

ANALYSIS OF MODAL SHIFT IN SOUTH AFRICA: A QUALITATIVE INVESTIGATION

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ABSTRACT

The qualitative investigation into factors facilitating modal shift formed part of a larger research study that was conducted by the CSIR for the National Department of Transport. The aim of the study was to understand the factors that are most likely to influence modal shift in South Africa. Within the context of this study it was intended to achieve two purposes: a) to understand how to move commuters in South Africa from private transport to public transport and b) providing conditions whereby optimal use can be made of existing and current public transport available in the country. Modal shift is the result of a personal choice. This study investigated current factors influencing choice of mode as well as factors influencing the *choice to shift from one mode* to another utilising focus groups as a qualitative data collection method. The study was conducted in all nine provinces and public participation from high, medium and low income participants from rural, urban and metropolitan areas were sought. Findings from this research indicated that there is a large void between what is “available” to people and what people “prefer” as their ideal mode of transport. Modal choice was found to be associated with a community/income group “perceived freedom” to make choices. This was strongly associated with the level of income as well as physical access and affordability of specific modes of transport. Furthermore the findings from the study indicate that there are significant differences in how people from different provinces and income groups view and choose specific modes of transport based on personal, social and environmental factors. This paper provides an overview of the findings pertaining to these relationships and correlations between the different factors found to influence modal choice.

1. INTRODUCTION

Reasons as to how and why people make use of different modes of transport vary significantly and are deeply rooted in the way people perceive their world, in the way that they live, as well as their physical, social and economic circumstances (Guell et al., 2012). People choose to make use of public transport as it is available, save time in traffic, is clean, comfortable and efficient. Non-motorised transport is used for more or less the same reasons although available infrastructure and health benefits also play a big role in choosing to walk or cycle (Green, 2009; Guell et al., 2012). Guell et al. (2012) state that within transport research, travel choices are conceptualised as a rational choice, where decisions are made based on travel choices/options that minimises the travel time and other costs of travel. Other factors influencing travel choice includes individual characteristics, geography, attitudes and beliefs as well as the social and built environment.

Increased public transport usage is still considered the solution for South Africa's congested highways, negative environmental impacts, long travel times and high crash rates. Recent research (Mokonyama and Venter, 2007) however indicate that instead of seeing a decrease in private vehicle travel, purchasing of private vehicles is increasing.

This trend or phenomenon is observed despite the Government's long term vision for effective and sufficient public transport in South Africa. Walters (2013) states that previous South African public transport strategies envisioned a 20% mode shift for work trips from private vehicles to public transport by 2020. At this stage this is seemingly not happening. This study was the first of a kind for South Africa and people from all income and living areas were included in the study. The study investigated the knowledge attitudes and perceptions that people in South Africa hold with regards to different travel modes and their current choices as well as their perceptions regarding the availability of these modes. The study also presented a platform for people to provide details of how their preferred mode/s and public transport should function.

2. OBJECTIVES OF THE STUDY

In order to understand modal shift in South Africa better, this research study was conducted for the Department of Transport by the CSIR. The purpose of the research study was to prompt a better understanding of the reasons related to modal choice and modal shift in South Africa. The study investigated the underlying motives for changing or not changing from one mode of transport to another. Modal shift entails two components: a) moving commuters in South Africa from private transport to public transport and b) providing conditions whereby optimal use can be made of existing and current public transport available in the country.

3. STUDY DESIGN

A comprehensive literature review that highlighted local and international research related to known factors influencing modal choice and modal shift. The literature review informed the design of the qualitative study.

3.1. Why qualitative research?

Quantitative models can only offer limited explanations as to "why people choose to travel the way they do" and that social theory and models are important in understanding the complex social, environmental and psychological factors that come into play when choosing a particular mode of transport (Guell et al., 2012). This research paper describes the methodology followed and findings from the qualitative study. Politis et al. (2012) states that although quantitative measurement of things such as travel time and costs can be fairly easily determined, latent variables and psychometric properties are more difficult to measure. For this reason the researchers draw on social science theories to better understand the travel and mode choices made by people. Qualitative research designs are scientific research tools used to better understand a problem within a particular social setting. Qualitative research methods involve the systematic collection, organisation and interpretation of textual material derived from talk or observation (Malterud, 2001). Graneheim and Lundman (2003) states that reality can be interpreted in many ways and that the understanding thereof is dependent of subjective interpretation. Qualitative research is useful in reflecting the context and in highlighting the diversity of different focus groups and their settings. This gives researchers the opportunity to capture different perspectives and viewpoints that might give rise to new theories and constructs. According to Banyard and Miller (1998), qualitative research represents a different scientific paradigm. From this perspective the importance is not the scientific objectivity or interpersonal detachment, but rather the focus and filter of reality as seen through local and historical lenses. Qualitative approaches are not only tools to gather information within a specific context, but could at the same time be used for individual and group empowerment that could facilitate action and social change.

