

# ENGENDERING MOBILITY: TOWARDS IMPROVED GENDER ANALYSIS IN THE TRANSPORT SECTOR

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## 1 Introduction

Day-to-day travel to access paid employment, undertake household maintenance tasks, and for social interaction, is both an important determinant of individual welfare and a significant cost to individuals and their households. Traditional transport planning has tended to focus primarily on access to employment, addressing the travel needs of regular commuters through the provision of improved transport infrastructure and services while paying limited attention to non-work travel occurring outside the morning and afternoon peak periods.

However, in recent years there has been a relatively strong consensus to move towards understanding and meeting a wider range of travel needs, including those of particular user groups such as low-income persons. These travel needs include those relating to servicing social and reproductive work, as well as informal productive work – the types of activities that tend to be performed by women, yet are seldom sufficiently recognised or valued for the function they perform in sustaining households and communities.<sup>1</sup> A result of the more narrow focus of traditional transport planning, as Mahapa points out, is that transport systems have tended to “function in ways which prioritise men’s needs and viewpoints over those of women”.<sup>2</sup> Transport needs arising from women’s multiple roles are often not adequately addressed in transport research and implementation initiatives. Furthermore, evaluations of the success of development initiatives often neglect to reflect the gendered distribution of benefits or consider the influence of social-reproductive work on these interventions.

Research on gender and transport in developing countries has to date mostly focused on rural areas. In review two main findings stand out. Firstly, most of the literature indicates significant differences in the transport needs of men and women, reflecting to a large extent differences in the constructed roles of men and women in society. Secondly, studies across the developing world have highlighted the transport burden women face on a daily basis – perhaps best illustrated by the dominance of head-loading and the transport of firewood and water by rural women.<sup>3</sup>

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<sup>1</sup> M Mashiri *Improving mobility and accessibility for developing communities* (1997)

<sup>2</sup> S Mahapa *Spatial & social exclusion: Travel & transport needs of rural women in Limpopo, South Africa* (2003) 4

<sup>3</sup> DF Bryceson & J Howe ‘Rural household transport in Africa: Reducing the burden on women?’ (1993) *World Development* 21(11) 1715-1728; M Grieco & J Turner ‘Gender,

There is however a paucity of information relating to urban and peri-urban women's transport needs, and their effects on the socio-economic and physical welfare of women and their communities. In addition, a tendency to equate "gender" with "women" has led to insufficient attention being paid to the relationship between men and women as an important determinant of mobility outcomes. The result has been, at times, that interventions aimed at reducing women's transport burden, for instance by increasing access to appropriate technologies such as bicycles, have failed because of cultural prohibitions or because men enjoy privileged access to vehicles in a household.<sup>4</sup>

For development to be sustainable and equitable, gender needs to be mainstreamed into transport research and implementation initiatives. This is important for the design and implementation of transport systems that are responsive to the practical needs of women, households, and indeed communities. Mainstreaming gender is also necessary for the empowerment of women, particularly the poor, by addressing their strategic needs such as access to socio-economic opportunities. Although a few systematic gender inclusion procedures exist to promote gender-sensitivity and responsiveness in transport sector policies in developing countries, the institutional framework as well as the official and political will to operationalise them is weak.

In South Africa, the need to put in place transport sector gender analysis frameworks and methodologies, predicated upon a rights-based approach to, as Grieco put it, "move from the activities of marginal policy activists to mainstream professional practice",<sup>5</sup> is of critical importance. It is the purpose of this chapter to advance the discourse between gender analysis and transport, specifically within the urban development context, with a view to promoting an understanding of the strategic role of transport, access and mobility in addressing strategic human (including gendered) development issues. The objective is to explore the use of practical frameworks and tools that can be used by transport and urban analysts in starting to examine the gender aspects of their work. In 1993, Moser noted that analysts often "lack the necessary planning principles and methodological tools"<sup>6</sup> to do so. This is felt to be true still of the area of transport, mobility and access, which could benefit from drawing on existing gender analysis frameworks and further developing them towards the engendering of the field.

The gender analysis framework explored here is based on Caroline Moser's well-known work in the gender and development field,<sup>7</sup> but is extended for application specifically in the transport field. The framework's

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poverty & transport: A call for policy action' (1997) *Proceedings of the UN International Forum on Urban Poverty (HABITAT): "Governance & Participation: Practical Approaches to Urban Poverty Reduction"*; M Mashiri, D Motha & A Sarkar *Towards a rural accessibility planning framework* (1998); P Maramba & M Bamberger *A gender responsive monitoring & evaluation system for the Rural Travel & Transport Programs in Africa: A Handbook for Planners, Managers and Evaluators* (2001)

<sup>4</sup> Bryceson & Howe (n 3 above)

<sup>5</sup> Grieco et al (n 3 above) 2

<sup>6</sup> C Moser *Gender Planning and Development: Theory, Practice and Training* (1993) 5.

See also M Mashiri et al 'Towards setting a research agenda around mainstreaming gender in the transport sector' (2005) *Proceedings: South African Transport Conference* for an overview of critical issues around the mainstreaming of gender in transport in Southern Africa.

<sup>7</sup> Moser (n 6 above)

application is illustrated briefly with examples from recent research undertaken by the authors in South Africa. The chapter first provides a brief overview of previous work on gender, transport, and development, in order to place the present discussion in a larger context. Then the proposed framework is discussed with its examples, highlighting methodological issues that are relevant to the discussion. A final discussion and conclusions follow at the end.

## **2 Gender and transport in developing countries: Previous research**

In developed countries research on the travel patterns and needs of women has been ongoing for several decades. The gender perspective in transport followed partly from an increased awareness of the ways in which societal expectations of differing economic and social roles for men and women impose different travel needs and constraints on each group.<sup>8</sup>

Gender aspects of transport have also been the focus of an increasing number of studies in developing countries, where surveys relating to transport have increasingly incorporated gender-disaggregated figures and analyses.<sup>9</sup> Gender differences in time spent on travel and transport, as well as socio-economic and health costs relating to transport, have been highlighted. The consensus within gender and transport research has been that women bear a greater transport burden than men. This leads to what has been termed “time poverty” for women, especially in rural and peri-urban areas where the excessive amounts of time spent walking to fields or collecting firewood and water reduces the time available for undertaking other personal or household tasks. Time poverty is considered a key constraint to low-income women’s ability to accumulate assets and reduce their vulnerability.<sup>10</sup> The overview below discusses previous findings on women’s transport burdens related to women’s demand for travel, and the mobility constraints faced by many women.

