but also the elderly, to clubs, friends, hospitals, schools . For the Netherlands it looks like some 15 per cent of the journeys made by women are for escorting (MON 2009,8.11 category overig, in Jeekel,2013). We also have figures for Switzerland where in 2005 94 per cent of escorting was done by car (Jeekel, 2013). In the British Travel Survey 2006 is stated ; “Including both escort education trips and other escort trips, women aged 30-39 made over 25 per cent of their trips escorting someone else”. And in Germany , for parents with children under 6 years escorting is 26 % of their trips, slowing down to 12 % when children are above 6 years. From these data the picture arises that escorting is becoming an important motive for car use; some 11 per cent in trips and 8 per cent in distance, with a peak for women between 30 and 50 years of age with children, where escorting accounts for 25 per cent or more of their trips. Escorting is very car dependent ; it looksthat more than 80 per cent of the distance for escorting is travelled by car, making escorting the most car oriented motive (Jeekel,2013). Escorting can sometimes become more or less a day job as is explained in Descartes,Kottak and Kelly (2007) showing how the life of mothers in a richer but rather remote suburb in Michigan centres around chauffeuring the children. Performing child transportation is part of their idea of good mothering. Note that for escorting the second highest mode is walking, and not public transport (Jeekel,2013). Escorting and the school run take time , as most travel for these motives is not on highways, but on smaller and slower roads, mostly in build up areas.

Pooley et.al (2005a and b) made a transversal historic study on mobility patterns in the United Kingdom over a long time period, and they saw *the loss of independent mobility of children as the only really paradigmatic change*. What are the reasons for such a change ? There is a huge literature on case studies and on studies trying to explain this shift. I will make a difference between generic and more specific reasons. Two generic reasons (Karsten and Van Vliet,2006) are to be noted. The first is that parents believe that children are not as resilient as they were a generation ago (see Thomsen,2009). Parents until the seventies of the last century were more convinced that their children were resilient and able to solve their own problems. And the second reason is that parents perceive the environments to be less safe then they were when they did grow up. Parents are anxious and feel the need to protect their children.

In the literature on this subject five specific reasons can be noted (see also Stewart, Moudon and Claybrooke, 2012). The first has to do with the traffic situation. Traffic, and especially car traffic, has grown tremendous in these last four decades, and the “readability” of traffic and traffic situations has grown to a problem for children. Parents, car drivers themselves, have seen traffic as a threath, and have starting adapting to it. They do not consider more radical solutions as fighting the dominance of car mobility. As Mc Laren and Parusel (2015) convincingly argue : *“if it were not for parents undertaking disciplined care and preventing children’s traffic injuries, the automobilty system could not be sustained”*. This means that parental traffic safeguarding has, with the victory of motorised traffic in the use of streets, become a necessity, although Mc Laren and Parusel (2011) saw great differences in magnitude and attitudes of this parental safeguarding between parents of different socio- economic classes.

The second reason is what is called “stranger, danger”. Parents view many of their contemporaries more as potential dangers, than as potential friends. The “front porch interaction” seems to have been lost. Gill (2007) on this theme ; *“For many children and parents, the immediate neighbourhood around the family home is no longer populated with familiar faces. They may have never met, never said hello*

*to, or perhaps even set eyes on their neighbours. As parents today look out of their front doors, they see a world that is at best uninterested in their children and at worst hostile to them. Fewer friendly faces mean that support and solidarity from other adults, even in the minimal form of a watching eye, can rarely be assumed. Trusting relationships within the modern community are often hard to initiate."* I noted this already by introducing the "community- light"- concept (Lupi,2005) ; only minor exchanges with your neighbours, further staying on your own. It are basically isolated parents that coin a certain "stranger, danger"- attitude. I will look at especially this element of fear somewhat longer, later in this subchapter.

A third reason is the choice for schools. In earlier days most parents did choose the school nearest to their homes as the school for their children. Parents are now choosing the school they consider the most appropriate. This leads to the situation in for example England that half of all parents choose another school than the nearest one. This means longer distances for the school run, with probably more difficult traffic situations to overcome.

A fourth reason is more difficult to grasp. There seems to be a rather diffuse anxiety over the fate of children, especially among middle class and higher class parents. They consider educating their children towards responsible adults a difficult task, where only little guidance is offered to them. What then happens is following what seems to them the attitude of the majority of parents in their networks. A definition on what good parenting or good mothering seems to be in relation to risks and car use seems to exist (see for example Murray, 2009, Ridgewell, Sipe and Buchanan, 2005). The fear for remarks from other parents seems to be a crucial element in denying children independent mobility (Descartes, Kottak and Kelly, 2007, Ridgewell et.al, 2005, Barker, 2011, Kearns, 2003). You could be considered a non- responsible parent in letting your child move more freely. More study on the creation of "carescapes", and on the related socialising through what should be seen as responsible parental behaviour would be appropriate.

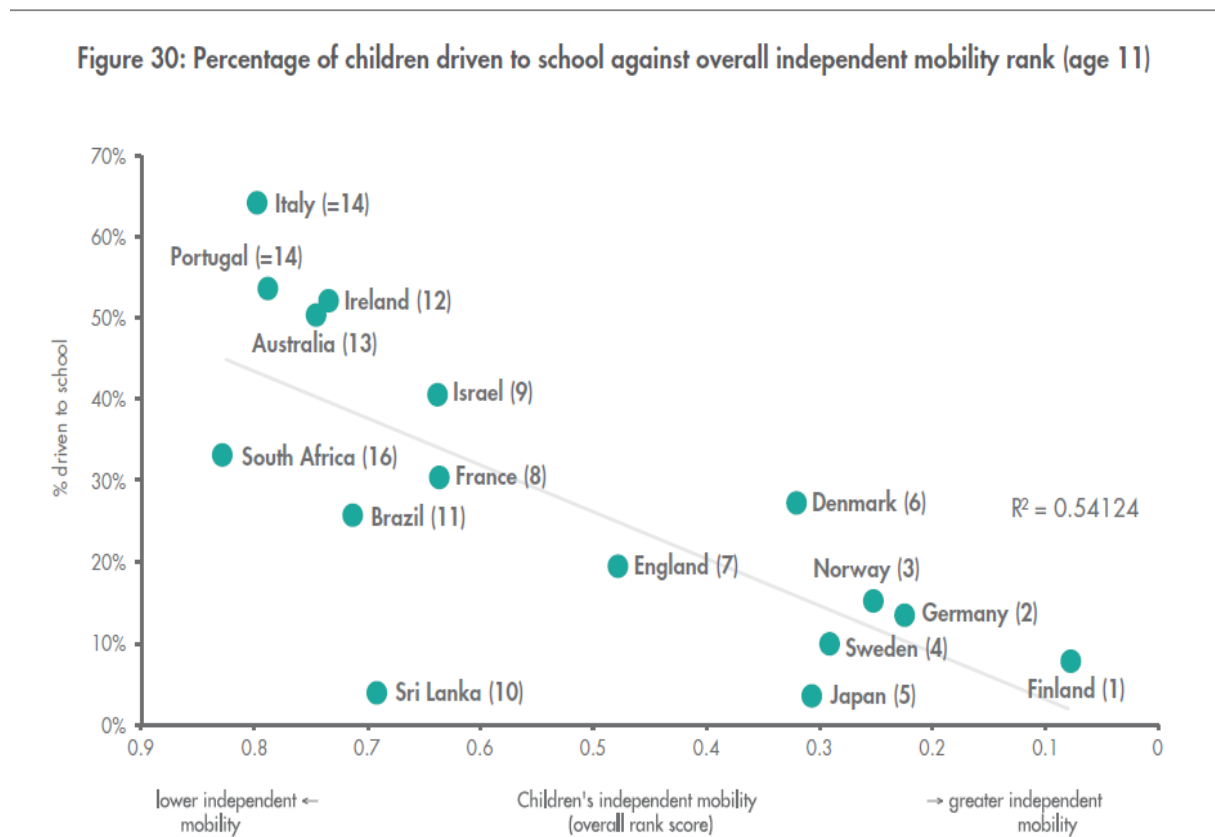
The last specific reason is related to the timing of societal arrangements. For many households, where both parents work, this loss of independent mobility of children is just the consequence of their time scheduling (Stone et.al, 2014). It takes too much time in the morning to walk or cycle with them. When schools starts at 8.30 parents have too little time left to start working at 9.00. So they drop their children to school and drive immediately further to their work. After school mostly the mothers drop their children at clubs, sport, hobbies, so they have some time available for household shopping, or again for their work. Or they work all day and leave their children under an after school - organisation, taking care of the children to 18.00.

What are the results of this complete pattern of the last two to three decades? Children live more indoor, instead of outdoors, children spent more leisure time in organised activities and clubs, instead of having the gift of unstructured time, children have a smaller range for their free mobility than children in the past, while their range of dependent mobility has grown a lot, compared to children in the past. Playing and playmates become choices, often made by their parents, where in the past playmates were just there, near to where you lived. Little (2010) noticed that lack of challenging play does often contribute to behavioural problems, especially in suburbs. Loss of active transport of children could lead to obesitas, as many health specialists fear and already notice.

Louv (2005) mentions in a rather famous book a specific result; the connection of children with nature gets lost. He calls this "*nature- deficit order*" and this stands for him as ; "*The growing separation of children from nature, unless reversed, will drive future families deeper into their cocoons, removing them not only from natural experiences, but from many social contacts.*"

Children are, sometimes indirect, via daycare officials, now far more supervised and controlled by their parents than in the past. Lower class children on the whole have more independent mobility (Davidson et.al, 2008, 5, Lareau, 2002), and the same holds true for children whose parents have greater networks and are better integrated in their neighbourhoods (Prezza et.al, 2006). In an interesting article on children's independent mobility in Japan (Provi Drianda and Kinoshita, 2011) six modern licenses for this mobility were introduced; to cross roads alone, to walk to places other than school, to travel home from school independently, to use buses, to go out after dark and to cycle alone on main roads. Research on how these licenses have changed in time, looking at a great number of countries would present interesting cross-cultural results.

There are differences between countries (see for example Carver et.al, 2013, for a comparison between England and Australia). A figure from the Policy Studies Institute (2015) is illustrative.



From research it seems that Germany, Japan, the Netherlands and Denmark still keep, although also here decreasing, a certain independent mobility for children. And on the other side are the more Anglosaxon countries like the United Kingdom, Australia, the United States and Canada, where there is rather little independent mobility of children (Jeekel, 2011). For Germany we know that children tend to be more escorted by parents in cities than in smaller towns, and that women do this in most circumstances (78%, Scheiner, 2016b).

### 2.1.1.2 Discussing fear, anxiety and children's mobility

Parental fear is frequently reported as an important source for the diminishing independent mobility of children. When this is related to traffic safety this is justified in national statistics (for example NHTSA, Traffic Safety Facts - Children, 2016). When this is related to crime concerns, like "stranger danger", this must be based more on social norms than on actual risk, as kidnappings make up very low shares in crime, and happen almost never related to schools (Stewart, Moudon and Claybrooke, 2012). Here media presentations make parents worry. Parents are more worried about girls than about

boys (Riviere, 2012, Villanueva et.al, 2012). In general there is something with fear and anxiety in our OECD societies. Although we are richer than ever, and safer than almost ever before (seen from statistics) we feel more anxious. For Denyss (2017) this is the result is a controlling mode that has been introduced in society- we have organised everything via control, and we would like to control all situations, and when this cannot be achieved we start to feel anxious- in combination with the situation that we have become so individualised that we do not trust of fellow human beings anymore, unless we are befriended. Fear of crime and strangers is not comparable with the actual incidence of crime, but is an emotional response influenced by many factors such as perceived vulnerability, victimisation and neighbourhood upkeep (Foster et.al, 2014). Parents often seem to have inflated risk perceptions, and these lead to denying their children rights to mobility. Popular media and more localised email (be careful etc.) were noted as sources perpetuating fear (O'Connor, Brown, 2013). Parent understanding of fear is thus socially constructed,.

Related to this is the loss of the connection to normal contact with most people in the neighbourhood by hard working individuals, as they just do not find time to invest in their neighbourhood contacts. Parents often feel that "natural surveillance" or "the eyes on the street" has been lost, with fewer people walking around. And indeed, also after school time many neighbourhoods, especially in suburbs and peri-urban areas are still empty with almost all adults at work.



But an extra element seems involved, as Furedi mentions ; the adult solidarity, whereby adults take collective responsibility for children seems lost, as parents are now regarding *"other people not as allies, but as potential predators of their young ones"* (Furedi, 2008). And O'Connor and Brown (2013) conclude that high levels of community activity and social cohesion appear to be important in alleviating parental fears related to children's mobility.

One level more abstract, Beck (1992) defined our western societies as risk societies. In his discourse three elements are central ; risk, individualisation and modernity. The production of welfare in modern society is systematically combined with the production of societal risks. The logic of the distribution of wealth, that always defined society, is changed in the logic of the distribution of risks. A risk society produces at the same time anxiety and insecurity, and expectations and chances. The equilibrium between these four elements seems crucial. The greater individual freedom, the richer variety, and the loss of standard behaviours causes at a societal level the disappearance of a sense of direction. At the personal level feelings of anxiety and insecurity could arise; *"In a risk culture moral discomfort generates a need for safety"* (Boutellier, 2002). A more fluid lifestyle is created, with a loss of long standing orientation marks, you cannot trust your fellow citizens any longer, as you see them too little.

The situation on children's mobility has been criticised by eloquent researchers and opinion makers. To start very conceptual, Durodie, the former director of the British International Centre for Security Analysis, criticizes the start of discussions about anxiety, risks, insecurity and safety. The focus is in his vision on managing and mitigating risks and far less on the use of our human capacities to organise our lives in a more controlled way; *“to take a risk”* has become *“to be at risk”* (Durodie, 2005, 14). Modern societies are very defensive about risks; *“we do not have a risk society but a risk perception society”* (Durodie, 2006). Durodie's approach focuses on the term *“resilience”*. Resilience has been lost. In Durodie's opinion; *“key element in shaping our perceptions of risk and the management of most policy issues today is a sense of isolation and insecurity that affects every layer of society”* (Durodie, 2005). People living in each others proximity do not know each other, are socially not interrelated. Durodie expects resilience to grow when we know better - in connection with our fellow human beings - what to strive for, who we want to be, and what we are aiming at. Locke (1998) heads in the same direction. His central thesis is that the price paid for greater freedom of movement for modern man has been a growing anonymity in the social spheres. Small isolated private introspection leads to framing everything unknown and social as a potential or actual risk. Durodie finally argues that the best approach to anxiety is to restore the connections with our fellow human beings. Competent risk management needs trust, and we have lost too much our trust in our fellow human beings.

Concerning the loss of independent mobility of children the spectrum of critics is broad (Darbyshire, 2007, Malone, 2007, Tranter and Sharpe, 2008, Estroff Marano, 2004, Gill, 2007). But is all this criticism completely justified? There is a chance that we have to differentiate between urban, suburban and rural areas. Statistics and literature show that especially lower class children in cities have a higher real risk to be confronted with dangerous situations outdoors (Pain, 2006). There is the importance of gangs and disorderly behaviour in public spaces. Pain (2006) also qualifies the perspective of many critics as *“based on a white, suburban, middle class norm”*, as she noted more dangerous situations in her data, which were largely drawn for children from socially disadvantaged backgrounds. Mothers follow their own risk experiences. They base their decisions less on perceptions of risk, and more on their everyday risk experiences (Murray, 2009). Lopez, Cordovil and Neto (2014) en Kytta (2015) concluded in this respect that the best chances for independent mobility for children were to be found in smaller cities with moderate urban densities.

And parents, as Holloway and Pimlott-Wilson (2014) noted, see all the institutionalized enrichment activities, such as hobbies, clubs and sport certainly often not as alternatives for independent mobility, but as fun, healthy and socially beneficial for their children. As Holloway (2014) notes there is a certain bias in these activities as middle and higher class parents could more easily pay for their memberships.

### **2.1.1.3 Children's perceptions and conclusion**

How to frame all this material related to transport disadvantage for children to age 12? They seem to have lost a right to move on their own. But they have gained a spectrum of activities that are organized. And there is a difference between countries and between social strata. What is known from research is that children are mostly in favour of more active transport. And they consider strict boundaries superimposed over them not very helpful. They do not always follow their parental fears, but private spaces feel for them more safe than the urban public space (Harden, 2002), and they consider public transport less safe than car traffic (Baslington, 2009). Children often understand the parental situation that parents are not home but need to work (Harden et. al, 2013). They mostly dislike not being able to go straight home after school, but to have to spend time in *“intermediate places”* (Harden et.al, 2013) Murray identifies that children develop their own risk landscape and their own strategies to cope with danger (Murray 2009, Barker, 2003). Children possess a sophisticated understanding of their

everyday mobility and its interdependencies (Hansen, et.al., 2015). For example they have a broader range of safety issues than parents, also containing the risks of bullying, animals and the quality of the physical environment (Crawford et.al, 2017).

Finally ; children want in majority more active play and are “yearning for more unstructured time, just to do their own thing “(Houlihan,2005). But they also like the enrichment activities (as clubs and hobbies). In their own words, these activities keep them happily occupied, they do not see them as a threat to independent free play. Concluding this paragraph children under age 12 are not allowed to be as mobile as they could be. The transport disadvantage for children, related to their loss and lack of independent mobility is cultural and social constructed and has certainly something to do with parental fear, parental stress and parental isolation. Children are missing experiences but are, as it seems also gaining new experiences, in clubs and organized leisure. Whether with children there is a situation of overall transport disadvantage is a matter of appreciation, but my answer would be “yes”. Their vision of the environment can become “ *a motorized one, where meaningful places are isolated islands, excluded from each other*” (Lopez, Cordovil and Neto, 2014). Their spatial marginalisation should be challenged.

### **2.1.2 Adolescents (12 -18); Feeling stuck near to your home residence**

As Bjerkan and Nordtomme (2014) analysed, there is far less literature about the next period after childhood and the mobility problems in that period. Adolescents, going to secondary education, have not obtained their driving license yet. They can be seen as an intermediate group. Parents have to allow them a certain independence of travel, certainly after age 14 (and adolescent’s travel increases with increasing age) but their action radius is mostly smaller than wanted. In these adolescent years and in the course of their journeys personal preferences for travel are established, and adolescents develop relations of sociability among peers that are beyond control of parents, who until then supervised their mobility (Devaux and Oppenchain,2012). Walking is an essential mode for adolescents, as is public transport, and in more flat countries like Denmark or the Netherlands bicycles have an important role. Leisure mobility without parents starts to become important. And negotiating comes in when adolescents would like to be transported by car.

Parents have then to be willing and able to drive them. This form of chaperonage is at pains with the wish of most adolescents to be completely out of the “dependence zone” with their parents. In Consuming the Car (2002) Carrabine and Longhurst presented the function of the car for youngsters between 15 and 18 years old in two neighbourhoods in Manchester. They identified a significance orientation and a problem orientation. In this last orientation elements like road rage, joyriding and vulnerability to car advertisements come into view. This is the showing-off side, the thrilling, the excitement area. The significance orientation is about the role of the car in being able to join greater society with all its chances and possibilities. Youngsters negotiate with their parents and peers about organising car traffic. They are anxious about becoming outsiders among their friends, when they cannot join parties, activities or events. The majority want a car as fast as possible, to be able to participate and also because “*the car is a protective shield in the management of risks going to the city*” (Carrabine and Longhurst, 2002). In a few countries driving a car is earlier possible as driving age is below 18. This is in the OECD world the situation in the most car dominated countries , thus in many states of the USA (14 or 16), Canada (16, and in Alberta 14), Australia and New Zealand (both 16). In these countries adolescents have some extra rules (for example in North Dakota, , those under 16 who have a license may only drive a car that is their parents’ car and are not allowed to drive between sunset or 9:00 PM whichever is later and 5:00 AM unless the driver is driving directly to or from work, official school activity, or religious activity).

In most other countries a mix between travel modes of adolescents can be noted. To present some figures, for Norway (Bjerkan and Nordtomme, 2014) a rather great difference between adolescents trips for leisure from single or dual parent households could be noted. Cars were the mode for 28 % of adolescents of single parent households and for 39 % of dual parent households, and for public transport these figures were 22 % and 11 %. The other half consisted of walking (40%) and cycling (10%). For Sheffield, Easton and Ferrari (2015) noted half of school trips of 11 to 16 years old was done by walking, 20 % by normal bus, 12 % by school bus, and 12 % by car. In Stockholm most 13 or 14 years old walked to school, (60 %) or cycled (14 %), whereas 26 % went motorised, or by public transport or by parent car. And for Vienna for all trips made by adolescents walking and public transport were popular followed at greater distance by the parent's car and cycling (Fussl et.al, 2012).

There is interesting literature on adolescent mobility in France, in three different circumstances. In the ZUS, the Zones Urbaines Sensibles, the most difficult areas of the banlieus, many parents do not own cars. Boys travel from age 13 with public transport, sometimes in the form of gangs. But their leaving the ZUS is lower than the leaving of adolescents from other areas (51 % in the weekend, compared to 62 % of other boys). Girls even stay more in the ZUS (43 % to 68 % of the other girls, Oppenchaim, 2009). In the rural areas of France three stages in adolescent mobility can be followed; from 11 to 13 boys are playful, and start to learn the outside world, while girls still stay at home. From 13- 15 the territories visited by boys grow, and girls start to move outside. And from 15-17 gangs of boys and girls are formed (Devaux, 2014). But rural adolescents in France keep a strong local focus in their mobility based on walking and later the use of motorised two-wheelers (Devaux and Oppenchaim, 2012). And in the broader Ile de France region difference on mobility can be seen between richer and poorer adolescents. Poorer girls walk far less than richer girls, and on a far higher level the same holds for boys. Boys of richer households do far less move to activities without their parents (Devaux, Oppenchaim and Proulhac, 2016). On the same theme Massot and Zaffran concluded in 2007 that some 60 % of adolescents walked or went by public transport to activities, whereas 11 % was driven by parents, and 29 % had a mixed pattern.

All these data of Europe can be compared with some North American studies. Bachiri (2006) studied adolescent mobility in the peri- urban area of Quebec. As there is hardly any public transport, parents have to drive them to most locations *"le nomadisme est devenu une valeur culturelle. La non- mobilite est cause croissante de l'exclusion"* (nomadism has become a cultural value. Non-mobilization is the increasing cause of exclusion). And Weston and Handy (2005) presented data for the United States with a concentration on the suburbs where near to 30 % of all trips made by adolescents was parent – independent. When adolescents return from school, they feel stuck in their suburbs, "with a lack of destinations attractive to them, a situation which leads to boredom and potentially vandalism" (Weston and Handy, 2005).

What about transport disadvantage for adolescents? I already presented a number of situations where adolescents could have felt transport disadvantage, as it became clear that in many peri- urban areas in France, after school, many adolescents were more or less stuck to their residence, and the same situation could be noted in the rural areas of the Great Plains in Northern America. And in former Eastern Germany the adolescents could not easily move individually to friends for leisure, or sports. The basic situation seems to be that the delivery of transport to school is organised, and that all other transport (including the in importance increasing leisure trips) is seen as a responsibility of the younger persons themselves, in combination with their parents.

In the peri- urban situation parents often choose to live in rather isolated locations, and these parents seem to take for granted that their children get a smaller action space, at least a small action space without their help in their children's transport. Parents will often provide this help, but mostly at *their*



terms and times. However, in the more rural situations the problem does not seem to be a problem of choice; you just live in a sparsely inhabited environment, and have to create your network with the few other youngsters, that are just as you, not able to move easily to shops, sports, leisure. Edwards et.al (2014) clarified that accessibility acted as a barrier to physical activity in counties of the Great Plains. At an individual level, participants shared that many families, particularly high-need populations, needed to be transported to and from activities: *“Well, there certainly are, you know, a lot of opportunities if the kids are fortunate enough to have somebody to chaperone them around. You know, unfortunately a lot of children’s parents’ schedules don’t allow for that kind of thing.”* (Edwards et.al, 2014). Given that there is no public transport, some families found themselves without the means to get to activities. This barrier was seen as particularly problematic since physical cities were generally focused in structured sport programs that required attendance at centralized facilities. In more general terms also Roul et.al (2016) conclude that the issue of leisure may be a greater and more complex concern for youth living in rural areas, as youngsters, certainly to age 16 depend fully on parents willing and able to drive them. Lacking a car is associated by Australian adolescents with reduced transport independence (Delbosc, Vella-Brodick, 2015). The alternative is to stay home and engage in computer screen- based activities. Christian et.al (2017) noted that in Western Australia for girls this was a non- preferred alternative compared to visiting other locations with support of parents, whereas for boys this was not the case.

I conclude that adolescents will sometimes feel genuine transport disadvantage, as they have nowhere to go except for hoping on transport offered by parents. However we have, to my best knowledge, as yet no good statistical data on issues of adolescent transport. For example, it is completely unclear whether the driving license at 16 or even younger creates a greater or smaller relief of involuntary transport disadvantage. For me it is obvious that parents should be made responsible for most situations of transport disadvantage of adolescents, as they have chosen for the actual residence, and they can decide to move. When parents are not deciding to do so, it is up to the social capital of the adolescents, and up to their and their parents’ social network, to avoid situations of social exclusion via transport.

## **2.2 Elderly**

In the next decade in OECD countries the share in mobility of the elderly (above 65 years of age) will increase. They will make more kilometres, have more driving licenses and remain driving longer than ever. Especially in the first phase of elderly life (65-74 years of age) this mobility in almost all modes is important, and we will notice a rather mobile part of the population. The last part of elderly life (75 plus) contains more mobility problems. In this paragraph the focus will be on the patterns in mobility of the elderly (3.2.2.1), the mobility culture of the elderly (3.2.2.2), and two specific themes, the mobility of the huge group of single older women (3.2.2.3.1) and driving cessation, which is often seen to be a problem for old aged men (3.2.2.3.2). As always in this book I will search for transport disadvantages. For the elderly much literature on this theme does not find its source in transport research but in geriatric studies; mobility of the elderly is an issue that receives also attention from health and quality of life- perspectives.

### **2.2.1 Mobility patterns of the elderly**

There are now far more older people on the road than ever. Some 15 years ago, this growing mobility of the elderly seemed somewhat unexpected, as in the United States insufficient attention was given to this phenomenon in transport modelling, which led to false predictions (Rosenbloom and Stahl, 2002). Especially the car use of the elderly is growing. A large proportion of the cohorts born after the Second World War, who are now retiring, have driving licences. People of 65 and older now make more

trips and travel longer distances than comparable age groups some 20-30 years ago did (material from Scandinavian countries in ; Hjorthol, Levin and Siren, 2010). We already noticed that the take-off of the car in most OECD countries took place in the seventies, which means that the more recent elderly have grown up or grown accustomed to car use, and will remain driving. For a great majority of elderly car use and being mobile is considered completely normal (Berg. et. al, 2015).

There is a split to be noted between the two phases. In *the first phase* (65-74) we could speak of a rather car dependent mobility pattern. The car dominates the mobility landscape and is used often for still longer distances. In fact, the distances are more or less comparable with distances travelled by ages 45-65, when the work-related travel is taken out of the statistics. A few figures on the modal split in Sweden and the Netherlands (data for Denmark; Haustein, Nielsen and Siren, 2014, and for Canada: Turcotte, 2012) are available.

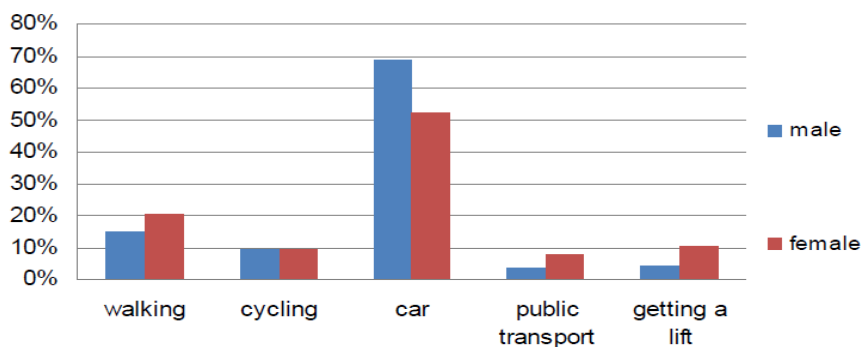
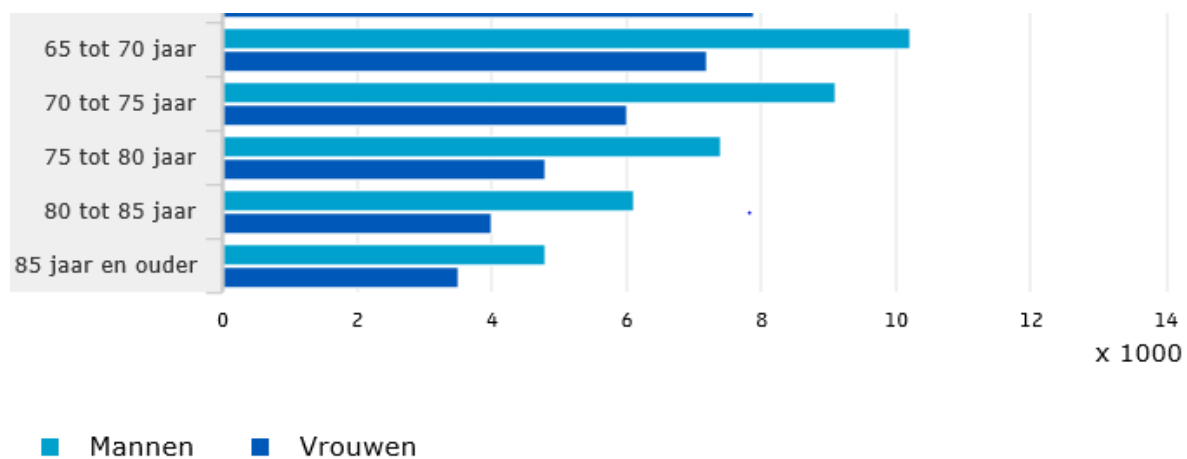


FIGURE 4: PREFERRED MODE OF TRANSPORT BY GENDER, SWEDEN

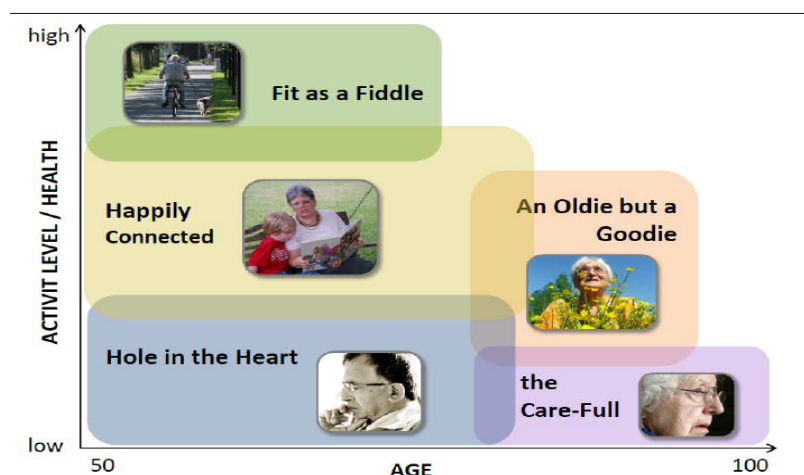
This figure (Consol, 2013) is for the elderly of all ages in Sweden and shows the preferred and used mode of travel. The car dominates, especially with the men, who walk less than women. Public transport is very low, but higher for women. This pattern can be noted in all OECD countries (see for example for Rotterdam; Bocker, Van Amen, Helbich, 2016, for the Netherlands in general ; Goldenbeld, 2015). Older people are only minor users of regular public transport. In *the second phase*, after 75 years of age, the number of kilometres travelled is only half of the number of kilometres travelled at 65. Although women did receive driving licenses in the last decades, in the older generations still a split can be seen in numbers of kilometres yearly driven as this figure (CSB, 2016) from the Netherlands shows.



In total men travel between 65-74 years in the Netherlands 21,5 kilometres on average daily, and this decreases to 11,5 kilometres after 75 years of age. Women travel 14,5 kilometres in the first elderly period, and this decreases to 9 kilometres. Note that the decrease in women's mobility is slower. In most OECD countries mobility problems start to grow above 75 years of age, meaning that in the first elderly phase mobility is now just as normal as in other stages of life, however with still less driving of women and with more walking and less public transport use than average. Figueroa, Sick Nielsen and Siren (2014) found that even in higher density situations elderly substitute car use by public transport less than non-elderly. Most trips are made for shopping, visiting friends and family and leisure (see for example Jorritsma and Olde Kater, 2008). Older people at risk of poverty travel significantly less (Giesel and Kohler, 2015). Trip complexity is higher where population density is lower. Older people in rural areas have more cars per capita, greater car use, and more complex trips than their urban counterparts. Bus use is related to the density of bus stops, and less to the frequency of bus service. In general, public transport, outside the urban areas is seen as rather burdensome. Busses are used by older people, but only when they do not have a disability (Schmocker et.al, 2008) And older people prefer trips with fewer purposes that can be made at ease (Su and Bell, 2009).

There are many mobility typologies of the elderly constructed. I will present a few in the next subparagraph, but the typology below clarifies the split in mobility in the two phases rather nicely (Mandl,Millonig and Friedl,2013, Hefter and Gotz, 2013).

As until now only the first part of the “babyboom”- generation has reached the older age, there is much



thinking and speculation on what the future will bring. Shergold, Hubers and Lyons (2015) identified four important questions in this respect, about individualised versus collective transport, engagement in active travel, types of journeys made, and journey substitution through technology. In later parts of the “babyboom”-generation (1951-1955) and the first parts of the next generation (1956-1962) the share of driving licences of

women did grow in most OECD countries rather fast. As Siren and Haustein (2013) clarified, expectations regarding ageing and the future differ between the baby boomers and the previous generations.

### 2.2.2 Mobility cultures of the elderly

Mobility means for most elderly far more than just traversing distances. Mobility means independence, and independence is what most elderly people cherish. They fear getting dependent and needing help. Independence is the ability to do things your own way, with your own speed. You do not have to adapt to wishes and time schedules of other people. It is, in a sense, the continuation of your self-identity. Men seem to cherish this independence even more than women, and for them it seems closely related to driving. And as Ahern and Hine (2012) concluded for Ireland, in rural areas, car access is often a precondition for independent life.

Thus, mobility affects mental health, social health, emotional health and the sense of self (Turner Goins et.al, 2015). Independence is “related to older adults’ ability to move fluidly through geographical

space; their ability to do things at different sites in geographical space and thereby be socially connected, participate in civil society, and enact desired identities” (Schwanen, Banister and Bowling, 2012). However, the relation between car access and independence is rather difficult. On the one hand, car access enables people with physical limitations to still live independently. On the other hand it are the more healthy elderly that still own a car (Scheiner, 2006). Losing one’s car – mobility is often equated with losing one’s independence, control as well as spatial and temporal autonomy and qualitative studies show the possibility of no longer being able to drive as traumatizing, especially in suburbs and rural areas (Lord, Despres and Ramadier, 2011). The car maintains the intricate link between keep doing what you always did and worsening physical conditions, or nicer stated: *‘Independence mediates the link between mobility and well-being’* (Turner Goins et.al, 2015). Losing the ability of car travel means the need to adapt your lifestyles. That could mean; growing accustomed to public transport, remaining home, or asking for lifts. And it means avoiding situations that are without your car too complicated to manage (Lord, Despres, Ramadier, 2011).

A caveat is here at its place. The perspective introduced here has a certain bias. It is a male perspective, and a perspective from suburbs and rural areas. It is less the perspective of women and of urban areas. Here it is also worthwhile to differentiate socially. There are many segmentations made when it comes to mobility styles of the elderly. In *Older People’s Mobility: Segments, Factors, Trends*, Haustein and Siren (2015) summarised the segmentation studies by introducing 4 “groups of segments”. The first were the *Affluent Mobile Drivers*, with high car use and high activity engagement, more males, and in good health. The second were the *Car Dependent Seniors*, mostly with high car use, but with low activity engagement, not in good health any longer. The third were the *Mobile multi-modal users*, a group segment not found in the United States, while this group uses all modes and has a high to medium activity engagement and is often still in good health. And the last group are *Transport Service Oriented Seniors*, with a bias on walking, public transport use and car use as a passenger, predominantly women, not in very good health. Affluent Mobile Drivers and Mobile multi modal users probably dominate in the first elderly phase, between 65-74 years of age, whereas Car Dependent Seniors and Transport Service Oriented Seniors probably dominate in the second elderly phase, above 75 years of age.