3.2. Focus groups as a qualitative research tool for the modal shift project

This study made use of focus groups in order to collect information pertaining to how and why South African people make certain choices with regard to modes of transport. As a qualitative research tool, focus groups bring together a number of participants to discuss topics of mutual interest to the focus group participants and researcher (Morgan and Spannish, 1984). Interaction in the focus group is valuable and provides information on a level not accessible through individual interviews. Whether people in the group agree on a topic or disagree on a topic the outcome is that it is inherently a product of the interaction within the group. Another valuable characteristic of a focus group setting is the questions and probing that might seem unimportant to participants but that generate a wealth of data in terms of the research question. The first question in the modal shift topic guide for example, "how do people in this community travel?" generated a lot of information needed for understanding the current conditions that in future could influence modal shift in the various areas visited. These discussions enabled researchers to explore and probe various factors and variables based on the initial discussion about current mode of choice. Focus groups provide the researcher with an opportunity to obtain opinions from more than one person at a time. Focus groups are useful in generating new knowledge as well as to support or reject information that is already known. In focus group settings participants have the opportunity to share their thoughts on a specific topic which sparks new ideas and generate discussions which in turn provide the researcher with answers and insight into the research questions.

3.3. Participant selection, demographics and geographic distribution

Participants (high, medium and low income participants) from rural, urban and metropolitan areas were sourced to participate in the focus groups. Demographic issues important for representation included gender, age, income, and disability. The sourcing of respondents took into account the following guidelines in each of the identified areas in order to ensure the respondents in the focus groups represent the low, medium and high income groups. The three income bands were defined in terms of distinct household income thresholds that exhibit unique response surfaces to household car ownership:

- A low income group of up to R3 000 per month where a change in household income yields small changes in household car ownership. Criteria for inclusion in low income group included respondents from areas identified or earmarked for inclusion in the Comprehensive Rural Development Plan (Department of Rural Development and Land Reform, 2010).
- Medium income between R3 000 and R8 000 per month, where a change in household income results in large increases in household car ownership. Criteria for inclusion in the medium income group included respondents from fixed work settings such as employees of organizations e.g. nursing staff at a hospital, etc. was invited to participate in the study. Respondents in these households should have been earning a salary for at least three years.
- High income above R8 000 per month, where on average households have at least one car per household. Criteria for inclusion in the high income group included: People who have just bought cars for the first time or who have changed their place of residence. People who use the newest modes of public transport including the Gautrain, Bus Rapid Transport system in the City of Johannesburg and the Business Express Train Services provided by the Passenger Rail Agency of South Africa.

Table 1 below illustrates the distribution of focus groups according to regions.

Income group	Rural	Urban	Metropolitan
High income	Paarl (Western Cape) Port St. Johns (Eastern Cape) (18 participants)	Polokwane (Limpopo) Mafikeng (North West) (17 participants)	Sandton, Johannesburg (Gauteng) Cape Town (Western Cape) (15 participants)
Medium income	Muyexe Village (Limpopo) Mokgalwaneng, Disake and Matlametlong (North West) (18 participants)	Witbank (Mpumalanga) Buffalo City (Eastern Cape) (32 participants)	Soweto, Johannesburg (Gauteng) Nelson Mandela Bay (Eastern Cape) (20 participants)
Low income	Riemvasmaak (Northern Cape) Shongweni (Kwazulu-Natal) (22 participants)	Bronkhorspruit (Gauteng) Bethlehem (Free State) (15 participants)	Winterveld, Tshwane (Gauteng) Kwa-Mashu, Ethekewini (Kwazulu-Natal) (17 participants)

A hundred and seventy four (174) people participated in this research. The number of participants per focus group varied between 4-18 persons, depending on the availability of participants for each area. The sample was sourced from all the nine provinces although not all provinces were represented equally.

