

Making the connections between transport disadvantage and the social exclusion of low income populations in the Tshwane Region of South Africa

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ARTICLE INFO

Keywords:

Transportation policy
Poverty
Disadvantage
Social exclusion
South Africa

ABSTRACT

To date, the majority of studies which consider transport from a social exclusion perspective have been conducted in the context of the developed world where both income poverty and lack of transport are relative rather absolute states. In a unique departure from these previous studies, this paper explores the relationship between transport and social disadvantage in the development context, the key difference being that income poverty is absolute and where there is much lower access to both private and public transportation generally. Thus, it seeks to explore whether the concept of social exclusion remains valid, when it is the *majority* of the population that is experiencing transport and income poverty compared with the *minority* who do so in advanced economies.

The paper is based on a scoping study for the Republic of South Africa Department of Transport (RSA DOT), which primarily involved focus group discussions with a range of socially deprived urban and peri-urban population groups living in the Tshwane region of South Africa. In a second departure from previous studies which consider transport and social disadvantage in the development context, the study takes a primarily urban focus. The rationale for this is that theoretically low income urban settlements do not suffer from the lack of transport infrastructure and motorised transport services in the way that more remote rural areas do. The policy issue is therefore less a question of addressing a deficit in supply and more one of addressing particular aspects of public transit service failure, which are more readily amenable to relatively low cost, manageable, small-scale national and local policy interventions.

A primary aim for the study was to reinvigorate cross-government debate of these issues in the hope of breaking South African government's long-standing and persistent policy inertia in the delivery of equitable and socially sustainable urban transport systems.

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1. Introduction

In 2007/2008, the Republic of South Africa Department of Transport (RSA DOT) became interested in the issue of transport and social exclusion following a detailed analysis of their 2003 National Household Travel Survey (NHTS) (Republic of South Africa Department of Transport, 2005). The survey was the first ever of its kind to be undertaken with a representative sample of the whole of the South African population. It identified that the overwhelming majority of South African households do not have regular access to any form of motorised transport and that this seriously undermines their ability to participate in key economic and social activities. This was hardly a surprising discovery, as the lack of transport experienced by South Africa's low income populations has been a persistent and prominent problem in both its pre- and post-apartheid era (Khosa, 1995), as we shall see in the literature review section which follows.

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Successive South African governments have been largely unresponsive to the problem of transport poverty and it is still not included as a consideration within South Africa's Millennium Development Goals (MDGs) (Grieco et al., 2009). When government has responded to this agenda the focus has tended towards the development of new transport infrastructure projects and in particular major road-building programmes in rural areas (Potgieter et al., 2006). In general, there has been a very poor post-apartheid government response to the escalating mobility needs of low income travellers, who constitute the vast majority of South Africa's urban population. The NHTS demonstrates that the privately-run and still largely unregulated minibus or *kombi*-taxis, (which sprung up in the late 1970s to fill the gap between urban public transport supply and demand), remains the main form of motorised transport for two-thirds of all public transport users, compared to one in five who use buses and one in seven who use rail (Dibben, 2006). Later sections of this paper will demonstrate that this comes with its own set of particular problems for the people who are forced to rely on them as their only means of regular transportation.

Publication of the 2003 NHTS and official recognition of transport-related social exclusion by the RSA DOT came at a time when the United Kingdom (UK) government had just published its now seminal *Making the Connections* report (Social Exclusion Unit, 2003). The SEU report had served to significantly raise the profile of 'transport poverty' in transport and other social policy circles in the UK (Lucas, 2010). Policy makers within the RSA DOT had been following the progress of the UK agenda and felt that a similar 'social exclusion' approach to transport disadvantage in South Africa might lead to a similar result within South African social policy circles, in recognition that in the past:

"... 'development transport' advocacy, with its mixture of voices from the fields of engineering, economics, geography and urban and rural governance and planning, may not effectively or perhaps even coherently project themselves in agenda-setting development circles."

(Bryceson, 2009, p. 3 in Greico, et al. (Eds.), 2009).

Little policy progress has been made despite significant and robust evidence of a strong relationship between lack of transport and economic and social disadvantage in the South African context. This has been particularly noted in relation to women's pre- and post-natal health outcomes and high infant mortality rates (McCray, 2004), the changing geography of schools and access to a basic education (Lemon and Battersby-Lennard, 2009), unemployment and economic insecurity (Potgieter et al., 2006) and the low living standards and unsustainable livelihoods of most transport poor households and population sectors (Bryceson et al., 2003). The contribution of the study should therefore be considered in the context of this past governmental inertia (Cameron, 2000) and the related objective to raise the profile of the important transport-related social exclusion with transport and social policy makers in the wider context of:

- (a) Existing research of the interaction between transport and social development which has already been undertaken within developing nations and in South Africa in particular. The main aim here is to critically evaluate whether application of the 'social exclusion' approach adopted by this study can offer any new insights into this relationship and/or on how to practically address the persistent problem of transport disadvantage.
- (b) The past studies of transport and social exclusion which have hitherto been undertaken in advanced industrial societies, where both the problems of poverty and lack of transport are issues for a *minority* rather than *majority* of the population. The main aim here is to draw out any similarities and key differences in the reported experiences of transport poverty and its social consequences in these diverse policy delivery contexts, and to determine whether there are any policy solutions which might be transferred from the UK to the South African context - or if this is wholly inappropriate.

2. A long tradition of transport and social development research in South Africa

As Potgieter et al. (2006, p. 2) attest, transport has been identified as a key factor in the economic and social development process because it facilitates the movement of people and goods, thereby (theoretically at least) promotes trade and better standards of living through improved access to markets, employment, health, education and social services. Largely from a belief in this relationship, the World Bank's lending in the 1950s and 1960s tended to be heavily biased towards investment in transport infrastructure

and in particular road-building (Bryceson et al., 2008). In 2002, however, van de Walle found little evidence to convincingly suggest that rural road-building in development contexts had affected social outcomes beyond what they would have been without the new road.

An overview of the relevant literature identifies a wealth of studies which explore the interaction between transport provision and access to basic activities and amenities on the one hand, and the social consequences of this for low income populations. A number of these studies are of particular relevance because of their specific focus on the South African context (e.g. Bryceson and Howe, 1993; Mahapa and Mashiri, 2001; McCray, 2004; Potgieter et al., 2006; Grieco et al., 2009). In common with Van de Walle, many of these authors also criticise the over emphasis of past policy on major transport infrastructure projects as a social development tool and seriously challenge their appropriateness and effectiveness in lifting low income population out of poverty (Bryceson et al., 2008). For example, Mahapa and Mishiri (2001) note the pre-occupation of transport policymakers with higher technology fixes and efficiency savings rather than the travel needs of local 'beneficiary' communities, which they claim could have resulted in different, less expensive and more context-specific and gender-sensitive solutions.

The majority of these studies have tended towards a focus on the transport provision of low-income *rural* South Africans, where there is almost a complete absence of public transport services. They identify an over-reliance on walking to access all out of home activities, and how the inequalities which arise from this particularly affects women's participation in the paid employment and the formal economy and can result in their low uptake of health-care and educational opportunities. In a rare (but not unique) departure from these previous studies, (e.g. see also Venter et al., 2007), this paper is concerned with the relationship between transport disadvantage and social exclusion in the *urban* context.

Salon and Guylani (2010, p. 642) identify that existing research on transport for the *urban poor in developing cities* has tended towards four key themes: (i) financial poverty as the main cause of transport disadvantage; (ii) the spatial mismatches between housing location and labour market opportunities; (iii) road safety for pedestrians and other non-motorised road users; and (iv) gender differences in transport provision and the related disproportionate negative social consequences of this for women and children. Fouracre et al. (2006) have also argued that a more participatory approach to urban transport planning in developing countries would also lead to a better understanding of the effects and implications of travel on the livelihoods of the *urban* poor. This paper identifies similar recurring themes.

Salon and Gulyani (2010) statistically demonstrate poverty to be strongly negatively correlated with the use of motorised transport and identify that affordability is a key issue in the transport poverty of urban slum dwellers in Nairobi, with the situation being particularly bad for slum women and their children. They find that most slum dwellers need to use motorised transport to access education and employment opportunities that could lift them out of poverty, both because of the distance of their housing locations from these key destinations and because of their inability to move physically closer to them due to the absence of affordable housing in the areas where such opportunities are located within the city. As the authors observe, the main problem of transport and access in the urban context is not the absence of transport infrastructure or motorised public transport *per se*, because of the almost ubiquitous presence of the privately owned and operated minibus-taxi industry (*matatus* as they are referred to in Kenya, *kombis* in South Africa). Rather it is because the taxis are reported to be unaffordable, unsafe, unreliable and unsuitable for the long journeys that must often be undertaken to access work and other key

destinations. Again, similar themes have emerged from our own study, which to a certain extent helps to triangulate and support our qualitative research findings.