Mobility of elderly decreases with age and is often related to diminishing health. We need to recognise the thresholds in health change that impact in a non- marginal way to mobility situations (Alsnih and Hensher, 2003). Older people could identify causes of difficulty (pathologies, impairments, symptoms) of mobility related problems and accommodations (task modifications, use of medical or other aids) pretty clearly (Ramos-Pichardo et.al, 2014). The figure below from the Netherlands shows the relation between three relevant elements (Consol, 2013).

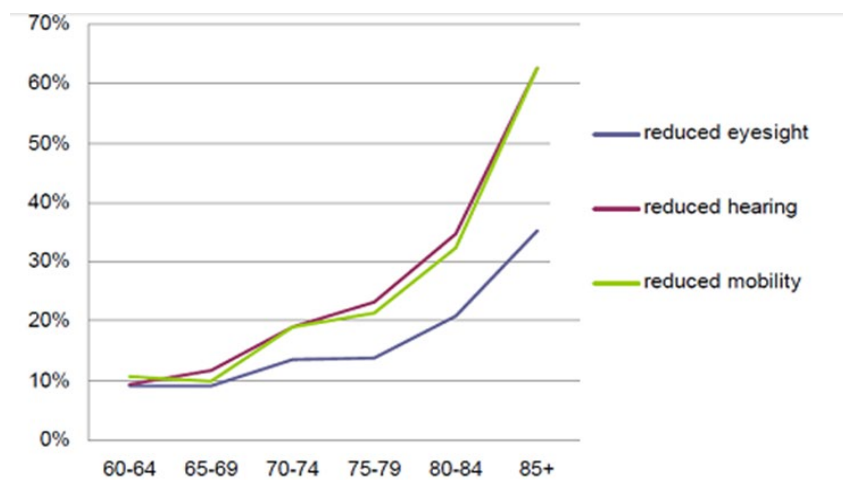


FIGURE 7: PHYSICAL IMPAIRMENT, NETHERLANDS

Especially in the second phase of elderly life transport disadvantages can be noted. In the literature this theme is often approached via the “unmet needs” of the elderly. A number of results of these unmet needs studies will be presented here.

At first, it seems useful to differentiate between serious needs and discretionary needs (Luiu, Tight and Barrow, 2017). Health related mobility and shopping for daily products mostly belongs in the first category, leisure and often also visiting friends and family in the second category. An illustration is that older people will give up driving for leisure activities, but not for shopping (Haustein and Siren, 2014). Secondly, the split between never drivers, still- drivers and ex- drivers is useful (Haustein and Siren, 2014). Still - drivers have the least unmet needs, never- drivers have unmet needs, but evaluated other transport modes the most positively (Haustein, Siren, 2014) ) and it seems that ex- drivers, accustomed to the flexibility car driving did give them until recently, have the most unmet needs (Nordbakke and Schwanen, 2015). This is partly the situation because ex- drivers are unfamiliar with the possibilities public transport could offer, and are rather often reluctant to study these (Nordbakke and Schwanen, 2015). Older people in couples have more unmet needs, than single older people. But single people felt more need for out- of – home activities. (Nordbakke and Schwanen, 2015). And older people in rural areas and outer suburbs have the greatest unmet needs (Luiu, Tight and Barrow, 2017) . People needing help with their mobility had more unmet needs.

People with unmet needs often evaluated the offered solutions as inadequate. At first, the characteristics of the built environment were not helpful for walking of older persons (quality of pavements, distances between blocks, see Clarke and Gallagher, 2013). Also, taxi drivers sometimes failed to bring them right in front of their residence, public transport was seen as problematic , especially for discretionary travel (Luiu, Tight and Barrow, 2017), or not even considered, and with asking for lifts there was an intricate situation. Rather often older people are careful about asking for rides, to avoid the formation of more structural and durable relationships , and also because they feel not able to do something in return (Schwanen, Bannister and Bowling, 2012). Another perspective comes from an Australian study (Department of Infrastructure, 2007). In *Maintaining Mobility* is mentioned that getting lifts will probably become more difficult “*Even where family members do live close by, they are often not as available as previous generations to assist with transport for various reasons. For example, a higher level of female participation in the workforce means less time for non-work activities. Many people are having children later in life and may have both young children and older relatives to look after...the availability of private lifts may therefore be on the decline.*”

All-in all, transport disadvantage grows in the second phase of elderly life, and reaches its heights in ex-driving households, living in rural areas or outer suburbs. But many older households, singles and couples, will face transport disadvantages. It is than a function of their social capital whether they will face social exclusion. Often also this social capital diminishes at old age, as friends of the same age die. Social exclusion seems the case in the elaborated description of the living and mobility conditions of an older Swedish couple, living in a suburb of Malmo, not having any friends and still owning a car, but trapped in their house (Stjenborg, Wretstrand and Tesfahuney, 2015).

## **2.2.3 Two specific problems ; single older women without driving licenses and driving cessation**

### **2.2.3.1 Single older women**

Among the elderly there is now a rather vulnerable group. Most older women now living in OECD countries do not own a driving license. For example, as Giesel (2014) mentions, in Germany, in 2008, almost 90 % of all men over 75 years of age had a driving license, but only just over 40 % of the women. This means that in most couples, when the man dies, and the age gap is among these cohorts often still rather huge, the woman has to find new ways of mobility at a later stage in life. In essence, the problem is on two groups, single women that live alone for quite a while, and recent widows, both without driving licenses. The first group has in her life grown accustomed to finding her way in mobility, and for this group the mobility pattern often only changes for health reasons. The recent widows have to build complete new mobility styles, after having depended on car use as a passenger. Engels and Liu (2011) on this problem; *“A sizeable number of older women did not learn to drive and remain dependent upon their car driving husbands. They are therefore most likely to experience social exclusion after their partner dies and access to car travel is either reduced or ended altogether”*.

The problem of transport disadvantage of older single women has always been studied in qualitative terms. Thanks to a combination of statistics I am able to present first statistical data on this theme<sup>1</sup>

---

<sup>1</sup> In the Netherlands we now 2016 have 700.000 pairs (of which 100.000 have 2 cars) between 65-74, and 265.000 single women and 145.000 single men. This means that in this cohort we have 965.000 women, and we know that 25 % of these women do not have a driving license. We have 845.000 men and we know that 7,5 % of these men does not have a driving license. Figures for 75 plus are ; women 60 % and men 20 % no driving license. We assume that single women and women in pairs have the same % of driving licenses, and assume the same with men. And we assume that in pairs with one driving license the man holds that driving license. That leads to these global figures, based on input from CBS (2016), RDW (2016) and CBS Statline (2016).

<u>Situation</u>	65-74	75 plus	
Pair, 2 <u>driving licenses</u>	525.000 pairs/ w.v.100.000 (2)	145.000 pairs/ Min 36.000 (2)	
Pair, one <u>driving license</u>	120.000 pairs	<b>147.000 pairs</b>	<u>Vulnerable, when driving partner dies</u>
Pair, no <u>driving licenses</u>	56.000 pairs	<b>73.000 pairs</b>	
Single <u>woman, driving license</u>	200.000 persons	155.000 persons	
Single <u>woman, no driving license</u>	<b>65.000 persons</b>	<b>240.000 persons</b>	<u>Actual, many widows</u>
Single <u>man, driving license</u>	130.000 persons	93.000 persons	
Single <u>man, no driving license</u>	<b>14.000 persons</b>	<b>22.000 persons</b>	
<u>Pairs in total</u>	700.000 pairs	366.000 pairs	
<u>Single persons, in total f/m</u>	265.000/145.000 persons	395.000/115.000 persons	

So, in the Netherlands, in 2015 we had a little bit above a million elderly pairs, and 900.000 single older persons. In the first elderly phase there are twice as much pairs as in the second phase, and there are more single older persons in the 75 plus phase, than in the first phase. As can be seen from these statistics the number of widows without driving license grows with growing age and is at least near to 200.000 persons after the age of 75. And in near to 150.000 pairs mostly the woman is in a vulnerable position, being car dependent but without a driving license. There are also near to 75.000 pairs without any driving license, and even 22.000 single men without driving license. Combining these groups we arrive at some 400.000 individuals above 75 years of age, that could be confronted with transport disadvantages, this is one third (33 %) of the persons in this age group. However, the smaller half of these individuals could have grown accustomed to a mobility pattern without a car.

From research in the Dutch region Gelre- IJssel (GGD, 2007) we also know that in 2007 near to 16 % of the elderly had mobility problems, and women had twice as much problems as men (20 % versus 10 %). Of the older aged, 75 plus, 23 % of elderly faced mobility problems. Translating this figure to the Netherlands as a whole and supposing that the shares remained the same between 2007 and 2015, this could mean that of the 1,2 million Dutch elderly of 75 years and older (366.000 pairs and 510.000 singles) some 285.000 persons faced mobility problems. This is within the range found via statistics.

We also know where the Dutch elderly are living. In a recent study of The Netherlands Institute for Social Research SCP (2017) rather good information on the location can be found. Younger elderly can more than average be found in the suburbs and the rural areas, and are underrepresented in cities. For the older elderly the suburbs are overrepresented, and cities are just a little below average. In 15 year' s time cities have relatively lost many elderly. This means that a greater part of the elderly are now living at locations where it is more difficult to be mobile without car use.

But can we really note social exclusion among single older women? There is not much hard empirical evidence from the literature on this specific theme. But Izumiyama, Ohmori and Harata (2007) noted that elderly had to make undesired adjustments in their activity schedules to participate in medical care activities at hospitals, and Engels and Liu (2011) show for Melbourne that without changes in bus routes non – driving seniors without much social capital will face social exclusion through a combination of difficult access to services and changing retail locations. From literature presented in chapter 1 we know that social capital can mitigate the transport disadvantages. Ziegler (2012) presented on this theme an interesting study, introducing two older ladies in Manchester that cherish

their social capital (with neighbours, in a club) but see this capital diminishing. Their continuity in belonging can no longer be taken for granted at a neighbourhood level, because of changing relational practices. In this respect, Brooks (2014) suggests that the main interventions that help older people to stay connected are access, social life and place- making. Social capital asks investments from governments in access and place- making and from citizens including the elderly themselves in social life and place making. With growing age the possibilities to invest here seem to diminish. And thus, the combination in the situation of single older women, as being without driving licenses, living in suburbs and rural areas and diminishing capacities to maintain social capital and social networks could indeed lead to social exclusion.

### **2.2.3.2 Driving cessation**

After the age of 70 a vast majority of drivers renew their driving licenses. Only a minority intends not to renew, and this majority consisted in Denmark (and probably in most OECD countries) of women, of people living in urban areas and of single households (Siren and Haustein, 2016). Driving cessation constitutes a major life event for older people, with long- term, or even lasting impacts on their wellbeing (Ziegler and Schwanen, 2011). Health problems are the most common reason for driving cessation. Important are especially visual impairments, neurological disorders and recent hospitalizations (AAA Foundation for Traffic Safety, 2015). Also important reasons for driving cessation were accidents made or being confronted with, in periods just before the cessation decision. Less important seemed the influence of the children asking parents to stop driving. As evidence from Rosenbloom (2010) shows, often children have mixed emotions in this respect, and feel rather unsure and concerned how their parent(s) would do without a car on the one hand, and fearing to need to escort them permanently on the other hand.

Escorting seems important because and the elderly and their children see public transport only as a more or less realistic alternative in urban areas, and even then use of public transport is connected with emotions of anxiety and loss. Mercado, Paez and Newbold (2010) describe that in spite of its potential *“the elderly’s use of public transport is negatively affected by physical limitations, changing mobility lifestyle and the declining quality of public transit systems”*.

Especially men try to keep driving as long as possible. Cessation is often felt as a last step. There is a causation between health status and driving cessation. Most literature is about the health reasons for cessation, but here I would like to focus on the other relation; what happens with health after cessation (AAA Foundation for Traffic Safety, 2015)? Edwards et.al (2009) found a rapid decline in general health following driving cessation. And evidence on the association of driving cessation with depression is robust and compelling as AAA Foundation for Traffic Safety (2015) analysed in their study evaluating 20 studies on driving cessation (see also Ragland, Satariano and MacLeod, 2005). Part of this greater chances for depression can be explained by the perceived loss of control, and hence the loss of independence felt by older drivers. The way and moment of cessation seems also important. Older people that stopped voluntary were better prepared to new mobility lifestyles than people that were forced to stop. There are limited quantitative data on the differences between voluntary and involuntary driving cessation (Choi, Mezuk and Rebok, 2012), but only a small minority of the men stopped due to the advice of their doctors or their family, or just because of self- reflection.

Liddle et.al (2012) noticed significant differences between ex- drivers and current drivers. Ex – drivers had lower life satisfaction, were less likely to participate in volunteering activities, and family gatherings. They spend less time on social leisure and more time in solitary leisure. Comparing to people that had never driven they were less socially active. Mezuk and Rebok (2008) reported that over a 13 year period driving cessation was associated with a 51 % reduction in the size of the network of relatives and friends, and this loss of social capital was not mediated by the availability or access to



alternative transport. In a study from New Zealand, *Older People and Transport : Coping without a Car* (Davey, 2007), stopping driving was, especially for older men, analysed as particularly emotional. Older men often lose the capacity to arrange their mobility in a satisfactory way. Requesting and obtaining a lift becomes the most important form of mobility for the elderly, more important than the taxi and in New Zealand certainly more important than public transport. But, as we noted, older people are selective about asking for lifts, even to family. They do not like to ask lifts for leisure or social activities and as a result these activities will diminish, which could lead to loss of life-long friendships. Lifts are requested for shopping and especially for health reasons such as seeing a doctor or travelling to hospitals. In New Zealand many older people do not leave their house anymore. These problems are not broadly discussed as older people see this as a fact of modern life and they adjust accordingly.

All-in all, involuntary driving cessation often leads to a real problem of wellbeing, and can lead, via loss of independence, in combination with the decision not to ask for lifts all the time, to transport disadvantages and even to social exclusion. In the last phase many elderly will be confronted with greater transport disadvantages, that cannot be compensated by their (diminishing) social capital. Most problems will be faced by widows without driving licenses that were accustomed to their life as car passengers, and to ex-drivers who stopped driving involuntary, especially when these elderly live in suburban or rural areas. The last phase, 75 plus, of many older life's contains many mobility problems. More attention on transport disadvantages and social exclusion of the older elderly is needed.

## 2.3 Disabled

### 2.3.1 Disabled people and transport disadvantage

Mobility is difficult for many disabled. But for how many disabled, and which impairments are the most problematic in leading mobile lives? In answering this question the magnitude of transport disadvantage of disabled people could be defined. However, the question is rather difficult to answer. From the literature is clear that disability initiates many definition questions and many frames. At first, each OECD country presents a huge percentage of disabled persons, mostly somewhere between 15 and 20 % of the population. This is a question of definition, as in many countries also problems such as dyslexia or colour blindness fit in the disability spectrum. These broad definitions are not particularly helpful for the aim of this book, where the focus is on individuals and households facing involuntary transport disadvantages. Colour blind people and persons with dyslexia have in most cases no real problems with their mobilities.

Behind these definition problems stands an important debate about how to approach disability in society. Two quite different models of thinking lead to quite different frames (Taub, McLorg and Bartnick, 2009, Oliver and Barnes, 2010). The first and oldest model is the medical model. This model focusses on the biological and medical nature of the impairment. The functional limitations of body and mind are emphasized. The level of the impairment is measured and medical treatment and cures are promoted, to reach a state that is as near to what could be considered "normal". This model leads to a smaller number of really disabled persons, who need a special status. The other model, which is now central in most OECD countries, is called the social model. This model recognizes the dynamic interaction between impairment and disability. Impairment is only a problem because our societies are not fit to include impairments. Disability is seen as a problem, not as an integrated element in society. Political thinking is an important basis of this model as *"through unequal social interactions with powerful non-impaired others, powerless impaired individuals internalize negative self-conceptions and a limited view of life potential"* (Taub, McLorg, Bartnick, 2009).

In this social model the reality of impairment is not denied but this is not seen as the cause of the disadvantaged position of disabled people. That position is so disadvantaged because society, through its arrangements, restricts opportunities for disabled people to participate in mainstream economic, social, leisure activities (Oliver and Barnes, 2010). To give an example, when busses offer no entrance for wheelchair users these disabled individuals are unable to reach important locations for them at low costs. The social model originates from another way of looking at disabled people. One of the architects of the model, Kitchin (1998) sees disability as spatially and socially constructed. Disabled people were seen as unproductive and had to be excluded from society and were, in Kitchen's words, even oppressed. Normal environments were not places for them, to cite : *"the ideological messages to disabled people that are inscribed in space through the use of segregationist planning and inaccessible environments are clear- "you are out of place", or "you are different" (Kitchin, 1998).*

The social model is a complete correction of this way of framing disability. A society is only just and responsible when also people with impairments could lead normal lives. It is clear that the social model offers an emancipation agenda. Disabled should be helped and supported , when they need help, environments should be built and rebuild to include disabled people, transportation should not create entrance or access problems, to present a few points for this agenda . To realize this agenda rights are defined, and investment programmes created. And therefore, it is useful to present impairments as rather normal in society. This explains the huge percentages of disabled persons found in the statistics.



However, for the purpose of this book, this approach of broadening, although fully understandable, is not very helpful. It can be noted that in real life decision makers are certainly not completely endorsing the emancipation agenda. There are still many boundaries, many entrance and accessibility problems for disabled persons, especially for

disabled persons with severe impairments. Many buildings, much public transport, many services are still not at the level of help and support that makes it possible to lead normal lives for the disabled. I will present cases in 3.2.3.3, about expectations and experiences. And in 3.2.3.2 the focus will be on the broad spectrum of mobility and disability.

Here I will try to answer the factual question how many disabled persons probably face involuntary mobility problems, because of the state of art of the supply of their mobility. This answer forms the basis for an estimation of the magnitude of involuntary transport disadvantage. Canada offers more detailed statistics on the number of people with disabilities, and the same holds true for seven other countries where figures could be found on more detail. These countries often work with low, medium or severe impairments on the one hand, and with visual, motoric, auditive and mental impairments on the other side. From the perspective of mobility as it is now functioning (car driving as the basis, public transport in cities important) I prepared a small scheme, containing greater and smaller mobility problems.

	low	medium	severe
visual	x	x	x
motoric		(x)	x

auditive			(x)
mental (IQ lower than 70)	x	x	x

Lower visual impairment starts from 30 % sight, and lowers down. This means that in essence all visual impaired will not be able to drive. They can, however, often use public transport. On motoric, only the severely disabled will have great difficulty in driving. The mentally impaired are not in the circumstance to travel alone. As we know, people with auditive impairments are driving, with possibly some problems for the fully deaf persons. Finally, people with temporarily mental disorders, like depression, can drive.

One caveat on this scheme should be mentioned. The scheme is about which disabled persons will probably face problems in actuality, looking at the state of the art of mobility infrastructures now, and leaving out help offered. It is a factual scheme, and should not be used normative, as the accessibility of mobility for disabled persons is in essence a function of investments done in mobility.

One other element is important. Many disabled are elderly (mostly some 40 %) As I do not wish to overlap in data with paragraph 3.2, I separated the elderly (65 years of age and higher) in this exercise. With this in mind I will now present figures from the different countries. For Canada (Canadian Human Rights Commission, 2012) we have figures from 2011. Related to my scheme are then 400.000 visual disabled, 520.000 mentally disabled, and 300.000 motoric disabled, plus 60.000 auditive disabled. Together 1,3 million out of a population of 35 million, is 3,8 % of the population (including the elderly leads this to 6,1 %). For the Netherlands we note 140.000 visual disabled (only the blind) , 120.000 mentally disabled and 200.000 motoric disabled, arriving at 460.000 ( a figure not completely comparable with Canada, due to definition questions, SCP, 2012). Van Hal and Bakker (2007) arrived at around 1 million more severely disabled persons in the Netherlands (including the elderly), this is 5,8 % of the Dutch population.

To present, more as “rule of thumb” figures from 8 countries , mostly including the elderly. Please note that it is the severely disabled and not the severely disabled probably facing mobility problems (most statistics still include also the auditive disabled).

Country	Estimation severely disabled	Number of inhabitants of country	%
Australia	1,3 mln.	23,8 mln	5,5
Austria	0,4 mln	8,7 mln	5,2
Canada	1,4 mln	35,0 mln	4,0
Germany	5,0 mln (more than 50 %)	83,0 mln	6,0
Netherlands	1,0 mln	17,2 mln	5,8
Sweden	0,5 mln	10,0 mln	5,0
Switzerland	0,5 mln	8,7 mln	6,1
United Kingdom	4,1 mln	65,2 mln	6,3
			4,0-6,0 average 5,4

It seems , from these figures (Canada without the elderly) that in most OECD countries around 5-6 % of the total population can be described as severely disabled , also from the perspective of being able to cope with mobility infrastructures and services as they are offered today. Around 3,5 % of the total

population is severely disabled and younger than 65 years of age. This is a huge number of persons and the greatest part of them is probably facing involuntary transport disadvantage.

Accepting that most data are somewhat older there is still a lot of work to do before the future described in the social model will be reality. Governments did present rules, and subsidies, and rights have been formulated. To give an example, the International Transport Forum (2011) presented a report on Rights and Obligations. They note that *“the way transport services are planned and delivered, the design and maintenance of the pedestrian environment and land use planning can all contribute significantly to the problems that disabled and older people face, and can limit their ability to regain or retain independent living daily”*

It is clear that creating an *inclusive mobility environment for disabled* comes at a cost. To arrive at far smaller transport disadvantages for the disabled, governments and citizens should invest and support far more than is actually the situation. It seems that we are here in a “halfway- situation”. Yes, the notions of inclusiveness and independence in mobility for disabled are accepted, there are rights and policies formulated, but no, the actual situation in practice leads to still high transport disadvantages, not fully mitigated by social networks, and thus to rather huge social exclusion via transport.

To broaden the perspective, material culture and built environments are, as Freund (2001) writes in *Bodies, Disability and Spaces*, made for a limited variety of bodies. As a geographer comments (in Freund, 2001): *“modern landscapes seem to be designed for forty-year- old healthy males driving cars”*. Freund writes about disabling cities, with physical barriers to movement and with inaccessible buildings. This leads to exclusion of people with disabilities, as they feel insecure and marginalised, and having to make many efforts to find their way. They also can be at greater risk of injury in public and public transport space. Including the disabled could lead the way to Inclusive Transport, the title of this book. Diminishing transport disadvantage for the disabled is really a battle still to be won!

### **2.3.2 Mobility and disability**

As Paez and Farber (2012), Taylor and Jozefwicz (2012) and Wasfi, Steinmetz-Wood and Levinson (2016) noted, disabilities research in relation to transport and mobility has tended to remain in a state of underdevelopment. As yet, there are only very few academic articles to be found, stemming from transport research. Most articles on mobility of disabled persons are found in journals concentrating on disability. We already noticed the same situation of only minor contributions of transport researchers with the elderly and the adolescents. Transport researchers seem to consider only the mobility of children an interesting subject. It would be useful to elaborate longer on this circumstance, and on understanding why elderly, disabled and adolescents tend to be marginalised in transport research.

In this paragraph I will concentrate on the mobility patterns of the disabled. In 2009 the Department of Transport of the United Kingdom published an Evidence based review on mobility, concentrating on choices and barriers for different social groups. In 2002 disabled adults travelled a third less often than the non- disabled. Escorted by car was the most common mode of transport, followed by bus travel, and travel by taxi. 60 % of the disabled adults had no car in their household. The cost of mobility, especially for taxis, was seen as rather high by the disabled. Physical accessibility was a key issue for them. Walking the pavement, boarding busses, being unable to walk to and from bus stops, no seats at the bus stops, many complaints could have been heard. Many disabled persons feared for their personal security, and most noted that because of all the barriers they had to plan their journeys long in advance. In 2002 25 % of the disabled experienced difficulty reaching health care, and 18 to 23 % had difficulties in getting to friends, family or leisure. (Department for Transport, 2009). A decade later, in 2012 in London, 58 % of the disabled people had no car in their households, and they made some

25 % less trips than the non- disabled persons (Transport for London,2012). And in 2016 disabled persons in the United Kingdom as a whole travelled one third less (kilometres and trips) than average (Papworth Trust, 2017).

These data can be compared with data from France from 2009 (Dejoux and Armoogum, 2010). Here 19 % of the disabled mentioned being immobile in the last week, compared to only 1,5 % in the non-disabled population. Disabled persons made 60 % of the number of trips of non- disabled (and this was more or less the same in all age groups). From another research (Cadestin et. al, 2010) 8% of all disabled had problems travelling in 1993, and this has risen to 9 % in 2007.

In the U.S.A. wheelchair users were asked to report which destinations they could not reach without help. Especially workplaces, religious buildings and homes of friends scored badly (Meyers, et.al., 2002). What would help in reaching all destinations were personal assistance, health promotion, programs that improve civility and redesigning building and public spaces.

Myers and Ravesloot (2016) concluded that disabled people, researchers and city planners agreed that participation of the disabled in society is largely dependent on transportation. 57 % of persons with a medium impairment and 37 % of the persons with a severe impairment reported using independent transportation (compared to in general 82 %). Casas (2007) concluded that significant differences existed between deaf and blind people and non- disabled when comparing dining, entertainment and shopping opportunities, reflecting the inability of these disabled to travel longer distances . She also saw differences between the disabled themselves, as deaf and blind were far less constrained in their mobility then the mentally disabled.

It is difficult to clarify the source of the lower participation in society of disabled persons. Is this primarily a function of their impairment or is it just a function of the transport possibilities offered? Both seem to be important. Persons with disabilities could achieve greater freedom when they get full access to the variety of transport modes, when all relevant buildings can be accessed easily, and when pavements are well maintained. This asks for investments in vehicles, buildings and the urban infrastructure. And moreover, this asks for *Inclusive (or Universal) Design* of environments and communities. Inclusive Design is the design of an environment so that it can be accessed and used by as many people as possible, regardless of age, gender and disability. The lack of independent mobility is a function of under-investments in these necessities.

The Mineta Transportation Institute presented in 2016 *Improving Pathways to Transit for Persons with Disabilities*. Best results were made when the focus was on thinking about the complete journeys, from houses to bus stops, to boarding, to leaving, to house, and not focussing on just what happens when a disabled person boards. Improvements should also contribute to raising the level of independent travel for the disabled persons. In London 40 % of all train stations were step-free in 2013 (2008; 30 %), and 24 % of all metro stations (Papworth Trust, 2017)



For disabled persons that cannot travel without help in some countries and regions specific travel arrangements have been constructed. In the Netherlands there is the so called *doelgroepenvervoer*, which stands for specific travel for people that have an access to travel with small mini- busses (6 to 10 passengers) that function as demand- responsive transport. Some 360.000 people with disabilities used this form of transport in 2015, of which a third rather active. Most distances travelled were between 7 and 15 kilometres (Zijlstra and Bakker, 2016). 42 % of the users is 65 years of age or older. Solvoll and Hanssen (2017) noted that the satisfaction for specialised transport services for the disabled was by men related to the service area, whereas for women the comfort and the number of trips that could be made were more important.

### 2.3.3 Expectations and experiences

The patterns of mobility of disabled persons are now somewhat clearer. But this tells very little about their expectations and experiences. For example Wasfi, Steinmetz-Wood and Levinson (2016) noted that people with developmental disabilities (some 1,5 % of the U.S. population) felt dependent on others for their transportation needs, and 46 % felt unable to make trips they needed to make. Blais and El Geneidy (2014) found out that among the disabled the persons that could use transit (public transport) had a higher sense of well- being than non- transit users. The possibility of the use of transit seems linked to living independently, to socialising and to well- being. Stated the other way around, lack of independent transportation leads to lower feelings of well- being. A built environment that facilitates walking leads again to higher feelings of well - being. Taylor and Jozefowicz (2013) studied the daily mobility of disabled people for healthcare facilities in Bydgoszcz (Poland). Disabled persons showed greater mobility for healthcare than did their non- disabled counterparts, also because they preferred to travel further and longer to get the best and most comprehensive medical services. But travel takes time, as many of these better healthcare buildings are situated outside the main public transport network.

Wheelchair users felt often discomforted in their shopping in Swansea (Wales) (Bromley, Matthews and Thomas, 2007). Most of them reached the city centre by car or taxi. The vast majority considered busses “difficult”; *“on the whole there are not any disabled facilities on public transport. Unfortunately, it is al done for the majority of the people and not for the minority”*. The shopping environment in Swansea is not very friendly either with bad pavements , and some wheelchair users tended to resign and accepted their reality, in *“I think some people just have to accept that they cannot go into places where you cannot go...you cannot expect to go everywhere”*. Universally Accessible Design (Aarhaug and Elvebakk, 2015) is seen as the longer -term solution for overcoming barriers to integration and use of urban environments.

Bromley, Matthews and Thomas (2007) argue that although all planning and design has to ensure access for all groups, in reality the emphasis seems to be on satisfactory access, on the “adequate” rather than on the “universal”, and a decade later this still seems the case. On this issue an interesting conflict seems at stake in Adelaide, where the builders worked from the universal design frame, whereas the planners considered this too expensive and stated that only some elements needed to be accessible (Rains and Butland, 2013).

The quality of footpaths often leads to barriers for disabled persons. And on buildings, one person remarked: *“I often have to go on a scenic route”*, meaning that he has to travel longer routes and have to take back entrances. Rains and Butland (2013) had to conclude that discrimination of the disabled community had become naturalized. Aarhaug and Elvebakk (2015), working from Norway, are somewhat more positive, identify changes, but consider success not yet complete. Important for disabled people is to reach a point where there is predictability for them in the urban system, meaning that they can safely assume their journey will be smooth.

Wilkinson- Meyers et.al (2014) described the experiences the disabled had in their everyday mobilities. They felt, although well meant, the provision of support often as inadequate and inappropriate, wishing that support would be offered in dialogue with them, and balancing between the desired level of independence and the appropriate support. And support needs to be timely and readily available. On transport, their favourite mode, next to driving themselves, was accessible transport on demand. The normal transport services were often not seen as meeting the needs of disabled passengers. For example, taxi drivers often failed to bring disabled persons right to their front door. Interesting is the time issue, as waiting seems to be normal practice for disabled persons. Everything related to mobility takes much time, for instance: *“It’s harder to be spontaneous. Like if someone rings up and says “come around for a drink”, you can go to the shop and get a bottle. But when I don’t have a bottle in my house I would need a taxi to stop and help”*. And an important comment was on having lowered expectations, meaning that disabled persons expect less quality of their mobility and transport than what is seen as normal by non- disabled. Here a relation can be seen with the smaller travel horizons of Morris (2006). A desire for more activities such as tourism (Small and Darcy, 2010) or leisure (Paez and Farber, 2012) may be suppressed due to these lowered expectations. Disabled persons then consider these wishes too inappropriate for them based on their experiences in normal mobility life. And indeed, Small and Darcy (2010) presented many examples where disabled persons are excluded from participating fully on holidays due to a lack of accessible infrastructure.

All-in all, in individualised societies where almost every service to others has its price, and where we live together via the principles of “community light” (Hortulanus and Machielse, 2001, Lupi, 2005) the rather normal wishes of disabled persons seem to be outside what non- disabled persons see as normal. Hence, many disabled persons complain or resign, which leads to reactions from care professionals, who will support the disabled, but who are at the same time too powerless to realise budgets, attitudes and services from the main decisionmakers in society. This situation leads to minor changes for the better and at the same time to numerous experiences of transport disadvantage and social exclusion for the disabled.

### **3 Two transversal themes**

In this paragraph I will discuss two themes that are not immediately related to specific groups in society, in their relation to transport disadvantage. At first, in 3.1 the spotlight is on poverty as a source for transport disadvantage and social exclusion. And secondly, in 3.2 I will focus on gender issues related to transport disadvantage and social exclusion

#### **3.1 Poverty**

Poverty is often not far away when transport disadvantages are at stake. Poorer households and individuals travel far less than average, and can have affordability problems when it comes to car purchase. This could lead to car related economic stress. Some strata in society are poorer than most citizens, and this holds for ethnic minorities and single parent households. As in general in this book, the focus is on poverty and mobility in OECD countries, but a subparagraph on the relation between poverty and mobility in Latin America is included. In 3.1.1 I will introduce the themes and present statistical evidence related to mobility and poverty. In 3.1.2 I will shift to affordability questions and to car related stress. 3.3.1.3 presents material on the mobilities of ethnic minorities and single parent households. And in 3.3.1.4 the focus will be on mobility and poverty in Latin America.

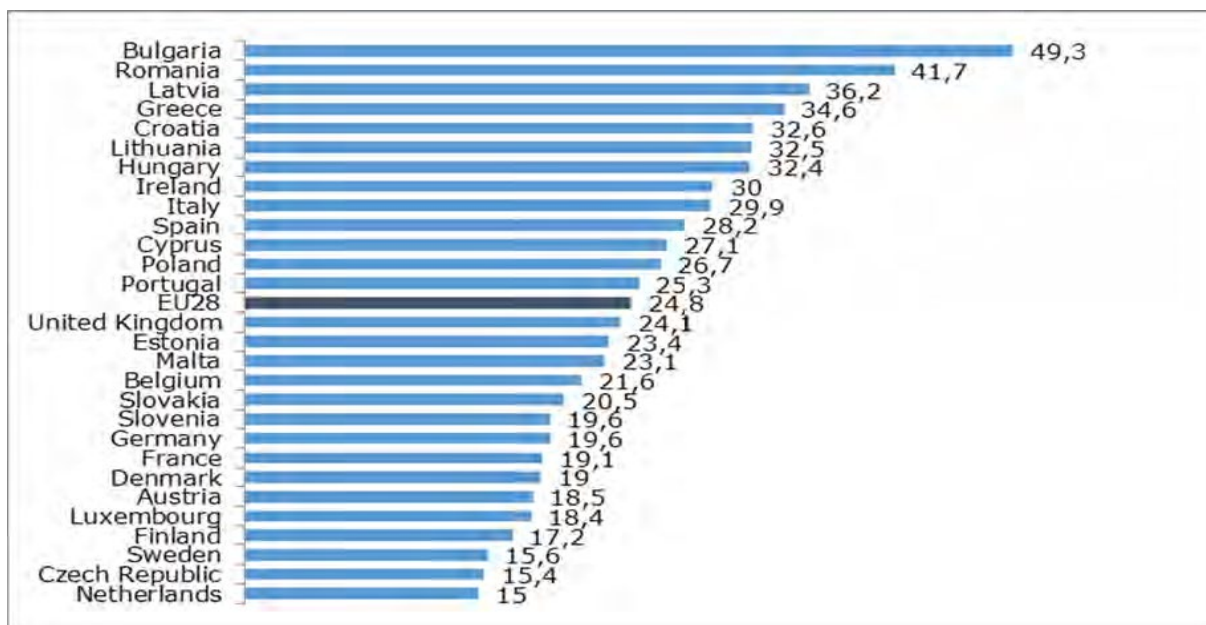
##### **.3.1.2 Mobility and poverty, the general picture.**

As Pooley (2016) clarifies in the past most people travelled in much the same way, with only the elite being an exception. With the increase in transport options, also transport related social exclusion did

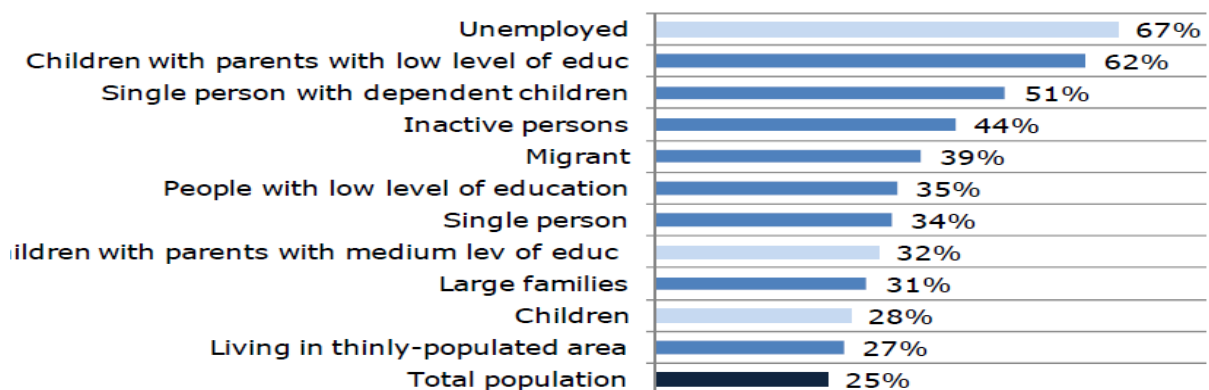


become more common. There are more groups that cannot participate fully to what is in modern days seen as the standard for mobility. Those who are unable to access fast and convenient travel can become socially excluded, when they are also not able to mitigate their transport disadvantage through social capital. Many poorer households and individuals will be in such a situation, but certainly not all. For example, in the UK poorer households do not on average experience lower levels of access to public transport. But they report higher difficulties in reaching key services. This is related to lower levels of car ownership.