Table 2 below gives an indication of gender participants across income groups and living areas.

Gender	Low income	Medium income	High income	Rural	Urban	Metropolitan
Male	35%	32%	54%	31%	52%	32%
Female	56%	59%	46%	61%	40%	63%
Not recorded	9%	9%	0%	8%	8%	5%
Total	100%	100%	100%	100%	100%	100%

Table 3 below gives an indication of participants' age groups across income groups and living areas.

Table 3: Percentage of age groups according to income and living area						
Age groups	Low income	Medium income	High income	Rural	Urban	Metropolitan
0-19 years	5%	7%	18%	2%	17%	7%
20-49 years	50%	45%	75%	44%	58%	61%
50-69 years	19%	25%	0%	10%	15%	27%
Older than 70 years	0%	4%	0%	4%	0%	0%
Unspecified	26%	19%	7%	40%	10%	5%
Total	100%	100%	100%	100%	100%	100%

3.4. Process followed

Two pilot focus groups were conducted in order to test the validity and reliability of the questions in the topic guide.

The questions developed for the topic guide related directly to focus group participants' choice of mode of transport. The questions explore reasons for currently using a specific mode of transport; factors that influenced past choices in shifting from one mode to another as well as factors that in future could induce modal shift. The topic guide was piloted in two separate focus group sessions. The topic guide focused the discussion on the following topics as depicted in figure 1 below. A total of 18 focus groups were conducted across the country.

3.5. Analysis of the data

Analysis of the data was conducted with qualitative software (ATLAS.ti©). The transcripts were analysed in terms of the topics probed in the topic guide, coded and then recoded in order to capture emerging themes across the different focus groups.

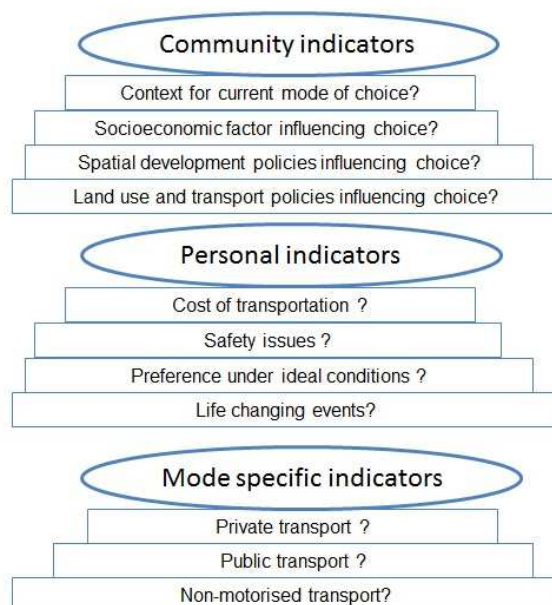


Figure 1: Topic guide structure

3.6. Limitations of the study

The availability of participants was dependent on the time of day or the area where the focus group was conducted. During school hours, representation of learners was less than during the school holidays. In rural areas the distance participants were required to travel also influenced participation from elderly people. The sample though, was representative of people who uses the different modes of transport for compulsory trips such as work and education. In terms of age and gender the sample sourced was considered to be balanced.

4. FINDINGS FROM FOCUS GROUPS DISCUSSIONS

4.1. Main factors influencing choice of mode according to income group

High income participants felt that they would rather pay more for public transport or pay the operational and maintenance costs of a private vehicle if this enabled them to travel to and from their destination as efficiently as possible. High income participants preferred direct routes. High income participants also felt that they would pay more for a mode of transport with which they do not have to transfer from one vehicle to another or from one mode to another. Convenience, in terms of the number of transfers, has a strong influence on the choice of mode. Participants with access to a private vehicle considered it inconvenient to walk *any* distance in order to access public transport. Respondents indicated that they would rather pay more for public transport that helps them to reach their destination faster. Lastly, safety and security issues were highlighted by high income participants. Safety on board taxis and buses was seen as being jeopardized by reckless and unsafe driver behaviour. Trains were associated with high criminal activities. The types of criminal activities perceived included mugging and harassment, which were strongly associated with overcrowding on trains. These factors were encapsulated by a focus group participant in a metropolitan area: *"I just hate public transport. There is no taxi that comes straight to my home, in town I wait in a long queue. Taxi drivers don't follow rules, taxi vehicles are not road worthy, it was raining and there was a hole on the roof of the taxi. In the inyathi vehicles it's like you are sitting on a toilet seat, they think they are doing you a favour. The driver attitude is bad, having your own car is better."*