Furthermore, although the diversity of women’s activities – relating to commercial and subsistence production, social-reproduction and community development – are deemed important for sustaining households and communities, they are inadequately supported by transport sector initiatives.<sup>11</sup>

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<sup>8</sup> M Wachs ‘The Gender Gap’ (1997) *ITS Review* 1-2; Good overviews of previous and contemporary work on women and travel in developed countries are provided by S Rosenbloom (ed) *Women’s travel issues: Proceedings from the Second National Conference, October 23-26, 1996* (1996); K Hamilton ‘Gender and transport in developed countries’ in *Expert Workshop “Gender perspectives for Earth Summit 2002: Energy, Transport, Information for Decision Making”*. (2001); and A Root & L Schintler ‘Gender, Transportation, and the Environment’ in DA Hensher & KJ Button (eds) *Handbook of Transport and the Environment* (2003) 647-663.

<sup>9</sup> For example M Mashiri (n 1 above); E Vasconcellos, ‘Urban Transport and Equity: the case of São Paulo’ (1998) *World Transport Policy & Practice* 4(1) 9-20.

<sup>10</sup> World Bank *Cities on the move: a World Bank urban transport strategy review* (2002).

<sup>11</sup> Bryceson & Howe (n 3 above); C Calvo *Case study on the role of women in rural transport: Access of women to domestic facilities* (1994); Grieco et al (n 3 above); J Turner & P Fouracre ‘Women and transport in developing countries’ (1995) *Transport Reviews* 15(1)

The second and third sections below summarise arguments around the linkages between gender, transport, and development, and around the mainstreaming of gender analysis in transport policies, strategies and programs.

### **Demand for transport: women's activities, transport patterns, and mobility constraints**

The diversity of women's travel needs stems from the variety of roles they fulfil within society. Although these roles vary between societies, classes and ethnic groups, a convenient way of examining them is to consider women's "triple role", in which they are responsible for paid productive work, reproductive work – such as childcare and household management – and community management work – maintaining community and social networks.<sup>12</sup> For rural women, the travel-related tasks most frequently identified in the available literature include trips to the fields, collection of firewood and water, travel to grinding mills and dip tanks, nursing the sick and taking them to clinics and hospitals, and trips to the market and shops.

The time constraints imposed by the need to engage in reproductive and community management tasks may limit the potential range of work opportunities that can be accessed in the available time. For women living on the peripheries of cities facing long travel distances to work – as is often the case with newly urbanised or resettled people – the limiting effect on their ability to pursue livelihood activities can be particularly damaging. For instance, after resettlement of Delhi's central area squatter colonies on cheaper peripheral land, unemployment among women rose by 27% compared to 5% for men.<sup>13</sup> Women's work trips have also been found to be more spatially concentrated in the local neighbourhood or at home, and tend to be shorter than men's,<sup>14</sup> although this varies according to local settlement patterns.

It has been established that while women spend much time and energy performing these critical tasks, they often have inadequate access to appropriate modes of transport for these purposes. Public transport often fails to provide for women's transport needs, as it tends to be structured around times and routes associated with peak period commuting patterns. The orientation of most public transport towards the Central Business Districts of cities poorly matches the more diverse, suburb-to-suburb travel patterns of many women.

In many cases, especially in deep rural areas, public transport does not exist. Furthermore, research shows that most vehicles (including bicycles, animal-drawn carts and wheelbarrows, collectively referred to as intermediate

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77-96; Maramba & Bamberger (n 3 above); M Mashiri & S Mahapa 'Social exclusion & rural transport: A road improvement project' in P Fernando & G Porter (eds) *Balancing the Load: Women, Gender & Transport* (2002).

<sup>12</sup> Moser (n 6 above)

<sup>13</sup> C Moser & L Peake (eds) *Women, Human Settlements and Housing* (1987).

<sup>14</sup> Turner & Fouracre (n 11 above); AR Abidemi 'Gender differences in intra-urban travel behaviour: a preliminary survey in Ibadan, Nigeria' in X Godard & I Fatonzoun (eds) *Urban Mobility for All – Proceedings of the Tenth International CODATU Conference* (2002).

modes of travel (IMTs)) are owned, controlled and used by men.<sup>15</sup> In a vicious circle, the lack of access to faster modes contributes to excessive amounts of time spent travelling, which is considered a key constraint to poor women's ability to accumulate assets and reduce their vulnerability. As Fernando and Porter put it, "women's transport burden contributes to women's time poverty".<sup>16</sup>

The trend is reversed, however, as women gain more control over household income and men come to appreciate and depend on women's incomes (most often from informal jobs). In some Asian cities, for instance, women are increasingly gaining mobility by purchasing motorized two-wheelers as household incomes rise.<sup>17</sup>

Children's transport burdens and needs are often highlighted in gender and transport research, as children too generally have little control over and access to transport-related resources, and since their care is primarily entrusted to women. Most children from low-income households travel long distances – often on foot – to attend school.<sup>18</sup> Many are unable to attend school for this reason, particularly girls whose safety is a concern. They are also often responsible for tasks such as firewood and water collection.<sup>19</sup>

### **Women's mobility constraints and development**

Women's mobility constraints have been recognised as having an impact on women's time, security and position in society. More generally, women's mobility constraints have been linked to a lack of economic growth and social sustainability in households and communities, and as having an impact on the success of development strategies.<sup>20</sup> A number of stakeholders in the field, including the World Bank, have asserted that women's transport burdens and needs must be addressed in order for development to be equitable, feasible and sustainable.<sup>21</sup> Thus, mainstreaming gender in the transport sector is increasingly being viewed not only as a rights issue, but also as part of a business case for development projects and investments.

While gender equity (including gendered power relations issues), mobility and access are considered as basic rights in the gender and transport discourse, increased productivity by women and the overall economic growth that could result from freeing women from the time poverty emanating from domestic tasks and an excessive transport burden, have also frequently been

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<sup>15</sup> Bryceson & Howe (n 3 above) 15; Mashiri (n 1 above); Maramba & Bamberger (n 3 above) 2.