The EU did present an official indicator for identifying “households at risk of poverty or social exclusion”, the Arope- indicator (European Parliament, 2015). In the UK 28 % of these Arope households reported they could not afford a car, and 39 % of low- income individuals did not have access to a household car (Lucas, 2012). Hine (2007) explains how transport disadvantage is experienced by low income households and individuals. These individuals and households make fewer journeys overall, walk and use public transport more than all other income groups, and see poor transport as a barrier to employment.



There is a great variety in poverty levels in the European Union. Bulgaria had in 2012 49,3 % households at risk of poverty or social exclusion, and the Netherlands was on the other end of the spectrum with 15 %. With sort of households were vulnerable? Again, the report of the European Parliament with Arope- levels;



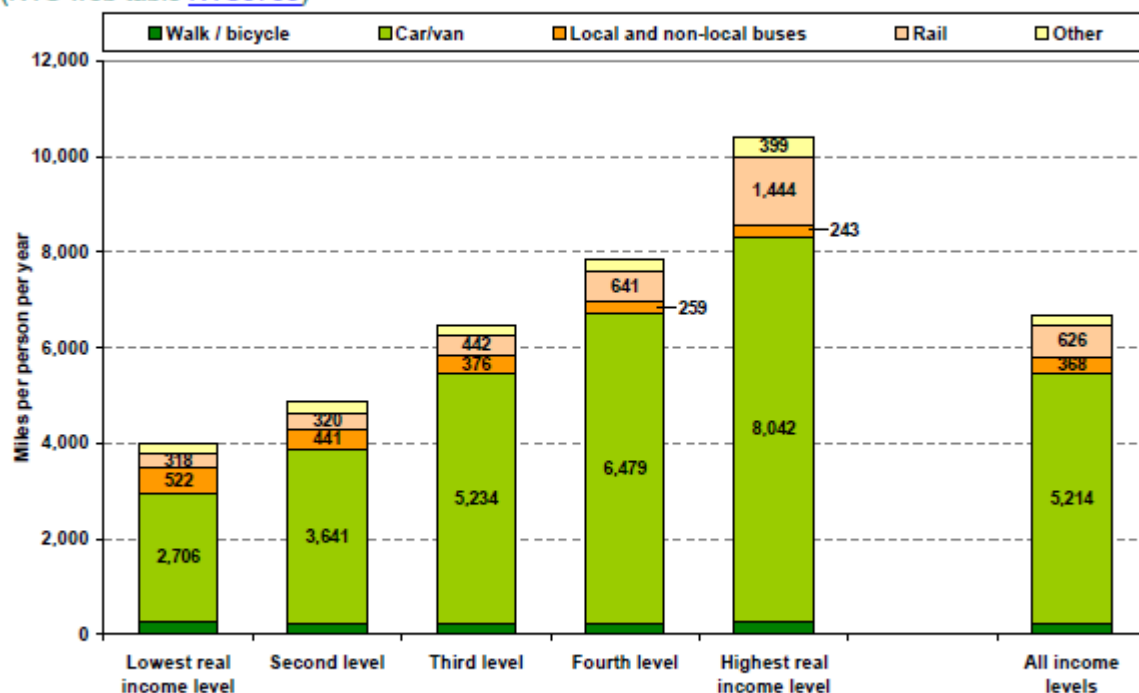


Looking at the top of this list I already focussed on the inactive persons, but not yet on the unemployed, the households with single parents, and the migrants/ethnic minorities. We already noticed that households at risk of poverty travel less by car, but what are further characteristics of their mobility picture? Here the use of income quintiles could help. Households in the lowest income quintile seem to travel in all OECD countries far less kilometres, and own far less cars. A number of countries present characteristics for mobility in relation to the quintiles. For example here are some figures from the Netherlands (CBS, Statline, 2016). In 2015 the lowest, poorest, quintile of households made on average 2,44 trips, and the highest quintile 2,76 trips. The differences increased dramatically looking at the number of kilometres made on average per day, with 21,71 km for the lowest and 40,64 km for the highest quintile. Nearly twice as much kilometres travelled by the highest quintile compared to the lowest, but less differences in travel time; the 21.71 km of the lowest quintile takes 55 minutes, while the 40,64 km of the highest quintile did take 70 minutes. This difference can be explained by the use of faster transport modes by the highest quintile. Looking at the difference of the lowest quintile to the average (the third quintile) we can note that 10 % less trips are made, and 30 % less kilometres (21,71 to 30 kilometres) while only six minutes less travel time is spent (again 10 %). The mobility of the poorest quintile of households is slow mobility!

This picture is more or less the same in other countries where statistics of this kind are available. For instance Switzerland (Bundesamt für Statistik, 2015), with the lowest income level travelling 22,5 kilometres on average per day, and the highest 51,6 kilometres.

Or the United Kingdom (NTS, 2012);

**Average distance travelled by mode and household income: Great Britain, 2012**  
(NTS web table [NTS0705](#))

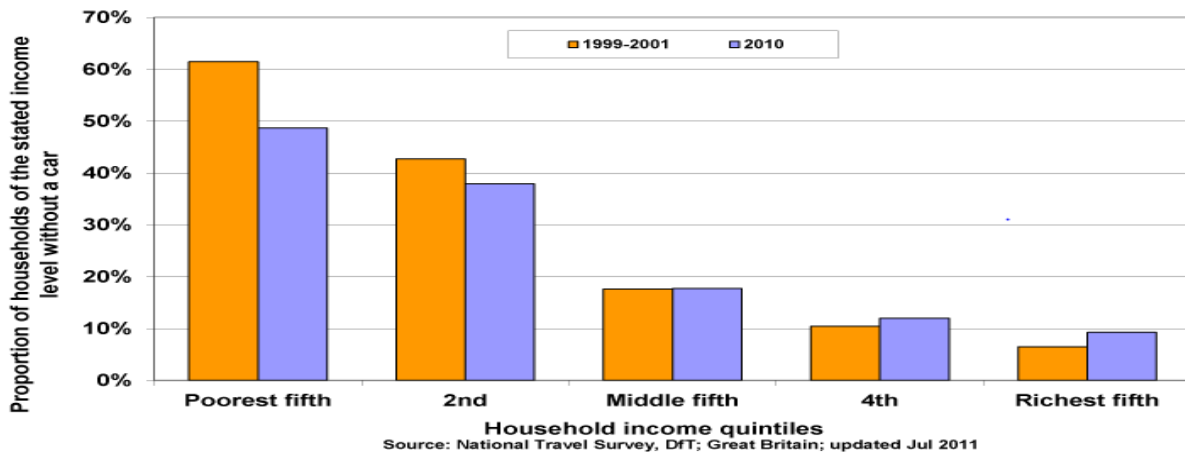


Statistical Release - National Travel Survey 2012 - Page 18 of 25

The figures for France are presented in Jouffe (2014); the lowest incomes travel 16 kilometres, make 2,62 trips and this costs them on average 47 minutes, whereas the highest incomes travel 30 kilometres, make 3,33 trips and 67 minutes travelling. Jouffe concludes : "*La pauvreté se traduit notamment par*

*l'usage des modes de transport les plus lents* ("poverty can be translated in the use of the slower transport modes"). In all three countries the difference from lowest to highest quintile is greater than in the Netherlands, as is the difference between the lowest quintile and average. Also note in the UK the differences in rail kilometres, rail transport at longer distances being a transport mode for the higher incomes in this country.

Looking at non- car ownership we see the following picture (from the UK)



In the Netherlands (CBS Statline, 2016) in 2015 of the lowest quintile 62 % had no car, and for the highest quintile only 7,2 %. All in all, in the lowest quintile there are 50 to 60 % of households without a car and the second quintile still 40 %. On average in OECD countries the number of households without cars is between 20 and 25 %. Delbosc and Currie (2012) studied in Australia households that have fewer cars than drivers and the degree of choice they experienced. There are involuntary and voluntary households. The voluntary ones, who could afford more cars, were younger and located in the urban area, whereas the involuntary one were older (with nearly 40 % retired) and living further away from the city centre. Involuntary households belonged more often to the lowest income groups than voluntary households, relied more on others for their transport and had a lower life satisfaction. Mattioli (2014) made a differentiation in carless households and concluded that when the degree of urbanity is lower these carless households are far more concentrated among "marginal" social groups (which in his definition are singles, unemployed, lowest income, disabled, old!). In rural areas nearly all households, except the more marginal ones have cars, whereas in urban areas there are many non-car households outside these more marginal social groups.

On education in the Netherlands the differentiation in mobility is greater than on income, as the lower educated make 2,18 trips and the highest educated 2,92 trips. The highest educated make more than twice the kilometres of the lower educated (44,86 compared to 20,98). Lower educated lead more sedentary lives, and have smaller travel horizons (Morris, 2006). They remain in a smaller action radius around their homes. This has immediate consequences. In the Netherlands the Nicis, institute for urban research, did a study on the mobility of low skilled workers (Cremers, Backera, Faun, 2007). The demand for their labour is in the view of the lower skilled workers so far away that "matches" do not happen. Much new employment is situated near or along the Dutch highways (see 6.2.4), often difficult to reach without cars, and at a distance from the urban residential neighbourhoods.

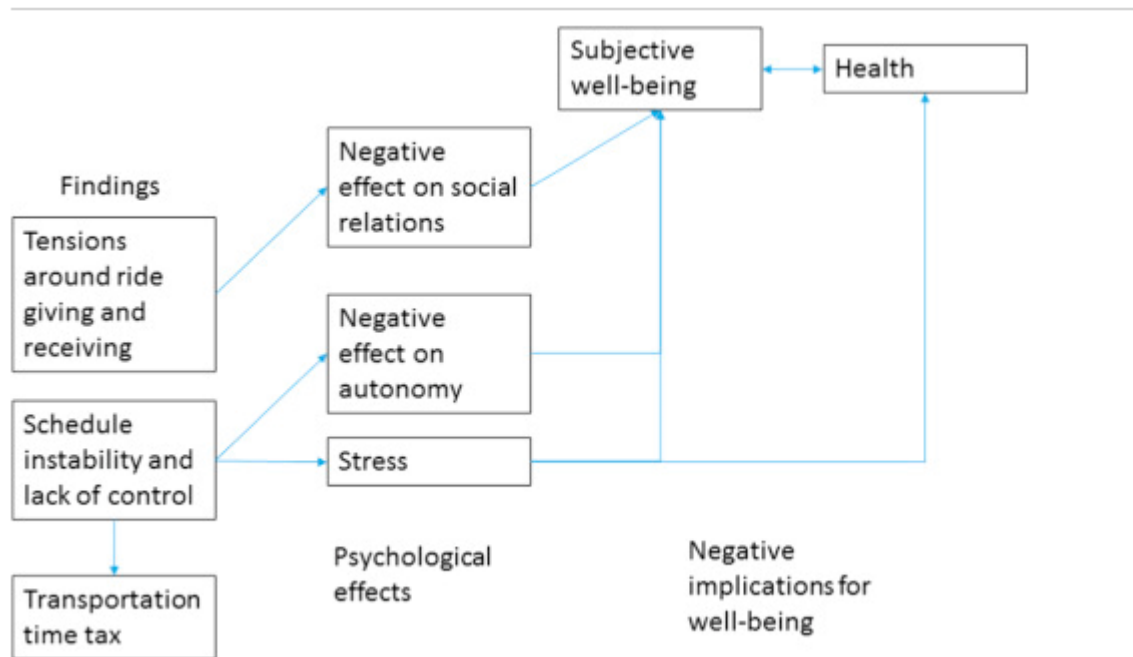
All-in all the general picture of poverty related to mobility seems clear ; less cars, smaller distances travelled, smaller action radius, somewhat less trips, slower mobilities, more walking, more busses, less train use. Less mobility, more efforts for mobility. And less access to all available services and shops, and opportunities missed. There are certainly many interrelations between income, education, age etc. But this is not the theme of this book. Access problems will be greater for poorer households

and individuals in rural areas (see on this issue also Fitzgerald (2012) for the situation in New Zealand). We already noted that in dense urban areas access to a car does not seem necessary when routing and time scheduling of public transport are appropriate. When this is not the case problems of transport disadvantage could also arise in urban areas as could be seen in the case study on Melbourne's outer areas, presented in 1.2.4.

Thus far the focus was on statistics. The UK National Centre for Social Research presented in *The Travel Choices and Needs of Low Income Households: the Role of the Car* (2009) the experiences of low income car households on their mobility circumstances, especially related to their car use. These households cherish their cars, and see rising car costs as a main problem. Transport costs are a strong influence on the travel behaviour of people with low income. We can here see a split in the poorer households. Households with cars see transport disadvantages in the situation that they drive less because of greater burdens on their household incomes. Households without cars face transport disadvantages because they cannot reach a number of locations where for them important services and shops are located. No money to reach or no physical possibility to reach.

Although there is transport disadvantage, in many circumstances this does not lead to social exclusion. Jouffe et.al (2015) did research on the strategies and tactics of poorer households and concluded; "*Les tactiques de mobilité et les stratégies d'accessibilité permettent de substituer l'usage des ressources tirées de la proximité à une coûteuse mobilité automobile. Les ménages pauvres s'appuient pour cela à la fois sur les relocalisations résidentielles, les transports en commun, les emplois, services et commerces locaux, et surtout sur les réseaux sociaux locaux. L'apport de notre travail est de montrer l'intensité de ces pratiques et leur articulation en un système alternatif à la mobilité automobile. La forte complémentarité des tactiques et stratégies rend ce système plus efficace mais aussi plus vulnérable.*" ("Mobility tactics and accessibility strategies make it possible to substitute the use of resources derived from proximity to expensive car mobility. Poor households rely on residential relocations, public transport, local jobs, services and shops, and especially on local social networks. The contribution of our work is to show the intensity of these practices and their articulation into an alternative system to automobile mobility. The strong complementarity of tactics and strategies makes this system more efficient but also more vulnerable).

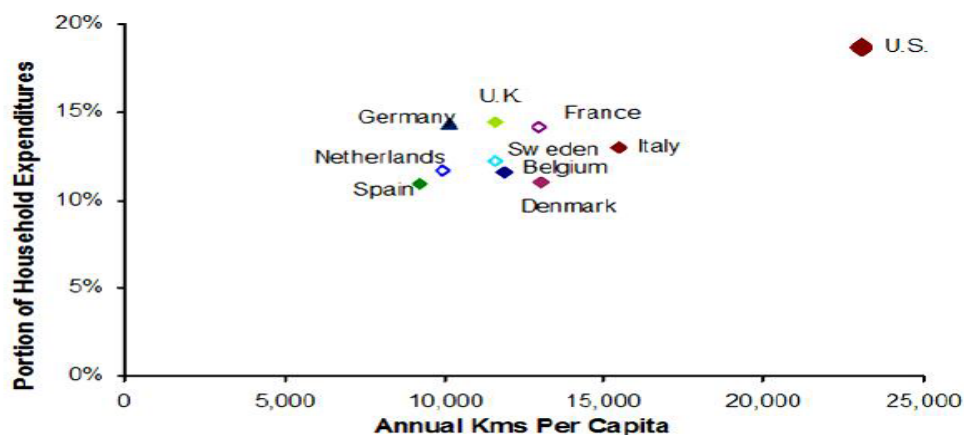
On this same issue Lowe and Mosby (2016) take another position. Their respondents noticed enormous time costs extra in not having a car, with also the experience that busses are not always punctual on time, which creates stress, because one cannot reach the start of the work at the appropriate times, or have to change their timetables and routes. There is also stress related asking for lifts and not being able to do much in return. Their findings were summarised in an interesting scheme



Being carless needs extra time and extra effort and has its price. They conclude that models tend to underestimate these mobility costs.

### 3.3.1.3 Poverty, affordability and car related economic stress

For lower income households mobility can be expensive. We tend to forget this truth. Most households in Europe spend between 11- 15 % of their household budgets on transport and mobility (Jeekel, 2013, statistical chapter), which makes mobility the third largest expenditure, behind housing and food. However, for lower incomes the share of transport and mobility in their household budgets often exceeds the 20 % threshold. Public transport in many countries did increase its fares more than average income growth and above inflation, and car ownership confronts in most OECD countries the car owner with a number of fixed costs (taxes, insurance) and with fluctuating fuel prices. How many households are facing affordability problems in their mobility? First a definition; Litman (2015) describes transport affordability as “the financial burden households bear in purchasing transportation services, particularly those required to access basic goods and activities”. Affordability is also a relative term. Some households like their being mobile so much that a 25 % share of transport costs in their household budgets is accepted. But in most OECD countries the mentioned 15 % is the standard.



### North America

Litman (2015) clarified that the portion of household budget devoted to transport is much higher in the U.S. than in other countries due to much higher rates of per capita vehicle travel. Interesting in this respect is also The Hamilton Project of the Brookings Institution (2014), that researched household expenditures over 30 years in the U.S. Their results are mostly in line with the official statistics with most quintiles having nearly equal shares for transport in the household budgets in 2014.

Annual income by quintile	Annual spending	Vehicles per household	Households with at least one vehicle	Transportation spending per household	Percentage of annual spending
All quintiles	\$53,495	1.9	87%	\$9,073	17%
First quintile (\$18,362 and below)	\$23,713	0.9	63%	\$3,555	15%
Second quintile (\$18,363–\$35,681)	\$33,546	1.4	86%	\$5,696	17%
Third quintile (\$35,682–\$59,549)	\$45,395	1.9	93%	\$8,475	19%
Fourth quintile (\$59,550–\$99,620)	\$60,417	2.3	96%	\$10,844	18%
Fifth quintile (\$99,621 and above)	\$104,363	2.8	97%	\$16,788	16%

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Expenditure Survey, available at [www.bls.gov/cex](http://www.bls.gov/cex) as of June 2016.

Canadian figures are comparable, but here indeed the share of the lowest quintile households is higher than the share of the highest quintile (Statistics Canada, 2017). Walks (2017) studied the levels of automobile-related debt among lower-income households in seven Canadian metropolitan areas. He noted that research on the relationships between car dependence and financial vulnerability is still in its infancy. And he suggests from the data that such a relationship between car dependence and debt burdens really exists. Please note the situation that in North America 65 % of all lowest quintile households own a car, whereas we noted that this is only 40 % or even lower in most European countries. Owning a car creates an extra burden on household budgets. But especially in OECD countries outside Europe (Canada, U.S., New Zealand, Australia) a car is felt as a necessity also by the majority of poorest households. This could, as we saw in Melbourne, lead to car related economic stress. You just have to spend so much on your mobility that there is pressure on other expenditure categories.

This pressure can be a huge problem when also the costs of housing are more than average for the lowest quintile income households. In a number of the urban areas in the United States poorer households are faced with more than 55 % of their budgets going to only mobility and housing combined. This leaves to little budget for other necessary expenditures. For example in Tampa, Florida both costs did rise to on average nearly 60 per cent of the household incomes of the lower income groups. There is also an ethnic factor involved. Minorities face more social exclusion via transport (Surface Transport Project, 2003, 2005).

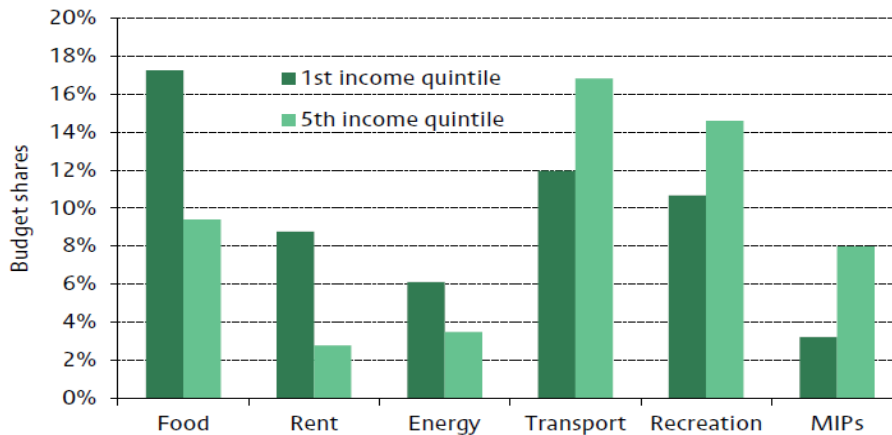
This pressure can also create huge problems when fuel costs will rise. At the moment of writing fuel cost are rather low. But they tend to fluctuate and a 10 % rise leads to a near to 1,3 % increase in the share of mobility in household budgets of the lowest income quintile households.

### Europe and Australia

The situation in Europe differs from the United States in one important aspect. In most European countries the share of mobility costs in the total household budgets increases with growing incomes.

In the Netherlands the lowest quintile spends 8 % of their budgets on transport (with only one third of the costs the highest quintile spends on purchasing transport modes!). The highest quintile spends 17 %.

Data on 2010-2011 for the United Kingdom show the same pattern (Adams, Hood and Levell, 2014).



The lowest quintile households spend 12 % of the budget on transport, the highest quintile 17 %. Also in Australia this trend can be seen. The lowest quintile spends in 2011 13 % of its budget on transport, the highest quintile 18 % (Household Expenditure Survey 2009-2010).

Nicolas and Pelé (2017) measured for Lyon the trends in household expenditures for daily mobility. Between 1996 and 2005 there was an increase in car ownership and an increase in mobility related expenditures, however between 2005 and 2015 alternative modes did get a greater share and expenditures more or less stabilised, or better; did grow with older households, and did diminish for younger households.

#### *In general*

Lowest quintile households spend between 8 and 15 % of the household budgets on mobility and transport. In Europe these households spend lower shares of their budgets on mobility than the highest quintile, in Northern America the share of lower quintile households is mostly on the same level as the mobility share of the highest quintile income households. It is as yet unclear what explains the difference, but a combination of more expenditures on purchasing and using cars plus less equality in societies could be responsible for these differences. The differentiation could be great. Lower income households feel that they should not move beyond a certain share on mobility in their household budgets, certainly when a combined share on housing and transport is already high. This could lead to smaller travel horizons for these households, as they just feel they cannot afford to travel greater distances, or to purchase a car. This situation should be related to the situation the research from Horton and Reed (2010) illustrated that public spending in the UK on mobility and transport has a bias to the highest income groups, the result of much car based, and especially national infrastructure based and train transport based public spending. Unfortunately, to the best of my knowledge there are no data on this theme from other countries.

There is one other element where low-income households face problems. They live relatively more than other households in areas with poorer access to green spaces and recreational activities. They also live more than average in areas with high local air pollution and higher noise levels. Their residence areas are often the “drive thru”- areas of the richer households (Sustainable Development Commission, 2011)

### *Crisis, fuel costs and mobility*

Lowest quintile households are vulnerable for changes in their financial circumstances and for changes in costs related to mobility. Ulfarsson et.al (2015) explored the reaction of households in Iceland on the financial crisis in 2008. Residents from the suburbs of Reykjavik were more likely than inner city residents to reduce their number of trips, especially for recreation. And bus transit increased while cars were less used. There was only a marginal change in car ownership.

The pricing of public transport is important for lower income households, as Li, Dodson and Sipe (2015) showed for Brisbane in Australia. Public transport in Brisbane is pretty expensive, and cannot challenge the ownership and use of private cars, even for the lowest income households. There is no cheap transport available, and households in such a situation *"need to absorb large fuel cost increases before it would become cost-effective to shift to public transport, a problem that would be worsened if travel time cost was also included"*. Buttner (2016) noted for the Munich area in Germany that the dispersal in urban structures and growing distances to daily mobility destinations is leading to higher transport costs. A number of scenarios with different increasing fuel prices was calculated, and especially when prices of fuel tripled huge problems could be expected, Many households then had to sell their second cars, and to switch to public transport, an adaptation strategy that would take too far much extra time needed for daily mobility. Or they had to accept the far higher fuel prices, creating a burden on their household budget. Here a *speed versus time trade-off* could be seen. In villages and suburbs without appropriate public transport only one option was left.

Although fuel pricing are now relatively low (writing end 2017) a huge fluctuation can be noticed. A decade ago prices were rising. The most extensive literature on the effects of high prices for fossil fuels comes from Australia. Dodson and Sipe (2006) noticed that in some areas high fuel prices gave rise to changes in financial and consumption patterns. Oil prices had an influence on inflation levels in the Australian economy. Some taxes have been cut, on the basis of a rationale set out by former Prime Minister Howard *"...the high price of petrol is having a depressing effect on people's livelihoods, people's incomes."* Dodson and Sipe (2006) consider that the problems of the outer suburbs could be mitigated by creating a public transport system, at the costs of spending money on highways. And in *Addressing Oil Vulnerability through Travel Behaviour Change* (Meiklejohn, 2008) the author presented the results of the adjustments made by Australian car drivers as a result of the high petrol prices of 2007. Sixty one per cent used their cars less, 59 per cent tried to combine trips, 29 per cent saved money on other spending (with going to a pub, luxurious food, and newspapers often mentioned) and 19 per cent made more use of public transport. The use of city buses did rise, as we also noticed in Reykjavik.

The lowest income households are the most vulnerable for fluctuations in fuel prices and for rising costs of public transport. This is worse for rural areas where transport costs make up 82 % of all the additional rural cost (the cost for living in rather remote areas). As households in rural areas are more or less dependent on car travel, increases in fuel prices will have their impact, even though fuel cost make up somewhere between 14 and 47 % of per mile car travel costs (Smith, Hirsch, Davis, 2012), the greater part being related to purchase and maintenance of cars. Berry et.al (2016) showed for France that 18,8 % of the French population was exposed to rising fuel prices, as they can have difficulties leading to transport disadvantage when fuel will again increase. Nicolas, Vanco and Verry (2012) explained that at least part of these people are the multi motorised double income earning households in the peri- urban areas. Although they have good income, their expenses on mobility are already huge, and problems start arising when these mobility expenses keep rising. Here a real example of car related economic stress is at stake, but in a different situation than in Melbourne where 40.000 plus households have low incomes and 2 or more cars available (Currie, Delbosc, 2013).

### **3.1.4 Three vulnerable household types ; ethnic minority households, asylum seekers and single parent households**

The three household types mentioned have in common that a majority of households of both types belong to the lowest income household quintiles.

#### **3..1.4.1 Ethnic minority households**

Strange enough, rather little is known in the literature of the mobility circumstances of ethnic minority households. We know a lot from their mobilities across borders, but very little once they have settled in a new country. And often academic articles are rather unspecific on the household types and household characteristics the articles are designed for, targeted at, or framed for. The focus is on lower incomes, or on non- car households, and far less on households with Asian backgrounds, or households where all members have low education levels, to name a few examples. It is for me rather unclear why this is the case, as much policy related information is lacking on the one hand, while on the other hand some rather academic themes (such as the best equations to measure accessibility) are studied over and over again in the academic community.

Basic material comes from outside academia. For the UK is known that 18 % of white households do not have a car, the figure is 40 % for black households. (Sustainable Development Commission, 2011).

Ethnic minority households are more dependent on public transport, but also often have to face forms of discrimination, sometimes raising anxiety to use busses or trains (ethnic minority households in London are more worried in public transport, Transport for London, 2012). Most ethnic minority households are living in depressed areas (all information Commission Sustainable Development, UK, 2011, especially figure 18). Ethnic minority groups in London walk much, take busses, and hardly cycle (Transport for London, 2012). Transport cost are their greatest mobility problem.

The Social Research Institute of the Netherlands SCP (Harms, 2006) carried out a study on ethnic minorities in 2005, with a follow-up study (KiM, 2008). The most significant Dutch minorities – Turks, Moroccans, Surinamese and Antilleans – live mostly in the bigger cities of the Netherlands. 78 % of them live in the biggest 50 municipalities. The Netherlands has 1.2 million ethnic minority people of 7.1 per cent of the population. These people make fewer journeys than the native Dutch population. For example, Turks and Moroccans make only 65 % of the journeys made by native Dutchmen in comparable situations. Turkish and Moroccan women in particular make very few journeys. The differences in distances travelled are even greater. Turks and Moroccans travel only half the distance, and stay in their cities. The Surinamese and Antilleans travel more, some 70 % of the distances of the comparable Dutch group. Mobility of allochthones is essentially urban mobility. They do not use bikes very often, prefer walking and are relatively great public transport users. They have far fewer cars than average, with the exception of the Turks.

The same pattern can be seen in Norway, where 59 % of the immigrant men had car licenses, 42 % of the immigrant women, and 90 % of the original Norwegians (Uteng, 2009). For Germany, there is detailed research for the city of Offenbach am Main, where immigrant had fewer cars or bicycles, are where especially women used public transport. Riding bicycles is seldom seen with immigrants, although they answer being familiar with riding bicycles (Welsch, Conrad and Wirowsky, 2016).

There is also material from the United States. Blumenberg (2009) showed that immigrants are more likely than native-born workers to rely on alternative modes of travel, carpooling, public transit, walking, and bicycling. As data from the 2006 American Community Survey (ACS) of the U.S. Census indicate that immigrants are 1.8 times more likely to commute by carpool, 2.8 times more likely to commute by public transit, and 1.4 times more likely to commute by walking and bicycling compared



to native-born commuters, all statistically significant differences. And Tal and Handy (2010) concluded that ethnic minority households have different patterns of travel than individuals born in the US and also than immigrants who have lived in the US for longer periods of time, and that patterns of travel vary with place of birth. The models they used show that immigrants largely assimilate to typical US patterns of travel after 5 years. Park et.al (2010) noted that older Blacks in the rural part of the U.S. reported more transportation difficulties than the White population (24,7 % versus 11,6 %). Blumenberg and Smart (2010) pose a caveat on conclusions of great use of public transport by ethnic minority households, as they are far more likely than native-born Americans to use transit, they are still more likely to travel by household carpool than by public transportation.

But still, ethnic minorities drive less. Why ? Chatman and Klein (2013) tried to explain this. On the one hand most ethnic minority households live in urban environments, which is related to lower shares in car use. At the other hand, immigrants are seeking employment, safety and education, and are probably less interested in amenities. Cars are just functional. More cars or cars arrive in immigrant households once they move to suburbs, but they move largely due to employment, to chances on education, and already move to existing migrant enclaves. Klocker et.al (2015 ) noticed in Australia that overseas-born households were less car dependent than Australian households. They combined trips to save petrol, did walk or cycle more than average, and used public transport far more often. It was unclear why this behaviour was their standard.

All-in all , a mixed picture arises of ethnic minority households as more public transport oriented at first, but after some years following the normal mobility patterns of their society, but not always. There is probably more wisdom in broader explanations of their behaviour, not just costs arguments, but the literature remains rather scarce.

### **3.1.4.2 Asylum seekers and refugees**

Asylum seekers and refugees are often transport disadvantaged. Asylum seekers are located in asylum centres, mostly situated in peripheral rural areas, with only minor public transport. As they have no income of their own , it is a matter of choices of national, regional and local governments whether they will receive subsidies for travelling. This is a rather value – laden decision, as many voters see asylum seekers not yet as members of their society, and do not wish to see them travel the country. Also important to note is the difficulty many asylum seekers have in understanding the organisation of public transport. There are differences in the mobility ability of asylum seekers, mostly related to their network capital (Baratta, 2016). Being able to reach friends or health advice is essential in this phase.



For refugees with permits to stay another situation arises. Here the theme is to find a house and a job, and transport is essential. For refugees, early immigrants now living in Vermont their reality is as follows. In this rural state there is little public transport, which made integration via employment or

language courses difficult (Bose, 2014). Immigrants here saw in 82 % the car as their solution. And another option ,carsharing, is , at least in New York, through its culture and price setting, still considered as an exclusive programme for white and younger persons (Kim, 2015).

### **3.1.4.3 Single parent households**

Single parent households are more often than two parents households earning lower incomes. They can face transport disadvantages, as the parent has to combine employment, child care and household activities. Single parent households in the Netherlands have higher rates of non- car ownership and make 70,5 % of their kilometres by car (average in the Netherlands; 76,5 %, Jeekel, 2013). But the greatest difference is in driving or being a passenger. On average is 52 % driving and 24 % passenger (2009), but for single parent households the figures are 38 % and 32,5 %. They receive more lifts from friends and family (Jeekel,2013).

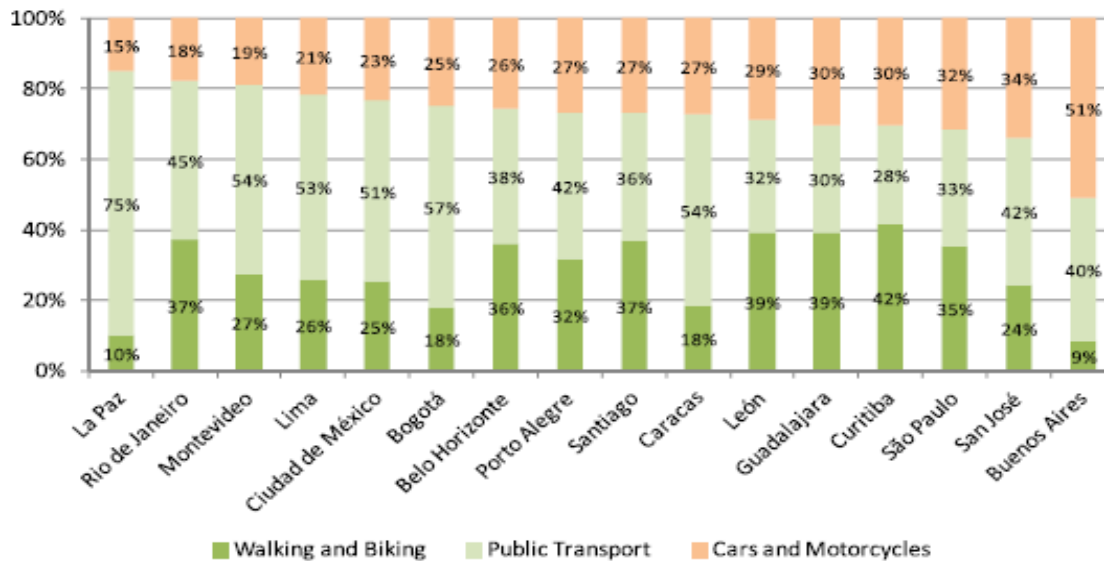
Chlond and Ottmann describe in *The Mobility Behaviour of Single Parents and their Activities* (2007) their mobility situation in Germany. One fifth of German family households are single-parent households. Car ownership changes with employment. More working single parents than average own cars, while unemployed single parents have far lower car ownership higher than average. Single parents without work have far lower car ownership rates. Working single parents feel time stress, but not many mobility problems. For non- working single parents the opposite is true. Most single parent families live in the urban areas and they mostly consider this easier from a mobility viewpoint.

In *Social Exclusion, Accessibility and Lone Parents* (Titheridge 2008) describes the British situation. 43 % of single-parent families have no car, and this creates problems especially with regard to work (mostly working mothers) and bringing and getting children to and from school “...the ability to get children to and from school, nursery or childcare, whilst travelling and working long hours is key in terms of current UK policy”(Titheridge, 2008, 11).

From this evidence a first conclusion could be that single parent households will probably face forms of transport disadvantage when they are unemployed and without cars. They then have to rely on getting lifts, which seems accepted, at least in the Netherlands. But in general, single parent households enjoy rather high levels of mobility. And, as Paez et.al (2009) did show for Toronto, they enjoy also relatively high levels of accessibility to employment in central areas.

### **3.1.5 Mobility and poverty in Latin America**

Latin America is a public transport continent. The ownership of cars is still rather low, and most households can already afford paying for public transport. The number of trips in Latin American households is on average half of the number of trips of OECD households, but as in many countries great inequalities exist, these figures overshadow a broad and rich spectrum of mobility circumstances.



First a look at the figures. Latin America is a very urbanised continent with percentages of urban population from 61 to 93 %. This means that urban mobility is very important in presenting a general picture on mobility. Secondly, Latin American countries have enormous differences in car ownership, although even the most car oriented country, Argentina, has only 55 % of the average number of cars per 1000 adult inhabitants in OECD countries. In general, in Latin America, half of all households to one in 8 households own cars. There is a geographical interesting situation on car ownership. The highest ratios can be found (2014) in the South of Latin America with Argentina with 314 cars per 100 adult inhabitants, Chile with 230, and Uruguay with 200. The Eastern part of Latin America is also high with Brazil 249, and Surinam 291 (however; Guyana 95). Far less car ownership can be found in the middle and western part of Latin America, with figures from 148 and 147 (Colombia and Venezuela) to 109, 73, 70 and 57 (for respectively Ecuador, Peru, Bolivia and Paraguay).