Medium income group participants' highlighted affordability (cost) of transport; travel time as well as safety and security as main factors influencing choice of mode. Affordability of transport is considered the most important factor for choosing a mode of transport for medium income participants. A metropolitan medium income participant stated that: *"I travel mostly locally and to town. I use the train to go to Vereeniging because it is cheaper. To town I use a taxi because it is convenient; I only walk for about 2 minutes"*. In general taxis were considered the most expensive form of transport. Despite this, it was still the most accessible and most efficient way to travel from one area to another. Modes that have long travel times are viewed negatively. The choice against travel by train or bus is particularly influenced by the perception of long travel times and the fact that it is a scheduled service. Lastly security was associated with the level of perceived safety while travelling or waiting for public transport, the vehicle itself as well as driver behaviour. Non-motorised transport modes, walking and cycling were not considered a safe mode of transport by medium income participants.

Low income participants on the other hand were mostly concerned with the availability of transport in an area, the cost and affordability of the transport and lastly safety issues. In terms of the availability of transport (the choice between different modes) low income participants perceived it as limited in the rural and urban areas. The limited availability of different modes in an area restricts choice of low income participants even further as for example the rural areas, even for available modes, respondents indicated that they often have to wait for a long time for infrequent services, sometimes to the detriment of their

jobs. A participant from an urban area emphasised the following: *“Here we work for transport and transport is too expensive. We spent a lot on transport, R800 a month. For example if you earn R1200 you can spent 800 Rand of that on transport ... There should be a competitor to compete with buses and taxis so that the service is improved. If we had a choice we would opt for the train because it is affordable”*. Safety issues mainly revolved around poorly maintained vehicles that are seen as unsafe and while they do not result in mode shift, they results in low levels of satisfaction.

4.2. Factors influencing modal choice across income groups and living areas

Cost and affordability: Cost and the affordability of transport is an important factor for all focus group participants in all the provinces visited. Cost associated with different modes of transport differs from province to province and is linked to factors such as the distance to travel, number of legs of a trip, means to pay for the transport. Cost is relative to the distance travelled along with other issues such as the cost to transport luggage, shopping bags etc.

Availability and accessibility: Choice of mode is influenced by how far the mode of transport is from the community, how much it costs per trip to access that specific mode of transport as well as whether or not the people has the means to pay for additional trips to access his mode of choice. In metropolitan areas, the perception was that there is a wider choice of modes available. In high income rural and urban areas, choice of modes were limited despite the fact that participants might have the means to pay for their preferred mode of choice. Reasons for this varied between services (e.g. train, BRT etc.) that are not available to people, the topography of the areas and conditions of roads that would not for example allow buses to operate in certain areas.

Speed, distance, travel time and frequency of travel: The speed at which the mode travels was deemed important, for example the train is considered the most affordable option for travel, but considered too slow in comparison with other modes such as taxi and bus. This medium income respondent from a metropolitan area indicated that: *“The train, one can take if they are not in a hurry or if you want to save some money”*. Again this depends on where the train service is located. Both trains and buses are considered preferable modes of transport for long distance travel. For shorter distances taxis are used as the main mode of transport.

Convenience and comfort: Convenience was associated with two factors namely time and comfort. Taxis, as indicated above on are the most convenient mode of transport in all the provinces. Taxis are considered faster than buses and trains. It is possible to find taxis near to one’s house, place of work, etc. In most provinces participants felt that taxis are more convenient than buses because buses operate on a schedule. Buses have scheduled stops, which mean that the buses take considerably longer to travel from one destination to another. Buses are considered overcrowded in peak times and at specific times such as the end of the month. On the other hand buses were considered comfortable because there is significantly more space for luggage. Buses also provide an option to buy monthly tickets.