Before presenting the main findings of the study, the paper first explores our understandings of transport disadvantage within the South African context from an overview of the literature. It then moves on to identify why the application of a social exclusion approach might provide a useful way to communicate the significance of transport poverty in the urban social development context to national and local policy makers. Having established this background context for the RSA DOT study, it discusses its key findings in relation to the key social policy objectives for low income population living in deprived urban contexts in South Africa. It also discusses how these concerns might have further resonance for policymakers in other development contexts.

3. Understanding transport disadvantage in the South Africa context

Porter (2002) identifies that transport poverty is not only associated with a lack of provision of transport infrastructure and motorised services and the monetary cost of travel but can also include the amount of time people spend accessing and waiting for transportation, the time they spend actually travelling and the overall time spent away from the home – all of which significantly reduces the potential for undertaking other life-supporting activities. It can also embrace the discomforts and risks experienced whilst travelling, such as exposure to accidents, crime, noise and pollutants.

The literature identifies that there are four key causal factors in people's transport poverty within the South African context: (i) low access to private transport and public transport services, (ii) affordability issues linked with high levels of reliance on the use of minibus taxis; (iii) the legacy of apartheid planning and new post-apartheid housing development patterns, and (iv) over-reliance on walking and exposure to risk:

- (i) *Low access to private vehicles and public transit services* – the 2003 NHTS identifies that the majority of lowest income quintile South African have extremely poor access to both private vehicles and public transport services. Whilst the majority of the White population (83%) hold a driving licence, only 10% of the Black population, and 21% of Coloureds¹ and just over half of the Asian population (56%) do so. On average, only 26% of low income households had access to a car, more than 75% had no access to a train station and nearly 40% did not have access to a bus service.
- (ii) *Affordability issues* – the 2003 NHTS identifies that the majority of households in the lowest income quintile spend between R1 and R100 of their monthly income on public transport. However, as small minority of the lowest income households (5%) spend over R200 a month on this, which would account for approximately a half of their total monthly income. The high cost of travel is largely attributable to the low income populations' over-dependence on privately operated minibus taxis. The 2003 NHTS identified that about two-thirds of all transit riders travelled by *kombis*. There are considerable problems with this type of transport provision: many of the vehicles are old, dangerous and over-crowded and there are regular complaints about bad driver behaviour, including drunkenness, rudeness and in extreme cases violence and sexual harassment (Khosha,

1992; Dibben, 2006). The relatively high cost of travel and *kombi* dependence also needs to be understood in the context of the *widespread* poverty and deprivation experienced by the *vast majority* of Black South Africans. The NHTS identifies that in 2003, 22% of households had a monthly income of less than R500 and 24% had an income of between R501–1000. Wright and Noble (2009, p. 8) identified that in 2007:

- 72% of people live in households that are income and/or materially deprived.
 - 37.8% of the relevant working age population are unemployed or unable to work due to sickness/disability.
 - 27.4% of the adult population aged 18–65 are educationally deprived (have had no secondary schooling).
 - 67.2% of the population experience environmental deprivation.
 - Levels of deprivation vary greatly by province, with the most deprived municipality being located in the Eastern Cap and the least deprived in the Western Cape, but that levels of deprivation also vary greatly within provinces.
- (iii) *The legacy of apartheid development and the housing location of low income urban populations.* As Christopher (2001) identifies, spatial segregation did not end with the dissolution of the apartheid regime in 1991 and the majority of the South African population remains highly segregated. In urban areas, low income, Black South Africans still live in traditional townships in the urban periphery or are pushed into formal or informal ghettos on the outskirts of the main city centres. These areas are poorly served by public transport and bus and train routes still predominantly serve passenger markets that are racially distinctive, despite the far higher demand and need for these services by the Black urban poor (Behrens and Wilkinson, 2003).
- (iv) *Over-reliance on walking and resulting high exposure to traffic risks.* As a result of both the physical lack of motorised transport and its non-affordability, the vast majority of both the urban and rural poor walk to most destinations. For example, Venter (2009) identifies that 40% of low income workers walk to work, while the 2003 NHTS identifies that 80% households undertake their food shopping trips on foot, 76% of learners walk to their place of education and roughly 40% of households access health care (traditional or medical) this way. It is also important to note that approximately 65% households in the lowest quintile and 63% of the second lowest quintile reported that they did not use any form of motorised transport over the 7 days prior to the survey week. As McCray (2004) clearly describes, this over-reliance on walking as the primary mode of transport can lead to the direct or indirect inability to participate in other key life-enhancing activities such as employment, the take-up of healthcare and/or educational opportunities.

4. Why adopt a social exclusion approach?

To date, the majority of studies of transport and social exclusion have been conducted within a UK context (e.g. Church et al., 1999; TRaC, 2000; Lucas et al., 2001; Social Exclusion Unit, 2003; Lucas, 2006; Preston and Rajé, 2007; Mackett et al., 2008). Although more recently there have also been a number of European (e.g. Schonfelder and Axhausen, 2003; Grieco, 2006; Ohnmacht et al., 2009; Cebollada, 2009; Priya and Uteng, 2009; Priya Uteng, 2009), Australian (Hurni, 2006; Currie et al., 2007) and Canadian (e.g. Páez et al., 2009, 2010) studies looking at this issue. This past focus is

¹ Coloured is still an official racial classification within the RSA NHTS.

in part because the language of social exclusion and its core policy remit is a primarily European agenda arising from French social policy of the 1970s (Burchart et al., 2002).

In Levitas et al. (2007) for the UK Department of Communities and Local Government (DCLG), social exclusion is identified as involving:

‘... the lack or denial of resources, rights, goods and services, and the inability to participate in the normal relationships and activities, available to the majority of people in a society, whether in economic, social, cultural or political arenas. It affects both the quality of life of individuals and the equity and cohesion of society as a whole.’ (Levitas et al., 2007, p. 9)

The particular rationale for adopting a social exclusion approach to transport disadvantage is that, first, it directly identifies the *social consequences or outcomes* of a lack of transport provision in terms of the inability of affected individuals and communities to participate in *key life-enhancing opportunities*, resulting in reduced job search activities, job losses, missed health appointments, school truancies, lower post-16 educational participation and increased physical isolation in later life. In this way it firmly established transport and mobility, or rather the lack of it, as a *social policy problem*.

Secondly, it differentiates between those constraints which predominantly rest with affected *individuals*, such as their personal abilities, skills, resources and capacities to access the transport system, and those which are predominantly externally determined by the *system of provision*, such as the location of local services, the levels and quality of public transport provision, travel information and so forth. The intention here is *transformative*, in that the research should lead to a set of practical policy and programme solutions across the appropriate areas of transport and land use service delivery.

Thirdly, the research aims to ‘give a voice’ to the *lived experiences* of affected groups and individuals with the aim of articulating their concerns about the transport system to planners, policy makers and other decision-makers. To maintain this *advocacy* role, the research needed to be methodologically inclusive and transparent, but also to retain a degree of objective impartiality in the presentation of its results. The primary intention of this is to help policy makers to recognise that: (a) the problem is multi-dimensional (i.e. can be located with both the circumstances of the individual who is affected and the processes, institutions and structures within wider society); (b) it is relational (i.e. that disadvantage is seen in direct comparison to the normal relationships and activities of the rest of the population); and (c) it is dynamic in nature (i.e. it changes temporally and over space, as well as during the lifetime of the person who is affected).

In the UK, social exclusion approach to transport has been hugely influential in shaping the thinking of transport and non-transport professionals in terms of how public transport provision can support or undermine the delivery of the wider social policy agenda (Centre for the Research of Social Policy, 2009). It has also clearly had resonance within the wider Europe context (see for example Ohnmacht et al., 2009) and on academic and policy thinking in Australia (e.g. Currie et al., 2007), Canada (e.g. Páez et al., 2009) and New Zealand (e.g. Rose et al., 2009).

However, it is unclear how useful the application of such an approach to transport disadvantage would be in the ‘development’ context and/or in terms of helping to deliver South Africa’s MSGs, however. A secondary aim of the RSA DOT scoping study, therefore, was to explore the viability, suitability and policy effectiveness of applying a social exclusion ‘lens’ to the issue of transport poverty and social disadvantage in the South African urban development

context. The study was in no way designed to invalidate or compete with past studies, but rather to compliment them by re-invigorating communication of the issue of transport-related social exclusion to political leaders and policymakers within national and local government.