Hidalgo and Huizenga (2013) note that in a few countries the first sustainable transport policies are now implemented; Brazil, Chile, and Colombia. But in countries such as Bolivia, Paraguay and Ecuador this does not seem the case. This is important because with growing prosperity the orientation in providing mobility in essentially urbanised areas becomes crucial; should investments be oriented towards creating networks of urban highways, or towards a mix of transport modes in a frame of objectives related to sustainability? To function as the basis for future mobility systems this mix of transport modes will only be possible with very good public transport.

Latin America is the birthplace of Bus Rapid Transit (BRT). The concept of BRT originated in Curitiba, a big Brazilian city, in 1974. Bus Rapid Transit can be described as “a high – quality bus based transit system that delivers fast, comfortable, and cost – effective urban mobility through the process of segregated right-of-way infrastructure, rapid and frequent operations, and excellence in marketing and customer service.” (Hensher and Golob, 2008). After Curitiba BRT was created in Bogotá, and this BRT – system, the Transmilenio, became a landmark.

BRT can contain many passengers. For example the main trunk corridor in Bogotá has a peak maximum ridership of 35.000 trips per hour, one way, with a 3 minutes maximum peak headways with buses spaced much closer together much of the peak, average station dwell times of 25 seconds with articulated buses having a carrying capacity of 160 passengers and off- vehicle smart card payment (Hensher and Golob, 2008).



A few reasons for this start in cities in the Global South can be noted. Essential is that BRT systems can be created in only a few years. Not very much new infrastructure is needed ; the roads are existing, only stations have to be build. Charismatic and visionary leadership is needed, often in the form of directly chosen mayors (see Davila, 2009). Leaders have been successful in promoting and completing first phases of BRT projects within their terms in office (Hidalgo and Carrigan, 2010) . When such a first phase is a success, the reputation of the systems leads to following phases, often also on the ticket of the same mayors. And the successes of the early initiators – Curitiba, Bogota, Mexico City, Ahmedabad, Guangzhou- helped decision makers in other developing countries to present BRT concepts. Essential are also the lower costs of BRT systems. BRT represent a far cheaper option than light rail or metro systems (Cervero 2013).

However , there are some negative points to be mentioned. Several BRT systems suffer from problems, inherent to their design. Hidalgo and Gutierrez (2013) mention; rushed implementation, very high occupancy rates, early deterioration of infrastructures, delayed implementation of the collection systems and too tight financial planning. And BRT systems have mostly not been very successful in helping cities as a whole to become more sustainable. As the sustainability of the BRT- systems *sensu stricto* is mostly acknowledged, the situation that BRT – systems are being designed primarily by the singular objective of enhancing mobility, made them fail to be fully helpful in promoting more sustainable patterns of urban growth. More thought needs to be given to locating the stations, taken into account perspectives of value capturing and densification. And their contribution to social sustainability is somewhat problematic. Seen from the poorer households it is questionable whether these households can afford the costs of this qualitative reasonable good form of public transport. There are many doubts in this respect as Grieco (2013, 2015) did show. With diminishing government spending the increasing pressure is to let a greater share of the fares pay by the users. This creates burdens for lower income households, and the BRT becomes a system for lower- and middle- middle classes, but not for the lowest income households who in Latin American cities live rather often at greater distances from city centres.

As Grieco (2013) states : *“The peripheral position of the poor in respect of key urban facilities and services and the lack of directly routed urban transport services to compensate for these deficiencies, impose complex geographies of mobility upon them ”*. This could mean that many members from poorer households need to walk for their mobility, or need to take polluting paratransit options. In many Latin American cities the government officials try to replace these “busses and vehicles for the





poor” by BRT solutions. When this does not succeed (see for example Crawford, 2012), BRT systems get too few passengers to keep the subsidies at an appropriate levels, and a process of upscaling services and rising fare prices starts. It is all about reaching an equilibrium between offering cheap transport for the poorest and qualitative

good transport for the middle classes, with an eye on efficient use of taxpayers money. That this is rather problematic is showed in two publications. At first Falavigna and Hernandez (2016) on Cordoba (Argentina) and Montevideo (Uruguay). In their view affordability of good public transport is one of the most relevant obstacles for the urban poor to have decent levels of accessibility. They cannot afford to use this transport at all times, and sacrifice some trips to become “captive walkers” as can be seen in the modal splits related to income quintiles in the two cities.

When cities start increasing their public transport fares the share of walking goes up. In recent years this was more the case of Cordoba than in Montevideo, where prices were kept lower. One ticket price is often helpful for poorer urban households. Hernandez and Davila (2016) presented material from Bogota and its suburbs. Residents of greater Bogota make 1,5 trips per day, and low income households spend more than 20 % of their income on motorised transport as well as long periods on foot to reach public transport. And they bring in another aspect; *“travel patterns for accessing income-earning opportunities usually involve long periods of travel towards Bogota subject to long walking times and high financial outlays for individuals and their households. These are also constrained by high crime and violence levels that limit the areas and times when it is possible to travel on foot.”* In a more detailed study on the urban fringe of Bogota, Hernandez and Titheridge (2016) noted that the neighbourhood studied was located inconveniently with respect to the centres of employment. People had to travel long distances, which with normal public transport, such as BRT, would mean spending a huge part of their wages. So ; *“ time, energy, comfort, and even security are traded- off for the fare costs”*. Informal transport plays a key role in this respect.

Immobility of poorer households can be seen in Rio de Janeiro (Motte Baumvol, 2012). Nearly 47 % of the inhabitants of Rio made no trips at all, with 54 % in greater and poorer northern part and 33 % in the smaller and richer southern part of the city. In OECD countries the average is on 15 %. One explanation could be that walking trips less than 300 metres are not counted in Rio’s statistics. But more important are low education and unemployment. Also many older people lead very sedentary lives. Ureta (2008) offers another element for the explanation. He studied mobility behaviour in a social housing estate at the outskirts of Santiago, Chile. People felt trapped here, as they needed to travel for everything. Employment opportunities were situated at great distances, and even supermarkets were not near. The bus had a flat rate fare, helpful for these inhabitants when moving far away, but trips in the vicinity were very expensive. So movements not directly related to obligation or need were postponed or discarded. It was difficult to break out of a circle of poverty, due to the costs of transport. Looking at this situation Grieco (2015) writes on the role of the small paratransit “busses and vehicles for the poor”; *“the inconvenience that a large fleet of low- income cargo-carrying small vehicles presents to the free flowing of the elite urban transport system may be compensated for by its servicing of socially and economically low-income journeys for which no other municipal or market provision is made or likely to be made”*



And a new transport mode, connecting the poorest districts in hilly cities immediately to city centres could help in specific circumstances; the cable car (Brand and Davila, 2011).

## 3.2 Gender

### 3.2.1 Gender in mobility ; patterns and symbols

Gender is important in mobility, as men and women still create and live different patterns. There are structural differences, as Rosenbloom (2004) concluded in an earlier, now rather famous article *Understanding Women's and Men's Travel Patterns. The Research Challenge*. Fifteen years ago there was not much attention given to these differences, in her vision because at that time; “many travel behaviour researchers do not respect more qualitative or less statistically based research, they do not read it, and fail to profit from insights offered by that literature” (Rosenbloom, 2004). This situation has changed, as there is now a spectrum of articles about gender aspects in mobility, or, nicer stated about “gendered mobility”. Out of these articles a rather convincing pattern arises. Women have less driving licenses, less car use, use more often public transport, walk more, make more trips, travel per trip shorter distances, make smaller distances in general. To present some figures (Civitas, 2014);

#### Gender differences by modal split (value %) in different Member States

Transport mode	Italy, 2011		UK, 2010		Germany, 2008		France, 2008	
	Women	Men	Women	Men	Women	Men	Women	Men
Car	60.6	72.7	37.5	47.2	36.3	49.2	62.8	67
Car as passenger			26.7	17.4	18.8	11.3		
Public transport	16.5	12.7	10.3	9.8	8.8	8.2	8.5	8.1
Foot&Byke	22.9	14.6	23.6	23.2	36.1	31.3	28.1	21.7
Other			1.9	2.4			0.6	3.2
Total	100	100	100	100	100	100	100	100

Also, the reasons for the trips differ between women and men. To present a representative example;

#### UK, trip purpose by gender and age range (%)

Trip Purpose	All		21 - 59		60-69		over 70	
	Men	Women	Men	Women	Men	Women	Men	Women
Commuting	24	15	33	21	16	5	2	1
Business	12	5	16	8	10	2	2	0
Education	3	3	1	1	0	0	0	0
Escort	8	11	6	11	7	6	7	4
Shopping	10	15	8	14	15	25	26	28
Visit	17	21	14	19	19	26	24	26
Personal business	8	9	7	8	10	11	14	14
Sport/entertainment	19	21	16	18	23	25	26	26
Total (%)	100	100	100	100	100	100	100	100

Source: National Travel Survey 2010 –Department for Transport

Shopping, escorting and visiting trips are still women's business, whereas longer commuting trips are basically men's business. This is not to say that women do not make trips from home to work, but the amount is some 40 % lower, whereas escorting trips are twice as much made by women. This seems to be the case across the OECD world, compare for example the UK with the city of Vienna, Austria.

Important in this respect is that women have more complex mobility patterns than men during the day. For example, mothers are combining work trips, trips to school, trips for escorting, and shopping trips during their days, whereas men make the longer home to work -trips and return. Scholten, Friberg and Sanden (2012) present an interesting schedule as an example;

---

h.	07.20–07.30	driving	Mobility project 1
	07.30–07.35	leaving the kids at school	
	07.35–07.55	driving to the day-care centre	
	07.40–07.55	driving to work	
	13.30–13.40	walking to a nearby shop	Mobility project 2
	13.40–13.55	buying trousers	
	13.55–14.00	walking back to work	
	14.00–14.10	driving to the day-care centre	Mobility project 3
	14.10–14.20	picking up the kids	
	14.20–14.25	driving to school	
	14.25–14.30	picking up the kids	
	14.30–14.35	driving to the library	
	14.35–15.45	borrowing books, taking a coffee break	
	15.45–15.55	driving to the children's grandparents' home	Mobility project 4
	15.55–16.15	chatting with the children's grandparents	
	16.15–16.30	driving home	

---

Some symbols are often used, for travel patterns of mothers, for example "rushing around". In *Rushing Around: Coordination, Mobility and Inequality* (2002) Shove analysed what is necessary to allow the social practices defined as normal in our societies to take place. She defines a practice as; "a routine like way in which people travel, use products, in which developments are framed, and in which the world is understood". Mobility systems facilitate all the practices that can take place, but mobility systems do also change these practices. The task for mobility changes through time is clarified as "...mobility is not about getting from A to B...but instead about integrating everyday life and the activities required of 'normal' practice. " And, "...people are rushing around in order to preserve the sense that they are behaving in normal and ordinary ways" (Shove, 2002).

Flexibility is needed to combine the different trips during the days and the car can organise this flexibility at greater distances (whereas the bicycle can do this on smaller distances); public transport can only difficult organise these flexibilities. For the "time poorer" - households car use seems necessary. In *Running Around in Circles* (2003), Skinner analysed the need for mothers to manage a number of deadlines each day. On time for school, not too early leaving work, on time back at school,

on time to the hobby, and time picking up from hobby. Keys to successful management of deadlines are a short distance between work, school and care, flexible working hours, help from family and friends, and having disposal over fast transport. And Dobbs described in *Wedded to the Car; Employment and the Importance of Private Transport* (2005) some reasons why households with access to many public transport facilities still use their cars for most journeys. Public transport does not lead them where they have to be, and many households are critical about the inability of public transport to make chain trip patterns. Women are more active on the labour market when they have a car at their disposal.

Friberg, Sanden and Scholten (2014) looked at this pattern from a more feminist perspective and concluded that modern women have a spatially dispersed everyday life. Women use more often public transport than men (figures from France, EGT, 2010), use cars less, so they have to mitigate, not being able or not wanting to use the most efficient mode. As Kronsell, Rosqvist and Hiselius (2016) clarify women are more environmentally concerned and express more criticism on automobility than men (also Sanchez and Gonzalez, 2016). Men use more energy for their transport than women (Carlsson-Kanyama et.al, 2010). On this issue a clear statement of Hanson (2010), a long term researcher on gender differences in mobility, seems appropriate; *“it seems clear that if we are going to pursue sustainable mobility seriously, it does not make sense to posit the mobility patterns associated with masculinity as any kind of desirable benchmark with respect to personal mobility”*

The complex mobility patterns of mothers lead to some evidence that women value travel time and reliability more highly than men (Giuliano, 2010). Women seek jobs closer to their residence to facilitate the other necessary trips. The distance of fathers between house and work is systematically higher than for mothers (Simicevic, Milosavljevic and Djoric, 2016). Of growing importance in recent decades has been the chauffeuring or escorting, now generating between 5 and 15 % of vehicle travel (Litman, 2015), and really a mobility domain of women. There is room for differentiation as Unbehauen et.al (2014) concluded. They presented a differentiation in women’s mobility patterns and arrived at five clusters; care-oriented working persons, care persons with young children, work-oriented care persons, long distance commuters and care persons for the elderly. Women had distinctive different schedules and activity patterns.

### **3.2.2 Decline or stagnation in gender gaps**

It looks like the different patterns of gendered mobility are stable. This, however, is not the case. They are in flux. Patterns change over time. The once dominant pattern of men going out in the world, and women organising the house and households is now at least partly broken in most OECD countries. To give an example, the discrepancy by gender in possessing driving licences has continued to decrease.

As Olde Kalter, Harms and Jorritsma (2009) explain for the Netherlands the increase in women’s car use did come from their increasing labour market participation, and the growing household incomes. However, the convergence in gender difference does not apply to all trip purposes. Gender gaps in work related trips and in escorting/chauffeuring trips did not diminish (Fan, 2017). But also here dynamism is at stake, as Boarnet and Hsu (2015) found that the chauffeuring gap tends to be smaller when the woman’s earning power is larger compared with the man in the same household. And the work trip related gap is far smaller in households with women without children.

Research often confirms still the relevance of traditional theories of socially constructed gender roles in explaining gender differences in travel, especially in families with children (Fan, 2017). In practice this means that mothers are working, in the EU countries rather often part time, at smaller distances from their home, in jobs that pay less than the jobs of their male partners, as they have to make all the other trips to let the household function. Another explanation is offered in Hjorthol and Vagane (2014)



who note that in one car - households a lack of suitable means of transport might have restricted women's choices on labour markets. However, even when women have access to a car, they commute less. Interesting to note is that higher educated women are likely to have the longer commutes (Hjorthol and Vagane, 2014). Men in general travel the longer home-work distances, and create access to wider labour markets (Frandsberg and Vilhelmson, 2011). At least, this is the pattern in the generations aged 35 and above. For the youngest generations this pattern could change, as more equilibrium can be noted, especially with the higher educated. Tilley and Houston (2016) even note that young women are now travelling more than young men, due to, at least in the UK, a significant decline in weekly mobility amongst younger men under 30. The authors attribute this decline to lifestyle shifts and end rather speculative, but interesting: *"...younger men may socialise more in the home, due to less disposable income combined with greater familiarity of communicating online. Alcohol prices in UK supermarkets have fallen sharply relative to licenced premises, which is perhaps contributing to socialising at home."*

There is also a geographical dimension to all this, as living in urban areas increases the chances for women to have qualified more full- time jobs, whereas living in the periphery is disadvantageous for those who want full time jobs (Hjorthol and Vagane, 2014). A generic conclusion could be that travel patterns are converging, with a certain stop for mothers, and with perhaps for younger generations a trend towards even greater convergence.

### **3.2.3 Transport disadvantage and stress related to gender**

Until now I discussed the patterns of gendered mobility. It is appropriate to consider where and how these patterns relate to our main theme: transport disadvantage and social exclusion via transport. Which elements related to gendered mobility lead or could lead to transport disadvantages? In this paragraph three elements will be discussed. At first, temporarily transport disadvantages springing from one car ownership in households with two or even more driving licenses. Secondly, the stress related to the complex travel pattern of mothers. And the last element relates to single households. There is a group of single households that seems to lack in the academic literature. We have literature on young single households, who mostly can cope with transport disadvantages. And there is literature on older single households, as discussed in 2.2.3. But literature on middle aged single households and their mobility is almost completely lacking. From the scarce literature an interesting gendered pattern arises.

#### **3.3.2.3.1 Temporary transport disadvantage**

Many households have one car and two persons with driving licences. In these situations there needs to be a form of decision making on which of the members has the access to the car. The other person has temporary no access to a car, which could, certainly outside urban areas, lead to potential or actual temporary transport disadvantages. Very little has been published about temporary transport disadvantage. One of the few articles is Richardson and Ampt (1997). But we know more about the decision processes. Women, and certainly mothers, have their complex travel patterns and need, as we noticed, flexibility. An important question in this respect was raised by Schwanen, Kwan, and Ren (2008): *" Given that the private vehicle tends to offer people the highest level of flexibility in choosing the time of departure and destination, our results also raise the question whether people are capable of substituting auto trips for more sustainable modes of transportation (public transport and walking) that tend to offer more restricted access and mobility"*

Who is the partner that has to accommodate his or her travel pattern? Gil Sola found for Sweden that in households having one car, that car is used for woman's mobility in 30 % of households and for man's commuting in 54 % of households (Gil Sola, 2013) . The figures of 2011 for Germany, in a study

of Scheiner and Holz Rau (2012) were somewhat comparable with men driving 56,6 % of their trips and women 36,5 %. These differences grow when salaries increase, but diminish when mothers are nursing the children (also in Scheiner and Holz Rau, 2012) or as Scheiner (2014) mentions ; *“taking on households tasks strengthens an individual’s negotiating position with relation to the car”*. Gender contracts on car use are in the vision of Gli Sola (2016); *“not static but under constant negotiation, particularly during times of major social transformation, at both the societal (structural) and household(individual) level.”* There is a spectrum of possibilities, from the right of men to own the family car to the full and normal acceptance that the woman has the most complex spacing and timing problems and thus the primary access to the car. Konrad, Scheiner and Holz Rau (2016) presented data over three decades for Germany. In these three decades especially fulltime working men in one car households did reduce their car use, in favour of their partners. There are still differences in distances travelled by car, but they noted a convergence trend. And the birth of a child has the most notable change effects on mode use, with mothers tending to drive less after the birth of the first child, but more after the birth of a further child (Scheiner, 2014b).

The non- car partner can face temporary transport disadvantages, which makes his or her travel vulnerable. A decision process towards more cars could then start. Clark, Lyons and Chatterjee (2016) looked at the processes leading the changes in the number of cars in the household, in both ways. 65 % of these changes were associated with employment change, cohabitation, residential relocation, child birth, retirement or an adult joining or leaving the household. And a 26 % of the households studied considered changing their number of cars.

Temporary transport disadvantage is probably seen as a problem to be avoided in more rural and peri-urban areas. In rural Scotland women have different travel patterns to men; more journeys are related to family possibilities, often at off-peak times, and many chain journeys. In *Stuck in the Countryside? Women’s Transport in Rural Aberdeenshire* (2010) Noack carried out interviews.

All women questioned considered rural living very car- dependent, with children being completely reliant on their parents, mostly on their mothers *“...to everything, they have to be driven”* (Noack, 2010). When there is only one car in the family it is mostly the woman who gets the car, she needs it for her more difficult mobility patterns. Problems arise when the car is needed by her partner. In fact, living without two cars seems to be rather difficult.

The same is the situation in peri-urban France, as is shown in *Entre ville et campagne, le difficile equilibre des periurbaines lointaines* (Ortar, 2008), which was discussed in 1.2.3. A last example comes from rural Spain (Camarero, Cruz and Oliva, 2016). A car is necessary there to reach locations for shopping and employment, especially with recent closures of shops and workplaces. Residents who do not have cars are the elderly and the dependent, characteristic populations in interior of Spain. *“Support Networks”* are needed, also for most women *“of a certain age”*. Men have the car, and can thus control the travel patterns of most of these women. The role of persons in their middle age (not very many living in these areas) is essential, as they can offer help in mobility.

### **3.2.3.2 Stress related to complex transport patterns**

The complexities of travel, especially for mothers, comes at a cost. There is often a feeling of hurriedness involved, related to time scarcity and to the question whether all time schedules can be realised. Nothing has to go wrong. On this issue Schwanen’s *Matter(s) of Interest; Artefacts, Spacing and Timing* (2007) is interesting where he relates the theory to modern cares around *“spacing and timing”* of double-earner households. He looks at daily nurseries and shows that even searching for children’s toys can make a normal day into a hurried day.

I will look into in greater depths in the second part of this book, but here the notion that stress related to mobility is not always economic and car related stress, but broader stress which find its sources in the urge to be mobile is the take away. Related to this is the work of Sweet and Kanaroglou (2016) about gender differences in the role of travel and time use, leading to subjective well-being. They concluded that lowest income women were comparatively more disadvantaged in their travel than the lowest income men. And participating in activities plays a far more important role in women subjective well-being than in men's subjective well-being.

A specific stress factor for women is found in the quality of public transport, mostly busses and metro's. Kim and Gustafson-Pearce (2016) concluded that the greatest anxieties in the London Underground were on anti-social behaviour, on too much noise, on overcrowding and on the conditions for late night travel. And Loukaitou-Sideris (2009) clarified that passengers are more fearful during their journeys to and from the stop or station and during the wait for the bus or train than when they are on the vehicle. General maintenance of the facilities and regular cleaning are considered very important. All-in all car commuting women reported higher levels of satisfaction than women did who travelled by public transport. More in general, people do not like busses. In Edinburgh, Stradling et.al did a study about the negative aspects of bus transport under the title *Eight Reasons People Don't Like Buses* (2002). From a factor analysis the greatest irritation was "*unwanted arousal*"; you just want to make a trip and, unasked, you are confronted with all sorts of persons and situations that you do not want to deal with, and that confront you with the harsher and bleaker side of public life. In your car you are not confronted with this unwanted arousal, you can close yourself off from these kinds of experiences. Parents, and certainly middle-class parents, also do not want to confront their children with these realities of life.

### 3.3.2.3.3 Middle aged single households and elements of gender

Single households form in many OECD countries now the greatest share of all households. For example in the Netherlands 34 % of all households are single person households, 28 % couples, 26 % couples with children and 7 % are single parent households.

There are 900.000 older single households (age 65 and higher), and 850.000 single households younger than 35 years of age. This means that in the Netherlands there are 1,15 million middle aged (35-65 years of age) single households, more men (670.000) than women (470.000). This is near to 7 % of the Dutch population. We also know that of all single households only 47 % owns one or more cars in the Netherlands. There will be smaller car coverage at higher single ages and at lower single ages. An educated guess could be that 55 -60 % of middle aged single households will have cars. This then could mean that around half a million middle aged singles are carless.

To create some perspective, the share of single households differs in the EU, from 47 % and higher or near to 40 % in the Nordic countries and Germany, to 21 % in Portugal and Cyprus (Eurostat 2015) .

In Canada, on average single- persons households commute shorter distances, are less likely to have a driving license, or to have access to a car, than average. Young and Lachapelle (2017) noted that they use cars 17 % less than family households and use active modes 9% more.

Urban areas have higher shares of single households, as more than 50 % of all households are single in for example Oslo, Amsterdam, Munich and Paris. (Eurostat, 2015). In the United States the share of single households is 19,4 (age 35-54) and an estimate of 13 % above age 55, together around 32 % (Bachman, Barua, 2015), comparable with the Netherlands. In all countries at younger ages the share of men in the singles population is higher, and this share diminishes with age; at age 58 in the Netherlands there are more single women than single men (Demey et.al, 2013);

There are many middle aged men living alone. In the Netherlands of all men between 35 and 65 years of age some 19 % lived alone in 2016. In Finland this was 23 % in 2011 (Statistics Finland, 2012). The share of women living alone is lower in the Netherlands, around 14 %. The situation that 80 % of all single parent households are households where the parent is a woman, can explain this difference (Demey et.al, 2013, CBS Netherlands, 2016).

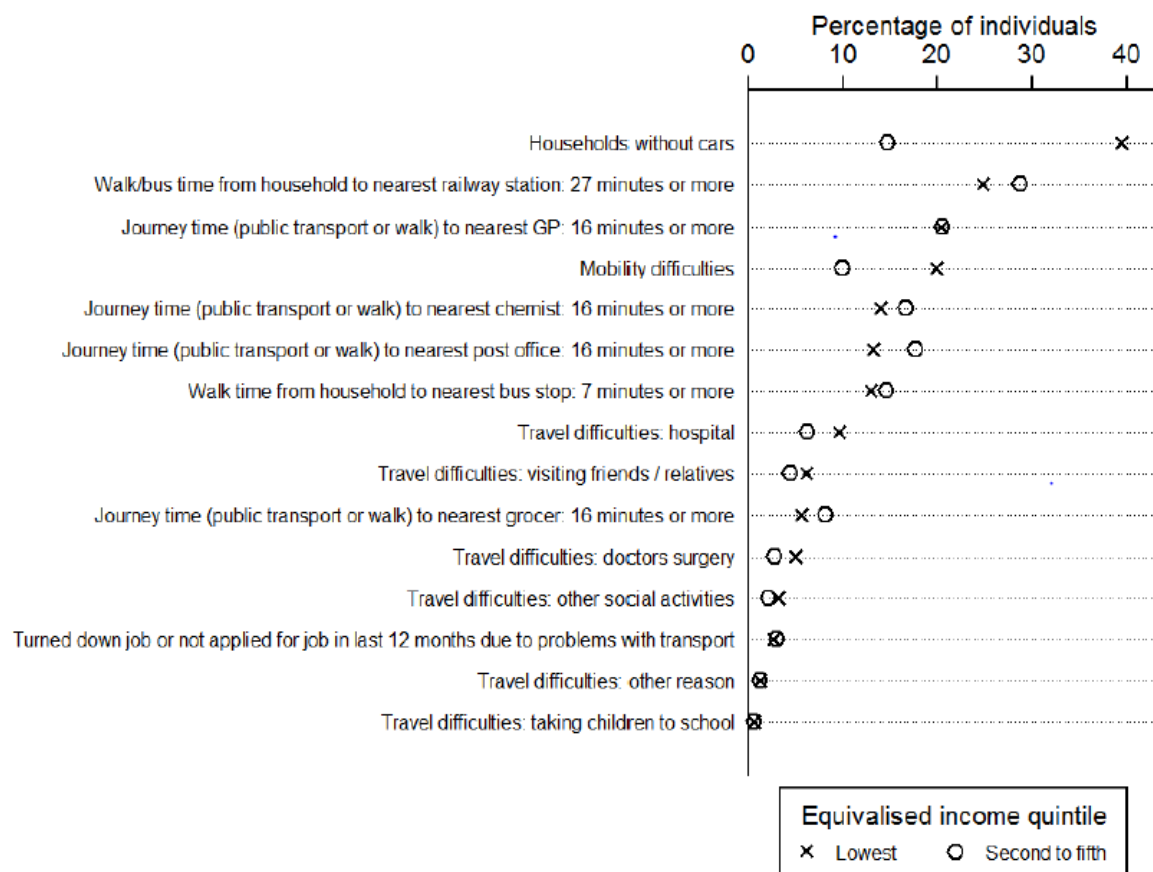
We know very little of the lifestyles and the mobility of these middle aged singles. Their issues are relatively unexplored (Palmer, 2006). Older data from the UK suggest that 30 % of this group belongs in the lowest income quintile (Palmer, 2006). And we know that there are several pathways to living alone.

Only 25 % of the men and 20 % of the women are “all life singles”. Some 45 % of the men and even 60 % of the women have a divorce history. Unfortunately to the best of my knowledge we have only figures for the UK 2009/10. Compared to those living with a partner, middle-aged men and women living alone are generally more likely to have no qualifications, to be not employed, to be in social housing or privately rented housing. And this holds even more true for men than for women. Men with partners were between 35-54 years of age unemployed for 12 %, whereas figures for single men in the same age groups were around 30 % (Demey et.al, 2013) ! And this was especially the case for the never partnered men. Although there is only scarce material, it looks that single middle -aged men are more at risk than single middle -aged women. An example from the Netherlands. When we go back to the 55 -60 % car coverage in middle aged singles, and we estimate a gender divide of 65 % car access for men and 45 % for women, whereas we know that half of the singles live in urban areas, we have a risk element which could contain (35 % carless of 670.000 men , and 55 % car less of 470.000 women, is 500.000 singles, and 50 % in non- urban resident areas, is 250.000) a group of some around 1 % of the total population ( 170.000 people) that is single , middle aged, probably more male, living outside cities, and more often their whole life time single that seems at risk of transport disadvantage. But more research is certainly needed here.

## **4 Some conclusions**

### **4.1 About accessibility of services and amenities.**

The literature on accessibility is growing. I already discussed the more academic oriented articles on measuring accessibility. A good summary could be found by an elaboration of Lucas et.al (2016b) of the data from the National Travel Survey of Great Britain (2012). The authors looked at a number of accessibility problems for the lowest income quintile and for the other four quintiles, and looked at the coverage of individuals facing the accessibility problems.



It can be noticed that in the lowest quintile some 20 % faced mobility difficulties and in the other quintiles 10 %. Thus, taken together some 12 % of the individuals faces mobility difficulties. Also taken together some 15 % had long journey times to chemists and post offices. Travelling to hospitals was difficult for some 7 % of the individuals, and visiting friends for 5 %. Grengs (2001) found that in Syracuse, New York, 12 % of the households did not have reasonable means for reaching a supermarket, whereas low levels of accessibility were associated with neighbourhoods of high poverty and with high shares of African Americans.

But when is minor accessibility to amenities, services and friends really a problem? Here the *impedance factor* is important, being a measure of a travellers willingness to travel long distances. Grengs (2015) found that households had the greatest unwillingness to travel long distances for convenience stores, supermarkets, childcare facilities and schools, whereas they show greater willingness to travel long distances for banks, medical clinics, hospitals and social visits. Grengs (2015), working in the U.S., concluded that because they live in cities several vulnerable groups were not as disadvantaged in accessibility as mostly understood. They had however access problems reaching shopping malls and supermarkets. For supermarkets this could be explained by the American situation, where supermarkets have moved out of city centres to outlying suburban locations. The same happened in France, where I already quoted Orfeuil (2004), mentioning that in Ile de France, the region around Paris, 50 % of the commercial centres with the supermarkets and shopping malls had no public transport connections.

Wright (2008) discussed access to health care and concluded that a sizeable number of individuals was prevented from accessing the health care system in the United States through transportation barriers. Accessing public service facilities is a problem, because these services are open at the same hours that

individual households are working. Delafontaine et. al (2011) concluded that rescheduling opening hours could greatly improve accessibilities. And Johnson, Currie and Stanley (2011) concluded that in Melbourne for arts and cultural activities higher access was related to elderly, to non- car households and to those living in inner parts of the city.

Haugen (2011) and Haugen et.al (2012) discussed which accessibilities mattered to whom in the Swedish contexts. Most households were rather satisfied with the distances from their homes to various destinations. And people travel farther than to the nearest option, and do not seem to strive for mobility minimisation.

All-in all, as most households and individuals are not facing accessibility problems, but there is a group of 10 to 15 % of all households and individuals facing accessibility problems, of which the magnitude differs. Especially access to supermarkets and health care seems crucial and problematic.

### **3.4.2 Transport disadvantage in societal perspective; some first conclusions**

Where are the transport disadvantaged, the car -related economic stress, and the social exclusion via transport in modern western societies situated? A summary of part A, with a strong caveat ; as the problem is under-researched quantitatively, and as real targeted statistics are not available, I will present at best an educated guess, derived from much literature that mostly lacks in data- focus.

At first, transport disadvantaged will be found with the disabled, with the more severe handicaps. This is around 4,5 % of the population. Then the transport disadvantaged will be found with the older elderly in most OECD countries, in car – less households; many single older women, and many men who stopped driving. This is some 1,5 % of the population. These two groups will face transport disadvantage in all geographical situations.

For the other potentially transport disadvantaged groups, geography plays a role. In cities, other permanently transport disadvantaged will not be that many. But here a new problem arises. As many potentially transport disadvantaged can only find their mobility over greater areas via public transport, these people will face temporary transport disadvantages, at times when there is no or only minor public transport service such as evenings, nights, or Sundays.

From cities to the most rural areas, the share of the transport disadvantaged in the population increases. This share starts to increase in the outer suburbs of cities, and increases further in suburbia, the peri- urban areas and the rural areas. In all these areas especially the poorer households, the single parent households, the middle aged single households, the adolescents, and women (often more on a temporary base, when the single household car is not available) can face transport disadvantage, when they miss access to car mobility. This group in total will be some 6 % of the population.

All-in all, some 12 % of the population will be transport disadvantaged. Part of this 12 % will have the social capital (with help from friends, family, community solutions) to avoid social exclusion via transport. Statistics are lacking, but my expectation would be that this can be the situation for some 40 % of the transport disadvantaged, leaving on average some 7 % of the population in the OECD countries facing social exclusion via transport.

There is also another group facing problems. A way to avoid transport disadvantage is to buy yourself out of this disadvantage. Here we enter the area of mobility -related economic stress. In most circumstances this will be car- related economic stress, as households buy cars and thus buy themselves out of mobility poverty but sometimes into real poverty, as they will be faced with high shares for mobility expenditures in their household incomes. A smaller number of individuals and

households will have high expenditures in taxis or public transport fares. I expect that some 3-4 % of all households can face economic stress through mobility.

All-in all, some 15 % of the population faces a form of problem with their mobility, and probably 1 in 10 households is really facing great difficulties in their mobility. This magnitude indicates a serious problem. For the richer part of the OECD world (Canada, USA, Australia, New Zealand, Nordic countries, Netherlands, Belgium, Ireland, United Kingdom, Germany, France, Switzerland, Austria, Italy, Spain, Portugal, Poland, Slovenia, Czech Republic, Japan, South Korea, jointly somewhat more than 1 billion inhabitants) my expectation would be that over 100 million persons and some 50 million households are involved.

I consider it rather safe to conclude that in OECD countries **one in ten households** faces social exclusion via transport. We have seen in this chapter that the expression of this exclusion differs a lot, from rural adolescents missing friends and networks, because their parents moved to “virtually nowhere”, via widows who did grow to near immobility after the loss of their car driving husbands, to disabled people who feel discriminated in public transport, or broader, by the situation that built up environments are structured according the wishes of “40 year old healthy males”, to poor households missing employment opportunities or even hospital appointments, because they cannot reach their locations without heavy burdens on their budget.

This “*one in ten households in OECD countries facing social exclusion via transport*” grows to an even greater share of households in the developing world, where very many households and individuals will be faced with burdensome transport situations. However, here structural analyses are being made. The combination of road upgrading and maintenance, delivering appropriate transport services, and diminishing economic and gender inequalities is here the road to less involuntary transport disadvantages.