Gender: High income participants were willing to pay more for their preferred mode of transport for different reasons. It seemed that for high income male participants, travel time was important while for females convenience and accessing safe and reliable transport was important. Participants in KwaZulu Natal, was of the opinion that it is not considered safe for women to travel alone or to use public transport in the evenings while in the Eastern Cape it was not considered safe for females to travel on trains during the night. Also in the Eastern Cape the issue of female children was considered who are at risk when walking on their own due to the cultural practice of “ukuthwala”. This is a cultural practice, where a man “abducts” the female and then later negotiates regarding marriage.

Purpose of travel: Travel for work purposes differ from province to province. Self-employed people in rural or urban areas are required to obtain transportation to metropolitan areas where they are able to buy their goods in bulk. In order to transport goods back to their respective communities people need enough luggage space. Travelling for work within the area where focus groups participants live is dependent on the location of the work in relation to where the people live. In some areas one public transport trip (mostly by taxi) is sufficient to get to and from work. Travelling to work was closely associated with accessing different modes of transport, distance and the costs associated with traveling. In most areas bicycles were not a preferred mode of transport. The exception seemed to be in medium income urban areas, where a bicycle is associated with the ability to earn income e.g. doing deliveries.

Spatial and land use issues: Issues related to infrastructure deterioration or the unavailability of facilities and infrastructure were reason enough to influence participants to choose private vehicles for transport. The location and distance of transport services from main communities was problematic. In some places the location of the train station for example is 20-30km away from where most of the community members reside and is therefore not accessible without a taxi trip. The same was true for bus services. In especially low and medium income, rural and urban areas, people would prefer to make use of alternative transport options than taxis. If these preferred services were closer to where people lived and worked the participants indicated that they would definitely change the way they travel. Therefore in most parts of the country the public transport network was considered inadequate in that it does not cater for much of a choice between modes.

Customer satisfaction: Overall there was a strong feeling that there should be better communication on service delivery issues that affect peoples' daily lives. A low income, metropolitan participant indicated that: *"The owners of the taxis should be accessible to their customers so that they can know our needs and desires. Maybe we can form a people's forums which will voice transport issues that we experience in this area. We often experience a breakdown in communication between the driver and passengers. The conductors on the taxis are rude, they don't wash, they backchat. I personally don't like to sit next to the driver because of the duty of being asked to count the money"*. It was felt that there should be better communication regarding services between the operators and the communities in which they operate. This breakdown in the service is considered a major inconvenience to people as they then have to quickly make alternative plans to get to their destinations. People often purchase monthly tickets for example the bus service and then lose that money due to a break-down in the scheduled service. It was felt that especially scheduled bus and train services should be reliable.

Safety: Most forms of transport are considered safe. Taxis were considered as the most unsafe form of public transport and the reasons cited for this revolved around driver behaviour issues as well as maintenance and road-worthiness of vehicles. Safety in terms of crime was associated with time of day. In general travelling during the night time was considered more dangerous than travelling in the day. Safety was associated to specific modes of transport and not necessarily to infrastructure such as train platforms, bus stops and so forth.

4.3. Mode specific factors

The degree to which each mode of transport is preferred differs from province to province. In more affluent communities travel by private vehicle were favoured as a current mode of transport. Although the minority of participants had access to a private vehicle, many of the participants indicated that they would like to own and operate a private vehicle. The reasoning being that (Participant from a medium income group, urban area): *"If I have a car I have the freedom and convenience to go anywhere I want at any time but previously I was taking a taxi"*. Another participant from a high income metropolitan area indicated that:

“They buy cars because they want to use them for leisure and for personal business. When you use public transport your travel options are limited whereas if you have a private vehicle you can use at your own convenience”. In urban areas buses were also a preferred mode of transport. Across the country in all income groups it was firmly believed that buses should transport learners (scholars). In a high income rural area the following was said regarding private transport, current transport and buses: *“I use a taxi because I don’t have my own private transport. I also use bakkies because I come from the rural areas. Buses are not used. The buses are not being used for transportation of people. The buses are being used for transporting scholars”.*