5. Aims and objectives of the Tshwane scoping study

The key aims and objectives of the scoping study were to identify:

- (i) If, and in what physical and social circumstances people on low incomes experience transport and accessibility problems on any kind of regular basis.
- (ii) The types of problems they experience and/or the underlying causes of such problems, e.g. lack of available transport, access onto the transport system, the cost of travel, lack of information, low travel horizons, the inappropriate location of activity opportunities such as employment, healthcare services, schools relative to their homes.
- (iii) Whether different people are affected differently and when, where and how they are affected, and the longer-term consequences of such problems in terms of their wealth and financial security, physical and mental well-being, maintaining family ties and supporting social networks.
- (iv) What types of locally appropriate solutions could be developed to address these problems from the perspectives of the people who experience them.
- (v) A set of messages that could be taken forward within transport and social welfare policy circles to secure active support for the furtherance of this agenda.

6. Methodology

The methodological approach for the study was based on several similarly focused UK and European studies undertaken by the author over the past ten years. It was entirely qualitative in nature, which was deemed appropriate due to both the exploratory nature of the enquiry and the type of in-depth and sensitive information that was being sought from the participants. The main data gathering effort involved eleven, 2-h, professionally facilitated focus groups with eight to ten people in each group.

The focus groups took place between July and August 2008 in five different areas in the Tshwane (Pretoria) Metropolitan Region (see Figs. 1 and 2): one in inner city Pretoria, two in the smaller urban townships of Mamelodi and Danville, one in the urban periphery in Soshanguve and one in Winterveld, a semi-rural settlement. The following groups of participants were recruited on-street or in local centres (such as health or community centres) and, in most instances, were local residents of these areas:

6.2. Study area 1: Sunnyside, Pretoria City Centre

1. People with permanent or temporary disabilities or conditions that make it difficult for them to independently travel to activity centres such as work, health care or shops.
2. People who do not work and are responsible for the care of young or old family members.

6.3. Study area 2: Shoshanguve

3. Heads of household who are younger than 18 years (i.e. no adults in the house).
4. Students at tertiary institutions.

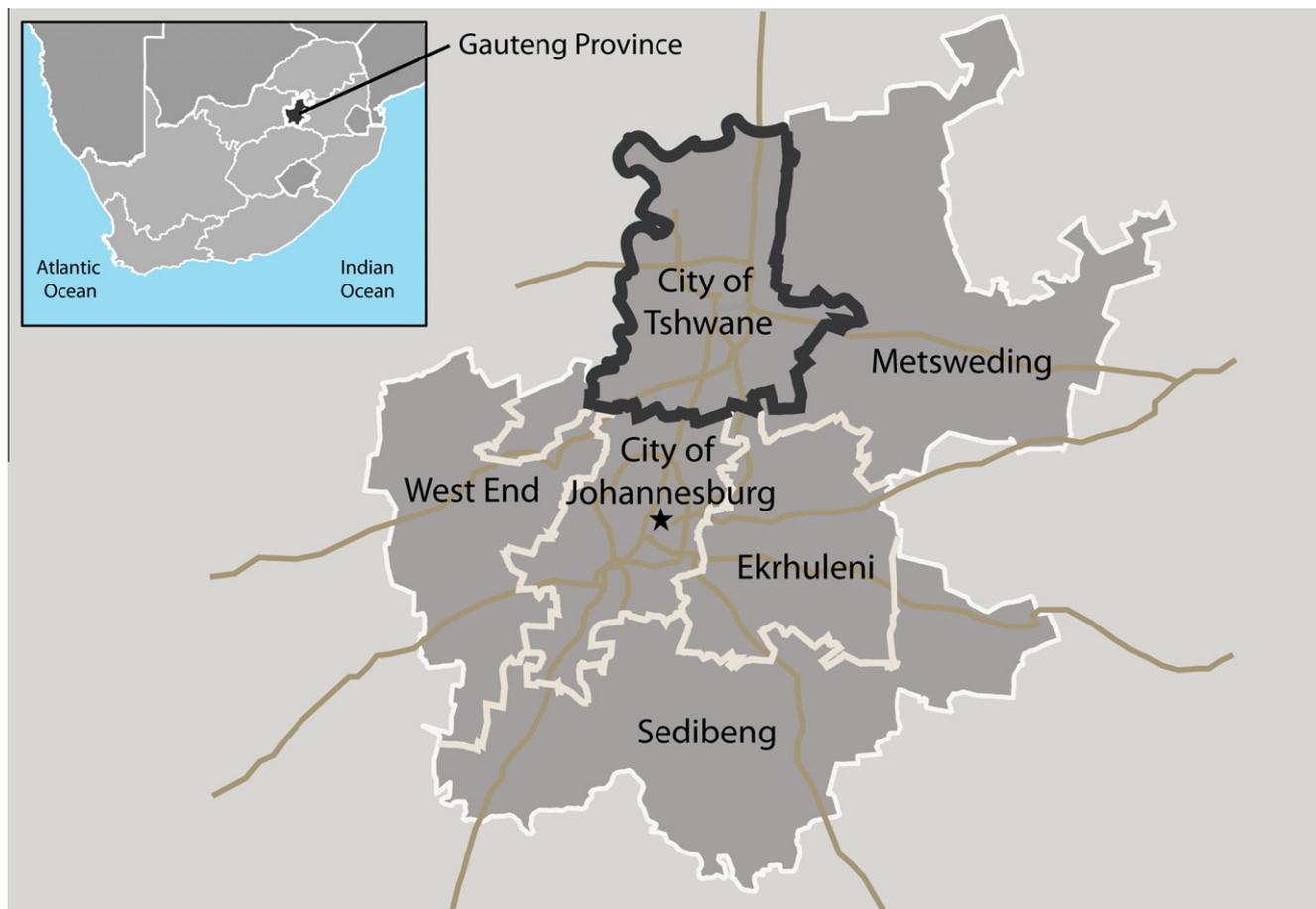


Fig. 1. Map of Gauteng province.

6.4. Study Area 3: Mamelodi

5. Unemployed adults (excluding students, housewives and pensioners), i.e. people who are considered economically but cannot find work.
6. Single parents (females only).
7. Low income workers earning less than R1000 per month.

6.5. Study Area 4: Danville

8. Unemployed adults (Whites only).

6.6. Study Area 5: Winterveld

9. Unemployed adults.
10. Low income workers earning less than R1000 per month.
11. Older people (65+) who do not work.

These target groups and areas were pre-identified by the RSA DOT as being the most relevant in terms of offering the experiences of people from a range of different socially disadvantaged groups and settlement types based on their prior analysis of the NHTS. In total, 102 people participated in the group discussions. All the groups except the single female parents in Mamelodi were with women and men and all the groups except the Danville unemployed group were entirely comprised of Black Africans. The groups were held in a home or community centre in a convenient location to where the participants were recruited, with transport being arranged for anyone who needed it.

It is recognised that the focus group approach has its critics mainly that the *reported narratives* only represent the views of the participants and cannot be taken to apply to the wider population. This is indeed true, but it should also be pointed out that it is rarely the *intention* of such research to be used in this way. Rather it aims to interactively explore the experiences of carefully selected participants who have already been identified as being appropriate for communicating important insights on a given topic, because of their own experiences or situation. The focus group exercise is intended to illicit new, shared understandings of these experiences between the group's participants and its facilitator (who is or represents the researcher) in order to develop innovative conceptual approaches or new solutions to an identified problem or set of issues.

There are a number of ways to 'verify' the findings of such methods. A strong background 'grounding' in the evidence through literature and policy review, trips to the field, key informant interviews and participant observation provides an important initial step. Replication of the discussion with different groups, in different contexts and over time can also sometimes serve to draw out common themes and concerns or to challenge commonly held but unsubstantiated assumptions or 'truisms' about a situation. Supporting statistical analysis of existing datasets or follow-up surveys with a random sample of the population can be used to 'verify' these qualitative findings, if this is deemed necessary or important, affordable and practicable (Robson, 2003). In this case some, but not all, of these techniques have been explored with varying degrees of success, as now described.