## REFEERENCES

AAA Foundation for Traffic Safety (2015): Driving Cessation and Health Outcomes in Older Adults. A LongROAD Study, Washington DC (3)

Aarhaug,J, Elvebakk,B (2015): The impact of Universally accessible public transport – a before and after study, Transport Policy, 44, pp. 143-150 (3)

AASHTO (2013): Commuting in America 2013: The National Report on Commuting Patterns and Trends (2,5)

ADAC Studie zur Mobilität (2016): Mobilität sichert Entwicklung: Herausforderungen für den ländlichen Raum, IGES (2)

Adams,A, Hood,A, Levell,P (2014): ‘The Squeeze on Incomes’, in C. Emmersen, P. Johnson and H. Miller (eds), The Green Budget 2014., London (3)

Adeel,M, Gar-On-Yeh,A, Zhang,F (2016): Transportation disadvantage and activity participation in the cities of Rawalpindi and Islamabad, Pakistan, Transport Policy, 47, pp. 1-12 (2)

Adewoyin,J et.al. (2016): Spatial Distribution and Accessibility of Primary Health Centre in Ife East Local Government of Osun State, Nigeria, Journal of Scientific Research & Reports, 9 (7), pp.1-9 (4)

- Ahern,A,Hine,J (2012): Rural transport- Valuing the mobility of older people, *Research in Transportation Economics*, 34(1), pp. 27-34 (3)
- Ahern,A, Hine, J (2015): Accessibility of Health Services for Aged People in Rural Ireland, *International Journal of Sustainable Transportation*, 9:5,pp. 389-395 (5)
- Ahern,A, Vega,A, Caulfield,B (2016): Deprivation and access to work in Dublin City: The impact of transport disadvantage, *Research in Transportation Economics*, 57, pp. 44-52 (2)
- Ahmad,M (2013): Independent- Mobility Rights and the State of Public Transport for Disabled People: Evidence From Southern Punjab in Pakistan, *Administration & Society*, 47 (2), pp. 197-213 (2)
- AKOPLAN (2011): Mobilität und soziale Teilhabe sind Grundrechte – Ein Landesweites Sozial-ticket ist eine Notwendigkeit, Antrag im Landtag Nordrhein Westfalen, 15/1682 (5)
- Almeida Motta, Da Silva, De Sequero Santos (2013): Crisis of public transport by bus in developing countries: A case study from Brazil, *International Journal of Sustainable Development Planning*, 8, 3, pp. 348-361 (4)
- Alsnihi,R, Hensher,D (2003): The mobility and accessibility expectations of seniors in an aging population, *Transportation Research Part A*, 37, pp. 903-916 (3)
- Anable,J et.al (2010): *Energy – 2050. The Lifestyle Scenarios*, London, UK, UK Energy Research Centre (1)
- Anderson,A et.al.(2013); Persistence among Deep Rural Communities in the Northern Plains, Revisited, *Online Journal of Rural Research & Policy*, 8 (4), pp. 1-14 (2)
- Antonson,H, Akerskog,A (2015): “This is what we did last time”. Uncertainty over landscape analysis and its procurement in the Swedish planning process, *Land Use Policy*, 42, pp. 48-57 (1)
- Arbeitsgemeinschaft der Akademien Ländlicher Raum in den Deutschen Ländern (2013): *Kleine Städte und Dörfer: Schrumpfung in landlichen Räumen für Kooperation und Vitalisierung nutzen?* IGW , Berlin (2)
- Armoogum,J et. al (2010): Plus de voyages, plus de kilometres quotidiens: une tendance à l’homogénéisation des comportements de mobilité des Français, sauf entre ville et campagne, in ; *La mobilité des Français*, Commissariat Général au Développement Durable, La Défense, Paris (6)
- Arsenio,E, Martens,K, Di Ciommo,F (2016): Sustainable urban mobility plans: Bridging climate change and equity targets?, *Research in Transportation Economics*,55, pp. 30-39 (4)
- Ardila-Gomez,A (2012): *Public Transport in Latin America: a view from the World Bank* (4)
- Asian Development Bank ABD (2011): *Developing Tajikistan’s Transport Sector* (4)
- Axhausen,K (2005): Activity spaces, biographies, social networks and their welfare gains and externalities: Some hypotheses and empirical results, Paper for the PROCESSUS Colloquium, Toronto (1)
- Bache et. al (2014): Blame games and climate change: accountability, multi-level governance and carbon management, *The British Journal of Politics and International Relations*, pp. 1 – 20 (4)
- Bache et.al (2015): Symbolic meta-policy: (not) tackling climate change in the transport sector, *Political Studies*, 63,pp. 830-851 (4)



- Bachiri,N (2006): L'étalement urbain et la mobilité quotidienne d'adolescents de territoires urbain de la Communauté Metropolitaine de Quebec, Ecole d'Architecture, Université Laval, Quebec (3)
- Bachman,D, Barua,A (2015): Single- person households: Another look at the changing American family, Behind the Numbers Collection, Deloitte University Press (3)
- Bagley,C, Hillyard,S (2014): Rural schools, social capital and the Big Society: a theoretical and empirical exposition, British educational research journal, 40 (1), pp. 63-78 (2)
- Bajada,T, Mifsud,D, Di Ciommo,F (2016): Accessibility as an indicator of transport equity. The case of public transport infrastructure in Malta, and its impact on the elderly, Xjenza Online, 4, pp. 72-81 (5)
- Bakker,P, van Hal,J (2007): Understanding travel behaviour of people with a travel – impeding handicap: Each trip counts, paper for TRB Annual Meeting, Washington DC (3)
- Banister,D (2007): Is Paradigm Shift too Difficult in U.K. Transport? , Journal of Urban Technology, 14:2, pp. 71-86 (6)
- Banister,D (2008): The sustainable mobility paradigm, Transport Policy, 15, pp. 73-80 (4,6)
- Banister,D (2011a): Cities, mobility and climate change, Journal of Transport Geography, 19, pp. 1538-1546 (6)
- Banister,D (2011b): The trilogy of distance, space and time, Journal of Transport Geography, 19, pp. 950-959 (6)
- Banister,D (2015): Editorial: Journal impact factors and paper citations. Transport Reviews, 35(6), pp. 675-678 (4)
- Banister,D, Hickmann,R (2013): Transport futures: Thinking the Unthinkable, Transport Policy, 29, pp. 283-293 (6)
- Banister,D et.al (2016): Thinking Change and changing thinking. The need for change in transport thinking (6)
- Banjo,G, Gordon,H, Riverson,J (2012): Rural transport: improving its contribution to growth and poverty reduction in Sub – Saharan Africa, World Bank, Working Paper SSATP,93, Washington (2)
- Baratta,V (2016): Barriers To Success: Refugee Mobility In The New South Immigrant Gateway City of Columbia, SC, thesis, University of South Carolina (3)
- Barker,J (2011): “Manic Mums” and “Distant Dads” ?, Gendered geographies of care and the journey to school, Health & Place, 17, pp. 413-421 (3)
- Barr,S, Fraszczyk,A, Mulley,C (2010): Excess travelling – what does it mean? New definition and a case study of excess commuters in Tyne and Wear,UK, European Transport Research Review, 2, pp. 69-83 (6)
- Baslington, H. (2009) ; Children's perceptions of and attitudes towards, transport modes; why a vehicle for change is long overdue, Children's Geographies, 7 , 3, pp. 305-322 (3)
- Bastiaanssen,J (2012): Vervoersarmoede op Zuid. Een verkennend onderzoek naar de mate waarin verplaatsingsmogelijkheden van invloed zijn op de arbeidsreïntegratie van werklozen, Master thesis , Radboud Universiteit Nijmegen (1)

- Beck,U (1992) : Risk Society: Towards a New Modernity, Nottingham, UK, Sage Publications (1,3,4)
- Beckmann,J (2004): Mobility and Safety, Theory, Culture & Society, 21, pp. 81-101 (6)
- Beetz,S, Huning,S, Plieninger,T (2008): Landscapes of Peripherization in North- Eastern Germany's Countryside: New Challenges for Planning Theory and Practice, International Planning Studies, 13, 4, pp. 295-310 (2)
- Berg,J. et. al (2015): "I want complete freedom": car use and everyday mobility among the newly retired, European Transport Research Review, 7:31, pp. 1-10 (3)
- Bergstadt,C et.al (2011) Subjective well- being related to satisfaction with daily travel, Transportation, 38, pp. 1-15 (1)
- Berman,A (2017): The Beginning Of The End For The Bakken Shale Play, Forbes, 1-3-2017 (2)
- Berry,A. et. al (2016): Investigating fuel poverty in the transport sector: Toward a composite indicator of vulnerability, Energy Research & Social Science, 18, pp. 7-20 (3)
- Bertolini,L (2012): Integrating Mobility and Urban Development Agendas: a Manifesto, The Planning Review, 48:1, pp. 16-26 (6)
- Beyazit,E (2011): Evaluating Social Justice in Transport: Lessons to be Learned from the Capability approach, Transport Reviews, 31:1, pp. 117-134
- Billingham,C (2017): Waiting for Bobos: Displacement and Impeded Gentrification in a Midwestern City, City & Community,16:2, pp. 145-168 (2)
- Bitler,M, Haider,S (2011): An economic view of Food Deserts in the United States, Journal of Policy Analysis and Management, 30,1, pp. 153-176 (2)
- Bjerkkan,K, Nordtomme,M (2014): Car use in the leisure lives of adolescents. Does household structure matter?, Transport Policy, 33, pp. 1-7 (3)
- Blair,N, Hine,J, Bukhari,S (2013): Analysing the impact of network change on transport disadvantage: A GIS-based case study of Belfast, Journal of Transport Geography, 31, pp. 192-200 (2)
- Blais,D,El-Geneidy,D (2014): Better living through mobility: The relationship between access to transportation, well-being and disability. 93rd Annual Meeting of the Transportation Research Board, Washington, DC. (3)
- Blumenberg,E, Waller,M (2003): The long journey to work: Federal transportation policy for working families, Brookings Institution, Washington DC (2)
- Blumenberg,E. (2009): Moving in and moving around: immigrants, travel behaviour, and implications for transport policy, Transportation Letters 1.2 , pp. 169-180 (3)
- Blumenberg,E, Smart,M (2010): Getting by with the help of my friend...and family; immigrants and carpooling, Transportation, 37, pp. 429-446 (3)
- Boarnet,M, Hsu,H (2015): The gender gap in non- work travel; the relative roles of income earning potential and land use, Journal of Urban Economics, 86, pp. 111-127 (3)
- Bocajero,J, Oviedo,D (2012): Transport accessibility and social inequities: a tool for identification of mobility needs and evaluation of transport investments, Journal of Transport Geography, 24, pp 142-154(1)

- Bocker,L, van Amen,P, Helbich,M (2016): Elderly travel frequencies and transport mode choices in Greater Rotterdam, the Netherlands, *Transportation*,44(4),pp. 1-22 (3)
- Boisjoly,G, El\_Geneidy,A (2017a): How to get there? A critical assessment of accessibility objectives and indicators in metropolitan transportation plans, *Transport Policy*, 55, pp. 38-50 (5)
- Boisjoly,G, El-Geneidy,A (2017b): The insider; A planners' perspective, *Journal of Transport Geography*, 64, pp. 33-43 (5)
- Bommelstroet,M te, et.al (2017): Strenghts and weaknesses of accessibility instruments in planning practice: technology rules based on experimental workshops, *European Planning Studies*, 24:6, pp. 1175-1196 (5)
- Bose,P (2014): Refugees in Vermont: mobility and acculturation in a new immigrant destination, *Journal of Transport Geography*, 36, pp. 151-159 (3)
- Boussauw,K, Vanoutrive,T (2017); Transport policy in Belgium: Translating sustainability discourses into unsustainable outcomes, *Transport Policy*, 53, pp. 11-19 (6)
- Boutellier,H. (2002): *De Veiligheidsutopie; Hedendaags onbehagen en verlangen rond misdaad en straf*, Den Haag, Boom Uitgevers (3)
- Bouzouina, L, Cabrera Delgado,J, Emmerich,G (2014): Inegalites d'accessibilité a l'emploi en transport collectif urbain: deux decennies d'evolutions en banlieu lyonnaise, *Revue d'Economie Regionale et Urbaine*, 1, pp 33-61 (2)
- Bradshaw,J et.al (2004) ; The drivers of social exclusion, A review of the literature for the Social Exclusion Unit in the Cycle series, Office of the Deputy Prime Minister, London (1)
- Brand,C, Morton,C, Anable,J (2017): Lifestyle, efficiency & limits: modelling transport energy and emissions using a socio- technical approach, paper Environmental Change Institute and Transport Research Unit, University of Oxford (6)
- Brand,P, Davila,J (2001) : Mobility innovation at the urban margins. *Medellin's Metrocables*, *City*,15,6, pp. 647-661 (3)
- Braun,S (2016): Revisited Frontiers: The Bakken, the Plains, Potential Futures, and Real Pasts, Chapter 5, in Caraher,W and Conway,K (eds) : *The Bakken goes Boom. Oil and the changing geographies of North Dakota*, The Digital Press, University of North Dakota, Grand Forks (2)
- Brezina,T (2008) ; What went wrong in New Orleans? An Examination of the Welfare Dependency Explanation, *Social Problems*, Vol.55, No 1, pp 23-42 (1)
- Broekhoff,E, Erickson,P, Lee, C (2015): What cities do best: Piecing together an efficient global climate governance, Stockholm Environment Institute, Working Paper 2015-15 (4)
- Bromley,R, Matthews,D, Thomas,C (2007): City centre accessibility for wheelchair users; the consumer perspective and the planning implications, *Cities*, 24, 3 , pp. 229-241 (3)
- Brookings Institution (2014): *Developing a Common Narrative on Urban Accessibility: Transport Pricing and Accessibility*, Washington DC (3)
- Brooks,E (2014): *Social Isolation as it Affects Older People in Rural Areas*, Commission for Rural Communities, UK (2)

Brundtland Report (1989); Our Common Future, World Commission on Environment and Development (WCED)

Bryceson,D, Bradbury,A, Bradbury,T (2008): Roads to Poverty Reduction? Exploring Rural Roads' Impact on Mobility in Africa and Asia, Development Policy Review,26 (4), pp. 459-482 (2)

Bukhar,S et.al (2010): Transport disadvantage and Public transport network change: A case study of Belfast City, paper WCTR 12, July 11-15, Lisbon (5)

Buehler,R, Pucher,J (2011): Making public transport financially sustainable, Transport Policy,18, pp. 126-138 (5)

Bundesamt für Statistik (2016): Mobilität und Verkehr, Verkehrsverhalten der Bevölkerung, Neuchâtel (3)

Bundesanstalt Landwirtschaft und Ernährung (2013): Daseinsvorsorge in ländlichen Räumen unter Druck. Wie reagieren auf den demografischen Wandel?, Bonn (2)

Bureau,B, Glachant,M (2011); Distributional effects of public transport policies in the Paris Region, Transport Policy, 18, pp. 745-754 (5)

Burkitt,N (2000); Own transport preferred: transport and social exclusion in the North East. A report by the Low Pay Unit (1)

Busch-Geertsema, A, Klinger, Lanzendorf, M (2015) : Wo bleibt eigentlich die Mobilitätspolitik? Eine kritische Auseinandersetzung über Defizite und Chancen der deutschen Politik und Forschung Verkehr und Mobilität, Informationen zur Raumentwicklung, 2, pp. 135-148 (6)

Buttner,B (2016): Sharp Increases in Mobility Costs: A trigger for Sustainable Mobility, in Wulfhorst,G, Klug,S (eds), Sustainable Mobility in Metropolitan Regions, Studien zur Mobilitäts- und Verkehrsforschung (3)

Cadestin,C. et.al (2010): Mobility of disabled people and its evolution in France, Paris (3)

Camarero,L, Cruz,F, Oliva,J (2016): Rural sustainability, intergenerational support and mobility, European Urban and Regional Studies, 23(4), pp. 734-749 (3)

Campaign for Better Transport (2016): Buses in Crisis. A report on bus funding across England and Wales 2010-2016 (%)

Canadian Human Rights Commission (2012): Report on Equality of Rights of People with Disabilities, Ministry of Public Works and Government Services, Ottawa (3)

Canzler,W (1997): Der Erfolg des Automobils und das Zauberlehrlings-Syndrom, in ; Dierkes, M (eds); Technikgenese: Befunde aus einem Forschungsprogramm, Edition Sigma, Berlin, pp. 99-129 (6)

Canzler,W (2004): Wege aus der "verfahrenen" Verkehrspolitik? , Informationen zur Raumentwicklung, 6, pp. 341-348 (6)

Canzler,W (2017): Mit angezogener Handbremse: zum Stand der Energiewende, Aus Politik und Zeitgeschichte, 67, 16/17, pp. 31-38 (6)

Canzler,W, Knie,A (2004): Umdeutung des Automobils. Eine sozialwissenschaftliche Unternehmung, WZB Mitteilungen, Heft 105, pp. 29-33 (6)

Canzler,W , Knie, A(2009): Grüne Wege aus der Autokrise: Vom Autobauer zum Mobilitätsdienstleister, Heinrich Boll Stiftung (6)

Canzler,W, Knie,A (2015): Die neue Verkehrswelt Mobilität im Zeichen des Überflusses: schlau organisiert, effizient, bequem und nachhaltig unterwegs, in : Eine Grundlagenstudie im Auftrag des Bundesverbandes Erneuerbare Energien, Bochum (6)

Canzler,W, Knie,A (2016a): Brave New Mobility World? No energy transition without transport transition, paper Innovation Centre for Mobility and Societal Change (InnoZ), Berlin (6)

Canzler,W, Knie, A (2016b); Mobility in the age of digital modernity: why the private car is losing its significance, intermodal transport is winning and why digitalisation is the key, Applied Mobilities,1:1, pp. 56-67 (6)

Canzler,W, Marz,L (1996): Festgefahren? Der Automobilpakt im 21. Jahrhundert, Berlin, WZB Discussion Paper FS pp. 96-108 (6)

Canzler,W, Wittowsky,D (2016): The impact of Germany's *Energiewende* on the transport sector – Unsolved problems and conflicts, Utilities Policy,41, pp. 246-251 (6)

Cao,M, Hickmann,R (2016): Investigating travel vulnerability in Greater London: Future changes in oil prices and housing affordability, paper World Conference Transport Research, Sjanghai (2)

Carrabine,E, Longhurst,B (2002): Consuming the Car: anticipation, use and meaning in contemporary youth culture, Sociological Review, pp. 181-196 (3)

Carlsson-Kanyama,A et.al (1999): Insights and Applications Gender Differences in Environmental Impacts from Patterns of Transportation - A Case Study from Sweden. Society & Natural Resources, 12(4) pp. 355-369 (3)

Carson,G (2003): Reducing Social Exclusion by improving transport – assessing the problems and appraising the options, Paper European Transport Conference (1)

Carver,A et.al (2013): A comparison study of children's independent mobility in England and Australia, Children's Geographies, 11:4, pp. 461-475 (3)

Casas,I (2007): Social Exclusion and the Disabled: An Accessibility Approach, The Professional Geographer, 59:4, pp. 463-477 (3)

Cass, N, Shove, E, Urry,J (2005): Social exclusion, mobility and access, Sociological Review, 53, pp. 539–555 (1)

Cats,O, Susilo,Y, Reimal,T (2016): The prospects of fare-free public transport: evidence from Tallinn, Transportation, pp.1-22 (5)

Caubel,D (2012): Politique de transports et accès à la ville pour tous ? Une méthode d'évaluation appliquée à l'agglomération lyonnaise, Les Annales de la recherche urbaine, N°107, 2012. La ville en thèse. pp. 36-45 (2)

Cazemier,O (2016): Implementation of new flexible transport solutions in the province of Gelderland, International Conference on Demand Responsive Transportation: Paratransit from Dial-a-Ride to Technology Enabled Services,TRB, Beckenridge (5)

CBS (2015): Waardenverandering in Nederland, SOCON 1980-2011 data, Den Haag (6)

CBS (2016): Helpt minder kilometers na pensioen, Den Haag, 14-4-2016 (3)

CBS Statline (2016): Data on demography, elderly cohorts (3)

CBS Statline (2016): Statistiek Verkeer en Vervoer (3)

CDC Wonder (2016): Teenage Suicide Trends, by State, 1999-2014, Analysis of Population Reference Bureau of data from Centres of Disease Control and Prevention, National Centre of Health Statistics (2)

CE Delft (2017): Klimaatbeleid voor mobiliteit op de kaart, Delft (6)

Cervero,R (2013a): Transport Infrastructure and the Environment: Sustainability and Urbanism, Working paper Berkeley Institute of Urban and Regional Development (3,4)

Cervero,R (2013b): Bus Rapid Transit (BRT): An Efficient and Competitive Mode of Public Transport, paper Berkeley Institute of Urban and Regional Development (4)

Cesor (2011): De sociale effecten van basismobiliteit in niet- stedelijke gebieden, Vrije Universiteit Brussel (5)

Chalak,A et.al.(2016): Commuter's behaviour towards upgraded bus services in Greater Beirut: Implications for greenhouse gas emissions, social welfare and transport policy, Transportation Research Part A, 88, pp. 265-285 (2)

Charmes,E (2009): On the Residential 'Clubbisation' of French Peri-urban Municipalities, Urban Studies, 46 (1), pp. 189-212 ,(2)

Chatman,D, Klein,N (2013): Why do immigrants drive less? Confirmations, complications, and new hypotheses from a qualitative study in New Jersey, USA, Transport Policy, 30, pp. 336-344 (3)

Chemetov,P (2009): "Pour que Paris soit grand", L'Humanité, 18 decembre (2)

Chen,N, Akar,G (2017): How do socio-demographics and built environment affect individual accessibility based on activity space? Evidence from Greater Cleveland, Ohio, The Journal of Transport and Land Use, 10,1, pp. 477-503 (2)

Cheng,YH, Chen, SY (2015) : Perceived accessibility, mobility, and connectivity of public transportation system, Transportation Research Part A, 77, pp. 386-403 (1)

Chevalier,L, De Coninck,F, Motte- Baumvol,B (2014): La durabilité du périurbain dépendant de l'automobile au regard des pratiques d'achat en ligne des ménages. ASRDLF 2014-51ème colloque de l'Association de Science Régionale de Langue Française (2)

Chlond,B, Ottman,P (2007): Das Mobilitätsverhalten Alleinerziehenden und ihre Aktivitäten ausser Haus, Deutsche Zeitschrift fur Kommunalwissenschaften, 46 (2), pp. 46-61 (3)

Choi, M, Mezuk, B, Rebok,G (2012): Voluntary and Involuntary Driving Cessation in Later Life, Journal of Gerontological Social work, 55:4, pp. 367-376 (3)

Choplin,A, Delage,M (2011): Mobilités et espaces de vie des étudiants de l'Est francilien: des proximités et dependances a negocier, Cybergeog European Journal of Geography, 1 July (2)

Christian,H et.al (2017): Nowhere to Go and Nothing to Do but sit? Youth Screen Time and the Association With Access to Neighbourhood Destinations, Environment and Behaviour, 49 (1), pp. 84-108 (3)

Church,A, Frost,M, Sullivan,K (2000): Transport and social exclusion in London, Transport Policy, 7, pp. 195-205 (2)

Citiscopes (2016): Why Helsinki's innovative on-demand bus service failed, 4 march (5)

Civitas (2014): Gender equality and mobility: mind the gap!, Policy Note (3)

Clark,B, Lyons,G, Chatterjee,K (2016): Understanding the process that gives rise to household car ownership level changes, *Journal of Transport Geography*, 55, pp. 110-120 (3)

Clarke,P, Gallagher,N (2013): Optimizing Mobility in Later Life: The Role of the Urban Built Environment for Older Adults Aging in Place, *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 90,6, pp. 997-1009 (3)

Clifton,G, Mulley,C (2016); A historical overview of enhanced bus services in Australian cities: What has been tried, what has worked?, *Research in Transportation Economics*, 59, pp. 11-25 (6)

Cloke,P (1995): *Rural Accessibility and Mobility*, Institute of British Geographers, Rural Geography Study Group, Lampeter (2)

Clout,H (1972); *Rural Geography. An introductory survey*, Pergamon International Library (1,2)

Coevering,P van de, Schwanen,T (2006): Re-evaluating the impact of urban form on travel patterns in Europe and North- America, *Transport Policy*, 13, pp 229-239 (2)

Cohen,M (2012): The future of automobile society: a socio-technical transitions perspective, *Technology Analysis & Strategic Management*, 24, 4, pp. 377-390 (4)

Colantonio, A (2009) ; Social sustainability: a review and critique of traditional versus emerging themes and assessment methods, in: Horner, M et.al (ed) ; SUE-Mot Conference 2009: Second International Conference on Whole Life Urban Sustainability and its Assessment: conference proceedings, Loughborough; Loughborough University,865 (1)

Coles,O (1978): Transport and Rural Deprivation, in Walker,A, *Rural Poverty, Poverty Deprivation and Planning in Rural Areas*, Child Poverty Action Group, pp. 78-91 (2)

Commission for Integrated Transport (2008): *A new approach to Rural Public Transport*, London (2)

Commission for Rural Communities (2012): *Social Isolation experienced by older people in rural communities*, London (2)

Connor,B (2016): UK DRT; From Niche Market to Total Transport?, *Paratransit: Shaping the Flexible Transport Future*, Emerald Insight,(5)

ConSol (2013): *Mobility Patterns in the Ageing Populations, Concerns & Solutions. Road Safety in the Ageing Societies*, Work Package 2- Summary Report (3)

CorpWatch (2017): *What is Neoliberalism? A brief definition for activists*, San Francisco (6)

Coutard,O, Dupuy,G, Fol,S (2002): La pauvreté périurbaine: dépendance locale ou dépendance automobile, *Espaces et Sociétés*, 108-109, pp. 155-176 (2,6)

Coveney,J, O'Dwyer,L (2009) ; Effects of mobility and location on food access, *Health & Place*, 15, pp. 45-55 (2)

Crawford, G (2012): *Sustainable Transport in Colombia: Bogota and the Transmillenio*, Case Study UK Aid (3)



Crawford,S et.al (2017): Worries, “weirdo’ s”, neighbourhoods and knowing people: a qualitative study with children and parents regarding children’s independent mobility, *Health & Place*, 45, pp. 131-139 (3)

Cremers,M, Backera,V, Faun,H (2007): Afstand tot werk, of afstand tot de arbeidsmarkt: een onderzoek naar de ruimtelijke mobiliteit van lager opgeleiden in Twente en Zuid Limburg, Maastricht, E’til (1,3)

Creutzig,F (2015): Evolving Narratives of Low-Carbon Futures in Transportation, *Transport Reviews*, pp. 1-20 (6)

Creutzig,F et.al. (2016): Beyond Technology: Demand- Side Solutions for Climate Change Mitigation, *Annual Review of Environment and Resources*, 41, pp. 173-198 (6)

Criden,M (2008): The Stranded Poor: Recognizing the Importance of Public Transportation for Low-Income Households, *National Association for State Community Service Programs*, Washington DC (5)

Crossley,N (2008): (Net) Working out: social capital in a private health club, *The British journal of sociology*, 59 (3), pp. 475-500 (1)

Crozet,Y, Wulfhorst,G (2010): Urban mobility and public policies at a crossroad: 50 years after W. Hansen, the paradoxical come-back of accessibility, paper, WCTR, Lisbon (4)

Curl,A, Nelson,J, Anable,J (2011): Does Accessibility Planning address what matters? A review of current practice and practitioner perspectives, *Research in Transportation Business & Management*, University of Glasgow (5)

Curl,A, Clark,J, Kearns,A (2017): Household car adoption and financial distress in deprived urban communities: A case of forced car ownership ?, *Transport Policy* (6)

Currie,G (2010) : Quantifying spatial gaps in public transport supply based on social needs, *Journal of Transport Geography*, 18, pp. 31-41 (5)

Currie,G, Delbosc,A (2013); Exploring trends in Forced Car Ownership in Melbourne. *Proceedings Australasian Transport Research Forum*, 2-4 October, Brisbane, Australia (1,3)

Currie,G, Stanley,J (2008) ; Investigating Links between Social Capital and Public Transport, *Transport Reviews*, 28;4, pp. 527-547 (1)

Currie,G et.al (2009): Investigating links between transport disadvantage, social exclusion and well-being in Melbourne- Preliminary results, *Transport Policy*, 16, pp. 97-105 (2)

Curtis, A, Warren Mills, J, Leitner, M (2007): Katrina and Vulnerability: The Geography of Stress, *Journal of Health Care for the Poor and Underserved*, 18, pp. 315-330 (1)

Daniels,G, Dench,L (1974) : Passengers no more, Ian Allen, Shepperton (2)

Daniels,R, Mulley,C (2012); Planning Public Transport Networks – The Neglected Influence of Topography, *Journal of Public Transportation*, 15, pp. 23-41 (6)

Darbyshire,P (2007): “Childhood”: are reports of its death greatly exaggerated ?, *Journal of Child Health Care*, 11, pp. 85-97 (3)

Davey,A (2007); Older People and Transport: Coping without a Car, *Ageing & Society*, 27, pp. 49-65 (3)

Davidson, K, et. al.(2008): Children’s Active Commuting to School ; Current Knowledge and Future Directions, *Public Health Research, Practice and Policy*, 5, 3, pp 1-11 (3)

Davidson, L et al (2014): A survey of Demand Responsive Transport in Great Britain, *Transport Policy*, 31, pp. 47-54 (5)

Davila, J (2009) : Being a mayor: the view from four Colombian cities, *Environment & Urbanisation*, 21 (1), pp. 37-57 (3)

Dejoux, V, Armoogum J (2010): The gap in term of mobility for disabled travellers in France. Paper presented at 12th World Conference on Transport Research, Lisbon (3)

Dekker, P et al (2013): Samen!- en met de overheid: de publieke opinie over solidariteit, Raad voor Maatschappelijke Ontwikkeling, Den Haag (6)

Delafontaine, M, et al (2011); The impact of opening hours on the equity of individual space-time accessibility, *Computers, Environment and Urban Systems*, 35(4), pp. 276-288 (3)

Delbosc, A, Currie, G (2011a); The spatial context of transport disadvantage, social exclusion and well-being, *Journal of Transport Geography*, 19, pp. 1130-1137 (1)

Delbosc, A, Currie, G (2011b); Transport problems that matter- social and psychological links to transport disadvantage, *Journal of Transport Geography*, 19, pp. 170-178 (1)

Delbosc, A, Currie, G (2011c): Using Lorenz curves to assess public transport equity, *Journal of Transport Geography*, 19, pp. 1252-1259 (1)

Delbosc, A, Currie, G (2011c); Exploring the relative influences of transport disadvantage and social exclusion on well-being, *Transport Policy*, pp. 555-562 (1)

Delbosc, A, Currie, G (2012); Choice and disadvantage in low-car ownership households, *Transport Policy*, 23, pp 8-14 (1,3)

Delbosc, A, Vella- Brodrick, D (2015): The role of transport in supporting the autonomy of young adults, *Transportation Research Part F*, 33, pp. 97-105 (3)

Delhey, J, Dragolov, G (2014): Why Inequality Makes Europeans Less Happy: The Role of Distrust, Status Anxiety, and Perceived Conflict, *European Sociological Review*, 30, 2, pp. 151-165 (6)

Demey, D et al. (2013): Pathways into living alone in mid-life: Diversity and policy implications, *Advances in Life Course Research*, 18, pp. 161-174 (3)

Dempsey, N, Brown, C, Bramley, G (2012); The key to sustainable urban development in UK cities? The influence of density on social sustainability, *Progress in Planning*, 77, pp. 89-141 (6)

Deng, H et al. (2016): Urban transport social needs in China: Quantification with central government transit grant, *Transport Policy*, 51, pp 126-139 (2)

Denmark, D, Stevens, N (2016): Community Transport in Australia, In ; Paratransit: Shaping the Flexible Transport Future, *Emerald Insight*, pp. 263-287 (5)

Dennis, K, Urry, J (2007): The Digital Nexus of Post- automobility, working paper, Department of Sociology, Lancaster University (^)

Dennis, K, Urry, J (2009): *After the Car*, Polity Press, Oxford (6)

Denys, D (2017): Een kleine inkijk in onze angsten , Atlas Contact, Amsterdam (3,6)

Department of Infrastructure, Victoria, Australia (2007): *Maintaining Mobility: The transition from driver to non- driver* (3)

Department for Transport United Kingdom (2009): *Mobility: Choices and barriers for different social groups*, London (3)

Descartes,L, Kottak,C, Kelly,A (2007): *Chauffeurage and Commuting*, *Community, Work & Family*, 10, 2, pp. 161-178 (3)

Devaux,J (2014): *Les trois âges de socialisation des adolescents ruraux. Une analyse à partir des mobilités quotidiennes*, *Agora*, 68, pp. 25-39 (3)

Devaux,J, Oppenchaim,N (2012): *La mobilité des adolescents : une pratique socialisée et socialisante*, *Metro Politiques*, 28-11 (3)

Devaux,J, Oppenchaim,N, Proulhac,L (2016): *L'évolution des pratiques de mobilité des adolescents depuis 20 ans en Ile-de-France: quelle influence des variables sociales et territoriales sur les inegalites de genre?*, *Metropoles*,18 (3)

De Vos,J et.al (2012) ; *Reducing car use: changing attitudes or relocating? The influence of residential dissonance on travel behaviour*, *Journal of Transport Geography*, 20, pp. 1-9 (1)

Diaz Olvera,L, Plat,D, Pochet,P (2003): *Transportation conditions and access to services in a context of urban sprawl and deregulation. The case of Dar es Salaam*, *Transport Policy*, 10, pp. 287-298 (2)

Didier-Fevre,C (2013): *Young commuters in the peri-urban environment : Are they special users of public transportation?. Proceedings of the 1st EURUFU Scientific Conference, 2013, 1st Scientific Conference*, pp. 35-44 (2)

Didier-Fevre,C (2015): *"The place to be?" Vivre et bouger dans les entre-deux: jeunesse et mobilités dans les espaces periurbains*, these Université Paris Ouest (2)

Dobbs,L (2005):*Wedded to the car: Women, employment and the importance of private transport*, *Transport Policy*, 12,pp 266-278 (3)

Dodson,J, Sipe,N (2006); *Shocking the Suburbs: Urban location, housing debt and vulnerability in the Australian city*. Urban Research Program, Paper 8, Brisbane, Australia, Griffith University (1,3,6)

Dodson,J et.al (2006): *Investigating the Social Dimensions of Transport Disadvantage- I . Towards New Concepts and Methods*, *Urban Policy and Research*, 24:4, pp. 433-453 (1)

Dodson,J, Sipe,N (2007): *Oil Vulnerability in the Australian City: Assessing Socioeconomic Risks from Higher Urban Fuel Prices*, *Urban Studies*, 44, pp 37-62 (2)

Dodson,J, Sipe,N (2008); *Unsettling Suburbia: The New Landscape of Oil and Mortgage Vulnerability in Australian Cities*, Urban Research Program, Research Paper No. 17, Griffith University, Brisbane (6)

Dodson,J (2010); *In the Wrong Place at the Wrong Time? Assessing some Planning, Transport and Housing Market Limits to Urban Consolidation Policies*, *Urban Policy and Research*, 28:4, pp. 487-504 (6)

Dodson,J (2014); *Suburbia under an Energy Transition: A Socio- technical Perspective*, *Urban Studies*, 51, pp. 1487-1505 (6)

Dodson,J, Sipe,N, Li,T (2015); *Investigating urban oil vulnerability*, in Hickmann,R et.al (eds): *Handbook on Transport and Development*, Elgar Publishers, pp. 571-586 (6)

Douglas,H.P (1925); *The Suburban Trend*, New York, NY, The Century (2)

- Douglas,M et.al. (2011); Are cars the new tabacco?, *Journal of Public Health*, 33, 2, pp. 160-169 (6)
- Duchenne,C (2011): Transport et parité des sexes, Doc 2011-11, International Transport Forum (3)
- Dupré,M (2014): Representation sociale du covoiturage: des contraintes perçues au faire- ensemble, *Les Cahiers Scientifiques de Transport*, 66, pp. 97-113 (6)
- Dupuy,G (1999): La dependence automobile, Paris: Antropos (6)
- Durantón,G, Guerra,E (2016): Developing a Common Narrative on Urban Accessibility: An Urban Perspective, Brookings Institution, *Moving to Access* (4,5)
- Durodie,B. (2005): The Limitations of Risk management. *Tidsskrifte Politik* , 8, pp 14-21 (3)
- Durodie,B. (2006): The concept of Risk, Risk Case Studies. Nuffield Trust Global Programme on Health, Foreign Policy and Security (3)
- Duvarci,Y,Yigitcanlar,T,Mizokami,S (2015): Transport disadvantage impedance indexing: A methodological approach to reduce policy shortcomings, *Journal of Transport Geography*, 48, pp. 61-75 (1)
- Dijst,M, Kwan,MP (2002): Accessibility and Quality of Life : Time- Geographic Perspectives, in Donaghy,K et.al: *Social Dimension of Sustainable Transport*, Ashgate (1)
- Dijst, M, de Jong,T, Ritsema van Eck,J (2002): Opportunities for transport mode change: an exploration of a disaggregated approach, *Environment and Planning B*, 29, pp. 413-430 (1)
- Easton,S, Ferrari,E (2015): Children's travel to school – The interaction of individual, neighbourhood and school factors, *Transport Policy*, 44,pp. 9-18 (3)
- Ecorys (2016): (6)
- Edwards,J et.al (2009); Driving Cessation and Health Trajectories in Older Adults, *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences*, 64A (12), pp. 1290-1295 (3)
- Edwards,M et.al (2014): Promoting Young Physical Activity in Rural Southern Communities: Practitioner Perceptions of Environmental Opportunities and Barriers, *The Journal of Rural Health*, 1, pp. 1-9 (3)
- EGT (2010): Les modes utilisés pour les déplacements de la journée selon la catégorie socio-professionnelle des actifs occupés, en 2010. Source : EGT 2010 STIF-OMNIL-DRIEA (3)
- Ekers, M, Hamel,P, Keil,R (2012); Governing Suburbia: Modalities and Mechanisms of Suburban Governance, *Regional Studies*, 46:3, pp. 405 -422 (2)
- El-Geneidy,A et.al. (2016) : The cost of equity: Assessing transit accessibility and social disparity using total travel cost, *Transportation Research Part A*, 91, pp. 302-316 (1,5)
- Elchardus, M (2016): Mijn vrijheid is van ons, In *Jaarboek Wiardi Beckmann Stichting, Omstreden Vrijheid*, pp. 40-62 (6)
- Emberger,G (2017): National transport policy in Austria – from its beginning till today, *European Transport Research Review*, 9:6, pp. 1-16 (4)
- Engels,B, Liu,GJ (2011); Social exclusion, location and transport disadvantage amongst non- driving seniors in a Melbourne municipality, Australia, *Journal of Transport Geography*, 19, pp. 984-996 (3)

