



This item was submitted to Loughborough's Institutional Repository (<https://dspace.lboro.ac.uk/>) by the author and is made available under the following Creative Commons Licence conditions.



CC creative commons
COMMONS DEED

Attribution-NonCommercial-NoDerivs 2.5

You are free:

- to copy, distribute, display, and perform the work

Under the following conditions:

BY: **Attribution.** You must attribute the work in the manner specified by the author or licensor.

Noncommercial. You may not use this work for commercial purposes.

No Derivative Works. You may not alter, transform, or build upon this work.

- For any reuse or distribution, you must make clear to others the license terms of this work.
- Any of these conditions can be waived if you get permission from the copyright holder.

Your fair use and other rights are in no way affected by the above.

This is a human-readable summary of the [Legal Code \(the full license\)](#).

[Disclaimer](#) 

For the full text of this licence, please go to:
<http://creativecommons.org/licenses/by-nc-nd/2.5/>

THE JOURNEY TO WORK AS A BARRIER TO CONTINUED EMPLOYMENT IN LATER LIFE

Mrs Lucy Rackliff

Senior Researcher

Loughborough University

Mrs Colette Nicolle

Research Fellow

Loughborough University

Dr Martin Maguire

Research Fellow

Loughborough University

Abstract

Various economic, social and demographic factors have combined over recent years to make the promotion of longer productive working lives for older people a desirable policy objective. Although disability increases with age, many older workers lead healthy, active lives. With the UK Employment Equality (Age) Regulations (2006), employers now have to consider requests to continue working beyond retirement age, so the number and needs of older workers are likely to increase.

Difficulty with the journey to work is one of the barriers to employment for older workers. Whilst owning a car increases independence and improves quality of life, the compensatory techniques that may be used by older drivers when driving becomes difficult (avoiding bad weather, darkness, rush hours and complex junctions) may not be easily applied to the journey to work. Public transport is not always an option, with journey time, cost and availability all being potential issues. Whilst there are new technologies in both public and private transport that could help, they may not be designed with the requirements and limitations of older workers in mind, restricting their usefulness.

In addition, many older people experience conflicts with family commitments and activities. People can find themselves simultaneously caring for their parents, partners and grandchildren. These add to the complexity of journey planning and affect travel choices and decisions.

This work describes the results of two focus groups in which older workers and employee representatives explored the key influence travelling to work has on employment. The information, support and technology that would enable older workers to adapt their travel to accommodate changing needs are highlighted, and the relationship between travel decisions and organisational factors is described. This work forms part of the "Working Late" project, a collaborative research project funded under the New Dynamics of Ageing Programme.

Introduction

In recent years, a number of economic, social and demographic factors have combined to make the promotion of longer working lives a desirable policy objective. In the UK, as in most of Europe, there are now twice as many workers aged over 50 than aged under 25 (Illmarinen 2001). However, any increase in the age of the workforce provides challenges for policy-makers, employers and families. A number of barriers to later life working have been identified, including the onset of age-related health conditions, caring responsibilities, lack of relevant work experience, age discrimination and transport problems. A better understanding of these age-related barriers is needed to inform the development of more inclusive policies.

The work presented here is part of the “Working Late” project, a collaborative research project funded under the New Dynamics of Ageing program, a seven year multidisciplinary research initiative funded by the five research councils. The ultimate aim of the work is to improve the quality of life of older people. Working Late itself is a multi-disciplinary project, looking at employment, occupational health and the work environment, with a view to identifying and removing barriers to “working late”.

As has been stated, difficulty with the journey to work is one of the possible barriers to continued employment in later life. Commuting is a reasonably well-studied phenomenon. This may be because according to Benito and Oswald (2000), commuting is a big part of working life in Britain, where commutes are, on average, longer than elsewhere in Europe.