<sup>16</sup> P Fernando & G Porter 'Bridging the gap between gender & transport' in Fernando & Porter (eds) (n 11 above) 2

<sup>17</sup> For example A Astrop 'The Urban Travel Behaviour and Constraints of Low Income Households and Females in Pune, India' in Rosenbloom (ed) (n 8 above)

<sup>18</sup> G Porter & K Blaufuss *Children, transport & traffic in southern Ghana* (2002); R Behrens 'Understanding travel needs of the poor: towards improved travel analysis practices in South Africa' (2004) *Transport Reviews* 24(3) 317-36

<sup>19</sup> Turner & Fouracre (n 11 above); Porter & Blaufuss (n 18 above); A Murray, M Mashiri & P Theron *Rural transport plan: Baseline report 2004*

<sup>20</sup> J Lebo 'The importance of gender in socially sustainable transport programs: A donor perspective' in *Proceedings of the 1999 World Bank Gender & Transport Conference* (1999); Mahapa (n 2 above)

<sup>21</sup> Lebo (n 20 above)

emphasized.<sup>22</sup> This could improve not only women's station in society, but also the economic growth of developing countries. The extent to which this emphasis may contribute to women's tactical or strategic interests and objectives, however, has been questioned.<sup>23</sup> Contextual specificities could impact on the ways in which "freed up" time is used by women.<sup>24</sup> Furthermore, it is important not only to encourage women's participation in commercial activities, but to ensure that this participation does not merely shift the locus of their exploitation. It is thus important to understand that an increase in women's productive and commercial activities may not address the gender imbalances in time and energy spent on work, as well as imbalances in ownership and benefits gained from increased production.

The negative impacts of mobility constraints on the health and vulnerability of poor women have also frequently been raised. Women's health is negatively affected by head-loading, and a lack of access to safe transport modes can make them vulnerable to accidents (for example, when walking along transport infrastructure such as roads and paths), environmental dangers (such as snake-bites and floods in river beds) and sexual harassment (for example on public transport).<sup>25</sup> The links between constrained mobility and high levels of maternal mortality in Africa are also coming sharply into focus, as women struggle to access ante-natal and emergency health care services.<sup>26</sup>

### **Mainstreaming gender in the transport sector**

In response to research findings regarding women's transport needs and constraints, a number of gender-sensitive approaches to transport have been suggested. In terms of transport infrastructure and services interventions that can address women's specific practical needs, the following is often suggested:

- An inter-sectoral approach in relieving women's transport burden, particularly in bringing various resources to rural women (for example, water wells closer to rural homesteads and energy efficient ovens)
- Recognition of women's social-reproductive work as "work", in order to design public transport in a way that better meets women's needs
- Building of good paths, roads and bridges connecting socio-economic activity areas frequented by women and the provision of affordable transport services to enable them to travel more easily and safely

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<sup>22</sup> Bryceson & Howe (n 3 above) 20; Grieco & Turner (n 3 above) 2; Maramba & Bamberger (n 3 above) 2

<sup>23</sup> Bryceson & Howe (n 3 above) 21

<sup>24</sup> Mashiri et al (n 3 above)

<sup>25</sup> Bryceson & Howe (n 3 above) 7; Grieco & Turner (n 3 above) 3; Maramba & Bamberger (n 3 above) 11; Fernando & Porter (n 16 above) 10

<sup>26</sup> M Grieco *Toolkit on gender, transport and maternal mortality in Africa* (2005).

- Design and promotion of appropriate and sustainable technologies such as IMTs that can meet women's transport and access needs.

Researching and considering the role of cultural practices and beliefs is also an important step towards the design of appropriate transport interventions. The importance of this has been identified as being two-pronged:

- Locally specific cultural practices and beliefs inform the allocation of roles, status, power, and resources within households and communities. Thus, knowledge of cultural practices and beliefs is essential for understanding the gendered ways in which households and communities function and thus for identifying various transport needs through a gender-sensitive lens. For this to be achieved, meaningful involvement and participation of women in the planning of transport initiatives is critical.<sup>27</sup>
- Cultural practices and beliefs affect the success of transport interventions. For example, the benefits for women through the introduction of IMTs will be influenced by whether or not those forms of transport are considered appropriate for women, and by the gendered control over and access to such resources.<sup>28</sup>

The diversity of circumstances, practices and beliefs impacting on the success of gender sensitive interventions in rural areas also underscores the need for a better understanding of gender issues in more urbanized communities.

### **3 Towards appropriate gender-analysis frameworks for rural and urban transport**

#### **Choosing a gender analysis framework for the transport sector**

The frameworks reviewed here for application in the transport sector draw largely from a development and poverty alleviation base. Thus, these frameworks are intended to be applied in programmes, policies and initiatives involving low-income communities. A particular requirement is that the framework should be broadly applicable across both urban and rural contexts. Of course, spatial location – particularly in South Africa, where the effects of systematic and spatially designed exclusion are still visibly present – plays an important role in the socio-economic character of a community. These spatial dynamics would need to be accounted for and integrated in the application of any gender analysis framework.

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<sup>27</sup> Grieco & Turner (n 3 above); Mahapa (n 2 above); Maramba & Bamberger (n 3 above); Turner & Fouracre (n 11 above)

<sup>28</sup> S Agarwal et al 'Bearing the Weight: The Kayayoo, Ghana's Working Girl Child' in *Proceedings of the UNICEF Conference: "The Girl Child"* (1994) 1; Maramba & Bamberger (n 3 above) 2; J A Mwanusye 'Do intermediate means of transport reach rural women?' in Fernando & Porter (eds) (n 11 above) 48; Mashiri & Mahapa (n 11 above)

A number of gender analysis frameworks have been developed for and applied in the development field. Some of the most well known ones are the Harvard Framework,<sup>29</sup> the Gender Analysis Matrix,<sup>30</sup> the Capacities and Vulnerabilities Analysis Framework<sup>31</sup>, and Longwe's Women's Empowerment Framework.<sup>32</sup> The frameworks vary in their philosophical approach, scope of analysis, and the specific tools they employ for data collection and representation.

The chapter does not provide an exhaustive description or comparison of the available frameworks; other authors have done this well.<sup>33</sup> Rather it focuses on a single framework that seems best suited to analyse the problems and needs surrounding mobility and access, and in which the language is accessible to planners. It is also flexible enough to be applied at multiple levels of analysis, from regional or metropolitan planning and policy formulation, through to designing and monitoring transport interventions at the community level. Despite the appeal of the Moser framework on these grounds, it is not necessarily the best under all circumstances. Other approaches such as the Social Relations Approach<sup>34</sup> may, for instance, be better for performing gender analysis of transport institutions, while aspects of the Gender Analysis Matrix approach may be more powerful in supporting transformative community-based development work. The reader is encouraged to test and adapt or replace the proposed framework as needed.