Enoch,P (2015); How a rapid modal convergence into a universal automated taxi service could be the future for local passenger transport, *Technology Analysis & Strategic Management*,27 (8), pp. 1-15 (6)

Enquete Kommission Landtag Mecklenburg Vorpommern (2014): Alter werden in Mecklenburg-Vorpommern (2)

Enright,T (2013): Mass transportation in the neoliberal city: the mobilising myths of the Grand Paris Express, *Environment and Planning A*, 45, pp. 797-813 (2)

EPOMM( 2017): TEMS- The Modal Split Tool, <http://www.epomm.eu/tems/> (4,5)

ESPON Atlas (2014): Mapping European Territorial Structures and Dynamics, EU (3)

Essebo,M, Baeten,G (2012): Contradictions of “Sustainable Mobility”- The illogic of growth and the logic of myth, *Tijdschrift voor Economische en Sociale Geografie*, pp. 555-565 (4)

Estroff Marano,H (2004) ; A Nation of Wimps, A Nation of Wimps. The High Cost of Invasive Parenting (3)

Ettema,D et.al (2010): Out-of-home activities, daily travel and subjective well- being, *Transportation Research Part A*, 44, pp. 723-732 (1)

European Parliament Directorate General For Internal Policies (2015): Social Inclusion in EU Public Transport, Brussels (3)

Eurostat (2015): People in the EU, statistics on household and family structures (3)

Eyre,N et.al (2011): The way we live from now on : Lifestyle and energy consumption, in J.Skea et.al, *Energy 2050: the transition to a secure and low carbon energy system for the UK*, pp 258-293, London, Earthscan (1)

Faiz, A (2011): Transportation and the Urban Poor, *ITE Journal*, pp.40-43 (4)

Faiz,A (2012): The Promise of Rural Roads. Review of the Role of Low- Volume Roads in Rural Connectivity, Poverty Reduction, Crisis Management and Liveability, *Transportation Research Circular*, E-C167 (2)

Falavigna,C, Hernandez,D (2016): Assessing inequalities on public transport affordability in two Latin American cities: Montevideo (Uruguay) and Cordoba (Argentina), *Transport Policy*, 45, pp. 145-155 (3)

Fan,Y (2017): Household structure and gender differences in travel time; spouse/partner presence, presence, parenthood, and breadwinner status, *Transportation*, 44, pp. 271-291(3)

Farber,S, Paez,A (2011): Running to stay in place: the time-use implications of automobile oriented land-use and travel, *Journal of Transport Geography*, 19, pp. 782-793 (1)

Farber,S, Li, X (2013): Urban Sprawl and social interaction potential: an empirical analysis of large metropolitan regions in the United States, *Journal of Transport Geography*, 31, pp. 267-277 (2)

Farber,S et.al (2014): Assessing social equity in distance based transit fares using a model of travel behaviour, *Transportation Research Part A*, 67, pp. 291-303 (5)

Farber,S, Ritter,B, Fu,L (2016): Space-time mismatch between transit service and observed travel patterns in the Wasatch Front, Utah: A social equity perspective, *Travel Behaviour and Society*, 4, pp. 40-48 (5)

- Farmer,S (2011): Uneven public transportation development in neo liberalizing Chicago, USA, *Environment and Planning A*, 43, pp. 1154-1172 (5)
- Farrington,J, et.al (1998): Car dependence in rural Scotland, The Scottish Office, Edinburgh (2)
- Farrington,J, Farrington,C (2005): Rural accessibility, social inclusion and social justice: towards conceptualisation, *Journal of Transport Geography*, 13, pp. 1-12 (1)
- Farrington,J (2007): The new narrative of accessibility: its potential contribution to discourses in (transport) geography, *Journal of Transport Geography*, 15, pp. 319-330 (1)
- Femi,S (2013): Building Sustainable Policy Framework for Transport Development: A review of National Transport Policy initiatives in Nigeria, *Journal of Sustainable Development Studies*, 2, 1, pp. 1-23 (4)
- Ferreira, A, Batey, P (2007): Re- thinking accessibility planning. A multi-layer conceptual framework and its policy implications, *Town Planning Review*, 78(4), pp. 429-458 (5)
- FHWA (2014); FHWA NHTS BRIEF. Mobility Challenges for Households in Poverty (2)
- Fichert,F (2017): Transport policy planning in Germany – An analysis of political programs and investment masterplans, *European Transport Research Review*, 9:28, pp. 1-12 (4)
- Figuerola M, Sick Nielsen T, Siren A. (2014): Comparing Urban Form Correlations of the Travel Patterns of Older and Younger Adults. *Transport Policy*, 35, pp.10–20 (3)
- Fischmann,E, Brennan,T (2010): Oil vulnerability in Melbourne, Institute for Sensible Transport, Melbourne (2)
- Fitzgerald,G (2012): The social impacts of poor access to transport in rural New Zealand, NZ Transport Agency research report 484, Wellington (3)
- Fol,S (2009): La mobilité des pauvres, Paris, Belin (6)
- Fol,S, Cunningham- Sabot, E (2010): Declin urbain et Shrinking Cities: une evaluation critique des approches de la de croissance urbaine, *Les Annales de Geographie*, 674, pp. 359- 383 (6)
- Fol,S, Lehman- Frisch,S, Morange,M (2013): Segregation et justice spatiale, Presses Universitaire de Paris- Ouest 96)
- Fontanella,C et.al (2015): Widening Rural-Urban Disparities in Youth Suicides, United States, 1996-2010, *Journal American Medical Association JAMA, Pediatrics*, 169 (5), pp. 466-473 (2)
- Forsyth,A (2012): Defining Suburbs, *Journal of Planning Literature*, 27 (3), pp. 270-281 (2)
- Foster,S, et.al (2014): The impact of parent's fear of strangers and perceptions of informal social control on children's independent mobility, *Health & Place*, 26, pp. 60-68 (3)
- Foth,N, Manaugh,K, El-Geneidy,A (2013) ; Towards equitable transit: examining transit accessibility and social need in Toronto, Canada, 1996-2006, *Journal of Transport Geography*, 29, pp.1-10 (5)
- Frandsberg,L, Vilhelmson,B (2011): More or less travel: personal mobility trends in the Swedish population focusing gender and cohort, *Journal of Transport Geography*, 19, pp. 1235-1244 (3)
- Franke,S, Schmid, S (hrsg) (2013): Frauen im landlichen Raum, Hans Seidel Stiftung, Munchen (2)
- Freemark,Y (2015): Will autonomous cars change the role and value of public transportation? *The Transport Politic*, June,23 (5)

- Freund,P (2001): Bodies, Disability and Spaces: The social model and disabling spatial organisations, *Disability & Society*, 16:5, pp. 689-706 (3)
- Freund,P, Martin,G (2008); Fast cars/ Fast Foods: Hyperconsumption and its health and environmental consequences, *Social Theory and Health*, 6, pp. 309-322 (2)
- Furedi,F (2008): Fear and Security: A Vulnerability-led Policy Response, *Social Policy Administration*, 42,6, pp 645-661 (3)
- Fussl,E et.al (2012): Jugendliche: Lebensqualität, Verkehr & Mobilität, FWF Forschungsprojekt P 231984-G17, Wien (3)
- Fyhri,A et.al. (2011): Children's active travel and independent mobility in four countries; Development, social contributing trends and measures, *Transport Policy*, 18, pp. 703-710 (3)
- Gadepalli,R (2016): Role of Intermediate Public Transport in Indian Cities, *Economic and Political weekly*, 9, pp. 46-49 (4)
- Garbin,D, Millington,G (2011): Territorial Stigma and the Politics of Resistance in a Parisian Banlieue: La Courneuve and Beyond, *Urban Studies*, pp. 1-17 (2)
- Geels,F (2012); A socio-technical analysis of low-carbon transitions: introducing the multi-level perspective into transport studies, *Journal of Transport Geography*. 24, p. 471-482 (6)
- Geels,F (2014): Regime Resistance against Low-Carbon Transitions: Introducing Politics and Power into the Multi-Level Perspective, *Theory, Culture & Society*, 3, pp. 21-40 (4)
- Gehl,J (2013): *Cities for People*, Island Press (4)
- Germes,M, Glasze,G (2010): Die banlieues als Gegenorte der Republique. Ein Diskursanalyse neuer Sicherheitspolitiken in den Vorstädten Frankreichs, *Geographica Helvetica*, 65, 3, pp 217-228 (2)
- Gershuny,J (2005): Busyness as a badge of honour for the new superordinate working class, *Social Research*, 72, pp. 287-314 (6)
- Geurs,K, Wee,van B (2004): Accessibility evaluation of land-use and transport strategies: review and research directions, *Journal of Transport Geography*, 12, pp. 127-140 (1)
- Geurs,K, Krizek,K, Reggiani,A (2012): Accessibility analysis and transport planning: An introduction. In: Geurs,K, Krizek, K & Reggiani,A (Eds.), *Accessibility analysis and transport planning. Challenges for Europe and North America* (Edward Elgar Nectar Series) pp. 1-12, Cheltenham, UK: Edward Elgar Publishing Ltd (1)
- GGD (2007): Mobiliteitsbeperkingen bij ouderen in de regio Gelre- IJssel, *Gezondheidsatlas*, deel 10, Deventer (3)
- Ghosh- Dastidar,G (2017): Does opening a supermarket in a food desert change the food environment? , *Health & Place*, 46, pp. 249-256 (2)
- Giesel,F (2014): Mobility impairments among the elderly in rural areas of Germany, *Ageing and Safe Mobility Conference*, 27-28 Nov. , Bergisch - Gladbach
- Giesel,F, Rahn,C (2012): Mobility and social participation of the elderly in Suburbia: A gender- related analysis of Berlin and its hinterland, paper ETC Conference, 2012 (3)



- Giesel,F, Köhler,K (2015): How poverty restricts elderly Germans' everyday travel, European Transport Research Review, 7:15, pp.1-9 93)
- Gil Sola,A (2013): Towards gender equality? Women's and men's commuting under transformation and negotiation. Thesis at Department of Economy and Society. University of Gothenburg, Sweden (3)
- Gil Sola,A (2016): Constructing work travel inequalities: The role of household gender contracts, Journal of Transport Geography, 53, pp. 32-40 (3)
- Gill,T. (2007): No Fear ; Growing up in a Risk – averse society, Calouste Gulbenkian Foundation (3)
- Giuliano,G (2010): "Her money or her time": a gendered view of contemporary transport policy." Transportation Research Board Conference Proceedings. No. 46 #)
- Givoni,M (2013); Alternative Pathways to low carbon mobility, Givoni M, Banister,D eds, Moving Towards Low Carbon Mobility,pp. 209-230.
- GIZ (Deutsche Gesellschaft fur Internationale Zusammenarbeit) (2010): Financing Sustainable Urban Transport. International Review of National Urban Transport Policies and Programmes (4)
- GIZ (Deutsche Gesellschaft fur Internationale Zusammenarbeit) (2013); The contribution of Transport to Rural Development, Bonn (2)
- Glaeser,E, Kahn,M, Rappaport,J (2008): Why do the poor live in cities? The role of public transportation, Journal of Urban Economics,62,1 , pp. 1-24 (2)
- Glasze,G, Weber,F (2010): Drie Jahrzehnte area-basierte Stadtpolitik in Frankreich: *die Politique de la ville*, Raumforschung und Raumordnung,68 (6),pp. 459-470 (2)
- Gleeson,B, Randolph,B (2002): Social disadvantage and planning in the Sydney context, Urban Policy and Research, 20 (1), pp 101-107 (1)
- Gobillon,L, Selod,H, Zenou,Y (2007): The Mechanisms of Spatial Mismatch, Urban Studies, 44,12, pp. 2401-2427 (2)
- Gobillon,L, Selod,H (2013): Spatial mismatch, poverty and vulnerable populations, Handbook Regional Sciences, pp. 97-103, Springer Verlag (2)
- Godavarthy,R, Mattson,J (2016): Exploring Transit's Contribution to Liveability in Rural Communities: Case Study of Valley City and Dickinson, North Dakota, Upper Great Plains Transportation Institute, North Dakota State University, Fargo (2)
- Goldenbeld,C (2015): Effecten van vergrijzing op verkeersgedrag en mobiliteit. Een literatuurstudie., rapport R-2015-16, Stichting Wetenschappelijk Onderzoek Verkeersveiligheid SWOV, Den Haag (3)
- Goldmann,T.,Gorham,R (2006): Sustainable urban transport: Four innovative directions, Technology in Society, 28, pp. 261–27 (4).
- Gonick,S (2011): Disciplining the Metropolis: Grand Paris, Immigration and the Banlieue, Berkeley Planning Journal, 24, (1), pp 26-45 (2)
- Gordon, C et.al (2011): Measuring food deserts in New York's low- income neighbourhood, Health & Place, 17, pp. 696-700 (2)
- Gössling,S (2016): urban transport justice, Journal of Transport Geography, 54, pp. 1-9 (6)

- Gössling,S, Cohen,S, Hares,A (2016); Inside the black box: EU policy officers' perspectives on transport and climate change mitigation, *Journal of Transport Geography*,pp. 83-93 (6)
- Gössling,S, Metzler,D (2017): German climate policy: Facing an automobile dilemma, *Energy Policy* (6)
- Gottholmseder,G et.al (2009): Stress Perception and Commuting, *Health Economics*, 18, pp. 559-576 (2)
- Goulden,M, Ryley,T, Dingwall,R (2014): Beyond "predict and provide": UK transport, the growth paradigm and climate change, *Transport Policy*, 32,pp. 139-147 (4)\_
- Goyon,M, Ortar,N (2009): Desir de maison a l'aune du parcours résidentiel. Quelle promotion sociale dans le périurbain?, *Articulo-Journal of Urban Research* (2)
- Granados,N (2015); Does Transportation Infrastructure Reduce Poverty? Evidence from the Free Federal Trunk Highway System in Mexico, Thesis, Lund University (2)
- Grengs,J (2001): Does public transit counteract the segregation of carless households? Measuring spatial patterns of accessibility with GIS, *Transportation Research Record*, 1753, pp. 3-10 (3)
- Grengs,J (2005): The abandoned social goals of public transit in the neoliberal city of the USA, *City*, 9, 1, pp. 51-66 (5)
- Grengs,J (2010); Job accessibility and the modal mismatch in Detroit, *Journal of Transport Geography*, 18, pp. 42-54 (2)
- Grengs,J (2015): Nonwork Accessibility as Social Equity Indicator, *International Journal of Sustainable Transportation*, 9:1,pp. 1-14 (1,3)
- Grieco,M (2013): Transport, the poor and moving towards low-carbon societies, *Bulletin FAL*, Issue 318, nr. 2 (3)
- Grieco,M (2015): Social sustainability and urban mobility: shifting to a socially responsible pro-poor perspective, *Social Responsibility Journal*, 11,1, pp. 82-97 (3)
- Grise,M,El-Geneidy,A (2017): Evaluating the relationship between socially (dis)advantaged neighbourhoods and customer satisfaction of bus service in London, U.K., *Journal of Transport Geography*, 58, pp. 166-175 (5)
- Groot,J (1972); Het kleine dorp. Overlevingskansen en perspectieven voor dorpen en buurtschappen in Nederland, Wageningen, Bosch&Keuning (2)
- Gujba,H, Mulugetta,Y, Azapagic,A (2013): Passenger transport in Nigeria: Environmental and economic analysis with policy recommendations, *Energy Policy*,55, pp. 353-361 (4)
- Hagerstrand,T (1970); What about people in regional science? *Papers and Proceedings of the Regional Science Association*, 24, p. 7-21 (1,5)
- Halden,D (2009): 10 Years of accessibility planning in the UK – What has been achieved? Paper European Transport Conference (%)
- Halden,D (2011): The use and abuse of accessibility measures in UK passenger transport planning, *Research in Transportation Business & Management*, 2, pp. 12-19 (5)
- Halden,D(2014): Shaping the Future: case studies in UK accessibility planning, *Transportation Research Procedia*, 1, pp. 284-292 (5)

- Halpern,C (2014): Urban Mobility: What Role for the European Union? Explaining Dynamics of European Union Policy Design since 1995, *European Planning Studies*, 22:12, pp. 2526-2541 94)
- Hansen,W (1959): How accessibility shapes land use, *Journal of the Institute of Planners*, 25,2, pp. 73-76 (1)
- Hansen,A (2017): Transport in transition: Doi moi and the consumption of cars and motorbikes in Hanoi, *Journal of Consumer Culture*, 17 (2),pp. 378-396 94)
- Hansen,A, Nielsen,K (2014): Cars of Future Past in Vietnam and India (4)
- Hanson,S (2010): Gender and Mobility: new approaches for informing sustainability, *Gender, Place & Culture*, 17:1, pp. 5-23 (3)
- Harden,J. (2002): There's no place like home. The public/private distinction in children's theorizing of risk and safety, *Childhood*, 7, 1, pp. 43-59 (3)
- Harden,J, et al (2013): Home and away: constructing family and childhood in the context of working parenthood, *Children's Geographies*, 11:3, pp. 298-310 (3)
- Harms,L (2006): Anders Onderweg? Mobiliteit van allochtonen en autochtonen vergeleken, Den Haag, SCP (2,3)
- Harris,C(2007): Roads, Railways and Regimes: Why some societies are able to organise suburban public transport – and why others can't, Urban Research Programme Griffith University, Brisbane, Research Paper 14 92)
- Harris,R (2010): Meaningful Types in a World of Suburbs, in *Suburbanization in Global Society*, edited by Clapson,M and Hutchinson, R, pp. 15-50, Bingley, England, Emerald (2)
- Harrison, G (2013); The ethics of low carbon cars, Paper WCTR Rio de Janeiro, July 14 (6)
- Haugen,K (2011); The advantage of "near": Which accessibilities matter to whom?, *European Journal of Transport and Infrastructure Research*, 11 (4), pp. 368-388 (3,6)
- Haugen,K et.al (2012): Proximity, accessibility and choice: A matter of taste or condition?, *Papers in Regional Science*, 91,1, pp. 65-84 (3)
- Haustein,S, Nielsen,T, Siren,A (2014): Growing population segments and their impact on future transport, Rapport Trafiktage Aalborg Universitet (3)
- Haustein,S, Siren,A (2014): Seniors' unmet mobility needs – how important is a driving license?, *Journal of Transport Geography*, 41, pp. 45-52 (3)
- Haustein,S, Siren,A (2015): Older People's Mobility: Segments, Factors, Trends, *Transport Reviews*, 35:4, pp. 466-487 (3)
- Haynes,R et.al (1978): Community attitudes towards accessibility of hospitals in West Norfolk, in Moseley,M (ed), *Social Issues in Rural Norfolk*, University of East Anglia, Norwich (2)
- Healey,P (2007): *Urban Complexity and Spatial Strategies: Towards a Relational Planning for Our Times*, New York, Routledge (4)
- Hefter,T,Götz,K (2013): *Mobilität alterer Menschen*, Diskussionspapiere 36, Institut für sozial-ökologische Forschung, Frankfurt am Main (3)

- Heinze,G (2007): Öffentlicher Verkehr und demographischer Wandel: Chancen für Nordostdeutschland, S.Beetz: Die Zukunft der Infrastrukturen in ländlichen Räumen, Berlin- Brandenburgische Akademie der Wissenschaften, Materialien Nr.14, Berlin, pp. 21-30 (2)
- Helbich,M et.al (2017): Food deserts? Healthy food access in Amsterdam, *Applied Geography*, 83, pp. 1-12 (2)
- Hellerstein,J, Neumark, D, McInerney,M (2008): "Spatial mismatch or racial mismatch?," *Journal of Urban Economics*,. 64(2), pp. 464-479 (2)
- Hermesen,J (2009): Stil de tijd: pleidooi voor een langzame toekomst , *Arbeiderspers* (6)
- Hensher,D., Golob,T. (2008) : Bus rapid transit systems: a comparative assessment, *Transportation*, 35, pp. 501-518 (3)
- Herget,M (2013): Mobilität von Familien im Ländlichen Raum: Arbeitsteilung, Routinen und typische Bewältigungsstrategien, Springer Verlag, Fachmedien Wiesbaden (5)
- Hernandez,D, Davila,J (2016): Transport, urban development and the peripheral poor in Colombia. Placing splintering urbanism in the context of transport networks, *Journal of Transport Geography*, 51, pp. 180-192 (3)
- Hernandez,D, Titheridge,H (2016): Mobilities of the periphery: Informality, access and social exclusion in the urban fringe in Colombia, *Journal of Transport Geography*, 55, p. 152-164 (3)
- Hickman,R, Hall,P, Bannister,D (2013): Planning more for sustainable mobility, *Journal of Transport Geography*, 33, pp. 210-219 (6)
- Hidalgo,D, Carrigan,A (2010): Bus Rapid Transit: A Public Transport Renaissance, *Built Environment*, 36, 3, pp. 283-297 (3)
- Hidalgo,D, Gutierrez,L. (2013) : BRT and BHLS around the world: Explosive growth, large positive impacts and many issues outstanding, *Research in Transportation Economics*, 39, pp. 8-13 #)
- Hidalgo,D, Huizenga,C (2013): Implementation of sustainable urban transport in Latin America, *Research in Transportation Economics*, 40, pp. 66-77 (3)
- Hillman,M, Henderson,I, Whalley,G (1974): *Transport Realities and Transport Planning*, London (1)
- Hine,J (2007): Transport Disadvantage and Social Exclusion, Presentation to International conference on public transport and urban citizenship, Trinity College, Dublin, 21-9 (3)
- Hine,J, Mitchell,F (2001): The role of transport in social exclusion in Urban Scotland, *Scottish Executive Research Unit* (2,5)
- Hine,J, Grieco,M (2003). Scatters and clusters in time and space: implications for delivering integrated and inclusive transport. *Transport Policy*, Vol. 10, (4), pp. 299-306. (1,5)
- Hjorthol,R, Levin,L, Siren,A (2010): Mobility in different generations of older persons. The development of daily travel in different cohorts in Denmark, Norway and Sweden, *Journal of Transport Geography*, 18, pp. 624-633 (3)
- Hjorthol,R, Vagane,L (2014): Allocation of tasks, arrangement of working hours and commuting in different Norwegian households, *Journal of Transport Geography*, 35, pp. 75-83 (3)
- HMSO (1961): *Rural Bus Services*, Report of the Jack Committee, London (2)

Hochstenbach,C, Musterd,S (2017); Gentrification and the suburbanization of poverty: changing urban geographies through boom and bust periods, *Urban Geography*,39 (1),pp. 26-53

Hodgson,F, Turner,J (2003): Participation not consumption: the need for new participatory practices to adress transport and social exclusion, *Transport Policy*, 10, pp. 265-272(1)

Hoflund, B (2014): Urban and Rural Food Deserts in Nebraska, paper School of Public Administration, University of Nebraska, Omaha (2)

Holden,E (2004): Towards sustainable consumption: do green households have smaller ecological footprints? , *International Journal of Sustainable Development*, 7 (1), pp. 44-58 (4)

Holloway,S, Valentine,G.(2000): Spatiality and the New Social Studies of Childhood, in; *Sociology*, Vol.34, 4, pp 763-783 (3)

Holloway,S (2014): Changing children's geographies, *Children's Geographies*, 12:4, pp. 377-392 (3)

Holloway,S, Pimlott-Wilson,H (2014): Enriching children, institutionalizing childhood? Geographies of play, extracurricular activities and parenting in England, *Annals of the Association of American Geographers*, 104 (3), pp. 613-627 (3)

Horton,T,Reed,H(2010): Where the money goes: How we benefit from public services, [www.tuc.org.uk/extras/wherethemoneygoes.pdf](http://www.tuc.org.uk/extras/wherethemoneygoes.pdf) (3)

Hortulanus,R. Machielse,J (2001): Op het snijvlak van de fysieke en sociale leefomgeving. *Het Sociaal Debat*, Deel 3. (1,2)

Houlihan,L (2005): Being young is not child's play ; kids are richer but lack life skills, *Daily Telegraph*, Sydney, october 7 (3)

House of Commons. Environmental Audit Committee (2013): Transport and accessibility to public services (5)

Household Expenditure Survey 2009-2010 (2011), Australia (3)

Hu,L (2015): Job Accessibility of the Poor in Los Angeles, *Journal of the American Planning Association*, 81:1, pp. 30-45 (2)

Huizenga,C, Peet,K, Gotha,S (2016) Urban Transport and Climate Change, in *Worldwatch Insitute*, State of the World: Can a City be Sustainable?, pp. 195-210 (4)

Hunter,S (2014): Poverty in Suburbia: A Smith Institute study into the growth of poverty in the suburbs of England and Wales, *Smith Institute*, London (2)

Hurni A. (2005): Transport and social exclusion in Western Sydney. *Transporting the Future: Transport in a Changing Environment: Conference Proceedings of the 28th Australasian Transport Research Forum* (2)

IEA (International Energy Agency) (2017): Energy and CO2 emissions in the OECD, Paris (6)

IFRTD (2009): What next for the Transport Sector and the Millenium Development Goals, *International Forum for Rural Transport and Development*, London (2)

limi,A et. al (2015): Social and Economic Impacts of Rural Road Improvements in the State of Tocantins, Brazil, *World Bank Group, Policy Research Working Paper 7249*, Washington (2)

- Imran, M, Pearce,J (2015): Discursive barriers to Sustainable Transport in New Zealand Cities, *Urban Policy and Research*, 33;4, pp. 392-415 (2)
- Innes,J, Booher,D (2003): The impact of collaborative planning on governance capacity, IURD working paper, Berkeley, University of California (4)
- Innes,J, Booher,D (2010): *Planning with Complexity. An Introduction to Collaborative Rationality for Public Policy*, New York, Routledge (4)
- Insinghtrix (2007): *Accessibility Planning- Strategy Document*, City of Saskatoon (5)
- Institut d'Amenagement et d'Urbanisme (IAU) (2013): *La mobilité dans le periurbain francilien, perspectives pour une organisation plus durables des activites*, Paris (2)
- International Transport Forum ITF (2011): *Mobility: Rights Obligations and Equity in an Ageing Society*, Discussion Paper 05, Paris (3)
- International Transport Forum (2015): *International Experiences on Public Transport Provision in Rural Areas*, Paris (5)
- International Transport Forum (2016): *Urban Mobility System Upgrade. How shared self-driving cars could change city transport* (5)
- International Transport Forum ITF (2017): *Transport Outlook*, Paris (4)
- ITDP (2011): *Europe's Parking U- Turn; From Accommodation to Regulation*, New York (6)
- Izumiyana,H, Ohmori,N, Harata,N (2007): *Space-time accessibility measures for evaluating mobility-related social exclusion of the elderly*, Paper, Hiroshi Institute, University of Tokyo (3)
- Jacobs,J (1961) : *the Death and Life of Great American Cities*, New York, Vintage (4)
- Jacquet,J (2014): *Review of Risks to Communities from Shale Energy Development*, *Environmental Science & Technology*, 48, pp. 8321-8333 (2)
- Jaramillo,C, Lizarraga,C, Grindlay,A (2012): *Spatial disparity in transport social needs and public transport provision in Santiago de Cali*, *Journal of Transport Geography*, 24, pp. 340-357 92)
- Jarvis,H (2004): *City time: managing the infrastructure of everyday life*. ESRC Work Life and Time in the New Economy, seminar paper (6)
- Jeekel,H (2011): *De Autoafhankelijke Samenleving*, Eburon, Delft (1,4)
- Jeekel,H (2013) : *The Car – dependent Society. A European Perspective*, Ashgate, Farnham (1,3,4)
- Jeekel,H (2014): *Social exclusion, vulnerable groups and driving forces : towards a social research based policy on car mobility*, *Case Studies on Transport Policy*, 2(2), pp. 96-106 (4)
- Jeekel,H (2016): *Smart Mobility and Societal Challenges: An implementation perspective*, Inaugural Lecture, Eindhoven University of Technology, 17 june (4,5)
- Jeekel,H (2017): *Social Sustainability and Smart Mobility : Exploring the relationship*, *Transportation Research Procedia* 25 (2017) 4296–4310 (4,6)
- Jeekel,H, Martens,K (2017); *Equity in transport: learning from health care, education and especially housing*, *European Transport Research Review*,pp.1-13 (1,6)

- Jessop,B (2015): Margaret Thatcher and Thatcherism: Dead but not buried, *British Politics*, 10, pp. 16-30 (6)
- Joblinks (2012): Chart of Car Ownership Programs to Serve Low-Income Earners (1)
- Johnson, V, Currie,G, Stanley,J (2011): Exploring transport to arts and cultural activities as a facilitator of social inclusion, *Transport Policy*, 18, pp. 68-75 (3)
- Jones,P, Lucas,K (2012); The social consequences of transport decision-making: clarifying concepts, synthe sising knowledge and assessing implications, *Journal of Transport Geography*, 21, pp. 4-16 (6)
- Jones,P (2014): The evolution of urban mobility: The interplay of academic and policy perspectives, *IATSS (International Association of Traffic and Safety Sciences) Research*, 38, pp. 7-13 (4)
- Jorritsma, P, Olde Kalter,MJ (2008): Grijps op reis. Over de mobiliteit van ouderen, Kennisinstituut voor Mobiliteitsbeleid, Den Haag (3)
- Jouffe,Y (2014): La mobilité des pauvres. Contraintes et tactiques, *Informations sociales*, 2, 182, pp. 90-99 (3)
- Jouffe,Y et.al (2015): Faire face aux inégalités de mobilité. Tactiques, strategies et projects des menages pauvres en peripherie parisienne, *Cybergeog: European Journal of Geographie. Espace, Societe, Territoire*, pp.1-22 (3)
- Kain,J (1968): Housing segregation, negro employment and metropolitan decentralization, *Quarterly Journal of Economics*, 82, pp. 175-197 (2)
- Kamruzzaman,M et.al. (2009); Participation index: improved measure of transport related social exclusion? 41 st Annual Universities Transport Study Group Conference, 5-7 January, UCL, London (1)
- Kamruzzaman,M et.al (2016); Measures of transport-related social exclusion: A critical review of the literature. *Sustainability*, 8(7), 696 (1)
- Karsten,L and van Vliet,W (2006): Increasing Children's Freedom of Movement ; Introduction, *Children, Youth and Environments*, 16, 1, pp. 69- 73 (3)
- Kaufman,V, Bergman,M, Joye,D (2004): Motility: Mobility as capital, *International Journal of Urban and Regional Research*, 28 (4), pp. 745-756 (1)
- Kearns,R et.al. (2003): The Walking Bus; extending children's geographies ? *Area* 35, pp. 285-292 (3)
- Kebrowski,W, Bassens,D, Van Criekingen,M (2016); Re- politicizing Transport with the Right to the City: an Attempt to Mobilise Critical Urban Transport Studies, *Cosmopolis Centre for Urban Research* working paper (6)
- Kebrowski,W, Bassens,D (2017): "All transport problems are essentially mathematical": The uneven resonance of academic transport and mobility knowledge in Brussels, *Urban Geography*, July 2017 (4)
- Kennisinstituut voor Mobiliteitsbeleid (2008): Blijvend anders onderweg, Den Haag (3)
- Kennisinstituut voor Mobiliteitsbeleid (2015): Driver at the wheel? Self-driving vehicles and the traffic and transport system of the future (5)
- Kennisinstituut voor Mobiliteitsbeleid (2016); Stabiele beelden verdiept: trends in beleving en beeldvorming van mobiliteit, Den Haag (4)

- Kent,J (2013): Secured by automobility: why does the private car continue to dominate transport practices? Thesis University of New South Wales (6)
- Kent,J (2014): Driving to save time or saving time to drive? The enduring appeal of the private car, *Transportation Research Part A*, 65, pp. 103-115 (4)
- Kent,J (2015); Still Feeling the Car – The Role of Comfort in Sustaining Private Car Use, *Mobilities*, 10:5, pp. 726-747 (4)
- Kent,J, Dowling,R (2016): The Future of Paratransit and DRT: Introducing Cars on Demand, in *Paratransit: Shaping the Future*, pp. 391-412 (6)
- Kent,J, Mulley, C (2017); Riding with dogs in cars: What can it teach us about transport practices and policy?, *Transportation Research Part A*, 106, pp. 278-287 (6)
- Kenyon,S (2003): Understanding social exclusion and social inclusion, *Municipal Engineer* 156 (issue ME2), pp. 97-104 (1)
- Kenyon,S (2011): Transport and social exclusion: access to higher education in a UK policy context, *Journal of Transport Geography*, 19, pp. 763-771 (2)
- Kenworthy,J et.al (1999): *An International Sourcebook of Automobile Dependence in Cities, 1960–1990*. Boulder, CO: University Press of Colorado (6)
- Kenworthy,J, Laube,F (1999): Patterns of automobile dependence in cities: an international overview of key physical and economic dimensions with some implications for urban policy, *Transportation Research Part A*, 33, pp. 691-723 (6)
- Kenworthy,J (2006); The eco-city: ten key transport and planning dimensions for sustainable city development, *Environment & Urbanization*, 18, pp. 67-85
- Kenworthy,J (2008): Energy Use and CO2 Production in the Urban Passenger Transport Systems of 84 International Cities: Findings and Policy Implications, in Droege,P (ed): *Urban Energy Transition: From Fossil Fuels to Renewable Power*, pp. 211-236 (6)
- Kenworthy,J (2013): Deteriorating or Improving? Transport Sustainability Trends in Global Metropolitan Areas, in Renne,J, Fields, B (eds): *Transport Beyond Oil. Policy choices for a multimodal future*, pp. 244-264 (6)
- Kenworthy,J (2017): Is Automobile Dependence in Emerging Cities an Irresistible Force? Perspectives from Sao Paulo, Taipei, Prague, Mumbai, Sjanghai, Beijing and Guangzhou, *Sustainability*, 9, pp. 1-30 (6)
- Kesteloot, C. (2005): Urban socio-spatial configurations and the future of European cities. In Y.Kazepov (Ed.), *Cities of Europe. Changing contexts, local arrangements, and the challenge to urban cohesion*, pp. 123–148. Oxford: Blackwell (2)
- Kidder,B (2006): *The Challenges of Rural Transportation*, Western Rural Development Centre, Utah State University, Logan (2)
- Kilby,K, Smith,N (2012): *Accessibility Planning Policy: Evaluation and Future Directions, Final Report*, Atkins and CRSP (5)
- Kim,K (2015): Can carsharing meet the mobility needs for the low-income neighbourhoods? Lessons from carsharing usage patterns in New York City, *Transportation Research Part A*, 77, pp. 249-260 (3,6)



- Kim,J , Gustafson- Pearce,O (2016): Passengers' anxiety about using the London Underground, IEEE. Paper presented on International Conference on Intelligent Rail Transportation (3)
- Kitchin,R (1998): "Out of Place", "Knowing One's Place": Space , power and the exclusion of disabled people, *Disability & Society*, 13:3, pp. 343-356 (3)
- Klein,N, Smart,M (2017): Car today, gone tomorrow: The ephemeral car in low-income, immigrant and minority families, *Transportation*, 44, pp. 495-510 (2)
- Klinger,T, Kenworthy,J, Lanzendorf,M (2010,2013): Dimensions of Mobility Cultures in urban areas; a comparative analysis of German cities, *Journal of Transport Geography*,31, pp.18-29 (4,6)
- Klitkou,A et.al (2015): The role of lock-in mechanisms in transition processes: The case of energy for road transport, *Environmental Innovation and Societal Transition*, 16, pp. 22-37 (4)
- Klocker,N et.al (2015): Ethnically Diverse Transport Behaviours: An Australian Perspective, *Geographical Research*, 53(4), pp. 393-405 (3)
- Kneehole, E, Berube,A (2013): *Confronting Suburban Poverty in America*, Brookings Institution Press (2)
- Knight,N (2017): *Climate Fight Pits. Cities against National governments*, Common Dreams(4)
- Kobayashi,S, Fulton,L, Figueroa,M (2017): What Can Transport Deliver? Contrasting Scenario Pathways with New Technology Penetration, Working Paper- UCD-ITS-WP-17-02, University of California Davis, Institute of Transportation Studies 96)
- Kodransky,M, Lewenstein,G (2014): Connecting Low-Income People to Opportunity with Shared Mobiliy, ITDP/Living Cities (5)
- Kohler,J (2006): Transport and the environment: Policy and Economic considerations in the UK, Foresight Intelligent Infrastructures Project (4)
- Kolodinsky,J et.al (2013) : It is not how far you go, it is whether you can get there: modeling the effects of mobility on quality of life in rural , *Journal of Transport Geography*,31,pp. 113-122
- König, D et.al (2016). Business and operator models for MaaS. MAASiFiE project funded by CEDR. Deliverable 3 (5)
- Konrad,K, Scheiner,J, Holz Rau,C (2016): Pkw-Nutzung im Wandel des Geschlechterverhältnisses – Trends über drei Jahrzehnte, *Raumforschung und Raumordnung*, 74, pp. 307-321 (3)
- Koonce,K (2011): Social Cohesion as the Goal: Can Social Cohesion BE Directly Pursued, *Peabody Journal of Education*, 86, pp. 144-154 (6)
- Korsu, E, Massot,H (2006): Rapprocher les menages de leurs lieux de travail: les enjeux pour la regulation de l'usage de la voiture en France. *Les Cahiers Scientifiques du Transport*, pp. 61-90 (1)
- Kotkin,J (2012): *The Rise of the Great Plains. Regional opportunities in the 21 st Century*, Texas Tech University (2)
- Kronsell,A, Rosqvist,L, Hiselius,L (2016): Achieving climate objectives in transport policy by including women and challenging gender norms; The Swedish case, *International Journal of Sustainable Transportation*, 10:8, pp. 703- 711 (3)