A number of factors are thought to influence the journey to work. These include;

- Gender (Turner and Niemeier 1997) (Singell and Lillydahl 1986)
- Income and occupational status (Cubukgil and Miller 1982) (Benito and Oswald 2000)
- Geography (Benito and Oswald 2000)
- Car ownership (Benito and Oswald 2000)
- Industry sector (Benito and Oswald 2000)
- Employment type (Benito and Oswald 2000)
- Levels of education (Benito and Oswald 2000)

According to Benito and Oswald, men tend to spend longer than women commuting, a difference which is statistically significant and which does not seem to vary according to marital status or whether employment is in the public or private sector. This difference is described by Turner and Niemeier 1997 as a “*persistent empirical finding*”

Turner and Niemeier provide a summary of the key research into the likely explanatory factors behind this. The cited studies investigate a range of factors including;

- Time spent on household and family support activities
- Wages, house prices and other demographic factors as determinant of commute length
- Educational attainment
- Occupation

Conclusions about which of these factors has the most impact on gender differences in journey to work patterns are difficult to draw with any certainty, since there is likely to be some degree of interaction between them. For example, educational attainment may affect wages. However, it highlights the importance of gathering information about which of these various factors impact most on the decision to stay in (or leave) employment.

A number of complex interactions influence the effect of income on commuting patterns. Benito and Oswald states that there is a negative relation between income and commuting

time. The reason for this is that as income levels rise individuals will wish to increase the time they spend at work or on leisure, and to do this they will attempt to reduce commuting time. However, Cubukgil and Miller 1982 discusses a number of other factors which may mean that commuting time increases as income rises. For example, the ready availability of low income housing near centres of "blue collar" employment (factories and warehouses for example) may mean those on lower incomes spend less time commuting. On the other hand the greater selectivity in housing choice, decreases in the burden of commuting costs and skill specialities which decrease and disperse the locations at which work may be available may lead to those with higher incomes having longer commutes.

Whilst income may be thought of as a good proxy for occupational status, Cubukgil and Miller found some notable differences between different groups of workers with similar incomes working in different sectors. They conclude that

"Consistent reasonable and statistically significant differences exist among the commuting patterns of six occupation groups"

The other effect of income on commuting is its relation to car ownership. This will be dealt with in more detail later.

Geographical factors also affect the journey to work. Benito and Oswald 2000 concludes that there are a number of regional variations in commuting patterns and length. They suggest that during the 1990s there was a noticeable increase in travel to work times in the South East and London which was not reflected in increases in travel times elsewhere in the UK. This suggests that any study which aims to produce nationally-relevant findings must take regional differences into account. Findings from Benito and Oswald 2000 may now need to be treated with some caution, due to the time that has now elapsed, and the possible effect of more recent changes in commuting behaviour. However, it does suggest that employees in London and the South East may have a different experience from those elsewhere in the UK. It must also be recognised that public transport networks are generally dense in and around London, which may have a particular impact on the extent to which transport is a barrier or facilitator to "working late".

Despite the relative wealth of studies which examine the journey to work there is relatively little which looks at it in the specific context of ageing. This reflects a relative lack of focus on the 50 – 65 age group in many spheres of public policy. According to Fogarty (1975)

"Public policy has focussed at different times on various stages of the lifecycle: on infants and preschool children, on school and college education, on the problems of young married couples or of the old and retired. It has not paid similar attention to the role and problems in work, family, and the community of the late middle-aged."

The expectation that the number of older people enjoying continued good health and wanting to remain in employment will continue to rise makes a greater focus on this age group imperative. In addition, according to Fogarty, looking at this age group, more than any other, can usefully inform policies with much wider relevance;

"the mature middle aged are in this literal sense the keystone of the arch, the group which looks both forwards and backwards and has responsibilities in both directions at once"

According to the National Audit Office (2004), transport difficulty is one of the barriers to employment experienced by people aged over 50. According to their study, difficulties include the cost, time and availability of public transport, and in some cases, the unwillingness to travel outside their immediate locality to find employment or training opportunities. Owning a car gives older people independence and improves their quality of life. Older drivers may compensate for age-related decline in physical, sensory and cognitive abilities by avoiding road and traffic situations with high workload, bad weather, darkness, rush hours, complex junctions and other problematic situations. (Middleton, 2005). However, it may be the case that these coping strategies are difficult to adopt when commuting, as decisions over the time at which to travel, the route to take, and even whether or not to actually make the journey are not necessarily factors over which the older worker has any control.

Some studies show that as people age, they become less likely to travel by private transport, especially with respect to their own car driving (Smith et al, 2006). However, older people are travelling more than they were a decade ago, and they wish to continue driving for as long as possible. Our ageing population is likely to see this trend continue. For those who give up or reduce their driving, public transport poses its own barriers, including physical inaccessibility of the transport and stations, heightened by a person's own declining mobility; concerns over personal security; costs; lack of information; and the quality of services, including the availability, routing and reliability of required routes (Smith et al, 2006).