### **The Moser framework: an introduction**

The Women in Development (WID) approach, born in the 1970's, promoted the separate treatment of "women's issues".<sup>35</sup> In reaction, the Gender and Development (GAD) approach challenged many of the assumptions behind the WID approach, and argued for an integrated perspective and approach to gender issues in planning. One of the key elements of this was to argue for a closer look at gender *relations*, as opposed to concentrating research and analysis on "women's issues", recognising that gendered living involves a series of relationships and, as such, cannot be viewed in isolation. The Moser framework, developed by Caroline Moser in the early 1980's, in many ways exemplified this shift from a WID to a GAD approach.

Apart from the reasons stated above, the Moser framework was selected for the way in which it covers many of the most salient aspects of gender analysis, from gender roles to gendered power relations. It makes the quantitative empirical enquiries associated with the Harvard Framework, but also moves beyond that by investigating the reasons and processes behind patterns of ownership, control and responsibility (a relational approach, as espoused by GAD). Various aspects of gender analysis are flagged in this

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<sup>29</sup> C Overholt et al *Gender Roles in Development Projects: A Case Book* (1985)

<sup>30</sup> AR Parker *Another point of view: A manual on gender analysis training for grassroots workers* (1993)

<sup>31</sup> MB Anderson & PJ Woodrow *Rising from the Ashes: Development Strategies in Times of Disaster* (1989)

<sup>32</sup> S Williams *Oxfam Gender Training Manual* (1995)

<sup>33</sup> For example C March et al *A Guide to Gender-Analysis Frameworks* (1999)

<sup>34</sup> N Kabere *Reversed Realities: Gender Hierarchies in Development Thought* (1994)

<sup>35</sup> March et al (n 33 above)



framework, and while some critiques have highlighted its failure to take a firmer political empowerment approach to gender analysis, it could lend itself to strengthening and development in this area by drawing on other frameworks. The Moser framework is therefore in its approach accessible to the many planners, policy makers and development programme implementers for whom gender analysis approaches and discourses are somewhat unfamiliar.

The Moser framework is operationalised in terms of six “tools” which systematically direct the analyst’s attention to key aspects of gender analysis. The six tools are listed in the following table and described below.

<b>Key tools of the Moser framework</b>
Tool 1: Gender roles identification (triple role)
Tool 2: Gender needs assessment (practical and strategic gender needs)
Tool 3: Disaggregating control of resources and decision-making within the household
Tool 4: Planning for balancing the triple role
Tool 5: Distinguishing between different aims in interventions – the WID/GAD policy matrix
Tool 6: Involving women and gender aware organisations and planners in planning

### **Moser framework tool one: gender roles identification**

One of the cornerstones of gender analysis for development relates to unpacking differences in gender roles. Furthermore, gender analysis frameworks make a strong point of recognising different tasks as “work” – for example unpaid, domestic or informal work – types of work that tend to be undertaken by women but are often not recognised or appreciated for the roles they play in society. As such, many gender analysis frameworks include looking at gendered roles, tasks and responsibilities, as well as their status in society and development projects. This tool draws strongly on these gender analysis principles.

The Moser framework provides a tool for assessing gender roles, by mapping gendered divisions of labour. In essence, applying this tool involves asking “who does what?” and offers three categories through which to explore labour or activities, namely: reproductive work, productive work, and community work.<sup>36</sup> The framework aims to ensure that traditionally “invisible” forms of work are made “visible” and that all tasks and activities are valued equally. For example, it has often been noted that poor women undertake all three types of work as listed above, while men largely focus on productive and community work, especially of a political nature.

The table below provides examples of these categories, and offers some guidelines for the ways in which the details of these activities can be listed and further explored.

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<sup>36</sup> March (n 33 above) 56-57

Who	Activity	Productive	Reproductive	Community
Rural woman	What?	Brews beer	Collects water	Funeral
	Frequency?	Twice weekly	3 times a day	Occasional
	Where?	At home	At the river	Neighbouring village
	How long?	Most of the day	3 hours daily	Two full days
	How fixed?	Flexible	Fairly flexible	Occasional
Urban woman	What?	Cooks and sells food	Household shopping	Local women's group meeting
	Frequency?	Daily	Every second day	Occasional
	Where?	Taxi rank	Local spaza	Neighbour's house
	How long?	7:00 to 18:00	15 minutes	2-3 hours
	How fixed?	Little flexibility – linked to commute times	Any time before 19:00	Flexible timing

These are not rigidly divided activities. Community work, for example, could also lead to the production of a resource, and some have criticized these categories as artificial or insufficient to analyse gender power relations.<sup>37</sup> However, for those unfamiliar with gender analysis, the categories can offer a useful departure point and a tool with which to explore the gendered dimensions of labour, and in so doing, identifying transport and mobility needs and interests that are often overlooked by traditional approaches that tend to recognise, primarily, the types of work performed by men.

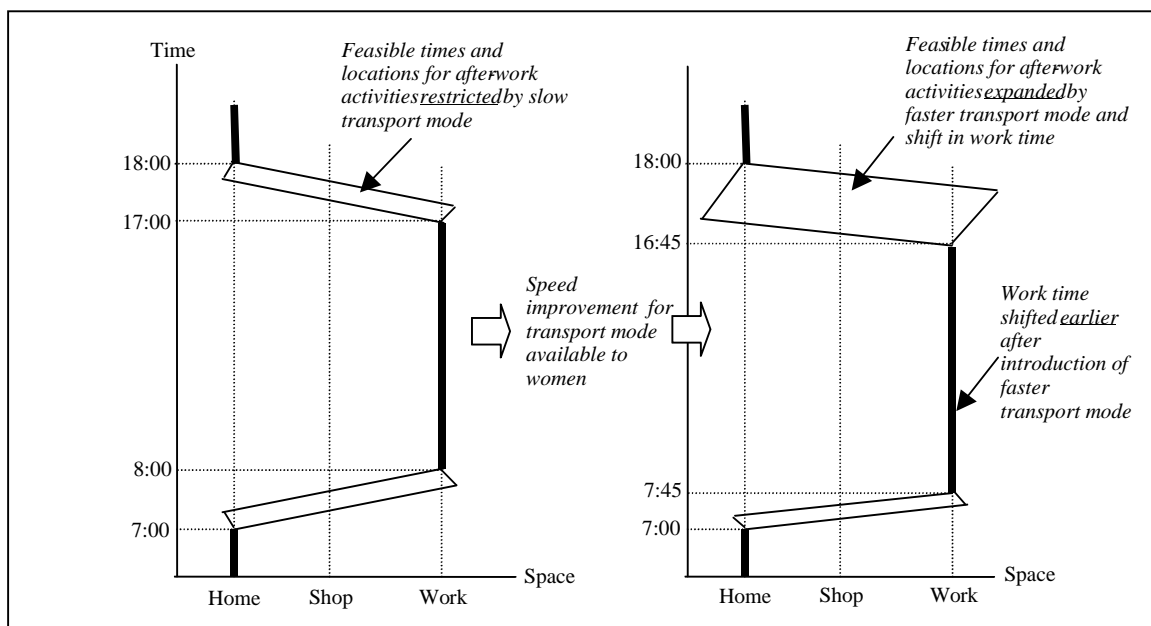
By taking activities, rather than travel, as its starting point, the tool is in keeping with the activity-based approach to travel analysis that has in recent years increasingly been recognised as a useful way to explore mobility and access needs of individuals.<sup>38</sup> By looking at all activities, transport and mobility concerns are raised that may otherwise be overlooked. For example, beer brewing has transport and mobility dimensions if we explore it further. Firstly, that the brewing process requires plenty of water necessitates the need for transport to collect water. Secondly, that it occurs at home and takes a number of days restricts mobility for the female brewers on certain days and at certain times. Thirdly, sourcing of ingredients and sometimes even the selling of this beer could also involve transport and mobility issues. Further enquiry could reveal that the brewer uses this as an income-generating enterprise to enable her to afford the trip to town to find gainful employment.