- Kuhnimhof, T et.al (2014): Automobility in Brazil, Russia, India and China- Quo Vadis?, Transportation Research Record, pp. 10-19 (4)
- Kuhnimhof, T, Weiss, C (2016): Why the car is key to low carbon mobility in Brazil. In: Hopkins, D, Higham, J eds. ,Low Carbon Mobility Transitions, Goodfellow Publishers Limited.pp.165-177 (4)
- Kytta,M et.al (2015): The last free-range children? Children's independent mobility in Finland in the 1990s and 2010s, Journal of Transport Geography, 47, pp. 1-12 (3)
- La Branche,S (2012): La schizophrénie écologique: le cas des déplacements quotidiens a Lyon, Vertig- la revue électronique en sciences de l'environnement (6)
- Lage und Perspektive der Verkehrs- und Mobilitätsforschung (2016): Protokoll zum Symposium 25/26 – 4- 2016, Berlin (6)
- Lareau,A. (2002): Invisible inequality : social class and childrearing in black families and white families, American Sociological Review, 67, 5, pp. 747-776 (3)
- Lang,T (2012): Shrinkage, Metropolization and Peripheralization in East Germany, European Planning Studies, 20, 10, pp. 1747-1754 (2)
- Lanzendorf,M (2002): Mobility styles and travel behaviour: an application of a lifestyle approach to leisure travel, Transportation Research Record, 1807, pp. 163-173 (1)
- Lanzendorf,M (2003): Mobility biographies; A new perspective for understanding travel behaviour. Paper presented at the International Conference on Travel Behaviour Research (IABTR), Lucerne (1,6)
- Lanzendorf, M , Schoenduwe,R (2013): Urbanität und Automobilität, Geographische Rundschau, 6, pp. 34-41 (6)
- Larsen,C (2013): The Rise and Fall of Social Cohesion: The Construction and De- construction of Social Trust in the US, UK, Sweden and Denmark, Oxford University Press (6)
- Larsen,K, Gilliland,J (2008): Mapping the evolution of "Food deserts" in a Canadian city: Supermarket accessibility in London Ontario 1961-2005, International Journal Health Geography, pp. 7-16 (2)
- Laurier,E (2011): Driving: Precognition and Driving, in Geographies of Mobility: Practices, Spaces, Subjects, edited by Cresswell,T, Merriman, P, Farnham , Ashgate, pp. 69-81 (4)
- Leavitt,W, Kiefer,J (2006): Infrastructure Interdependency and the Creation of a Normal Disaster: The Case of Hurricane Katrina and the City of New Orleans, Public Works Management Policy, 10, pp 306-314 (1)
- Lee,R, Sener,I (2016): Transportation Planning and quality of life; where do they intersect?, Transport Policy,48, pp 146-155 (1)
- Le Néchet,F, Nessi,H, Aguilera,A (2016); La mobilité des ménages périurbains au risque des crises économiques et environnementales. Géographie, économie, société 18.1 pp. 113-139 (2).
- Lennert,F, Schoenduwe,R (2017): Disrupting Mobility: Decarbonising Transport? In; Meyer,G and Shaheen, S (eds) Disrupting Mobility, Lecture Notes in Mobility, Springer International Publishing, pp. 213-237 (6)
- Li,T, Dodson,J, Sipe,N (2015): Differentiating metropolitan transport disadvantage by mode: Household expenditure on private fuel and public transport fares in Brisbane, Australia, Journal of Transport Geography, 49, pp. 16-25 (2,3)

Li,T, Dodson,J, Sipe, N (2017): Examining household relocation pressures from rising transport and housing costs – An Australian case study, *Transport Policy*

Liddle,J et.al. (2012): Time use, role participation and life satisfaction of older people: Impact of driving status, *Australian Occupational Therapy Journal*, 59, pp. 384-392 (3)

Lin,H, Lo,H, Chen,X (2009): Lifestyle classifications with and without activity travel patterns, *Transportation Research Part A*, 43 (6), pp. 626-638 (1)

Littig, B, Griessler,E (2005) ; Social sustainability: a catchword between political pragmatism and social theory, *International Journal Sustainable Development*, 8 (1/2), 66 (1)

Litman,T (2006): Lessons from Katrina and Rita. What Major Disasters Can Teach Transportation Planners, *Victoria Transport Policy Institute* (1)

Liman,T (2012); A New Social Equity Agenda For Sustainable Transportation, *Victoria Transport Policy Institute* (6)

Litman,T (2015): Evaluating Household Chauffeuring Burdens. Understanding Direct and Indirect Costs of Transporting Non- Drivers, *Victoria Transport Policy Institute* (3)

Litman,T (2017): Unaffordability is a Problem, but Sprawl is a terrible solution, *The City Fix*, 31 March (4)

Loader,C, Stanley,J (2008): Growing bus patronage and addressing transport disadvantage- The Melbourne Experience, *Transport Policy*, 16, pp. 106-114 (5)

Local Government Association (2015): Missing the bus? Councils and the future of the bus in non-metropolitan areas (5)

Locke,J (1998): The de- voicing of society; why don 't we talk to each other anymore ? New York, Simon and Schuster (1)

Loh,L , Briieger,W (2014): Suburban Sprawl in the developing world: Duplicating past mistakes? The case of Kuala Lumpur, Malaysia, *International Quarterly of Community Health Education*, 34,2, pp. 199-211 (4)

Lopes,F, Cordovil,R, Neto,C (2014): Children's independent mobility in Portugal: effects of urbanization degree and motorized modes of travel, *Journal of Transport Geography*, 41, pp. 210-219 (3)

Lord,S, Despres,C, Ramadier,T (2011): When mobility makes sense: A qualitative and longitudinal study of the daily mobility of the elderly, *Journal of Environmental Psychology*, 31, pp. 52-61 (3)

Loukaitou-Sideris,A (2009): What is Blocking her Path? Women, Mobility and Security. Paper presented at International Conference on Women's Issues in Transportation, Irvine (3)

Louv,R (2005): Last Child in the Woods: Saving our Children from Nature Deficit Disorder, *Alquoncun Books* (3)

Lovejoy,K, Handy,S (2011); Social networks as a source of private- vehicle transportation: the practice of getting rides and borrowing vehicles among Mexican immigrants in California, *Transportation Research Part A*, 45 (4) , pp. 248-257 (1)

Lovell,B (2012): Transit planning and social equity: A comparative analysis in West Seattle, thesis, *University of Washington* (5)

Lowe,K, Mosby,K (2016): The conceptual mismatch: A qualitative analysis of transportation costs and stressors for low- income adults, *Transport Policy*, 49, pp. 1-8 (4)

LSE (2014): New Climate Economy/Global Commission on the Economy and the Climate , NCE Cities – paper 03, Accessibility in Cities: Transport and Urban Form. (4)

Lucas,K, Grosvenor,T, Simpson,R (2001); Transport, the environment and social exclusion, Joseph Rowntree Foundation. Publisher, York Publishing Services Limited, 2001 (1,5)

Lucas,K (2006); Providing transport for social inclusion within a framework for environmental justice in the UK, *Transportation Research Part A*, 40, pp. 801-809

Lucas,K (2012); Transport and social exclusion: where are we now ?, *Transport Policy*, 20,pp 105-113 (1,3,6)

Lucas,K, Currie,G (2012); Developing socially inclusive transportation policy: transferring the United Kingdom approach to the State of Victoria, *Transportation*, 39: pp. 151-173 (1)

Lucas,K et.al (2016a) : Modelling the relationship between travel behaviours and social disadvantage, *Transportation Research Part A*, 85, pp. 157-173 (1,5)

Lucas,K et. al (2016 b): Transport Poverty and its adverse consequences, *Transport*, 169, pp. 353-365 (6)

Luiu,C, Tight,M, Burrow,M (2017): The unmet travel needs of the older population; a review of the literature, *Transport Reviews*, 37:4, pp. 488-506 93)

Lupi, T (2005): Community light: Territorial ties and local participation in a new suburban area." International conference' Doing, thinking, feeling home: the mental geography of residential environments', Delft, The Netherlands, October 14-15, Delft University of Technology, OTB Research Institute for the Built Environment (1,2,3)

Lutz,C (2015): Marketing car love in an age of fear: an anthropological approach to the emotional life of a world of automobiles, *Etnografica*, 19, pp. 593-603 (6)

Mackett, R (2010): Children's travel behaviour and its implications for their health, paper WCTR12, Lisbon, July 11-15 (3)

Malone, K (2007): The bubble-wrap generation ; children growing up in walled gardens, *Environmental Education Research*, 13, 4, pp. 513-527 (3)

Manaugh,K, El-Geneidy,A (2012): Who benefits from new transportation infrastructure? Using accessibility measures to evaluate social equity in public transport provision." In Geurts,K eds; *Accessibility Analysis and Transport Planning: Challenges for Europe and North America* (5)

Manaugh,K, Badami,M, El-Geneidy,A (2015); Integrating social equity into urban transportation planning: A critical evaluation of equity objectives and measures in transportation plans in North America, *Transport Policy*, 37, pp. 167-176 (5)

Manderscheid,K (2009): Unequal Mobilities." In Ohnmacht, T, Maksim, H. Bergman, M.(Hrsg.), *Mobilities and Inequality*. Aldershot: Ashgate: 27-50 (1)

Mandl,B, Millonig,A, Friedl,V (2013): The variety of golden agers: Identifying profiles of older people for mobility research. Presented at the Transportation Research Board, 92th Annual Meeting, Washington (3)

- Manville,M, Cummins,B (2015): Why do voters support public transportation? Public choices and private behaviour, *Transportation*, 42, pp. 302-332 (5)
- Markovitch,J Lucas,K (2011): The social and distributional impacts of transport; a literature review, working paper 1055, Transport Studies Unit, University of Oxford (1)
- Marletto,J (2010): Structure, agency and change in the car regime. A review of the literature. Paper. Centro di Ricerca Interdipartimentale di Economia della Institutone (CREI), University of Sassari (4)
- Marottoli,R et.al (1997): Driving cessation and increased depressive symptoms: Prospective evidence from the New Haven EPESE, *Journal of the American Geriatrics Society*, 45, pp. 202-206 (3)
- Marr,E (2012): Assessing Transportation Disadvantage and Public Transportation in Rural Ontario: A Case Study of Huron County, thesis, University of Guelph (2)
- Marrozi,M, Bolzan, M (2016): An Index of Household Accessibility to Basic Services: A Study of Italian Regions, *Social Indicators Research*, pp. 1-14 (5)
- Marsden,G et.al (2012): Transfer of Innovative Policies between Cities to promote sustainability: Case Study Evidence, paper University of California Transportation Centre, UCTC-FR-2012-08 (4)
- Marsden,G et.al. (2013): The realities of carbon management- why governance matters in the transport sector, in ; Universities' Transport Study Group, 45th Universities' Transport Conference, Oxford (4)
- Marsden,G et.al. (2014): Carbon management and travel behaviour: discourses, disputes and contradictions in governance, *Transport Policy*, 35, pp. 71-78 (4)
- Marsden,G, Groer,S (2016): Do Institutional Structures Matter? A comparative analysis of Urban Carbon Management Policies in the UK and Germany, *Journal of Transport Geography*, 51, pp. 170-179 (4)
- Marsden,G, Mc Donald,N (2017): Institutional issues in planning for more uncertain futures, *Transportation*, pp. 1-18
- Martens, K (2016): *Transport Justice. Designing Fair Transportation Systems*, Routledge (1,6)
- Martens,K, Bastiaansen,J (2014): Een index om het risico op bereikbaarheidsarmoede te meten, *Bijdrage aan Colloquim Vervoersplanologisch Speurwerk*, 20-21 -11, Eindhoven (1)
- Martin,S, Goodman,R (2016); Living on the Edge: New Forms of Poverty and Disadvantage on the Urban Fringe, in Williams, C ed, *Social Work and the City*, pp. 235-257 (2)
- Martinelli,D, Medellin,L (2008): Assessment of Bus Transit Equity in Two Metropolitan Areas, paper, West Virginia University, Morgantown, WV (5)
- Masood,M, Khan,M, Naqvi,H (2011): Transportation Problems in Developing Countries Pakistan: A case-in-Point, *International Journal of Business and Management*, 6,11, pp. 256-266 (4)
- Massot,H, Roy,E (2004): "Lieu de vie –lieu de travail, 25 ans d'évolution de la distance au travail", Rapport INRETS commissioned by the ADEME, 1 (1)
- Massot, H, Zaffran, J (2007): Auto-mobilité urbaine des adolescents franciliens, *Espace populations societies*, 2-3 (3)
- Mattauch,L, Ridgway,M, Creutzig,F (2015): Happy or liberal? Making sense of behaviour in transport policy design, *Transportation Research Part D; Transport and Environment*, 45, pp. 64-83 (6)

Mattingly,K, Morrissey,J (2014): Housing and transport expenditure: Socio- spatial indicators of affordability in Auckland, *Cities*, 38, pp. 69-83 (2)

Mattioli,G (2014a): Where sustainable transport and social exclusion meet: households without cars and car dependence in Great Britain, *Journal of environmental Policy& Planning*, 16 (3), pp. 379-400 (3)

Mattioli,G (2014b): Moving Through the City with Strangers? Public Transport as a Significant Type of Urban Public Space, in *Walking in the European City. Quotidian Mobility and Urban Ethnography*, Shortell,T, Brown, E eds. , Farnham, Ashgate, pp. 57-74 (4,5)

Mattioli,G (2016); Transport needs in a climate- constrained world. A novel framework to reconcile social and environmental sustainability in transport, *Energy Research & Social Science*, 18,pp. 118-128 (6)

Mattioli,G, Colleoni,M (2016): Transport Disadvantage, Car Dependence and Urban Form, Pucci,P and Colleoni,M (eds), *Understanding Mobilities for Designing Contemporary Cities*, Springer International Publishing, Switzerland, pp. 171-190 (2)

Mattioli,G, Anable,J, Vrotsou,K (2016): Car dependent practice: Findings from a sequence pattern data mining study of UK time use data, *Transportation Research Part A*, 89, pp. 56-72 (6)

Mattson,J (2010a); Aging and Mobility in Rural and Small Urban Areas, *Journal of Applied Gerontology* (2)

Mattson,J (2010b): Transportation, Distance, and Health Care Utilization for Older Adults in Rural and Small Urban Areas, Upper Great Plains Transportation Institute, North Dakota State University, Fargo (2)

Mattson,J (2012): Travel Behaviour and Mobility of Transportation- Disadvantaged Populations: Evidence from the National Household Travel Survey, Upper Great Plains Transportation Institute, North Dakota State University, Fargo (2)

Mattson,J, Hough,J (2015): Identifying and satisfying the mobility needs of North Dakota's Transit System, Upper Great Plains Transportation Institute, North Dakota State University, Fargo, Publication no. 280 (2)

May,A et.al. (2017): Appropriate national policy frameworks for sustainable mobility plans, *European Transport Research Review*, 9:7, pp. 1-16 94)

McCray,T, Brais,N (2007): Exploring the Role of Transportation in Fostering Social Exclusion: The Use of GIS to Support Qualitative Data, Networks and Spatial Economics, 7, pp. 397-412 (1)

McGuckin,N, Nakamoto,Y (2005): Differences in trip chaining by men and women, In: *Research on Women's Issues in Transportation: Report of a Conference* (3).

McLaren,A, Parusel,S. (2011): Parental Safeguarding at School Sites ; Unequal Risks and Responsibilities, *Canadian Journal of Sociology*, 36 (2), pp. 161-184 (3)

Mc Laren,A , Parusel,S (2015) "Watching like a hawk": gendered parenting in automobilized urban spaces, *Gender, Place & Culture*, 22:10, pp. 1426-1444 93)

Mees,P, Groenhart,L (2012): Transport Policy at the Crossroads: Travel to work in Australian capital cities 1976-2011 (4)

Meiklejohn,D (2008): Addressing Oil Vulnerability through Travel Behaviour Change. Paper presented at the 29<sup>th</sup> Australasian Transport Research Forum (3)

Melia,S, Barton,H, Parkhurst,G (2012): Potential for car free development in the UK, *Urban Design and Planning*, 166 (2), pp. 136-145 (1)

Mercado,R, Paez,A, Newbold,K (2007): Policy Areas Impinging on Elderly Transportation Mobility: An Explanation with Ontario, Canada as Example, *SEDAP Research Paper No. 187* (2,3)

Mercado,R, Paez,A, Newbold,K (2010): Transport policy and the provision of mobility options in an aging society: a case study of Ontario, *Journal of Transport Geography*, 18, pp. 649-661 (2)

Meyers,A et.al. (2002): Barriers, facilitators, and access for wheelchair users: substantive and methodological lessons from a pilot study of environmental effects, *Social Science and Medicine*, 55, pp. 1435-1446 (3)

Mezuk,B, Rebok,G (2008): Social integration and social support among older adults following driving cessation, *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 63(5),pp. 298-303 (3)

Miciukiewicz,K, Vigar,G (2012); Mobility and Social Cohesion in the Splintered City: Challenging Technocentric Transport Research and Policy-making Practices. *Urban Studies*, 49(9), pp. 1941-1957 (1,6)

Mignot,D (2008): Infrastructures de transport: investir dans les banlieues et les espaces peripheriques?, *Poivirs Locaux*, 76, 1 , pp. 67-72 (2)

Milbourne,L, Cushman,M (2013): From the Third Sector to the Big Society: How changing UK Government Policies Have Eroded Third Sector Trust, *Voluntas*, 24 , pp. 485-508 (6)

Milbourne,P, Doheny, S (2012): Older people and poverty in rural Britain: Material hardships, cultural denials and social inclusions, *Journal of Rural Studies*, 28, pp. 389-397 (2)

Mineta Transportation Institute (2016): Improving Pathways to Transit for persons with disabilities, Report 12-59, San Jose (3)

Ministry of Land, Infrastructure, Transport and Tourism Japan (2014); Basic Plan on Transport Policy (6)

Ministry of Land, Infrastructure, Transport and Tourism Japan (2016); White Paper on Land, Infrastructure, Transport and Tourism in Japan, 2016, Chapter 7, Building a Safe and Comfortable Society, pp. 227-231 (6)

Mkalawa,C, Haixiao,P (2014): Dar es Salaam city temporal growth and its influence on transportation, *Urban, Planning, and Transportation Research*, 2:1, pp. 423-446 (2)

Mokhtarian,P, Salomon,I, Singer,M (2015): What Moves Us? An Interdisciplinary Exploration of Reasons for Traveling, *Transport Reviews*, 35, pp. 250-274 (1)

Mondou,V,Violier,P (2010): Le vieillissement de la population periurbaine: quelles strategies pour pallier la disparation d' une mobilité autonome?, *Espaces, populations, Societes* pp. 83-93 ,

Moraglio,M, Diemel,HL (2015): Shifts, turning points and inertia exploring long-term industry trends in European transport, *European Journal Futures Research*,3,12, pp. 1-8 (6)

Morris,K (2006): Research into travel horizons and its subsequent influence on accessibility planning and demand responsive strategies in Greater Manchester, Paper European Transport Conference (1,3,5,6)

Moseley,M (1979 a): Rural mobility and accessibility, in J.M.Shaw, Rural Deprivation and Planning, Geo Abstracts, University of East Anglia, Norwich, pp. 137-147 (2)

Moseley,M (1979 b); Accessibility: The Rural Challenge; Methuen: London, UK (1,2)

Motivaction (2002): Mobiliteitsbeleving en mentaliteitsprofielen van de Nederlandse bevolking, Amsterdam (1,4)

Motte- Baumvol,B (2007): La dependance automobile pour l'accès aux services aux menages en grande couronne francilienne, Paris, these, Université de Paris I (1,6)

Motte- Baumvol,B, Massot,H, Byrd,A (2010): Escaping Car Dependence in the Outer Suburbs of Paris, Urban Studies, 47 (3), pp. 604-619 (1,2)

Motte Baumvol,B, Ravelet, E, Vincent-Geslin, S (2010): Vivre le periurbain. Des espaces sous influence urbaine, Espaces Temps.net (1,6)

Motte-Baumvol,B, Nassi,C (2012): Immobility in Rio de Janeiro, beyond poverty, Journal of Transport Geography (3)

Motte- Baumvol,B, Bonin,O (2013); Leaving highly car-dependent areas, WCTR paper, Rio de Janeiro (2,6)

Motte Baumvol, B, Bonin,O (2017): The spatial dimensions of immobility in France, Transportation, online, Springer Verlag (2,6)

Mouwens,A (2015): Drivers of customer satisfaction with public transport services, Transportation Research Part A, 78, pp. 1-20 95)

Mullen,C, Marsden,G (2015): Transport, economic competitiveness and competition: A city perspective, Journal of Transport Geography, 49, pp. 1-8 (6)

Mullen,C, Marsden,G (2016): Mobility justice in low carbon energy transitions, Energy Research & Social Science, 18, pp. 108-117 (6)

Mulley,C et.al (2012): Barriers to implementing flexible transport services: An international comparison of the experiences in Australia, Europe and USA, Research in Transportation Business& Management, 3, pp. 3-11 95)

Mulley,C, Daniels,R (2012); Quantifying the role of a flexible transport service in reducing the accessibility gap in low density areas: A case study in north-west Sydney, Research in Transportation Business & Management, 3, pp. 12-23 (6)

Mulley,C, Ho, C (2013); Evaluating the impact of bus network changes in Sydney, Australia, Transport Policy, 30, pp. 13-25 (6)

Mulley,C (2017); Mobility as a Service (MaaS) – does it have critical mass?, Transport Reviews, 37:3, pp. 247-251(5,6)

Murphy,A (2010): The Symbolic Dilemmas of Suburban Poverty: Challenges and Opportunities posed by Variations in the Contours of Suburban Poverty, Sociological Forum, 25, 3, pp 541-569 (2)



Murphy,A, Wallace,D (2010): Opportunities for Making Ends Meet and Upward Mobility: Differences in Organizational Deprivation across Urban and Suburban Poor Neighbourhoods, *Social Science Quarterly*, 91, 5, pp. 1164-1186 (2)

Murray,L (2009): Making the journey to school ; The gendered and generational aspects of risk in constructing everyday mobility, *Health, Risk & Society*, 11, 5, pp. 471-486 (3)

Muschwitz,C, Reimann,J (2015): Intelligente öffentliche Mobilität im ländlichen Raum – von Skandinavien lernen!, *Informationen zur Raumentwicklung*, Heft 2, pp. 107-118 (2)

Myers,A, Ravesloot,C (2016): Navigating time and space: how Americans with disabilities use time and transportation, *Community Development*, 47:1, pp. 75-90 (3)

Nadeau,C (2015): Unaffordable Fare: The cost of public transportation for low-income commuters working at three airports, Master Thesis, Massachusetts Institute of Technology, Cambridge (2)

Naess,P (2009): Residential Self-Selection and Appropriate Control Variables in Land Use: *Travel Studies*, *Transport Reviews*, 29, pp. 293-324 (2)

Naess,P (2012): Urban form and travel behaviour: Experience from a Nordic context, *Journal of Transport and Land Use*, 5, pp. 21-38 (2)

National Centre for Sustainable Transportation (2013): We can get there from here: New perspectives on Transportation Equity (3)

National Centre for Social Research (2009): The Travel Choices and Needs of Low Income Households: the Role of the Car (3)

National Travel Survey United Kingdom (2012) (3)

Nelson,J et.al (2017): The social and economic benefits of community transport in Scotland, *Case Studies on Transport Policy*,5, pp. 286-298 (5)

Neubauer,A (2017): Es bewegt sich was im ländlichen Raum. Vom Wandel und Erhalt der Alltagsmobilität älterer Menschen in Sarow, *ISR Impulse*, TU Berlin (2)

Neutens,T et.al. (2010): Evaluating the temporal organisation of public service provision using space-time accessibility analysis, *Urban Geography*, 31 (8), pp. 1039-1064 (1)

Neutens,T, Schwanen,T, Witlox,F (2011) : The Prism of Everyday Life; Towards a New Research Agenda for Time Geography, *Transport Reviews*, 31:1, pp. 25-47 (1)

Neven, A et.al (2015): Assessing the impact of different policy decisions on the resource requirements, 9of a Demand Responsive Transport system for persons with disabilities, *Transport Policy*, 44, pp. 48-57 (5)

Nguyen,N et.al (2013): Using Accessibility Indicators to investigate Urban Growth and Motorcycles use in Hanoi City, Vietnam, *proceedings of the Eastern Asia Society for Transportation studies* (4)

NHTSA (2016): Traffic Safety Facts, 2014 Data, Washington (3)

Nicolas,JP, Vanco,F, Verry,D (2012); Mobilité quotidienne et vulnérabilité des ménages, *Revue d'Economie Regionale & Urbaine*, 1, pp. 19-44 (3)

Nicolas,JP, Pelé (2017): Measuring trends in household expenditures for daily mobility. The case in Lyon, France, between 1995 and 2015, *Transport Policy*, 59, pp. 82-92 (3)

Noack,E (2010); Stuck in the Countryside? Women's transport mobility in rural Aberdeenshire, Scotland – Experiences, behaviour and needs, *Jahrbuch Österreichischen Gesellschaft für Agrarökonomie*, Band 19 (3)

Noordelijke Rekenkamer (2017): Met de bus naar de stad. Openbaar vervoer in perifere gebieden van de provincie Fryslan (5)

Nordbakke,S, Schwanen,T (2015): Transport, unmet activity needs and wellbeing in later life: exploring the links, *Transportation*, 42, pp. 1129-1151 (3)

Nostikasari,D (2015); Representations of everyday travel experiences:: Case study of the Dallas- Fort Worth Metropolitan Area, *Transport Policy*, 44, pp 96-107 (2)

O'Connor,J, Brown,A (2013): A qualitative study of "fear" as a regulator of children's independent physical activity in the suburbs, *Health & Place*, 24, pp 157-164'(3)

Olde Kalter,M, Harms, L, Jorritsma, P (2009): Changing travel patterns of women in the Netherlands. Paper presented at International Conference on Women's Issues in Transportation, Irvine (3)

Oldenziel,R et.al (2016): *Cycling Cities: The European Experience*, Foundation for the History of Technology, Eindhoven (5)

Oliver,M, Barnes,C (2010): Disability studies, disabled people and the struggle for inclusion, *British Journal of Sociology of Education*, 31:5, pp. 547-560 (3)

Olsson,L et.al. (2013): Happiness and Satisfaction with Work Commute, *Social Indicators Research*, 111, pp. 255-263 (2)

Olvera,L, Plat,D Pochet,P (2013); The puzzle of mobility and access to the city in Sub-Saharan Africa, *Journal of Transport Geography*, 32, pp. 56-64 (4)

Ontario Rural Council (2007): *Rural Youth: Leading Today, Tomorrow and Beyond. A Discussion Paper on Youth Engagement* (2)

Oppenchaim,N (2009): Mobilité quotidiennes et segregation: le cas des adolescents de Zones Urbaines Sensibles franciliennes, *Espace populations societes*, 2, pp 215-226 (3)

Orfeuil,JP (2004 a) ; Mobility, poverty, and exclusion in France, FIA Foundation (1)

Orfeuil,JP (2004 b): Accessibilité, Mobilité, Inegalites: Regards sur la question en France aujourd'hui, on ; Transport, pauvretés, exclusions: pouvoir bouger pour s'en sortir, Paris, Editions de L 'Aube (6)

Orfeuil, JP (2010); La mobilité, nouvelle question sociale, *Sociologes* (6)

Orfeuil,JP (2014): Quelles villes et quelles mobilités au service des dynamiques productives contemporaines? , *Responsabilite & Environnement*, pp. 40-45 (6)

Orfeuil, JP (2016) : La Mobilité. Vers de nouveaux modeles, *Les rencontres de l'ADEUS* (6)

Orfeuil, JP, Massot,H (2005): Penser les mobilités de demain: Essai de clairvoyance prospective, *Le Blanquet*, pp. 269-290 (6)

Ortar,N (2008): Entre ville et campagne, le difficile equilibre des periurbaines lointaines, *Metropoles* (1,3)

Ortar,N (2016): Dealing with energy crises: Working and living arrangements in peri-urban France, *Transport Policy* (2)

- Pain,R (2006): Paranoid Parenting ? Rematerializing risk and fear for children, *Social & Cultural Geography*, 7, 02, pp. 221-243 (3)
- Paez,A et.al (2009): Mobility and Social Exclusion in Canadian Communities. An Empirical Investigation of Opportunity Access and Deprivation from the Perspective of Vulnerable Groups, Policy Research Directorate, Human Resources and Social Development Canada (3)
- Paez,A, Farber,S (2012): Participation and desire: leisure activities among Canadian adults with disabilities, *Transportation*, 39 (6), pp. 1055-1078 (3)
- Paez,A, Scott,D, Morency,C (2012) ; Measuring accessibility: positive and normative implementations of various accessibility indicators, *Journal of Transport Geography*, 25, pp. 141-153 (1)
- Paget-Seekins,L (2012): Meeting Multiple Sustainability Goals: Non- Motorized Access and Non- Work Trip Usage on Public Transit, *International Journal of Sustainable Transportation*, 6:3, pp. 174-194 (5)
- Paget-Seekins,L (2013): Competing mobility needs: The users, actors and discourses in Atlanta, Georgia, *Transport Policy*, 27, pp. 142-149 (2)
- Palmer,R (2006): Single Person Households. Issues that JRF should be thinking about, Joseph Rowntree Foundation (3)
- Panerai,P (2008): Paris Metropole: Formes et Echelles du Grand-Paris, Editions de La Vilette, Paris (2)
- Panteia (2013): Review of the Action Plan on Urban Mobility MOVE/C1/319-1/2011 TREN/R1/350-2008 lot 2 Final Report (4)
- Papa,E, Lauwers,D (2015): Smart Mobility: Opportunity or Threat to Innovate Places and Cities?, Proceedings REAL CORP Tagungsverband, 5-7 May (4)
- Papa,E et.al (2016): Accessibility instruments for planning practice: A review of European experiences, *The Journal of Transport and Land use*, 9, 3, pp. 57-75 (5)
- Papa,E et.al (2017): The learning process of accessibility instrument developers: Testing the tools in planning, practice, *Transportation Research Part A*, 104, pp. 108-120 (5)
- Papworth Trust (2017): Disability in the United Kingdom 2016. Facts and Figures, Cambridge (3)
- Park,NS et.al (2010): Transportation Difficulty of Black and White Rural Older Adults, *Journal of Applied Gerontology*, 29, 1, pp. 70-88 (3)
- Paterson,M (2007): Automobile Politics: Ecology and Cultural Political Economy, Cambridge University Press (4)
- PBL Planbureau voor de Leefomgeving (2016): De geografie van het werken verandert. Deelname IABR (6)
- Pereira,R, Schwanen,T, Banister,D (2017): Distributive justice and equity in transportation, *Transport Reviews*, 37:2, pp. 170-191 (6)
- Perrotta,A (2015): How the poor Afford Public Transportation; The Case of New York City, Thesis, Columbia University (5)
- Petersen,T (2016): Watching the Swiss: A network approach to rural and exurban public transport, *Transport Policy*, 52, pp. 175-185 (5)

- Peterson,D, Ndembe,E (2015): The Impact of North Dakota's Oil Boom on Transit Liveability, Upper Great Plains Transportation Institute, North Dakota State University, Fargo (2)
- Pflieger,G et.al. (2009); How does Urban Public Transport Change Cities? Correlations between Past and present Transport and Urban Planning Policies, *Urban Studies*, 46(7), pp. 1421-1437 (5)
- Phin,D, Dotson,E (2013): Urban Transport Institutions and Governance and Integrated Land Use and Transport, Hanoi, Vietnam, Case study prepared for Global Report on Human settlements, Habitat (4)
- Pickton,Mj (2013: )Supporting research by becoming a researcher, AISS Summer Conference, University of Northhampton (5)
- Pojani D, Stead,D (2015): Sustainable Urban Transport in the Developing World: Beyond Megacities, *Sustainability*, 7, pp. 7784-7805 (4)
- Policy Studies Institute (2015): Children's Independent Mobility: an international comparison and recommendations for action, University of Westminster, London 93)
- Polidoro,M, de Lollo, J, Barros,M (2012): Urban Sprawl and the Challenges for Urban Planning, *Journal of Environmental Protection*, 3, pp. 1010-1019 (4)
- Pont,K et.al. (2009): Environmental correlates of children's active transportation: a systematic literature review, *Health & Place*, 15, pp. 849-862 (3)
- Pooley,C et.al. (2005a): Mobility in Everyday Life ; Changes in Everyday Mobility in Britain in the 20th Century, Aldershot, Ashgate (3)
- Pooley,C et. al (2005b): ; The journey to school in Britain since 1940s ; continuity and change, *Area*, 37, pp. 43-53 (3)
- Pooley,C (2016): Mobility, Transport and Social Inclusion: Lessons from History, *Social Inclusion*, 4, 3 pp. 100-109 (3)
- Porter,G (2007): Transport,(Im) Mobility, and Spatial Poverty Traps: Issues for Rural Women and Girl Children in Sub-Saharan Africa, Understanding and addressing spatial poverty traps: an international workshop, 29th March, Stellenbosch. (2)
- Porter,G et.al (2010): Young people's transport and mobility in sub-Saharan Africa: The gendered journey to school, *World Transport Policy and Practice*, 16,1,pp. 51-71(2)
- Porter,G (2012): Reflections on a century of road transport developments in West Africa and their (gendered) impacts on the rural poor, *Echo Geo*, avril (2)
- Porter,G et. al (2013): Transport and mobility constraints in an aging population: health and livelihood implications in rural Tanzania, *Journal of Transport Geography*, 30, pp. 161-169 (2)
- Porter,G (2014): Transport Services and Their Impact on Poverty and Growth in Rural Sub- Saharan Africa: A Review of Recent Research and Future Research Needs, *Transport Reviews*, 34,1, pp. 25-45 (2)
- Porter,G (2016); Mobilities in Rural Africa: New Connections, New Challenges, *Annals of the American Association of Geographers*, 106,2, pp. 434-441(2)
- Power,A (2012): Social inequality, disadvantaged neighbourhoods and transport deprivation; an assessment of the historical influence of housing policies, *Journal of Transport Geography*, 21, pp. 39-48 (2)

Prezza,G. et.al.(2006): Parental perception of social risk and of positive potentiality of outdoor autonomy for children ; the development of two instruments, *Journal of Environmental Psychology*, 1 25, pp 437-453 (3)

Preston,J, Rajé,F (2007); Accessibility, mobility and transport-related social exclusion, *Journal of Transport Geography*, 15, pp. 151-160 (1)

Provi Drianda,R Kinoshita, I.(2011): Danger from Traffic to Fear of Monkeys ; children's independent mobility in four diverse sites in Japan, *Global Studies of Childhood*, 1, 3, pp. 226-242 (3)

PTEG (Passenger Transport Executives UK) (2010): Transport & Social Inclusion: Have we made the connections in our cities? (5)

Pucher,J et.al (2005): Urban transport trends and policies in China and India: Impacts of Rapid Economic Growth, *Transport Reviews*, 27,4, pp. 379-410 (4)

Pyrialakou,V, Gritzka,K, Fricker,J (2016): Accessibility, mobility, and realized travel behaviour: Assessing transport disadvantage from a policy perspective, *Journal of Transport Geography*, 51, pp. 252-269 (1)

Quinton,S (2017): In Expect more conflicts between cities and states, The Pew Charitable Trust, January 25 (4)

Raballand,G et.al (2011): Are rural road investments alone sufficient to generate transport flows? Lessons learnt from a randomized experiment in rural Malawi and its policy implications, *World Bank, Research Paper 5535*, Washington (2)