New technology in both private and public transport may also pose barriers to older travellers. Older and disabled people may be the most likely to benefit from technologies such as route guidance and traffic information systems; however, they may have difficulties in taking full advantage of them if the systems, as well as the information provided within them, are not designed with their requirements and limitations in mind (Nicolle and Burnett, 2001).

Aims and Objectives

The broader objectives of "Working Late" are to identify barriers and facilitators to later life working, to identify optimal, evidence-based occupational health provision, and to develop, implement and evaluate interventions to promote healthy later life working.

Within this, the work described here focuses specifically on the journey to work, aiming to address a number of research questions, including;

- How might the commute affect people's ability to stay in work?
- Can older workers adapt their travel to accommodate their changing needs and sometimes their changing job circumstances?
- Are the technologies that might help accessible to them; are they relevant; are they usable?
- Does commuting have an impact on working life – either a positive one or a negative one? If the commute is particularly active employees may arrive at work more alert, refreshed and energised. If it is particularly problematic, does it make workers stressed and tired?
- What impact does commuting can have on family life, and is this more or less significant for the older worker?

Defining the boundaries of the age group to be considered is not a simple matter. Ageing is not a precisely bounded process, and whilst there is a likelihood of certain problems being encountered within certain stages of the lifecycle, they do not necessarily appear in the same order for everyone, and the precise point of onset will be different for different individuals. However, for the purposes of this research, "older" has been defined as being over 50. There are two reasons for selecting a relatively young cohort; firstly, it enables comparisons to be made within the groups of older workers. Today's 50-year-old can be compared to today's 65-year-old. This will enable us to consider factors such as the activity levels of the two groups, their levels of mobility, and their willingness to make longer and more costly commutes. The other reason is to examine the effect on commuting of the burden of family responsibility that people in the 50 – 65 age group often bear. At this age, many people find themselves simultaneously caring for their parents and their grandchildren, whilst sometimes also having to contend with the onset of age-related health problems themselves. The work considers "older workers", as distinct from older people in general, hence it is expected that the work will be largely concerned with people up to retirement age (60 – 65). However, it should be recognised that there may be people beyond this age who

are capable of remaining in work and who wish to do so, but who for whatever reason find themselves out of work.

Within the broader scope of the "Working Late" project, one of the outcomes of this work will be to develop the 'journey' aspect of a wider electronic resource to support older workers and their employers. Information will be focussed on the travelling needs of both employers and employees (including journey planning, transport solutions and transport technologies).

The aim of the preliminary work described in this paper was to inform the design of a broader questionnaire which will be distributed over the coming months. The issues which the focus groups were to address included;

- To explore how many employers and employees had considered the journey to work in the context of it being a potential barrier to employment later in life
- To identify the key organisational, institutional and personal factors that affect people's ability to manage the journey to work as their needs and capabilities change
- To begin to identify some of the information, support and technology that would enable older workers to adapt their travel or working patterns to cope with change.

The aims of the questionnaire activity that will follow are;

- to begin to quantify the scale of the problem
- to draw some conclusions about which groups are most likely to suffer significant difficulties with the journey
- in the light of these factors, to make recommendations about which interventions might be the most effective.

It is anticipated that the conclusions will link into other policy objectives, such as employers' sustainable travel plans and broader health objectives such as those to promote more active lifestyles.

Methodology

This paper describes the results of two focus groups held in July and September of 2009. The first group (organisational) comprised representatives of employers, trade unions, occupational health professionals and other interested parties (for example, charities concerned with the welfare of older people). The second group (employees) was made up of employees over 50. Participants were recruited through a number of means including cold-calling, using organisations with whom the university had worked previously, via other research networks and through the university's electronic notice board.

The first focus groups were scheduled to last for the morning on both days. The first was attended by 14 participants, and the second by 17.

In addition to being asked to address questions about the journey to work and its impact on employees, part of the session was taken up with discussions about another aspect of the "Working Late" project, namely interventions to help older workers remain active in the workplace.

The same presentation was delivered to both groups in order to provide some continuity and to facilitate comparison of the results. However, in the nature of loosely-structured focus groups, the discussions that followed took different directions at times. The presentation provided some background information on the project, including the scope, aims and objectives of the different work packages, and of the programme which is funding the work.