Prior to the focus group discussions, the author, together with members of the RSA DOT Research Unit and some of the focus

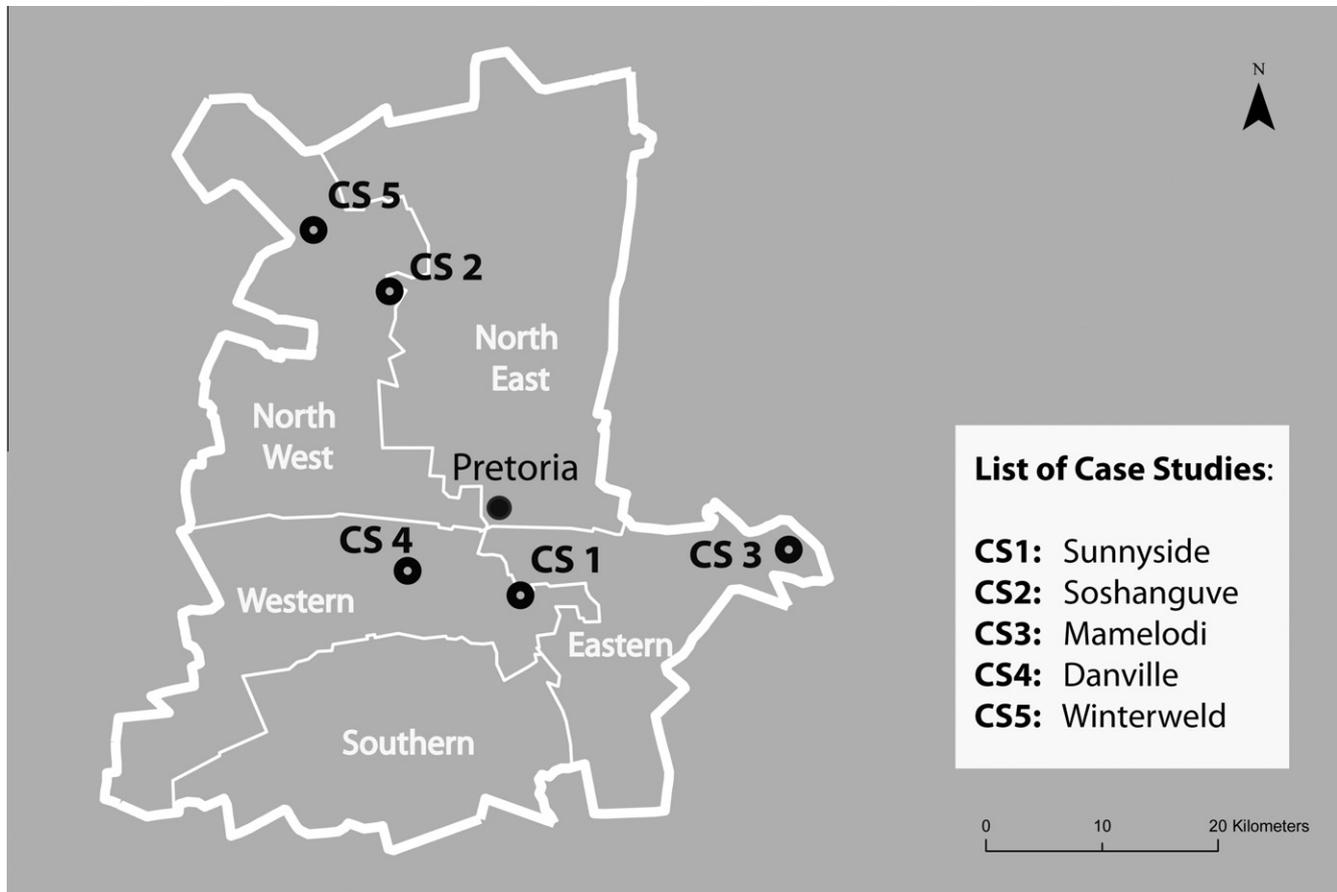


Fig. 2. Map of case study locations.

group organisers made study tours of a number of the areas where the focus groups took place. These visits were made using public transit (train, bus and kombi-taxi) and a number of different local facilities were visited: for example the local shopping plaza, open air market and medical centre at Mamelodi, the shopping plaza, tertiary education college and medical centre in Shoshanguve and a village health clinic, local police stations, a shopping centre and a semi-rural homestead. Informal conversations were held with a number of workers and local people at these venues, generally focusing on what it is like to live and work in the area and about people's experiences of transport. This was an extremely useful reconnaissance exercise, as it allowed RSA DOT policy officers and the fieldwork team to familiarise themselves with the local areas, identify possible recruitment locations and also to get a feel for the type of issues that might arise in the more formalised focus group discussions. The information that was gathered was also extremely helpful for formulating the topic guide for the focus groups.

A follow-up small area analysis of the NHTS was also undertaken to compare the reported experiences of the focus group participants with the statistical evidence for the same area where the data was available and could be extracted on a ward by ward basis. However, this exercise was extremely limited in its scope due to both the constraints of time and money and the very small NHTS sub-sample sizes which could be identified for each of the scoping study areas. The limited analysis which was possible suggests that there are some minor differences between the statistical evidence of transport disadvantage recorded in the NHTS and the focus groups, but further research and local area data is needed to explore this fully. The 2003 NHTS data is also now seven years out of date

and does not capture the rapidly changing dynamic of urban travel in South Africa today. The almost complete absence of any reliable and publicly available data on land uses and public transport operations also made it virtually impossible to undertake any follow-up GIS-based analyses to examine the relationship between the housing location of low income populations in Tshwane, their physical access to public transport services or its connectivity with key activity destinations.

A final potential weakness of the approach has been the researcher's own relative inexperience of the South African context, further constrained by an inability to directly communicate with the study participants, in their mother tongue. Given the likelihood of fairly low educational levels amongst many of the target participants combined with the unfamiliar prospect of being interviewed about their lives, it was felt that the discussions should be conducted in the local language. For this reason, the focus groups were run by experienced local professional facilitators, audio recorded and later transcribed and translated into English for *post hoc* analysis by the researcher. The facilitators were fully briefed about the aims of the research and the format and style of the discussions that were required before they went into the field, but the researcher was not able to be present at the discussions. This is not an uncommon situation but can lead to some important limitations at both the discussion and analysis stages of the research which need to be recognised.

In terms of the discussions themselves, there was the issue of delivery style. It is possible to identify from the focus group transcripts that the culture for conducting research of this nature was quite different to the researcher's own approach. There was a noticeable power divide between the facilitator and the group

participants, which emulated an overall 'strict teacher/naughty pupil' feel to a number of the discussions. One facilitator favoured a quick-fire rapid question and answer format to each member of the group. Participants' responses were rarely probed in any depth with many statements usually taken at face-value. Open discussion of an issue was often discouraged and any disagreements or differences in opinion were quickly closed down. This meant that the discussions tended to be more structured, less discursive and perhaps missed out on some of the more far-reaching, tentative or less formulated opinions that may otherwise have been forthcoming. The presence of the researcher, even without knowledge of the local languages, may have served to avoid some of these issues. On the other hand, the presence of an evident 'outsider' may have further undermined the participants' confidence to speak openly about their experiences and feelings.

A second data issue was that considerable time was spent asking each participant to recount an individual journey they had taken, which meant that some of the richness of the data was compromised

by collecting basic information on where and when people travelled, how long their journey took and how much they paid to travel. This was an intended part of the brief but the length of time it would take had not been fully anticipated. In its favour, the approach did mean that RSA DOT had a readily available source of data to check back on, to see if the problems with public transport that were being reported by the groups could be validated. In almost every instance, reported problems with the transport system could be confirmed and, in the Mamelodi case, aerial photography identified a whole community of about 10,000 households now exists which had not previously been known about by policy makers and is not served at all by the City of Tshwane's public transport system (see Fig. 3).