One research tool that is well suited to collecting the information required for identifying women's activities and their attributes, is activity and time-use diaries. Best practice in the design and application of such techniques is advancing fast, including their use in gender studies.<sup>39</sup> Analysis of time use and activity data of individuals can be facilitated through graphical representation using time-space prisms, showing the complete activity path across a period of time. The figure below shows an illustrative example of a simple home-work-home activity path. The important role of transport in

<sup>37</sup> March (n 33 above) 64-65

<sup>38</sup> For example TRL *Activity Patterns, Transport and Policies for the Urban Poor: Urban Mobility Planning Guidelines* (2003)

<sup>39</sup> For example P Apps *Gender, time use and models of the household* (2004)



linking activities, and circumscribing the feasible times and places that can be accessed for activities, becomes clear. Analysis of the potential responses open to women in reaction to transport changes – for instance by shifting existing tasks around, or using time saved travelling for undertaking additional activities – can be undertaken using such graphical methods. Where possible, participatory techniques should be the primary source of information on such responses.

A major strength of the activity approach is that it encourages the analyst to consider the complexity of impacts, in terms of the activities that meet the livelihood aspirations of women, of any transport interventions proposed. This is in contrast to the much more narrow focus of traditional project evaluation which attempts to quantify user cost and time savings associated with a transport project, in order to calculate a benefit-cost ratio as the major measure of its impacts.<sup>40</sup>

What the tool omits, however, is to explicitly account for the relationships between men and women's activities. Without addressing gender *relations*, delicate bargaining and cooperation systems can be overlooked. For instance, a woman could use extra time freed up by a transport intervention for performing an additional task on behalf of a male family member, in exchange for another favour done by this person. By completing and analysing activity patterns along the lines of the table above, for female *and* male members of a community, such linkages are more likely to be picked up.

An example of the way in which a focus on women's triple roles can enrich transport analysis is shown in Box 1.

### Moser framework tool two: gender needs assessment

This tool leads from and builds on Maxine Molyneux's concept of women's gender interests.<sup>41</sup> The idea behind this concept is that women

<sup>40</sup> Vasconcellos (n 9 above) 9-20

<sup>41</sup> M Molyneux 'Mobilisation without Emancipation? Women's Interests, States and Revolution in Nicaragua' (1985) *Feminist Studies* 11

have specific interests, not only because of their triple work role (as described above) but because of their subordinate position in relation to men. Moser distinguishes between practical and strategic gender needs. Practical needs refer to those needs that, if they were met, would improve some immediately perceived situation such as housing or water provision, without challenging women's subordinate position in society. Strategic needs, on the other hand, relate to equalising the existing relationships of power between men and women, and would involve changing gender divisions of labour, power or control. Some examples of each are tabulated below.

<b>Practical gender needs</b>	<b>Strategic gender needs</b>
Water & fuel wood provision	Challenges to the gendered division of labour
Provision of contraceptives & antenatal care	Empowerment of women to have a choice over child bearing & sexual behaviour
Access to inputs for cultivation	Collective organisation
Opportunities for earning an income to provide for households	Challenges to women's subordinate position within the household

As is indicated in the table above, this tool encourages planners to move beyond the provision of services and infrastructure that meet women's immediate needs, towards the strengthening of women's position in society. In other words, the approach takes into account the reasons, and not just the symptoms, of women's subordinate positions and associated levels of poverty.

In terms of transport and mobility issues, three key elements of this tool can be emphasised. Firstly, the need to look at travel needs or interests, and not just travel patterns, is highlighted when considering strategic gender needs. For example, access to fuel wood and water for rural woman could be supplemented with initiatives that aim to facilitate access to socio-economic opportunities. Provision of improved non-motorised transport options could help alleviate a woman's domestic burden – thus meeting a practical need – as well as improve access to markets to sell produce for additional income – and thereby improving her strategic position.

Secondly, transport and mobility initiatives need to be undertaken in cooperation with other sectors. For example, providing access for women to health care services needs to be undertaken in cooperation with the health sector to ensure adequate, well-trained and gender responsive health care services are available when women get there. In addition, this could ensure that non-transport interventions such as siting a school in the middle of the catchment area or introducing a mobile clinic reducing the need for transport are considered as constituent parts of a suite of interventions.

Thirdly, the active and meaningful participation of women in transport planning and research needs to occur for strategic gender needs to emerge. This would also involve substantial qualitative research to get beyond immediate needs and identify opportunities to address strategic needs. Several of the participatory techniques developed for rural development work can be adapted to work in urban areas. An example is the "participatory urban analysis" technique used by TRL in poor urban communities in Zimbabwe, Sri Lanka and Ghana to study the role of transport in meeting the

communities' livelihood aspirations.<sup>42</sup> It is an adaptation of the well-known suite of techniques known as participatory rural appraisal, and includes semi-structured household interviews, mobility mapping, institutional diagramming, transport focused discussion starters, priority ranking of major concerns, and livelihoods analysis.

However, as March et al<sup>43</sup> point out, some have argued that the division between strategic and practical gender needs should not be rigidly or artificially maintained. For example, if immediate or practical needs are not met (such as food security, water provision and sanitation), women (and men) will be unlikely to challenge and engage issues around gender relations as they will be too busy eking out a living. Moser's framework encourages planners to begin thinking beyond this, and to look towards setting up longer-term, sustainable solutions that not only address these immediate needs, but also build towards improving the position of women in society.