The key questions that attendees were invited to address were;

- 1) Has anybody ever considered the journey to work in terms of its likely effect on employees?
- 2) What factors influencing the commuter are within the control of employers and what factors are outside of it?
- 3) To what extent should employees try to accommodate an employee's declining ability to cope with their journey to work?
- 4) What existing sources of information are you aware of that could help someone who was struggling?

In addition, two case studies were presented. The first was of Mary, a 62 year old woman, who following a minor accident and some changes in the local road layout was beginning to lose confidence in her driving ability. Whilst beginning to dread the journey, she nevertheless found public transport not to be a practical option. She felt she might like to join a car-sharing scheme or similar, but did not know where to find the information. As she is increasingly unable to walk long distances, a car-share would have to be very local.

The second case study concerned Pat, who is only 55. Two years ago her employer relocated from a small market town to the centre of a big city. As a result, instead of a 20-minute drive, she was forced to make a 45-minute drive to the railway station, followed by a 70-minute train journey. Her role was classroom-based, so offered absolutely no scope for flexible hours or for working at home, and the cost of the commute was also becoming prohibitive. Pat has extensive family commitments, including the care of an elderly mother-in-law, and holiday and after school care for young grandchildren and great nieces.

Participants were invited to make any observations about the specific difficulties faced by these two individuals, and to comment on how they, in their specific roles, saw these particular cases.

The discussions were recorded, and a transcription service was used in order to ensure that as many of the comments as possible were captured. In addition, members of the project team took extensive notes, which were used to verify the accuracy of the transcripts and to provide additional detail in cases where the recording was not of a sufficient quality to decipher or attribute comments.

Results

The focus groups raised a number of issues, some of which were common to both the organisational and employee group, and some of which revealed differences in their opinions.

In terms of the awareness of the issues, the general consensus within both groups was that they had not really considered the problem the journey to work might present to older workers before, but once they had, many participants could think of examples of friends, colleagues or neighbours who had experienced difficulties. Within the organisational group, no one had considered the problem from their professional perspective, for example, as a Human Resources Director, Occupational Health Advisor, or Trade Union Representative. However, comments made in response to some of the later questions, and the discussions that followed, suggest that most of those in the organisational group would be prepared to do a lot more to help older workers manage the commute, and would consider it to be within their remit to do so.

A number of factors were highlighted as being things which employers could implement which might impact on the journey to work. Both groups identified relocation, flexible or staggered work times, working at home, and the provision of facilities such as parking, cycle racks and showers. Comments included;

“something that we’ve looked a little bit at is where organisations are looking at flexible start times, so that as part of job-retention or return-to-work initiatives for people who have developed health conditions, so that they can avoid the most stressful and difficult times. You know, a city like London, if you go in at 08:30 in the morning, it’s a nightmare. Some organisations have looked at flexible start times as an occupational health intervention, and I think that’s quite important, particularly as we’re talking about age and therefore the development of chronic disabilities etc.”

“with the growing use of broadband it’s possible to have many of your work type meetings... I’ve certainly done this, happening online. And IT now permits you to redirect telephone calls that should have been at work to your home number. And that actually takes away the need to be at the workplace every day..... if everybody who could was working at home one day a week or two days a week, that’s a hell of a lot of time you’re not spending travelling and probably would also have a very beneficial effect on the roads, as well. I’m not quite sure how it comes in but I do feel that there’s something important in there”

“Flexitime also would impact on the cost of travel because if you can travel... if you were going on the train, rail travel is cheaper outside of commuter times, so that’s important.”

“Things that are within our control – flexibility about whether people come to work or work from home, the times, all of those things, and car-sharing can often help with those kinds of things.”

“They could provide transport solutions. I was involved in a scheme once that was actually badged as bus to work and back, and as one word it looked quite good actually. And it provided transport in a mini bus for people going to a particular area.”

Both groups recognised that these kind of measures can benefit all employees, regardless of age. However, not all participants saw these measures as being without problems. Concerns were raised about how to monitor the health and safety of home-workers (especially in the case of older workers who may be beginning to develop age-related health problems), the potential isolating effects of not going into the office, and the possibility of flexible or staggered working times causing different problems and possibly impacting on the viability of car-sharing schemes.

“There is one downer to staggered times. We found that where people were starting later on in the morning the public transport wasn’t there because it was only during rush hour. And then it took the bus... the bus went off after nine o’clock so the people that they’d said to come in at ten, they couldn’t get in. They ended up having to come in about an hour and a half early just to get into work.”