These critical observations withstanding, analysis of the focus group evidence has helped to construct a picture of what transport means to low income residents in some of Tshwane's main low income urban settlements, and to offer some valuable insights for policy makers on how their key concerns might be addressed in the future. The next section of the paper outlines some of the

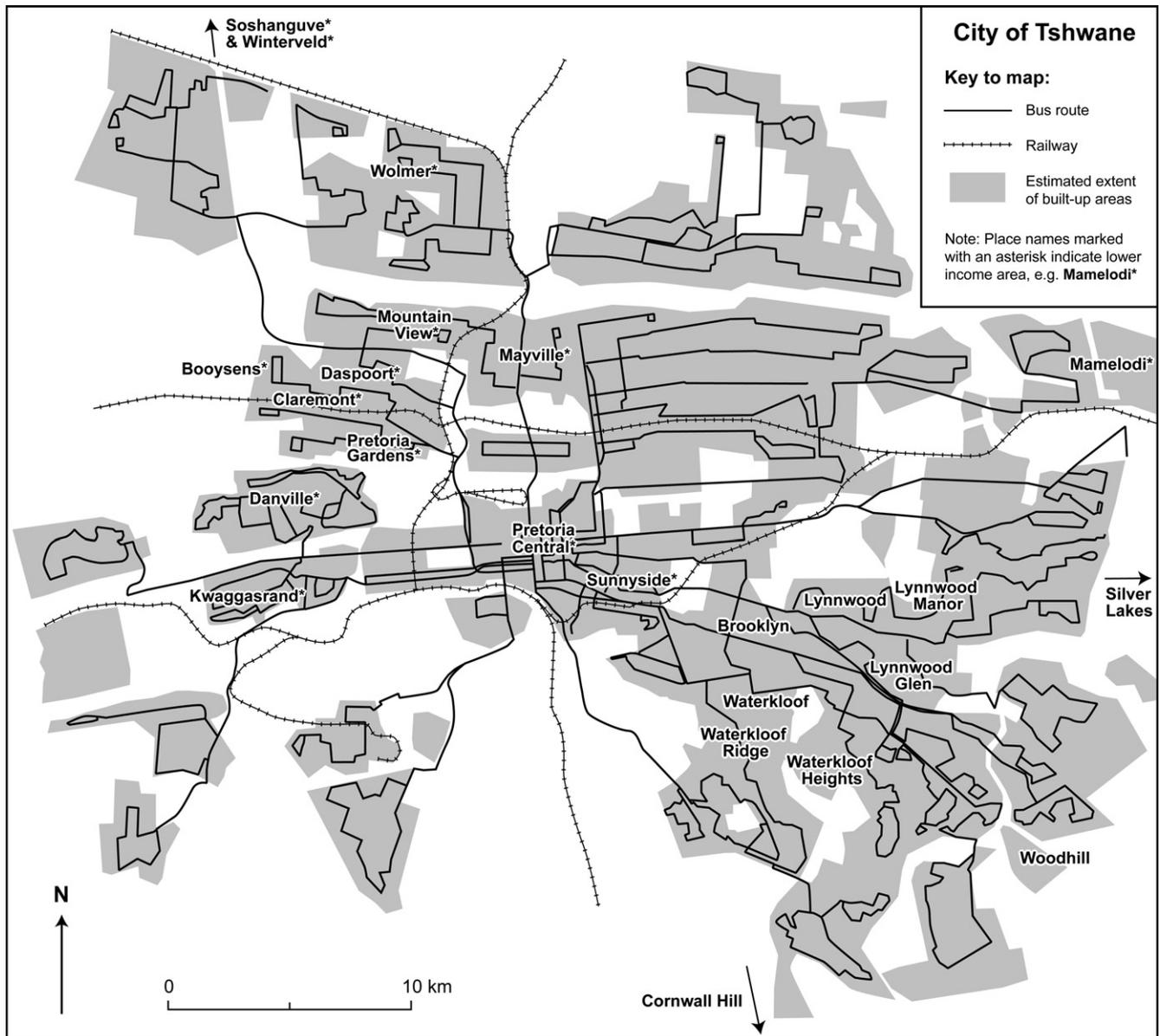


Fig. 3. Map of key bus routes and estimated extent of built-up areas.

key issues that emerged from our analysis of the eleven focus group discussions.

7. Key findings from the Tshwane focus groups

It should be noted that the findings which are identified below have emerged from detailed qualitative analysis the eleven focus group transcripts. They have been analysed at several levels: in *isolation* from each other and in relation to each other *within* each of the five study areas (e.g. all the Mamelodi groups), and *across* the five study areas and by the different participant groups (e.g. all three of the unemployed groups). This process of cutting and re-cutting the data is common practice in qualitative analyses and is used to draw out key themes, commonalities and differences in the data, some of which are reported below. However, it is only possible to offer a flavour of these findings and so what is presented here is only a small part of the overall analysis that was undertaken for the study due to the word limitations of the paper:

Two main presentational devices are used to relay our findings

- (i) A set of tables is included to indicate in which group and at what stage of the discussions different transport issues emerged – the idea here is to denote as far as possible the relative importance of each issue for each group.
- (ii) A series of illustrative quotes are used within the text – the idea here is to ‘give a voice’ to the participants’ actual narratives of their transport experiences.

Three key themes emerged from the discussions in relation to transport under which a range of issues can be subsumed, namely:

1. The importance of transport as a basic need.
2. The important role of transport in accessing key activities.
3. Perceptions of public transport services and other common barriers to its use.

These issues and concerns were generally raised within all of the eleven focus groups, although there was some variation in the order of priority they were given within each, as identified in Table 2).

7.1. Transport as a basic need

Initial discussions about transport were allowed to emerge in an evolutionary manner from an initial discussion of participants’ wider concerns about the areas in which they lived. This was in order that any problems that they were experiencing with transport could be seen in relation to the other difficulties they experienced with day to day living and would not be artificially inflated as an issue above these other concerns.

In common with the [Salon and Gulyani \(2010\)](#) Nairobi study, we found that although our participants made a lot of trips on foot, motorised travel was identified as a basic need by most participants. Despite the considerable hardships and financial constraints they were experiencing, the problem of transport and the impacts of poor transport provision on their own and their families’ daily lives emerged early on in most of the group discussions, as [Table 1](#) demonstrates. This is largely because many of the low income workers and students in the groups identified that they needed to travel relatively long distances from their home locations to access key activities such as employment and higher education on an almost daily basis. This accessibility theme will be picked up again in the Section 7.2 below.

The study areas where the participants live (apart from the central Pretoria groups) are also sparsely served by core services and amenities such as clinics, hospitals, libraries and other community and leisure facilities, as identified in [Table 2](#). This means that even those who do not have a regular job or college course to attend must rely on some form of motorised transport service on a fairly regular basis to visit the clinic or claim their benefits or undertake occasional ‘piece work’, despite the high cost involved. This issue will be revisited in Section 7.3. Most participants reported that

Table 1

The issues that were identified as most important to people’s lives and well-being in the order they emerged in the group discussions.

Group ^a	Issues identified									
	Meeting basic needs	Employment	Education	Transport	Health	Crime/fear of crime	Family/children	Community	Local environment	Religion/spirituality
1 Low income workers (Mamelodi)	2	1	6	3	4	8	5	7	9	
2 Low income workers (Winterveld)	5	1	4	6	8	9	7	3		2
3 Unemployed adults (Mamelodi)	8	2		4	9	5	6	7		1
4 Unemployed adults (Winterveld)	3	2	7	4	5	8	1			6
5 Unemployed White ^a adults (Danville)	5	2	1	3		4		7		6
6 Students 16–25 years (Soshanguve)	3	6	2	1	8	4	5	7		9
7 Full-time carers (Pretoria)	2	1	4	3	6	7	5			
8 Child head of household 16–19 years (Soshanguve)	7	3	2			1	5	4	8	6
9 Female unemployed lone parents ^a (Mamelodi)	2	1	3	6	7	9	4	5		8
10 People 65+ years (Winterveld)	4			2	6	3	1	5		
11 People with disabilities (Pretoria)			3	2	5	4	1			

NB: Each issue is coded according to the order in which it was 1st raised within each group, i.e. 1 + 1st issue raised, 2 + 2nd issue, etc.

^a All the focus groups were conducted with Black South Africans, except in the case of the one indicated with unemployed White adults in Winterveld. All groups comprised a roughly equal mix of men and women, except in the one indicated with female lone parents in Mamelodi.

Table 2
The need for more local facilities as identified by group and type of local facility.

Group	Type of local facility									
	Employment	High schools	Housing	Hospitals/ Clinics	Libraries	Community facilities	Sports facilities	Shops	Police stations	Better transport
1 Low income workers (Mamelodi)	1	5	4	6	2	3		7	8	
2 Low income workers (Winterveld)	3		5	2		7	4	1	6	
3 Unemployed adults (Mamelodi)	6		7		4	3	1	2	8	5
4 Unemployed adults (Winterveld)	2			1	4	5	3		6	
5 Unemployed White ^a adults (Danville)	6	8		2		1	4	7	3	5
6 Students 16–25 years (Soshanguve)	6		4	3		5	1	2		7
7 Full-time carers (Pretoria)	1	8		3	7	5	2		4	6
8 Child head of household 16–19 years (Soshanguve)	8	6			4	1	5	3	2	7
9 Female unemployed lone parents ^a (Mamelodi)	5	3		2			1			4
10 People 65 + years (Winterveld)			1					3		2
11 People with disabilities (Pretoria)	2		1			4				3

NB: Each issue is coded according to the order in which it was 1st raised within each group, i.e. 1 + 1st issue raised, 2 + 2nd issue, etc.

they needed to use a public transport or taxi service at least once a week and many participants needed to find daily fares in order to get to work, school or college.