### **Moser framework tool three: disaggregating control of resources and decision-making within the household**

This tool is aimed at unpacking the processes and relationships inherent in the use of resources. It moves beyond traditional transport planning approaches that largely look at travel and transport use patterns alone, towards the unravelling of power relationships that inform who has access to and control over resources and mobility patterns. This tool can also be used to unravel the bargaining processes involved in the allocation of resources, and in so doing inform transport planners of existing systems that may not be visible on an activity or time-use profile.

Looking at control over resources and decision-making powers can help to predict the benefits (or burdens) resulting from transport and mobility initiatives for development, as well as illuminate failures in past initiatives.<sup>44</sup> Some case studies have revealed that transport interventions meant to alleviate women's transport burdens have either entrenched the status quo or worsened the situation by bypassing the crucial question of power over resources. For example, during one project it was assumed that the introduction of carts in a village would reduce the burden of fetching firewood for women, as men would assume responsibility for this task.<sup>45</sup> However, men used the technology to collect firewood for commercial use and quickly exhausted the resources close to homesteads. In the end, women had to travel even further to collect firewood for domestic use. Thus, critical analyses of case studies highlight the need to carefully examine the gendered control over resources and decision-making powers, and to use this knowledge to plan, implement and evaluate transport initiatives.

An example of the type of questions that could be asked around access and control of transport resources is shown in Box 2.

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<sup>42</sup> TRL (n 38 above)

<sup>43</sup> March (n 33 above) 66

<sup>44</sup> M Mashiri & P Mdoda *Developing & testing good practice guidelines for collecting gender-sensitive transport information* (2003)

<sup>45</sup> Mashiri et al (n 3 above)

## **Moser framework tool four: planning for balancing the triple role**

This tool asks users to assess whether a planned initiative will increase a woman's workload in one role to the detriment of another. The argument is that due to the multiple roles they tend to play, women need to balance competing roles, and that the level of balance between these roles will determine women's involvement in new initiatives.<sup>46</sup>

A related issue is that of the overburdening of women through added roles and labour, or the shift in the locus of exploitation. For example, in the transport sector, women's employment in road construction and maintenance has been identified as a source of income for poor women, and has thus been encouraged in labour-intensive construction and maintenance projects. However, it is important to bear in mind women's reproductive and community activities as well, and to avoid merely adding to their labour burden. Furthermore, these types of work tend to be short-term, unstable (or unsustainable) and lowly paid. This relates again to strategic gender needs, of which sustainable employment could form an integral part, and in which employment of women should not be restricted to lowly paid work.

Furthermore, the issue of women's triple roles is highly relevant to transport and mobility issues as it relates to time constraints. Rural women in developing countries, for example, often spend a great deal of time collecting fuel wood and water for domestic use. This often constrains their participation in income-generating activities, as well as their participation in development projects and initiatives. Time use assessments and the relationship between time and women's various roles thus need to be considered in transport planning, and are raised in this tool.

The Moser framework also underscores the view that planning for women's triple roles requires inter-sectoral cooperation, since women's triple roles and the interplay between them are seldom taken into consideration when applying a single sector approach.<sup>47</sup> Multi-sectoral and non-transport interventions can also play a role in alleviating transport burdens, such as the provision of potable water close to households to alleviate women's burden of water collection.

In practical terms, application of this tool involves identifying possible transport and non-transport interventions, policies or projects. It then considers the potential of each set of interventions to address the practical and strategic gender needs identified previously, against the present realities of women's (and men's) activities and their access to/control over transport resources. Each of these tasks are probably best executed in a participatory setting that involves affected women and men in the process, thereby promoting understanding of the problems and creating ownership of the solutions.

In the urban context, studies have shown that women's multiple roles impact on their transport patterns and the availability of appropriate transport services. For example, the diversity of travel needs following from women's productive and reproductive work activities – including shopping and taking children to various activities – means that traditional public transport, where

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<sup>46</sup> March (n 33 above) 59

<sup>47</sup> March (n 33 above) 59

available, may not suit their travel needs very well. An example of the issues arising, and potential intervention strategies, is given in Box 3.

A weakness of this tool is the lack of identification of instances in which women are excluded from certain roles, such as political and community participation.<sup>48</sup> The application of this tool would thus benefit from bearing these issues in mind.

### **Moser framework tool five: distinguishing between different aims in interventions – the WID/GAD policy matrix**

This tool offers some broad categories through which users of the framework are encouraged to examine, question and make transparent their approach to development (and in particular to gender-sensitive development). The assumption that planning is a gender-neutral endeavour is challenged here, as it has been by gender analysts over the years. Thus, the ways in which different approaches transform or subordinate women's position are highlighted, and the ways in which these approaches address certain practical and strategic needs are unpacked.<sup>49</sup> The tool is primarily applied for evaluation purposes, but may also be used to determine an approach to a project or initiative during the planning phase.

Moser identified five policy approaches that have dominated development planning over the last few decades:<sup>50</sup>

- **Welfare approach:** Acknowledges women in their reproductive role only, and aims to meet their practical needs in their role as mothers and as passive recipients. Typical projects include providing food aid.
- **Equity approach:** In line with the WID approach, its purpose is to promote equality for women, for instance by promoting political and economic autonomy for women. It is considered by some to be threatening to men, and is unpopular with most governments.
- **Anti-poverty approach:** The purpose is to move poor women out of poverty by increasing their productivity, for instance through promotion of small-scale, income-generating projects. It thus sees women's poverty as a problem of underdevelopment rather than subordination. It is most popular with NGOs.
- **Efficiency approach:** Its purpose is to ensure that development is more efficient and effective through harnessing women's economic contribution. It seeks to meet women's practical gender needs, recognising all three roles. It has however been criticised for assuming that women's time is elastic, and that women can compensate for reduced state assistance by just extending their working day.
- **Empowerment approach:** The most recent approach, its purpose is to empower women to support their own initiatives, thus fostering self-reliance. Instead of taking a top-down

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<sup>48</sup> March (n 33 above) 66

<sup>49</sup> March (n 33 above) 59

<sup>50</sup> March (n 33 above) 60

approach to development, this approach advocates that strategic needs be met so that women themselves can make demands with respect to their practical needs.

Identifying the different approaches to development has relevance for planners in the transport and mobility fields, as it can help give an early indication of who are likely to be supporters and opponents to any proposed policies or projects. Furthermore, it is useful in unpacking and critiquing various assumptions and development paradigms. Most transport projects tend to fall within the ambit of the anti-poverty and efficiency approaches; where they aim to address practical gender needs, it is typically in pursuit of a general poverty reduction or development goal. Greater awareness of the welfare, empowerment and equity dimensions of a project may be desirable in itself.