“I have colleagues who check on their mother on the way into work and then pick up their grandchildren on the way home. And that makes the journey a lot more complicated. You’re not going from A to B; you’re going from A to B via C, via D and a lot of these things can be absolutely time-critical. The collection at school or the drop-off at nursery is in a very defined time window and you can’t necessarily move that. So if you want more flexible working practices that may then have a knock-on effect on your family commitments as well.”

It was also generally agreed that larger firms may have more scope to offer flexibility and to provide the kind of facilities suggested. Equally, it was thought that small and medium sized enterprises (SME) might suffer disproportionately if they lost skilled employees as a result of the journey becoming too problematic;

“I think also, if you look at the size of the organisation, think of this as an employee of a SME – Unless they have such core, critical skills that they can’t afford to lose, they’re going to say well actually it’s your decision, tough. I think many people here are working for large organisations, so it’s easier to absorb that sort of thing.”

It was when addressing the issue of the extent to which employers should try to accommodate declining ability to cope with the journey that the most differences between the organisational and the employee group became apparent. In response to the question *“Do you think there is a role for employers in getting involved in those kinds of things and working out how they can be solved”* the initial responses of the employees group were;

“No”

“It’s personal responsibility; it’s a lifestyle choice.”

“it’s not their problem to solve.”

“the employer shouldn’t be expected to go really out of their way and possibly put other people out just for you.”

This contrasts with the initial responses of the organisational group, who seemed much more willing to open a dialogue about ways of helping, but generally qualified it by reference to a number of other factors, one of the most important of which seemed to be the value of the employer to the organisation;

“It could be outside of an employer’s control, but certainly has to be considered for the employee and employer alike”

“One thing we found, which surprised me, was that we thought differently about employment groups. So you’d have managers talking about well, I need to make arrangements for staff travel... Some quite interesting potential blind spots here, about who’s receiving attention and who’s ignored. Something is about how people are valued, but it’s also about visibility and connection”.

“some people are more valuable to an employer. Some people they will be more enthusiastic and work harder to retain than other people”

The organisational group also identified links with other important policy areas, which were perhaps of less relevance to individual employees;

“connection with environmental congestion and climate change issues, I have to say, rather than as an employment benefit. We’re starting a lot of work with our workforce, trying to open up the greener, healthier options. We haven’t got the massive commuter journeys that certainly a Londoner or a Manchester might have. Most people [have] a relatively small travel to work for Sheffield City itself and the neighbouring towns. But even so a lot of factors described just echo very strongly what we’ve found when we talked to the workforce.”

In terms of identifying sources of support, most participants were able to respond only in very general terms, suggesting resources such as charities, lift-share websites and staff intranet. A notable exception to this seemed to be representatives and employees of local authorities, who knew of specific websites which offer travel advice, which could be adapted to address more specifically the needs of older workers.

The case studies generated a great deal of discussion, though again, there were differences between the two groups in terms of what they thought the employer could or should do to help. In the case of Mary, the organisational group was willing to consider providing counseling or further training to help Mary overcome her anxiety. It was also suggested that Mary may have been suffering from (or be beginning to develop) some mental health difficulties. Most participants felt that this was definitely something that should concern them, and which they would look at ways of helping with, should it be brought to their attention. In contrast, the employee group suggested Mary talk to her doctor, friends and neighbours, and look for other ways of getting to work. Whilst it was also suggested that she

open a dialogue with her employer, there was little expectation that the employer could or should be responsible for addressing the problem.

In Pat's case, the organisational group felt that the key to this case study lay in the handling of the initial relocation. Whilst relocation is recognised to cause a certain amount of upheaval for all employees, it was suggested that it might disproportionately affect older workers, especially those caring for other family members. Concerns were expressed at the possible difficulty of replacing Pat, and the costs of doing so, leading most to conclude that more careful handling of the initial relocation would have benefitted both parties. In contrast, the employee group felt that Pat should accept that her job was no longer right for her and should begin to look for something else (despite acknowledging the potential difficulty of doing so)

This suggests that employers have more vested interest in retaining good staff than employees recognise. As a result, they may be more willing to get involved than employees realise.