Ragland,D, Satariano,W, MacLeod,K (2005): Driving Cessation and Increased Depressive symptoms, in *Journal of Gerontology*, 60A, pp. 399-403 (3)

Rains,M, Butland,R (2013): Lifting the Barriers: Planning for Increased Mobility and Accessibility through the Adelaide CBD (Doctoral dissertation, Leishman Associates) 93)

Rammelt,C, Leung, M (2017): Tracing the Causal Loops Trough Local Perceptions of Rural Road Impacts in Ethiopia, *World Development*, 95, pp. 1-14 (2)

Rammler,S (2008): Die Wahlverwandschaft of modernity and mobility, in *Tracing Mobilities*, edited by W. Canzler, V. Kaufman and S. Kesselring, Ashgate, Aldershot, pp. 57-77 (1,4,6)

Rammler,S (2014): Reinventing Mobility. 14 Threses on Mobility Policy, Braunschweig (6)

Rammler,S (2016): "Die bigotterie ist auf allen Seiten gross"; interview mit Rammler, Zimmer und Knie, *Die Zukunft der Mobilität*, Enorm heft 5 (6)

Rammler, S (2017): Volk ohne Wagen. Streitschrift für eine neue Mobilität, Fischer Taschenbuchverlag, Frankfurt am Main (6)

Rammler,S, Sauter- Servaes, T (2013): Innovative Moblilitatsdienstleistungen, Arbeitspapier no.274 , Hans Bockler Stiftung, Düsseldorf (6)

Ramos- Pichardo,J et.al (2014): What do older people understand by mobility related difficulties?, *Archives of Gerontology and Geriatrics*, 59, pp. 122-130 (3)

Rau,H, Hynes,M, Heisserer,B (2016): Transport policy and governance in turbulent times: Evidence from Ireland, *Case Studies on Transport Policy*, 4, pp. 45-56 (4)

RDW (2016) : Data on driving licenses, Netherlands (3)

Reckwitz,A (2002); Towards a theory of social practices: a development in culturalist thinking, *European Journal of Social Theory*, 5 (2) pp. 243-263 (1)

Redlin,M et.al (2010): "Why are you still out there" Persistence among Deep Rural Communities in the Northern Plains, *Online Journal of Rural Research & Policy*, 5 (5), pp. 1-22(2)

Redshaw,S (2008): *In the Company of Cars. Driving as a Social and Cultural Practice*, Aldershot, Ashgate(1)

Reese,K (2016): Accelate, Reverse or Find the Off Ramp? Future Automobility in the Fragmented American Imagination, *Mobilities*, 11;1, pp. 152-170

Reichert- Schick,A (2013): Les services a la population dans les regions rurale peripheriques de l' Allemagne. Les exemples de la Pomeranie occidentale et de l'Eifel occidentale, *Norois*, 229, pp. 21-37 (2)

Reichert- Schick,A (2009): Siedlungsregression und Schrumpfungsprozesse landlicher Gemeinden in Vorpommern, *Europa Regional*, 16,1, pp. 36-48 (2)

Reijndorp,A et.al (1998): *Buitenwijk: Stedelijkheid op afstand*, Rotterdam, Nal (5,6)

Ricciardi,A, Xia,J, Currie,G (2015): Exploring public transport equity between separate disadvantaged cohorts: a case study in Perth, Australia, *Journal of Transport Geography*, 43, pp. 111-122 (2)

Richardson,A, Ampt,E (1997) *Car Availability: Accounting for temporal variations*, 25<sup>th</sup> PTRC European Transport Forum, Brunel University, England (3)

Ridgewell,C, Sipe,N, Buchanan,N (2005): *School travel modes in Brisbane*, Urban Research Programme, Griffith University, Research Paper (3)

Riesner,A (2014): Bedeutung und Forderung von Mobilität in landlichen Raume, *Zeitschrift für Geodäsie, Geoinformation und Landmanagement* 1 pp. 41-49 (2)

Riviere,C (2012): Les enfants : révélateurs de nos rapports aux espaces publics, *Metro Politiques*, 18-6 (3)

Roberto,E (2008): *Commuting to opportunity: The working poor and commuting in the United States*, Brookings Institution (2)

Roberts,J, Hodgson,R, Dolan,P (2011): " It is driving her mad": gender differences in the effects of commuting on psychological health, *Journal of Health Economics*, 30,5, pp. 1064-1076 (2)

Rock,S, Ahern,A, Caulfield,B (2016): The economic boom, bust and transport inequity in suburban Dublin, Ireland, *Research in Transportation Economics* 57, pp. 32-43 (2)

Rockefeller Foundation (2013): *Suburban Poverty in the United States* (2)

Rode,P, Floater,G (2014): *Accessibility in Cities: Transport and Urban Form*, The New Climate Economy series, London School of Economics (4)

Rog,D et. al. (2014): *Poverty and Service Delivery in Suburban America*, Urban Publications, Maxime Goodman Levin College of Urban Affairs, Cleveland State University (2)

Rosenbloom,S (2010): How adult children in the UK and the US view driving cessation of their parents: Is a policy window opening, *Journal of Transport Geography*, 18, pp. 634-641(3)

- Rosenbloom,S (2004): Understanding women's and men's travel patterns. In: Research on Women's Issues in Transportation: Report of a Conference (3)
- Rosenbloom,S, Stahl, A (2002): Automobility among the elderly: The convergence of environmental, safety, mobility and community design issues, *EJTIR*, 2 (3-4), pp. 197-213 (1)
- Rougé, L, Bonnin,S (2009): Les "captifs" du periurbain 10 ans apres, Rapport CERTU 08-26, Lyon (1)
- Roult,R. et.al (2016): Recreational needs and practices of youth living in rural areas in Quebec: views and concerns of stakeholders and parents, *Journal of Rural Social Sciences*, 31 (1), pp. 25-51 (3)
- Rural England (2016): Older people in rural areas: Vulnerability due to loneliness and isolation. Rural England research projects (2)
- Ruiz,M, Segui-Pons,J, Mateu-Llado,J (2017); Improving Bus service Levels and social equity through bus frequency modelling, *Journal of Transport Geography*, 58, pp. 220-233 (5)
- Ryley,T et.al (2013); DRT for DRT: Developing Relevant Tools for Demand Responsive Transport, presentation ATCO Conference (5)
- Ryley,T et.al (2014): Investigating the contribution of Demand Responsive Transport to a sustainable local public transport system, *Research in Transportation Economics*, 48, pp. 364-372 (5)
- Salau,T (2015): Public transportation in metropolitan Lagos, Nigeria: analysis of public users' socioeconomic characteristics, *Urban, Planning and Transport Research*,3:1,pp. 132-139 (4)
- Sanchez,T, Stolz,R, Ma,J (2003): Moving to Equity: Addressing inequitable effects of transportation policies on minorities, The Civil Rights Project at Harvard University, Cambridge (2))
- Sanchez,I, Gonzalez,E (2016): Gender differences in commuting behaviour: women's greater sensitivity, *Transportation Research Procedia*, 18, pp. 66-72 (3)
- Scheiner,J (2006): Does the car make elderly people happy and mobile? Settlement structure, car availability and leisure mobility of the elderly, *EJTIR*, 6(2), pp. 151-172 (3)
- Scheiner,J (2008): Verkehrskosten der Randwanderung privater Haushalte, *Raumforschung und Raumordnung*, 66, 1, pp. 52-62 (2)
- Scheiner,J et.al (2010): Ist das Leben in Suburbia nachteilig? Wohnstandortzufriedenheit und Mobilität in Stadt und Umland, *Standort-Zeitschrift für Angewandte Geographie*, 34 (3), pp. 88-96 (2)
- Scheiner,J (2014a); The gendered complexity of daily life: Effects of life-course events on changes in activity entropy and tour complexity over time, *Travel Behaviour and Society*, 1, pp. 91-105 (3)
- Scheiner,J (2014b): Gendered key events in the life course: effects on changes in travel mode choice over time, *Journal of Transport Geography*, 37, pp. 47-60 (3)
- Scheiner,J (2016a): Transport costs seen through the lens of residential self-selection and mobility geographies, *Transport Policy* (1)
- Scheiner,J (2016b): Schooltrips in Germany: Gendered escorting practices, *Transportation Research Part A*, 94, pp 76-92 (3)
- Scheiner,J, Holz Rau,C (2012): Gendered travel mode choice: a focus on car deficient households, *Journal of Transport Geography*, 24, pp. 250-261 (3)

- Schiefelbusch,M (2016): German Experiences with Volunteer-Based paratransit and Public Transport, In; Paratransit; Shaping the Flexible Transport Future, Emerald Insight, pp. 77-102 (5)
- Schmocker,JD et.al (2008): Mode choice of older and disabled people: a case study of shopping trips in London, *Journal of Transport Geography*, 16, pp. 257-267 (3)
- Schoeppe,S et.al (2016): Australian children's independent mobility levels: secondary analyses of cross- sectional data between 1991 and 2012, *Children's Geographies*, 14:4, pp. 408-421 (3)
- Scholten,C, Friberg,T, Sandén,A (2012). Re-Reading Time-Geography from a Gender Perspective: Examples from Gendered mobility. *Tijdschrift voor economische en sociale geografie*, 103(5), pp. 584-600 (3)
- Schonduwe, R, Lennert, F (2016): Future mobility and decarbonisation. Visioning transport futures. Pathways to decarbonisation in transportation scenarios, Stiftung Mercator (6)
- Schönfelder,S, Axhausen,K (2003): Activity spaces: measures social exclusion, *Transport Policy*, 10, pp. 273-286 (1)
- Schwanen,T (2007): Matters of Interest: artefacts, spacing and timing, *Geografiska Annaler*, 89B (1), pp. 9-22 (3)
- Schwanen,T, Kwan, MP, Ren,F (2008): How fixed is fixed? Gendered rigidity of space- time constraints and geographies of everyday activities, *Geoforum*, 39, pp. 2109-2121 (3)
- Schwanen,T, Banister,D, Anable,J(2011): Scientific research about climate change mitigation in transport: A critical review, *Transportation Research Part A*, 45,pp. 993-1006 (4)
- Schwanen,T, Banister,D, Anable, J (2012): Rethinking habits and their role in behavioural change: the case of low-carbon mobility, *Journal of Transport Geography*,24, pp. 522-532 (6)
- Schwanen,T, Banister,D, Bowling,A (2012): Independence and mobility in later life, *Geoforum*, 43, pp. 1313-1322 (3)
- Schwanen,T et.al. (2015) : Rethinking the links between social exclusion and transport disadvantage through the lens of social capital, *Transportation Research Part A*, 74, pp 123-139 (1)
- SCP (2004): De veeleisende samenleving, Rijswijk/Den Haag (6)
- SCP (2012): Factsheet Mensen met lichamelijke of verstandelijke beperkingen, Den Haag (3)
- SCP(2017): Dorpsleven tussen stad en land , Slotpublicatie Sociale Staat van het Platteland, Den Haag (3)
- Seils,E, Meyer,D (2012): Die Armut steigt und konzentriert sich in den Metropolen, WSI Report, Dusseldorf (2)
- Senatsverwaltung Berlin (2016); ÖPNV Gesamtbericht 2015(5)
- Setboonsarng (2005): Transport Infrastructure and Poverty Reduction, Asian Development Bank Institute1 Research Policy Brief, no 21 (4)
- Shay,E et.al (2016); Identifying transport disadvantage: Mixed-methods analysis combining GIS mapping with qualitative data, *Transport Policy*, 48, pp 129-138 (1)
- Shen,J (2017): Stuck in the suburbs? Socio- spatial exclusion in Shanghai, *Cities*, 60, pp 428-435(2)



- Shergold,I, Parkhurst,G (2010): Operationalising “sustainable mobility”: the case of transport policy for older citizens in rural areas, *Journal of Transport Geography*, 18, pp. 336-339(2)
- Shergold,I, Parkhurst,G, Musselwhie,C (2012): Rural car dependence: an emerging barrier to community activity for older people, *Transportation Planning and Technology*, 35:1, pp. 69-85 (2)
- Shergold,I, Lyons, G, Hubers,C (2015): Future mobility in an ageing society: where are we heading? , *Journal of Transport& Health*, 2 (1), pp. 86-94 (3)
- Shibayama,T (2017): Japan’s transport planning at national level, natural disasters and their interplays, *European Transport Research Review*, 9:44, pp. 1-18 (4,6)
- Shirmahammedli,A, Louen,C, Valle,D (2016): Exploring mobility equity in a society undergoing changes in travel behaviour: A case study of Aachen, Germany, *Transport Policy*, 46, pp. 32-39 (2)
- Shoup,D (2005) : *The High Costs of Free Parking* , Routledge (6)
- Shoup,D (2017): Interview with Parking Guru Donald Shoup, *Market Urbanism*, 5 May (6)
- Shove,E (2002): Rushing around: Coordination, mobility and inequality, ESRC Mobile Network Meeting, Department for Transport, London (3)
- Shove, E, Walker, G (2010); Governing transitions in the sustainability of everyday life, *Research Policy*, 39, pp. 471-476 (1)
- Sieber,N, Allen,H (2016): Impacts of Rural Roads on Poverty and Equity, *Transport and Communications Bulletin for Asia and the Pacific*, pp. 1-18 (2)
- Simicevic,J, Milosavljevic,N, Djoric,V (2016): Gender differences in travel behaviour and willingness to adopt sustainable behaviour, *Transportation Planning and Technology*, 39:5, pp.527-537 (3)
- Singh,S (2012): Urban Transport in India: Issues, Challenges and the Way Forward, *European Transport/ Traporti Europei*, Issue 52, Paper 5 (4)
- Singleton, P, Clifton,K (2017); Considering health in US metropolitan long-range transportation plans: A review of guidance statements and performance measures, *Transport Policy*, 57, pp. 79-89 (6)
- Siren,A, Haustein,S (2013); Baby boomers’ mobility patterns and preferences: What are the implications for future transport?, *Transport Policy*, 29, pp. 136-144 (3)
- Siren,A, Haustein,S (2016): Driving Cessation Anno 2016. Which Older Drivers Give Up Their License and Why? Evidence from Denmark, *Journal of Applied Gerontology*, 35 (1), pp. 18-38 (3)
- Skerrat,S (2010); Hot Spots and Not Spots: Addressing Infrastructure and Service Provision through combined Approaches in Rural Scotland, *Sustainability*, 2, pp.1719-1741 (5)
- Skinner,C (2003): *Running around in circles; How parents coordinate childcare, education and work*, London, Joseph Rowntree Foundation (3)
- Small,J, Darcy,S (2010): . Tourism, disability and mobility. In; *Tourism and inequality: Problems and prospects*, pp. 1-21 (3)
- Smart,M, Klein,N (2015): A longitudinal analysis of cars, transit and employment outcomes, *Mineta Transportation Institute Publications*, 9-2015 (2)
- Smith,N., Hirsch,D., Davis,A (2012): Accessibility and capability: the minimum transport needs and costs of rural households, *Journal of Transport Geography*, 21, pp. 93-101 (2,3)

Smith,T, Axon,C, Darton,R (2013); A methodology for measuring the sustainability of car transport systems, *Transport Policy*,30, pp. 308-317 (6)

Social Exclusion Unit (2002): Making the Connections: Transport and Social Exclusion. Interim findings (5)

Social Exclusion Unit (2003): Making the connections: transport and social exclusion, London (5)

Solomon,J, Titheridge,H (2009); Setting accessibility standards for social inclusion: some obstacles, UTSG paper (6)

Solvoll,G, Hanssen,TE (2017) ; User satisfaction with specialised transport for disabled in Norway, *Journal of Transport Geography*, 62, pp. 1-7 (3)

Somenahalli,S, et al (2016); Accessible transportation and mobility issues of elderly — how does Australia compare with Japan? *Journal of Sustainable Urbanization, Planning and Progress*, vol.1(1), pp. 31–43 (6)

Soron,D (2009): Driven to Drive: Cars and the problem of “compulsory Consumption”, in Conley,J , Tiger MacLaren, A, *Car Troubles*, Aldershot, Ashgate, pp. 181-197 (6)

Spangenberg,J (2010): The Growth Discourse, Growth Policy and Sustainable Development: Two Thought Experiments, *Journal of Cleaner Production*, 18, pp. 561-566 (4)

Sperling,D (2010): Steps into post fossil mobility: A vision and policy plan for sustainable transportation, Keynote lecture “Future Technologies II: Mobility, Our Common Future, Essen 4-11 (6)

Spiller,M (2014): Social Justice and the Centralisation of Governance in the Australian Metropolis: A Case Study of Melbourne, *Urban Policy and Research*, 32, pp. 361-380 (2)

Stacey,T, Shaddock, L (2015): Taken for a ride. How UK public transport subsidies entrench inequality, *The Equality Trust* (5)

Stangeland,C (2016): Fracking: Unintended consequences for local communities, Thesis, Naval Postgraduate School, Monterey, California (2)

Stanley,J,Lucas,K (2008); Social exclusion: What can public transport offer? , *Research in Transportation Economics*, 22, pp. 36-40 (1)

Stanley,J, Vella- Brodrick,D (2009): The usefulness of social exclusion to inform social policy in transport, *Transport policy*, 16, pp. 90-96 (1)

Stanley,J, Stanley,J, Hensher,D (2012) ; Mobility, Social Capital and Sense of Community: What Value, *Urban Studies*, 49 (16), pp. 3595-3609 (1)

Starkey,P, Hine,J (2014): Poverty and sustainable development. How transport affect spoor people with policy implications for poverty reduction. A literature review, *UN Habitat* (2)

Starkey,P (2016): Provision of rural transport services: user needs, practical constraints and policy issues, *Transport and Communications Bulletin for Asia and the Pacific* 86 , pp. 6-22 92)

Statistics Canada (2017): A profile of persons with disabilities among Canadians aged 15 years or older, 2012 (3)

Statistics Finland (2012): Middle-aged men live alone more often than women (3)

Steinruck,B, Kupper,P (2010): Mobilität in landlichen Raumen unter besonderer Berücksichtigung bedarfsgesteuerter Bedienformen des ÖPNV, Johann Heinrich von Thunen Institut, Braunschweig, 2/2010 (2)

Stel, van der, J (2004 ) : Individualisering, Zelfbeheersing en sociale integratie, in I Schnabel, P ed Individualisering en sociale integratie, , SCP, pp. 96-120 96)

Stern,N (2006): The Economics of Climate Change, Cambridge: Cambridge University Press 96)

Stetzer,L (2016): Social Sustainability and Mobility: The Case of Low-Income Groups, Wulfhorst,G, and Klug, S (eds), Sustainable Mobility in Metropolitan Regions, Springer Fachmedien Wiesbaden, pp 83-98 (2)

Stewart,O, Moudon,A, Claybrooke, C (2012): Common ground: Eight factors that influence walking and biking to school, Transport Policy, 24, pp 240-248 (3)

Stiftung Entwicklung und Frieden (2012): Sustainable Mobility. Recommendations for Future- Proof Transport Strategies (4)

Stjenborg, V, Wretstrand,A, Tesfahuney,M (2015): Everyday Life Mobilities of Older Persons- A Case Study of Ageing in a Suburban Landscape in Sweden, Mobilities, 10, pp. 383-401 (3)

Stokes,G , Lucas,K (2011); National Travel Survey Analysis, Poverty and travel behaviour in Great Britain – what the National Travel Survey tells us, Working Paper 1053, Transport Studies Unit, University of Oxford (1)

Stokes,G (2012) : Transport and the Rural Economy, Transport Studies Unit, University of Oxford (5)

Stokes,G (2016); Incomes, accessibility and transport poverty, R.Hickmann et.al (eds) International Handbook on Transport and Development, pp.414-428 (1)

Stone,M et.al. (2014): Predictors of driving among families living within 2 km from school: Exploring the role of the built environment, Transport Policy, 33, pp 8-16 (3)

Stone,W (2003): Bonding, bridging and linking with social capital. Stronger families learning exchange bulletin, 4(1), pp. 13-16 (1)

Stradling et.al. (2002): Eight reasons why people don't like busses. Paper, Napier University, Edinburgh (3)

Stutzer,A, Frey,B (2008): Stress that doesn't pay: The commuting paradox. The Scandinavian Journal of Economics 110.,pp. 339-366 (2)

Su,F,Bell,M (2009): Transport for older people: Characteristics and solutions, Research in Transportation Economics, 25, pp. 46-55 (3)

Sugerman,J (2015): Neoliberalism and Psychological Ethics, Journal of Theoretical and Philosophical Psychology, 35, pp. 103-116 (6)

Surface Transportation Project (2003): Transportation Costs and the American dream (3)

Surface Transportation Project (2005): Driven to Spend: Pumping Dollars out of our Households and Communities (3)

Sustainable Development Commission UK (2011) : Fairness in a Car-dependent Society (3)

- Sweet,M, Kanaroglou,Y (2016): Gender differences: The role of travel and time use in subjective well-being, *Transportation Research Part F*, 40, pp. 23-34 (3)
- Tal,G, Handy,S (2010): Travel behaviour of immigrants: An analysis of the 2001 National Household Transportation Survey. *Transport Policy* 17.2 pp. 85-93 (3)
- Taub,D, McLorg,P, Bartnick,A (2009): Physical and social barriers to social relationships: voices of rural disabled women in the USA, *Disability & Society*, 24:2, pp. 201-215 (3)
- Taylor,B (2012): Some Thoughts on transportation Equity and Public Policy, Equity Caucus at Transportation for America Forum, UCLA, Institute Transportation Studies (5)
- Taylor,B, Morris,E (2015): Public transportation objectives and rider demographics: are transit's priorities poor public policy? , *Transportation*, 42, pp. 347-367 (5)
- Taylor,Z, Jozefowicz,I (2012): Daily mobility of disabled people for healthcare facilities and their accessibility in urban space, *Geographia Polonica*, 85,3, pp. 5-22 (3)
- Terefe,L (2012): Impact of Road on Rural Poverty. Evidence from fifteen rural villages in Ethiopia, paper ISS, International Institute of Social Studies, The Hague (2)
- Thomsen,L (2009): "How times have changed"; Active transport literature review, *Vic Health* (3)
- Tierney,K. (2005): Social Inequality, Hazards, and Disasters. Pp. 109-128 in R. J. Daniels,D. F. Kettl, and H. Kunreuther (Eds.) *On Risk and Disaster: Lessons from Hurricane Katrina*.Philadelphia: University of Pennsylvania Press (1)
- Tighe,R, Ganning,J (2016): Do Shrinking Cities Allow Redevelopment Without Displacement? An Analysis of Affordability Based on Housing and Transportation Costs for Redeveloping, Declining and Stable Neighbourhoods, *Housing Policy Debate*, 26,4-5, pp. 785-800 (2)
- Tilley,S, Houston,D (2016): The gender turnaround: Young women now travelling more than young men, *Journal of Transport Geography*, 54, pp. 349-358
- Titheridge,H (2008): Social exclusion, accessibility and lone parents. Paper presented at the UK – Ireland Planning Research Conference, Belfast 18-30 March (3)
- Titheridge,H et.al (2014): Transport and Poverty. A review of the evidence, Working Paper, University College London (1)
- Tomer,A (2011): Transit Access and Zero- Vehicle Households, Brookings Metropolitan Policy Program (2)
- Tomer,A (2012): Where the Jobs Are: Employer Access to Labour by Transit, Brookings Metropolitan Policy Program (5)
- Tran,H, Schyler,A (2010): Gender and class in urban transport: the cases of Xian and Hanoi, *Environment & Urbanization*, pp. 139-155 (4)
- Transport for London (2012): Understanding the travel needs of London's diverse communities. Disabled People, Black, Asian and Minority Groups, TfL 10038, London (3)
- Transportation for America (2011): Aging in Place, Suck without Options. Fixing the Mobility Crisis Threatening the Baby Boom Generation (2)

- Tranter, P, and Sharpe, S. (2008): Escaping Monstropolis : child- friendly cities, peak oil and Monsters, *Children's Geographies*, 6, 3, pp. 295-308 (3)
- Turcotte,M (2012) ; Profile of senior's transportation habits, Statistics Canada (3)
- Turner Goins,R et.al (2015): Older Adults' Perception of Mobility: A Meta synthesis of Qualitative Studies, *Gerontologist*, 55,6, pp. 929-942(3)
- Ulfarsson, G et.al (2015): Urban household travel behaviour in a time of economic crisis: Changes in trip making and transit importance, *Journal of Transport Geography*, 49, pp. 68-75 (3)
- Umwelt Bundes Amt (2012): Achieving sustainability in urban transport in developing and transition countries, Texte 02/2012b (4)
- Unbehaun,W. et.al (2014): Women and Men with Care Responsibilities in the Austrian Alps: Activity and Mobility Patterns of a Diverse Group, *Mountain Research and Development*, 4(3), pp. 276-290 (3)
- UN High Level Group (2015): Mobilizing Sustainable Transport for Development. Analysis and Policy Recommendations (4)
- UN/Unicef (2014): World Urbanization Prospects, the 2014 Revision (4)
- Urban Institute (2014): Driving to Opportunity: Understanding the Links among Transportation Access, Residential Outcomes, and Economic Opportunity for Housing Voucher Recipients (5)
- Urban Resource Centre (2015): Responding to the transport crisis in Karachi, Working Paper (4)
- Ureta,S (2008): To Move or not to Move? Social Exclusion, Accessibility and Daily Mobility among the Low- income population of Santiago, Chile, *Mobilities*, 3;2, pp. 269-289 (3)
- Urry J (2004) ; The "System" of Automobility, *Theory, Culture& Society*, 21 (4/5), pp 25-40 (1,6)
- Urry,J (2007): *Mobilities*, Plon (4)
- Urry,J (2008): Governance, flows and the end of the car system, *Global Environmental Change*, 18, 3, pp. 343-349. (6)
- Urry,J (2010): Sociology and Climate change, *Sociological Review*, 57, Suppl. 2, p. 84-100 (6)
- Urry,J (2012) ; *Climate change and Society*, Polity Press, Cambridge (6)
- URTC region 2 (2015): Suburban Poverty, Public Transit, Economic Opportunities and Social Mobility (2)
- US Department of Agriculture (2010): Food Access Research Atlas (2)
- Uteng,T (2009): Gender, ethnicity, and constrained mobility: insights into the resultant social exclusion, *Environment and Planning A* , 41, pp. 1055-1071 (3)
- Uteng,T (2011): Gender and Mobility in the Developing World, *World Development Report 2012*, Background Paper(2)
- Vallance,S, Perkins,H, Dixon,J (2009) ; What is social sustainability? A clarification of concepts, *Geoforum*, 42, 342-348 (1,6)
- Van Acker,V, Mokhtarian,P, Witlox,F (2011): Going soft: On how subjective variables explain modal choices for leisure travel, *European Journal of Transport and Infrastructure Research*, 11 (2), pp. 115-146 (1)

- Van Acker,V, Goodwin, P, Witlox, F (2016); Key research themes on travel behaviour, lifestyle, and sustainable urban mobility, *International Journal of Sustainable Transportation*, 10:1, pp. 25-32 (1)
- Vasconcellos,E (2005): Transport metabolism, social diversity and equity: The case of Sao Paulo, Brazil, *Journal of Transport Geography*, 13, pp. 329-339 (2)
- Vasconcellos.E (2014): *Urban Transport, Environment and Equity. The case for developing countries*, Taylor & Francis, Hoboken (2)
- Veenema,J et.al (2015); Austerity in public transport in Europe: the influence of governance, *Research in Transportation Economics*, 51, pp. 31-39 (5)
- Veitch,J et.al. (2006) : Where do children usually play ? A qualitative study of parents' perceptions of influences on children's active free-play, *Health & Place*, 12, pp 383-393 (3)
- Vella-Brodrick,D, Stanley,J (2013): The significance of transport mobility in predicting well- being, *Transport policy*, 20, pp 236-242 (1)
- Venter, C (2011); Transport expenditure and affordability: The cost of being mobile, *Development Southern Africa*, 28,1, March (4)
- Verbich,D, El-Geneidy,A (2017): Public transit fare structure and social vulnerability in Montreal, *Transportation Research Part A*, 96, pp. 43-53 (5)
- Verlinghieri,E, Venturini,F (2017): Exploring the right to mobility through the 2013 mobilizations in Rio de Janeiro, *Journal of Transport Geography* (2,6)
- Verma,A et.al (2015); *Urban Mobility Trends in Indian Cities and Its Implications*, in Gurtoo,A, Williams, C, eds. , *Developing Country Perspectives on Public Service Delivery*, Springer India (4)
- Vidyattama,Y, Tanton,R, Nepal,B (2011): Housing Stress or Transport Stress? Issues in Australian Housing Affordability, NATSEM, University of Canberra, working Paper 11/06 (2)
- Vigar,G (2001): *The Politics of Mobility*, Spon Press, New York (4)
- Villanueva,K et.al (2012): How far do children travel from their homes? Exploring children's activity spaces in their neighbourhood, *Health & Place*, 18, pp. 263-273 (3)
- Vinke,M (2016): *Vervoersarmoede bestreden. Een onderzoek naar de voorgestelde veranderingen van de regiotali voor ouderen in de regio Achterhoek van de provincie Gelderland*, Master Thesis Universiteit Utrecht (5)
- Vinne, van der, V (2010): *De autoproblematiek in Nederland*, Siemes, Zutphen (1)
- Wachs,M, Kumagai,G (1973); Physical Accessibility as a social indicator, *Socio Economic Planning Science*, 7, pp 437-456 (1)
- Walia,S, Liepert,B (2012): Perceived Facilitators and Barriers to Physical Activity for Rural Youth: An Exploratory Study using Photovoice, *Nursing Publications*, Paper 215 (2)
- Walker,W et.al. (2006): Operationalizing the concept of Sustainable Transport and Mobility, *Environmental Practice*, 8 (1),pp. 24-48 (6)
- Walker,J (2008): Purpose-driven public transport: creating a clear conversation about public transport goals, *Journal of Transport Geography*, 16, pp. 436-442 (5)

- Walks,A (2017): Driving the poor into debt? Automobile loans, transport disadvantage, and automobile dependence, *Transport Policy* (forthcoming) (3)
- Wang, C et.al (2015); Exploring the propensity to travel by demand responsive transport in the rural area of Lincolnshire in England, *Case Studies on Transport Policy*, 3, pp. 129-136 (5)
- Wang,H, et. Al (2016): The role of socio- economic status and spatial effects on fresh food access: Two case studies in Canada, *Applied Geography*, 67, pp. 27-38 (2)
- Wasfi,R, Steinmetz-Wood, M, Levinson,D (2016); Measuring the transportation needs of people with developmental disabilities: A means to social inclusion, *Disability and Health Journal*, pp. 356-360 (3)
- Webber,M (1964) : The Urban Place and the Nonplace Urban Realm (6)
- Wee, van B, Geurs,K (2011): Discussing Equity and Social Exclusion in Accessibility Evaluations, *EJTIR*, 11 (4), pp. 350-367 (1)
- Wee, van,B, Geurs, K, Chorus,C (2013): Information, communication, travel behaviour and accessibility, *Journal of Transport and Land Use*, 6 (3), pp. 1-16 (1)
- Weglinski,S, Korsu,E (2013): Des déplacements quotidiens au service de la segregation résidentielle?, *Les Cahiers Scientifiques du Transport*, 63, pp 119-140 (2)
- Welch,T (2013): Equity in transport; The distribution of transit access and connectivity among affordable housing units,. *Transport policy*, 30, pp. 283-293 (1,5)
- Wells,P, Xenias,D (2015): From “freedom of the open road” to “cocooning: Understanding resistance to change in personal private automobility, *Environmental Innovation and Societal Transitions*, 16, pp. 106-119 (4)
- Welsch,J, Conrad,K, Wiiowsky,D (2016): Exploring immigrants travel behaviour: empirical findings from Offenbach am Main, Germany, *Transportation* (3)
- Westerlund,Y (2016): Development and Status for Large- Scale Demand Responsive Transport, in *Paratransit; Shaping the flexible transport Future*, Emerald Insight (5)
- Weston,L, Handy, S (2005): Driving by Choice or Necessity? Research Report SWUTC/05/167522-1, University of Texas, Austin (3)
- Wheatley,D (2014): Travel-to-work and subjective well-being: A study of UK dual career households, *Journal of Transport Geography*, 39, pp. 187-196 (3)
- White,P (2016): The roles of “Conventional” and “Demand Responsive Bus Services”, in *Paratransit: Shaping the Flexible Transport Future*, Emerald Insight, pp. 307-330
- Whitelegg,J (2015): A New Urban Design and Transport Planning Philosophy for a Sustainable Future, Straw-Barnes Press (4)
- Widener,M, Shannon,J (2014): When are food deserts? Integrating time into research on food accessibility, *Health & Place*, 30, pp. 1-3 (2)
- Wiebe,K Distatio,J (2016): Confronting the Illusion; Developing a Method to Identify Food Mirages and Food Deserts in Winnipeg, IUS in brief series, Institute of Urban Studies, University of Winnipeg, (2)
- Wilkinson-Meyers,L et.al (2014): Reducing disablement with adequate and appropriate resources: a New Zealand perspective, *Disability & Society*, 29:10, pp. 1540-1553 (3)

- Williams- Pocock,B, Bridge,K (2009): Linked Up Lives: Putting together work, home and community in ten Australian suburbs, Overview Report, Centre for Work + Life University of South Australia, Adelaide (2)
- Willing,R, Pojani,D (2017): Is the suburban dream still alive in Australia.? Evidence from Brisbane, Australian Planner, pp. 1-13 (2)
- Wondemu, K, Weiss,J (2012); Rural Roads and Development: Evidence from Ethiopia, EJTI, 12 (4), pp. 417-439 (2)
- Woolvin,M et.al (2015): Divergent geographies of policy and practice/ Voluntarism and devolution in England, Scotland and Wales, Geographical Journal, 181(1), pp. 38-46 (5)
- Woud, A van der (1987): Het Lege Land. De ruimtelijke orde van Nederland 1798-1948, Contact BV (1)
- Wright, B (2008): No way to go: A review of the literature on transportation barriers in health care, World Transport Policy & Practice, 14 (3), pp. 7-23 (3)
- Wright,J et.al (2016): Food Deserts : What is the Problem? What is the Solution? , Society, 53:171, pp. 171-181 (2)
- Wright, S et.al (2014) ; The design, management and operation of flexible transport systems: Comparison of experience between UK, Japan and India, Research in Transportation Economics, 48, pp. 330-338 (5)
- WRVS (2012): Loneliness amongst older people and the impact of family connections, Cardiff (2)
- Wulforth,G (2008): Erreichbarkeit- Accessibility- Accessibilité, Introduction to mobil. TUM 2008, International Conference on Mobility and Transport, Conference Proceedings, Munchen (4)
- Xia,J et.al (2016): a multi-dimensional view of transport-related exclusion: A comparative study of Greater Perth and Sydney, Transportation Research Part A, 94, pp. 205-221 (2)
- Yang,H, Cherry,C (2017): Use characteristics and demographics of rural transit riders: a case study in Tennessee, Transportation Planning and Technology, 40:2, pp. 213-227 (5)
- Yigitcanlar,F, Rashid, K, Dur,F (2010): Sustainable Urban and Transport Development for Transportation Disadvantaged ; A review, The Open Transportation Journal, 4, pp 1-8 (1)
- Young,M, Lachapelle,U (2017): Transportation behaviour of the growing Canadian single-person households, Transport Policy, 57, pp. 41-50 (3)
- Yousefian,A et.al (2009): Active Living for Rural Youth: Addressing Physical Inactivity in Rural Communities, Journal Public Health Management Practice, 15(3), pp. 223-231 (2)
- Zapata,M, Bates,L (2015); Equity Planning Revisited, Journal of Planning Education and Research, 35 (3), pp. 245-248 (6)
- Ziegler,F (2012): "You have to engage with life, or life will go away": An intersectional life course analysis of older women s social participation in a disadvantaged urban are, Geoforum, 43, pp. 1296-1305 (3)
- Ziegler,F, Schwanen,T (2011): "I like to go out to be energised by different people": an exploratory analysis of mobility and wellbeing in later life, Ageing & Society, 31, pp. 758-781 (3)



Zogo,V, Epo,B (2016): Assessing Gender Inclusion in Cameroon's Rural Transport, Journal of African Transformation, 1, 2, pp. 129-144 (2)

Zijderveld,A (1991): Staccato cultuur, flexibele maatschappij en verzorgende staat: de ironie van wat ons drijft en belangrijk dunkt, Boom Uitgevers, Den Haag (6)

Zijlstra,T, Bakker,P (2016): Cijfers en prognoses voor het doelgroepenvervoer in Nederland, Kennisinstituut voor Mobiliteitsbeleid, Den Haag (3)