### **Moser framework tool six: involving women and gender aware organisations and planners in planning**

The importance of the involvement of women in planning has increasingly gained acknowledgement in the development arena, to the point that, in many projects and organisations, failure to do so is regarded severely. Moser argues that this involvement, as well as that of gender aware planners and organisations, is critical for the identification and incorporation of women's practical and strategic needs into planning processes, not only with respect to analysis, but also with respect to decision making around the prioritization and defining of planning goals.<sup>51</sup>

This point has not yet been taken up sufficiently within the ambit of most transport policies and interventions. The discussion so far has intermittently suggested ways in which women's participation in gender-sensitive transport planning can be sought. The sixth Moser tool gives the analyst or planner a final check on whether the extent of involvement, and the way in which it is executed, is adequate.

## **4 Conclusions**

The chapter attempts to promote greater gender sensitivity in policies and projects that impact on the mobility and access of men and women, be they transport or non-transport interventions. Specific frameworks and tools were explored for use by planners and engineers to conceptualise, analyse and incorporate gender issues in their development work. The focus was specifically shifted from rural towards more urban contexts, recognising the need for improved gender analysis in urban transport planning. In the South African context, as elsewhere in developing countries, women bear much of the burden of transport, and are particularly vulnerable to sexual harassment and various forms of assault, particularly in the case of poor women. These issues need to be addressed rigorously if women's empowerment is to occur and if women are to participate meaningfully in development processes that benefit households, communities and nations.

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<sup>51</sup> March (n 33 above) 60-61



The Moser framework is considered appealing in this regard as it incorporates a language recognizable to planners – a point for which it has, on the one hand, been criticized as leading to the depoliticisation of its empowerment agenda,<sup>52</sup> but on the other hand, can make it more accessible to planners for whom gender analysis discourses are alienating.

Furthermore, the Moser framework raises the importance of gender equitable empowerment in development initiatives, while maintaining the importance of looking at efficiency. The framework thus raises both aspects, and can be used to address both, or one, depending on the planner's interpretation.<sup>53</sup> In other words, this framework does not compel its user to adopt a radical or transformative gender mainstreaming approach, but allows on the other hand for empowerment issues to be developed and strengthened within the existing framework by parties with the political will to do so.

A useful extension to the Moser framework is to focus on *both* men and women in their gendered context. Men, too, are gendered beings, invested with gendered roles, beliefs, identities and powers. It is thus important to consider these in gender analyses, in order to better understand women's position within gendered *systems*.<sup>54</sup> Furthermore, looking at men's strategic gender interests and gendered identities can highlight their strong vested interests in processes of change, and in so doing enhance our understanding of their resistance to women's empowerment and the ways in which to better work with men towards transformation. This has relevance both "on the ground" in working on development projects, and at an institutional level.

Furthermore, the Moser framework could benefit from increased attention to variables intersecting gender and mobility outcomes. The examples shown for Durban households highlighted, for instance, how both spatial (such as residential location) and non-spatial variables (such as employment type) can help create different transport options and mobility patterns for men and women. The differences between subgroups of women, and subgroups of men, need to be considered, and a homogeneous perspective of the genders avoided, for a fuller picture to emerge.

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<sup>52</sup> March (n 33 above) 64

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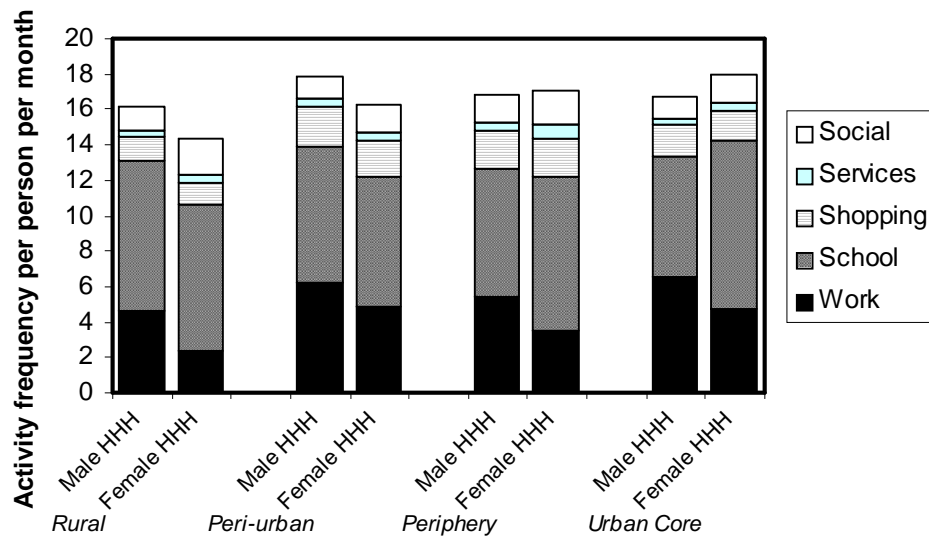
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### BOX 1 EXAMPLE: ACTIVITY PARTICIPATION

Recent household interview data from the eThekweni Metropolitan Area was used to examine gender differences in the activities attended and trips made across 600 households in different areas of the city of Durban (see Venter and Vokolkova, 2004). All households had low incomes, and lived in subsidised housing.

The graph below shows differences in the activity rates for male and female-headed households in four localities spread across the city, from rural (i.e. most distant) through peri-urban and peripheral (on the edge of the urbanised area), to urban core localities (located next to the Durban CBD).