7.2. The important role of transport in accessing key activities

Clearly, travel is predominantly a derived demand and people arguably only need to use motorised transport in order to access opportunities which are not available to them in their immediate walking vicinity. As identified above, most of the participants in our study said they needed to travel over distances that were considered too far to walk to access employment, education, healthcare, social services and other key amenities. Different population groups obviously have different types and levels of accessibility need according to their physical circumstances, age, employment and household responsibilities, social and cultural needs and so forth and their *activity needs* should be considered in relation to the *opportunity* to carry out these activities, as Table 3 demonstrates and the following sections of the paper also identify.

Access to employment is seen as paramount within the UK social exclusion agenda because this is seen as the main way in which people can lift themselves out of poverty. Unlike the UK, where people who are unemployed are able to claim welfare benefits, in South Africa most people must work to survive or must rely on others who have jobs, as most people are not entitled to any benefits. Even for those who are, the welfare benefits system usually does not provide them with sufficient money to cover their living expenses, as this participant describes:

“My personal life is very challenging these days, because of unemployment. I am one of those who are busy searching for employment. I have challenges that I have to pay the electricity and water in my home. I don't have an income in my house and I don't have anyone to back me up”

(Unemployed male 25–50 years, Winterveld)

For most low paid workers, transport is the first thing they have to think about when they get paid. This is because they usually have to cover considerable distances each day, often travelling for more than 2 h each way, to get from where they live to where they work. Unless they can cover their travel costs they will be physically unable to get to work and will lose their jobs; there are no currently travel subsidies for these low income workers:

“I look after my children and my siblings. One of my siblings is employed and the rest are at school. The other one of my siblings has two children. I earn too little and I have to pay rent, I have to pay for the bus and train in order to get to work and I earn little.

(Low income female worker, 20–50 years, Winterveld)

Another mother with two children, who also suffers from a disability, described to us how she has to find the money to travel to work even though she only earns R700 per month. She cannot afford to move closer to her job because of the higher rent she would have to pay for living in the city and also she would have no one to take care of the children while she is working. This quote eloquently sums up the extreme hardships she faces as a result of her low income, her disability, her family responsibilities and the spatial mismatch between where she lives and works:

“I have two kids and I have one foot and I work very hard. Instead of being paid maybe R1500 for the hard work that I do, I only get R700 and when I enquire about that I get told that it's because I get a grant as well. Things are very expensive and I am a mother and a father to my kids. . . I live in Mpumalanga [a semi-rural area about a 3 h drive from central Pretoria where she works] and I have to buy a ticket to come to work as I cannot leave my kids on their own and get a place to stay closer to work. On that little money I earn, I have to travel”

(Disabled female 18–55 years, Pretoria)

Access to education and training is another key target activity within the UK social exclusion agenda, particularly for 16–19 year olds who are not in employment, education or training (NEETS as they are referred to in the policy literature). In South Africa, all students must pay for their education on a sliding scale according to their families' income. For the students and parents of students participating in the focus groups, the high cost of transport and the difficulties they experienced in physically accessing higher education was seen as adding to this already substantial financial burden on low income households. This could lead to children dropping out of school before their matriculation, or missing some or all of the school week and thus finding it difficult to achieve a high standard in their school work. It also means that very few low income families could afford to pay for their children to attend college or university, which effectively locks them into an

Table 3

The core transport themes emerging from focus group discussions in the order in which they emerged.

Group	Transport as a basic need	Non-affordability of transport services	No access to public transport services	Personal safety/fear of crime (walking)	Personal safety (train)	Personal safety (taxis)	Type of activity it is difficult to access						
							Work	High school	Hospital/clinic	Police station	Library	Visiting family	Post office
1	Low income workers (Mamelodi)	9	1		2	8	6	4	3	7	5		8
2	Low income workers (Winterveld)	1	2	7		8	9	6	4	5			3
3	Unemployed adults (Mamelodi)		1					2	3	4			5
4	Unemployed adults (Winterveld)		1		2			3			4		5
5	Unemployed White ^a adults (Danville)		1		2			6		3	4		5
6	Students 16–25 years (Soshanguve)		1						2				3
7	Full-time carers (Pretoria)		3				1						2
8	Child head of household (Soshanguve)		5				1		4		3		2
9	Female lone parents ^a (Mamelodi)	2	1							1			2
10	People 65+ years (Winterveld)		2	3 ^a						1			
11	People with disabilities (Pretoria)	2	5	1 ^a				3	4	6			

NB: Each issue is coded according to the order in which it was 1st raised within each group, i.e. 1 + 1st issue raised, 2 + 2nd issue, etc.

intergenerational cycle of low educational attainment and poor work skills, lower ability to obtain a well paid job and less chance to escape poverty.

Although some students were able to travel on a free school bus service, many did not qualify for this service and this meant that they had to pay for a taxi to take them to school or college. One student explained how he was considering giving up his education because once he has paid for his travel he cannot afford to buy food for himself during the school day:

“I am not happy because I do not have money even to buy food during break time. My mother passed away. I go to school because I want to. Sometimes it’s not nice when people have something to buy and you cannot. I sometimes wonder what will make me continue because my background is very difficult . . . there won’t be any money for me to further my education and go to TUT or other institutions of higher learning.”

(Male student, 18–25 years, Soshanguve)

A number of the parents said that their children walked to school (some for 7 miles in the Mamelodi study area) and this led to another set of problems in terms of making them susceptible to physical attacks, theft or themselves getting involved in criminal activities along the way. This theme of crime and personal safety while travelling will be picked up again in the Section 7.3.

Access to healthcare is also an important consideration, given that health inequalities roughly mirror patterns of economic deprivation. Many people living on or below the poverty line in the UK

identify a stronger need to access healthcare facilities including walk-in clinics and hospitals than the average population (Social Exclusion Unit, 2003). Although the 2003 NHTS identified that more than 40% of people walk to access a medical centre or traditional healer, many of the participants in the focus groups, especially those participating in the urban peripheral groups in Mamelodi and Soshanguve, identified that they travelled considerable distances and also experienced transport problems when seeking medical care:

“I walk to the taxi for 10 min and I wait for the taxi to get full and its takes the taxi 35 min to get to the taxi rank and then I get another taxi, but I don’t wait for the taxi because it gets full fast. Then it drops me near to the clinic. Then I walk to the clinic for 35 min. It costs me R12”

(Low income male worker, 25–50 years, Mamelodi)

This quote identifies a round trip of more than 3 h of total travel time to the local clinic and was not an uncommon experience for a number of the group participants. For example a similar difficulty was identified by one of the single parents in another of the Mamelodi groups, who told us:

“If you want to take your child to the clinic, there is no other way . . . you will have to use a taxi and it is expensive . . . there are many taxis available but the buses are only available to transport people who are going to work and students”

(Female single parent, Mamelodi)

Access to food shopping is often seen as a leisure pass-time in the western world, but for low income households the ability to access healthy and affordable food in the urban context has been identified as a significant factor in reducing health inequalities (Social Exclusion Unit, 2003). In the development context, access to a sufficient quantity of food is the main concern and many participants in the focus groups described the difficulties they experience just to put food on the table. Although most participants did talk about the need to access food shops, most usually these were accessed by walking to a local Sparza shop. This over-reliance on walking led to its own particular set of transport problems, as will be described in Section 7.3.

The issue of whether local shops could provide families with a healthy diet or a sufficient variety of products, although highly relevant to their health outcomes, was not an issue which was explored within the context of the group discussions. A number of participants did comment on the rapid increases in the cost of a 'basic package of shopping' in recent months (including fish oil, rice, sugar, flour and maize), meaning that a basic monthly basket from the local grocery which used to be R182 now costs R320. This was attributed to the increased cost of petrol, which meant that transporting goods had become more expensive with a knock-on effect for all items of expenditure, whilst incomes have remained fairly static.

Access to friends, family and community is an often overlooked but highly important factor in maintaining the well-being and social capital of individual citizens and the communities in which they live. The important interactions between available transport provision, people's ability to support and maintain their social networks and the social capital of communities is increasingly being recognised as important within the transportation and social exclusion literature for developed countries (e.g. Currie and Stanley, 2008; Carrasco et al., 2008), but is rarely discussed within development context.