A number of additional issues came to light during the course of the discussions. One which generated a great deal of debate in both focus groups was the question of how to distinguish between the journey to work, and other journeys that were undertaken in the course of work. Whilst most participants were clear that in cases where driving was an integral part of the job (for example, for bus drivers, travelling sales people, haulage drivers) this could be excluded, in other cases it was far less clear-cut. Examples raised by participants included peripatetic teachers, trainers visiting different sites, carpet fitters and employees travelling to meetings and conferences instead of their normal workplace. It was generally felt that whilst a definition could be determined which specifically excluded ALL travel except that from normal residence to main place of work, this would be unnecessarily restrictive and would prevent examination of some of the most problematic journeys (for example, those when there is uncertainty about route, the availability of different travel options, and the ease of parking).

Another issue which was deemed to be important was the subjective nature of determining what constitutes a "difficult journey". This is influenced not only by personal factors, but is probably also subject to some regional and cultural influences. For example, participants seemed to agree that there is much anecdotal evidence that people in London and the South East have a different perception of what is an acceptable (or indeed a "normal") amount of time to spend commuting.

Finally, some participants took issue with the suggestion that women tend to make more complex journeys than men. Whilst this was a conclusion that was widely supported by existing studies it is perhaps something that subsequent stages of the research should look at again.

Conclusions and Further Research

The focus groups which have taken place already have identified a number of important issues which will be explored further in the next stages of the study. In summary, the key findings are;

- There is anecdotal evidence that the journey to work IS a barrier to employment later in life for some people.
- The employees over 50 who participated in the focus groups did not expect their employer to look for ways of supporting older workers in managing the journey to work. However, the employee representatives who participated felt that they DID have a role to play in some instances and were keen to explore practical ways of being involved.
- Some organisational factors were identified as being potentially useful, not just for older workers, but to improve the working lives of all employees. These included

flexible hours and working from home. However, it was felt that these would need to be monitored and managed carefully, in order that they did not introduce a different range of practical and health-related issues.

- There was very little awareness in either group of existing resources to help manage the journey to work
- A firmer but broader definition of what is included within “the journey to work” should be drawn up

The next stage of the research will be a questionnaire, the aims of which are to begin to determine the likely scale of the problem, and to identify any groups which are disproportionately affected. It is also hoped that the questionnaire will provide some more reliable evidence to support the anecdotal evidence presented by the focus group participants. It is envisaged that any particularly useful examples that emerge as a result of the questionnaire will be used as case studies later in the project.

The final conclusions of the work will feed into strategies to help promote and facilitate longer productive working lives, specifically by raising awareness of transport as a potential barrier or enablers to workforce participation.

In summary, the outcomes of this work will include:

- Report on barriers and enablers for older workers’ journey to work, including scenarios and personas of current and future journeys to work
- Specification for the journey aspect of electronic resource to help employers, employees, policy-makers and other stake-holders
-

Education and communication in the workplace are important elements of this work, as well as the need to inform employers and employees that this information resource is available. Therefore, the output from this task will form part of the dissemination strategy, which must inform employers and employees of the existence of the resource and promote its effective use. This will be done in collaboration with government and policy makers, for example, through on-line or face-to-face awareness raising seminars.

Bibliography

BENITO, A. and OSWALD, A., 2000. Commuting in Great Britain in the 1990's. University of Warwick, Department of Economics.

CUBUKGIL, A. and MILLER, E.J., 1982. Occupational status and the journey-to-work. *Transportation*, **11**(3), 251-276.

FOGARTY, M., 1975. 40. to 60: How we waste the middle aged.
Centre for Studies in Social Policy, London, 1975

ILMARINEN, J.E., 2001 Ageing Workers *Occupational and Environmental Medicine* 2001;**58**:546

MIDDLETON, H, 2005 Assessment and decision criteria for driving competence in the elderly. *Traffic and Transport Psychology: Theory and Application. Proceedings of the ACTTP 2004*. 101-113

NICOLLE, C., AND BURNETT, G.E. 2001. Accessible systems for transport. In *Inclusive Design guidelines for HCI*. Nicolle, C. and Abascal, J. (eds)
Taylor and Francis, London, ISBN 0-7484-0948-3

SINGELL, L.D. and LILLYDAHL, J.H., 1986. An empirical analysis of the commute to work patterns of males and females in two-earner households. *Urban Studies*, **23**(2), 119.

SMITH, N., BECKHELLING, J., IVALDI, A. KELLARD, K., SANDU, A., AND TARRANT, C. 2006 Evidence base review on mobility: Choices and barriers for different social groups
Department for Transport, London.

TURNER, T. and NIEMEIER, D., 1997. Travel to work and household responsibility: new evidence. *Transportation*, **24**(4), 397-419.