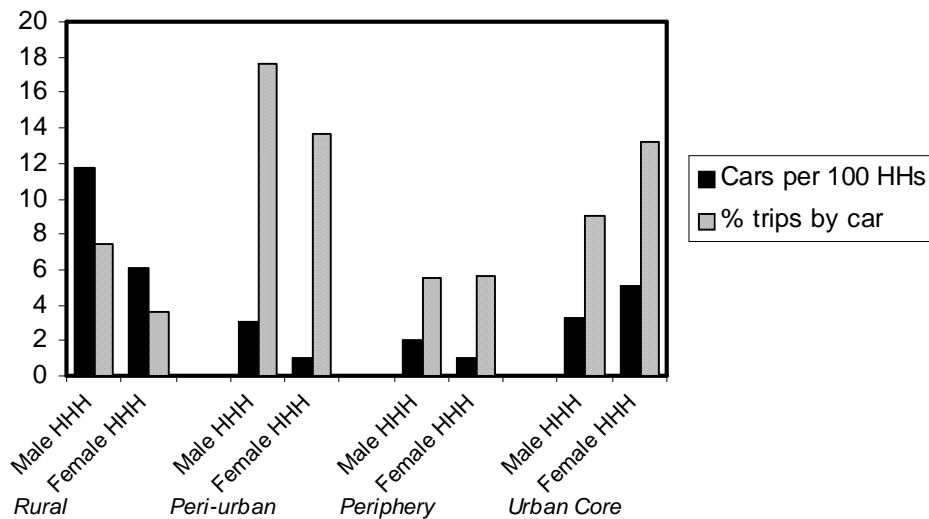
The graph not only confirms that, overall, significant differences exist between households headed by women as compared to men; but also that these differences correlate to a large degree with where the household is located within the city. In the most rural localities, female-headed households appear to be less mobile overall (on a per person basis) than male-headed households, while the opposite trend is observed in the more urban localities. This could be an indication of the relatively higher access and employment available closer to the inner city, which allows all households – and women in particular – to satisfy more of their out-of-home activity needs.

It is also evident that female-headed households tend to undertake a slightly different mix of activities: work activities are undertaken less frequently; shopping activities about as frequently; and school, services (including access to health care and pension pay-outs) and social/recreational activities more frequently than in male-headed households. This is so regardless of their location, indicating perhaps the strong effect of gender divisions of labour across a range of urban communities. Households headed by women also tended to have more children and elderly members (explaining the higher number of school and social service trips). Additional qualitative investigations could help to explore the reasons for these differences better.

## BOX 2 EXAMPLE: ACCESS TO AND USE OF CARS

Data on household car ownership and mode use in eThekweni show interesting differences between male and female-headed households regarding who controls and who benefits from ownership of private vehicles.

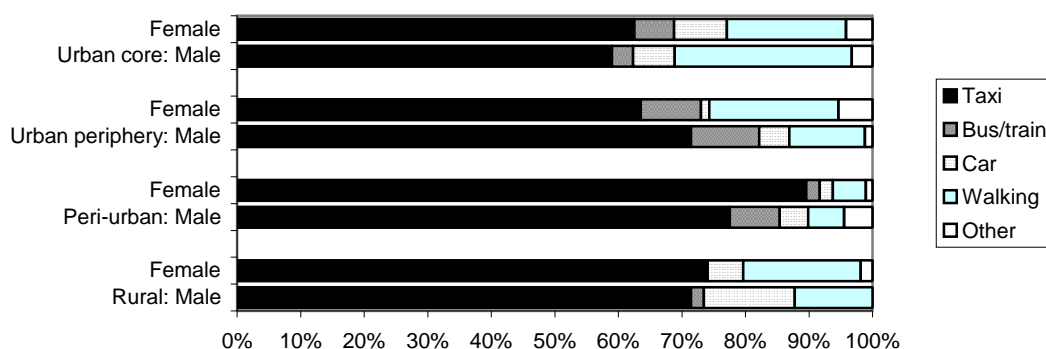
The graph below firstly shows car ownership trends on a household level across the four locality types (see Box 1 for an explanation). Female-headed households own fewer cars in all localities except the urban core, where car ownership is higher in households headed by women. As can be expected, use of motor vehicles (for all trip purposes) also tends to be lower in female-headed households outside the urban core, but higher inside the urban core locality. Once again, households in the more distant localities within the metro display gender related disparities in vehicle ownership and use that are similar to those that have been demonstrated by many previous researchers in deep rural areas. However, the pattern is reversed within the more central parts of the city, suggesting that traditional patterns of ownership and control over transport assets are changing across the urban landscape.



Further probing of patterns of vehicle use *within individual car-owning households* reveals somewhat surprisingly that, once a vehicle is acquired, women and men are about equally likely to use the car to travel to work and school. Additional qualitative inquiry into the processes of (transport) resource allocation between men and women could help explain outcomes such as these, and how they are changing over time. The example also highlights the need to go beyond the household as the unit of analysis, as this often masks underlying intra-household differences among people.

### BOX 3 EXAMPLE: TRAVEL MODES USED FOR TRIPS TO WORK

Data from eThekweni Metropolitan Area illustrate some of the issues involved in untangling the relationships between activities, travel patterns, and socio-economic variables in the urban context. The graph below shows the use of transport modes for the trip to work, by the gender of the traveller (not the household head), and his/her residential location. Overall, women tend to walk more and use taxis more than men, while men make greater use of cars and traditional public transport (bus and train). However, the mode splits vary significantly across individual localities, and between men and women. It is evident that complex spatial and personal factors affect travel patterns in ways that make generalisations around men's and women's needs, and how they would respond to changes in transport provision, dangerous.



One of the factors that help explain the observed differences is the nature of employment of men and women. Women in the sample are much more likely to work in the informal, unskilled and self-employed sectors than men: overall 80% of female workers fall in this category, compared to only 56% of male workers. This impacts on their work travel – women have more dispersed travel destinations, particularly in the urban core where 70% of women's work trips are to destinations outside the traditional core of the city (the CBD), compared to only 38% of men's trips.

The result is that women's work travel patterns are less well suited to the service offered by traditional forms of public transport, which tend to be radially oriented towards the core employment areas, and run mostly during the peak commute periods. Both the taxi and walking modes provide more suitable travel options, because of their flexibility and better penetration into areas not served by buses and trains. Further probing into the travel costs paid for commute travel reveals that women also tend to pay more for taxi transport to work than men, calculated on a per-kilometer basis. This is particularly so in rural and urban core localities – in the latter case, for instance, female travellers pay on average R1.60 per kilometre, and male taxi users R1.10. This could be partly due to the fact that more women have to change taxis on their way to work, and travel on lower volume routes where charges are likely to be higher to compensate for lower vehicle loads.

It follows that any changes in the taxi industry may have significant impacts on women's ability to access livelihood opportunities, and government interventions in this area have to be scrutinised for such impacts. The discussion above suggests that beneficial interventions may involve coordinating taxi services to provide more direct routings between a variety of origins and destinations; and providing infrastructure and management that would improve the safety and quality of both the walking and waiting components of taxi trips. Investing in better taxi ranks and, as importantly, safer street environments along the route (not just at its ends), are certainly pro-women interventions. Furthermore, any policies that potentially raise the cost of taxi travel – such as the South African government's project to replace and upgrade taxi vehicles is likely to be – could have significant gendered impacts that need to be understood much better by policy makers and implementers.