It clearly emerged from the group discussions that most participants placed a high value on their ability to visit their families, socialise with friends and be an active member of their community. However, many people said that they were simply unable to undertake these trips because they couldn't afford the transport costs, creating a gap in their family and social support networks. This was particularly difficult for people who had moved away from their home villages into the urban area in order to find work or to look after a sick relative:

"Sometimes it takes me two or four months to visit them. It is very far and as a result it is expensive. If you go there it takes sometimes three to four hours sitting on a bus. It is even worse using the train. You just have to relax because it is going to be the whole day's journey"

(Single mother 18–30 years, Mamelodi)

The sense of community and living in a place where neighbours looked out for each other, can borrow food from each other and can offer informal childcare and other support was also regularly cited as important. Nevertheless, there was also recognition that you cannot continue to rely on other people, whether friends or family, when they are also struggling to survive.

7.3. Perceptions of public transport services and barriers to use

No one, apart from the physically disabled participants in the Pretoria group, said that they found it difficult to physically access motorised transport due to lack of availability, although many described anything between a 10–30 min walk from their home to the main road in order to do so. In part, the high availability of transport is because the majority of people rely on readily available

minibus taxis or *kombis*. However, as much as the *kombis* are the transport 'solution' because they are available, they are also a problem because of their high cost, poor service quality and safety record and because they are usually *all* that is available when and where people on low incomes need to travel (Khosa, 1992; Dibben, 2006).

As Fig. 3 demonstrates, the City of Tshwane's public transport network does not permeate many of the settlements where the focus groups were held. Another problem is the timing and frequency of the services that do run. Although the train services run all through the day they are very slow, with multiple stops and long delays on route. They are also considered dangerous because of incidences of on-board muggings and overcrowding. Many of the bus routes only operate during peak hours and so are often perceived as *worker and student transport only*. This means that, for most trips and at most times of the day, urban and peri-urban residents across the whole of the Tshwane region (as well as in all of South Africa's main urban areas) tend to rely on the ubiquitous *kombis*, that wait on every street corner to pick up passengers throughout the day and night (although this perception is not necessarily accurate either, as many participants described having to walk long distances to access a *kombi*).

Table 3 identifies the core transport concerns that emerged for each of the groups with the number in each cell representing the order in which they emerged within the different group discussions (1 = 1st issues mentioned, etc.). Table 4 summarises the problems each group experienced with the different forms of transport that were available to them. No order of priority has been offered in this instance because the way in which these issues were discussed within the groups meant that no overall consensus on priority was reached for the group as a whole. The following sections seek to identify the importance of each issue for the individuals who participated.

Clearly a wealth of subtleties and nuances are glossed over within these tables, which merit far greater attention than the word limitations of this paper allows. A full representation of these issues was presented to RSA DOT, but the rest of this section serves to highlight the three priority issues that were raised by participants across all the groups in terms of their concerns about the public transport system, namely: (1) the high cost of transport relative to incomes; (2) public transport use; and (3). crime and personal safety whilst travelling.

7.4. The high cost of transport

Given that all of the participants were living on household incomes of less than R1000 per month (approx \$135 and £85) and that most were responsible for supporting anything between two to seven other household members on these incomes, it is unsurprising that the high cost of transport was a key concern. The vast majority of participants across all the groups were quoting single journey fares of between R6–18 and round trip costs of between R12–30. These high travel costs mean that once the money to pay for food (and often water), electricity and rent had been found each month, the additional cost of transport is seen as a considerable financial burden. One participant told us:

"I was working at Centurion. The ticket was R112 and the local taxi was R192. I had also to buy food from that amount. I was earning less than R800, so I realise that I am working for the transport and for the person I work for to gain. Then I realise I also had to buy food in the house and also eat at work. I must give my child a lunch box at school and I have to buy myself clothes and my child clothes as well. I was working from Monday to Monday and on the weekends as well [i.e. 7 days a week]. But I was earning less than R800."

(Unemployed female, 25–50 years, Winterveld)

Table 4
Expressed problems with different forms of transport.

Group	Type of difficulty																				
	Trains				Buses				Taxis				Walking				Cycling				
	Av	Aff	Co	Sa	Av	Aff	Co	Sa	Av	Aff	Co	Sa	Dis	Aff	Co	Sa	Av	Aff	Co	Sa	
1	a		a	a	a	a	a			a		a	a							a	
2				a	a					a		a									
3																					
4	a		a	a	a					a		a	a							a	
5				a		a			a	a		a	a							a	
6			a	a						a											
7	a			a						a											
8	a			a	a	a				a		a									
9	a				a					a		a									
10	a				a	a				a			a							a	
11	a					a				a	a		a								a

Key: Av = availability; Aff = affordability; Co = connectivity; Sa = safety; Dis = distance.

^a NB: denotes that this concern was raised by one or more participants in the group. The priority of these issues for each group could not be coded because this varied for different individuals in each group.

The phrase *'working for the transport'* was quoted several times across a number of different groups, encapsulating the notion that many low paid jobs only provided sufficient wages to cover the travel costs of getting to work and so *'it isn't worth the effort of working'*. This situation can be equated with the 'culture of worklessness' which is described in much of the UK social exclusion policy literature (e.g. *Social Exclusion, 1998*), whereby people on the periphery of the main urban centres describe themselves as 'locked out' of employment because they cannot afford to access the jobs which are available to them.

One of the inner city group participants even suggested that the cost of living is cheaper in the city despite the higher housing rental cost because people can walk to where they need to go and so do not have the added burden in their lives of having to meet these travel costs:

"It's cheaper to live in the township [on the outskirts of the city centre]. The problem is transport. You have to use taxis to come to town on a daily basis and we cannot afford that money. If we are here, at least we can walk or use a train and therefore we spend less on transport"

(Unemployed male, 25–50 years, Pretoria)

But it was explained that many people cannot afford to find a place of their own and must therefore remain with their families in the peripheral townships and travel into the city each day to work or college or leave their families behind during the working week and stay in shared accommodation or with family and friends in the urban centre, travelling back only when they have a day off work.

7.5. Public transport access and use

As identified earlier in the methodology section of this paper, part of each focus group discussion was spent asking each person in the group and getting them to talk through a regular individual journey to work, college, the clinic and/or the local shop (as appropriate to each group). It was clear from these exercises that the vast majority of trips were undertaken by minibus taxis but with some people using the train (where a local station was available) or the bus.

One of the most often cited concerns about the *kombis* after their high cost was in relation to their safety, both their poor physical condition and driver behaviour. They were also identified as noisy and uncomfortable to travel in, with music blaring, rude and unhelpful drivers and far too many people crammed into them. This issue is an important one when considering that many low paid workers use them every day to get to work and back, of-

ten travelling over considerable distances, in extremely hot weather and also at unsociable hours, such as very early in the morning or late at night after long (10–12 h) shifts.

When they are available, buses were mostly usually seen as preferable to the *kombis* because bus fares are generally much cheaper, and buses are safer, more comfortable and spacious (some even have toilets on-board).

"[The bus] is more comfortable and there is even a toilet inside compared with a taxi whereby they always squash you in by putting in 4–4 and you can't even stretch your legs"

(Student, Shoshanguve)

On the other hand, if the buses are full they often go past without stopping and sometimes deviate from their stated routes, so there is no guarantee of being on time at the destination end. Timetabled buses were described as infrequent and irregular, with services stopping too early in the evening for people to use when coming home from work. Services are also often not available during the day or at the weekends, and these two factors in combination mean that they are often viewed as only for inner city office workers or students. Outside of the city centre, people generally have to walk long distances (20–45 min and more) to access formal bus services. This can cause problems of exposure to crime and fears about personal safety whilst walking. As one participant commented:

"Taxis come three at a time and if you raise your finger it means you want to go to that place and they take you there. They are cheap and fast . . . ok they are not as safe as a bus but we stand at the bus stop till the bus comes and an old lady had her bag stolen . . . so I feel the taxi is better than the bus because you can get them at any time and you don't have to wait for a bus that comes on the hour and then skips past you"

(Female unemployed, 25–50 years, Daneville)

Where there is a local station nearby, trains are seen as a cheap alternative, especially because of the opportunity to buy cheap monthly tickets, but were also described as very slow and unsafe due to both overcrowding and muggings. This issue of exposure to crime and fears for personal safety when travelling was another general concern across all the groups, as described in the next section.

7.6. Crime and personal safety issues

Crime levels were perceived to be high in most of the areas in which the focus groups were held. This was often referred to in

connection with a lack of local activities and facilities, especially for young people. One of the Mamelodi participants told us:

“Our kids grow up on the streets. . . and adopt street lives. There are no places where kids meet to do different activities. . . no places like shopping centres, libraries”

(Female lone parent, Mamelodi)

This group continued to discuss how the children are forced to hang out on the street because they cannot afford to travel to activities outside their own areas and become inculcated into a cycle of drug-taking, petty crime and gang culture. Transport often provides a hub for criminal activities, with gangs particularly hanging out at stations and taxi stops or using the trains to mug passengers. Participants described how they felt particularly threatened whilst travelling on the trains at night:

“So in December I saw them robbing one person and she was with her child. They had a knife on her and they had her in the corner. They were searching her and taking her money and you don't know what to do. You can't shift or do anything and the other people are sitting a bit further away. You are just watching. It is not safe. You must always try to sit where there is a lot of people.”

(Low income female worker, Winterveld)

Similar accounts were given in a number of the groups, with young people, seniors, disabled people and women describing themselves as the most vulnerable to such attacks. Various coping strategies were described, such as walking in groups, not travelling after dark or waiting to travel until a neighbour or friend could go along. Some participants said that they avoided using the trains in particular because of the high incidences of crime.

8. Policy responses

The study recommended to the RSA DOT that changes are urgently needed in the way in which *transport* policy makers and planners at both the national and local level of government think about transport provision in its urban areas, to make it more responsive to the transport needs of low income and vulnerable population groups (Behrens, 2004). Equally, there is a need for other *social* policy sectors whose aim is to improve the social welfare of low income citizens to recognise the important role that access to transport plays in the delivery of their own policy goals and to embrace improved transport delivery as part of their welfare programmes. In recognition of this, an important aspect of the scoping study was to raise awareness of the key issues of concern amongst policy makers, initially in the RSA DOT but also in the Department of Social Development and Municipalities.

We recommended five key ways to address the transport concerns of low income populations: (i) to reduce or subsidise the cost of travelling by minibus taxi; (ii) improve public transport (particularly bus) provision; (iii) regulate the operation and fares structure of minibus taxis; (iv) improved policing at stations and other transport waiting areas; (v) provide affordable housing in closer proximity to employment and other key activities. These interventions are not mutually exclusive and, indeed, if delivered in tandem would most likely have a significant positive reinforcing effect. It is also immediately evident that they extend far beyond a transport policy remit to include social welfare, private enterprise, the legislature, trading standards, local government and the Municipalities, the police and criminal justice system, housing and planning. In other words this is a *cross-governmental* agenda requiring a *multi-stakeholder* approach and it is most likely this reason why it has met with such little past success in its development and delivery.

In follow-up interviews with policy makers' their responses were mixed. On the one hand there was little outright disagreement that there is a serious transport problem for low income urban populations in South Africa, but how and whose responsibility it is to address this identified a divergence of opinion. Some transport policymakers felt that this is a national transport policy agenda, others that national government should not concern itself with local transport provision. The Department of Social Development (DSD) was initially extremely suspicious of our motives for engaging with them on a transport issue because whenever it has tried to raise the issue of improving public transport provision with the DOT in the past no one has been prepared to engage on the subject. Similarly, a representative from the local neighbourhood development programme said that when had identified huge problems with transport and accessibility they were unable to find anyone within their local transport authority who was prepared to listen to them. Neither DSD nor the neighbourhood renewal officer felt that they had any role to play in the delivery of transport services to low income populations and saw this as a transport sector responsibility. This impasse mirrors the experiences of the *Social Exclusion Unit* (2003, p. 3), which found that the primary reason for past policy inertia in the UK was because:

“Historically no one has been responsible for ensuring that people can get to services and employments sites and as a result [transport] services have been developed with insufficient attention to accessibility. And too often accessibility has been seen as a problem for transport planners to solve. Rather than one that concerns and can be influenced by other organisations. . .”

9. Conclusions

The paper has explored the transport needs and concerns of low income population groups in South Africa and set these within the context of their everyday lives. In addition to the considerable financial and physical hardships low income and marginalised South Africans face, lack of transport is also a considerable problem for them. Travel costs eat into their already meagre incomes and add to the worries and financial burden of these households, often making it extremely difficult or impossible for them to look for employment, attend education, seek medical attention and/or maintain their social networks. For these problems to be fully appreciated within South Africa's Social Development Goals, access to accessible, affordable, safe and reliable public transport needs to be identified as a *basic human right*. It is evident that where populations are denied this right they will be unable to fully participate in the society in which they live and become systematically and insidiously socially excluded.

Our study identified that for many urban low income residents of the Tshwane region, formal public transport is often not an *option* because of where they live or the times when they need to travel. As such, many people must rely on the services of privately operated and largely unregulated *kombis*. The cost of this transport is extremely high in relation to people's incomes and can usually only be regularly afforded by the employed. In addition, journeys are overlong, uncomfortable and often unsafe and tiring. Most journeys also include long walks and waits for taxis to arrive and/or fill up with passengers once they turn up.

Identifying these issues is the easy part of the policy process and this is by no means the first study of its kind to do so and yet no policy progress has been made on these issues under either the pre- or post-apartheid regime. Clearly, there are numerous and considerable barriers to providing universal and affordable urban

public transport systems in South Africa, not least because currently such services simply do not exist in many of its urban areas and when they so exist are poorly planned and inadequately regulated (Cameron, 2000; Behrens, 2004). One of the key challenges therefore lies in finding the public finance which is needed to build new public transport networks that can match existing and emerging land uses and can also cater for the transport needs of low income sectors of the population, which may be quite different from the patterns of travel behaviour which higher income sectors reveal. Simply providing new public transport services is also not sufficient, as they need to be affordable, reliable, safe to use, accessible to people with disabilities and the less mobile, with good waiting facilities, properly trained drivers and clearly advertised timetables and routes.

Currently, South Africa's transport hopes and dreams are pinned on the introduction of new Bus Rapid Transport (BRT) systems in its twelve major urban centres. These major infrastructure projects are needed to bring high quality, modern and efficient mainstream public transport services to its inner cities, to better regulate the public transport sector and to break the stronghold of its taxi cabs. However, these services will only serve a minority of the travel needs of urban populations and it is unlikely that they will significantly reduce the transport disadvantages currently experienced by its low income populations, whose transport needs are often quite different to the ones that mainstream public transport systems serve.

Here the currently problematic *kombis* could provide part of the solution, while they should not be seen as a substitute for mainstream fixed route bus services, they are demonstrably able to operate efficiently and effectively where more formalised, fixed route, bus services cannot. If properly regulated (e.g. in terms of fare levels, driver training, operational and vehicle standards), they can usefully be included as a complimentary part of the overarching urban public transport network, but their operation must be fully integrated with the BRT system and its feeder services.

Clearly, different specific solutions will be needed in different places and for different groups of people but this cannot be a transport only agenda. Housing for low income families needs to be better located in places where people can more easily travel to work within reasonable travel times. Government also needs to ensure that where new housing is built there are adequate schools, medical services, shops, libraries and other facilities within easy walking distances. Places need to be properly policed so that it is safe for people to walk around during the day and night and car use amongst the high income population needs to also be simultaneously managed and regulated, so that it is safe for non-car users to travel in the urban environment.

Public transport also needs to be affordable to people on low incomes, as well as safe, frequent, reliable and comfortable; and, given the working hours and family commitments and responsibilities of many low income workers, probably also need to run 24 h of the day, 7 days a week. Special consideration should be given to the needs of people who have disabilities, with space for wheel chairs on buses and the introduction of low-floor entry vehicles. With the introduction of BRT in many of its urban centres over the next ten years, South Africa has the opportunity to deliver public transport as a human right to all its citizens, whether it has the political will to advance such a policy agenda remains to be seen.

Acknowledgements

The author would like to thank all the staff at the Republic of South Africa Department of Transport (RSA DOT) and, in particular, Laverne Dimitrov who was responsible for commissioning the study and her team in the RSA DOT Research Unit, who supported

me throughout it. I would also like to offer my thanks to Maria Lombard of TRC Africa Consultancy who contributed her valuable and considerable experience of undertaking transport research in South Africa to the study. She acted as my escort guide on the field trips, undertook the supporting local area analyses of the National Household Travel Survey and has also been a gracious host on my visits to Pretoria.

I would also like to thank Professor Michael Noble and his team at the Centre for the Analysis of South African Social Policy (CA-SASP), Wiseman Khelha Magasela and Dr. Ndingwa Noyoo at the Republic of South Africa Department of Social Development and Mr. Jack Koseff at the City of Johannesburg Department of Community Development for giving their time and valuable insights to the study.

Finally, I would like to recognise the important contribution of the African Response Consultancy fieldwork team who undertook the focus group exercises and my colleagues Andres Neves and Ailsa Allen who constructed the Tshwane maps for me.

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