Taxis are by far, considered as the most accessible form of transport in all the provinces visited. Taxis are readily available to people who have to travel for purposes that include work, leisure, shopping, school and recreation. A low income participant in a metropolitan area indicated that: *“We use taxis because they are easily accessible and always available”.* Taxi services in rural and urban areas were the most prevalent form of transport. Partly, this is due to other modes of transport not being readily available. In the rural provinces, people are reliant on taxis (often bakkie type taxis) that are capable of driving on the rural and gravel roads which are generally considered not to be well maintained. A high income rural participant said: *“I use a taxi because I don’t have my own private transport. I also use bakkies because I come from the rural areas”.* The condition of the roads is influenced by the area (topography), weather conditions (rain etc.) as well as the frequency with which these roads are used. In the urban areas, taxis are considered a fast and efficient mode of transport as taxis are available in most parts of the community and transport/delivers people fairly close to their end destinations. Taxis are preferred because they are not a scheduled service that people have to wait for. Convenience and timing was a main consideration in choosing taxis as a mode of transport. The cost of travelling by taxi varied from province to province as well as the distance to be travelled. Therefore although taxis are currently favoured there are indications that if other transport modes were on time, convenient and affordable, people would rather make use of other modes. Especially high income participants from different living areas indicated that if they have a choice, they would rather make use of alternative transport such as their own vehicles, BRT and Gautrain in metropolitan areas or private transport in rural and urban areas. Safety of passengers, driver attitude and driver behaviour were cited as problematic by participants across all income groups and living areas.

Buses are considered an affordable mode of transport for travel. Buses are considered convenient in terms of space for people along with their luggage and shopping bags. Only some of the areas visited have dedicated bus services. In the rural areas buses are not available due to poor road conditions or due to no scheduled services in the area.

Travelling by train was only an option if the people have access to a rail service. Travel by train is considered comfortable; there is enough space for luggage/shopping bags etc. People are able to relax if the train is not overcrowded. Travel by train was also cited as the most affordable option travel. When comparisons were drawn between travelling by train and travelling by taxis, trains were cited as the most affordable public transport option if it is accessible (close to the community) or available at all.

In terms of private vehicles in those areas where people have access to private vehicles, the reasons for using a private vehicle associated with those reasons given by participants preferring to make use of taxis (accessible, available etc.). These reasons included that it was convenient to own your own vehicle as you are not dependent on time schedules, it is considered “quicker” than other modes of transport and is accessible and available anywhere at any time. In urban and metropolitan focus groups the issue of trip chaining made the use of a car to be favoured as the public transport cannot offer such from a point of a participant. A private vehicle is considered ideal, if it can be afforded.

Non-motorised transport: In most communities, across all income groups and living areas people walk. This included walking to the nearest public transport; walking because they did not have the monetary means to pay for public transport. Walking was closely associated with the distance one has to walk in order to first access public transport and was closely associated with the means to pay for transport-if you don't have money, you walk. This was confirmed by a participant from one of the medium income metropolitan areas: *"If you don't have money for transport you have no choice but to walk"*.

In most communities' learners, walk to school: distances are often far and the topography of the environment makes it difficult for learners to walk. This rural high income participant alluded to the dangers associated with walking in the Eastern Cape: *"Children have no choice but to walk to school and they have to cross rivers during the rainy season. They end up turning back and missing classes because they cannot cross the river. The little children especially the ones in primary have some difficulties walking to school because the area is dense with forest and children have to walk through risking being raped, uthutwala (abduction)"*.

Cycling was not considered an option in most of the areas. Reference to the DoT Shova Kalula programme was met with criticism in areas familiar with the programme and scepticism in the areas that don't know about the programme. In areas already familiar with Shova Kalula programme it was indicated that the programmes are not deemed sustainable due to high maintenance costs, no support services and no clear management of the programmes. In general cycling is considered expensive and dangerous. Cycling is considered dangerous in terms of sharing the road with motorised vehicles and being involved in crash. This medium income urban participant indicated that: *"There are not many people who cycle. It is dangerous because you might get injured or even killed on the bicycle"*.

Cycling is not considered a reliable mode of transport and often distances to travel are too far. Cycling is also not considered a preferable mode of travel for females. Cycling was also considered "not option" because *"it is poor people who travel by bicycle"*. In only two of the areas visited, one low income metropolitan area, and one medium income urban area was cycling considered to be good for exercising and income generation (deliveries) purposes.

Donkey-carts were also not really cited as a mode of transport. In most of the areas, mentioning donkey carts were associated with the transportation of goods and not people. In only one low income rural area and in one medium income urban area donkey-carts were used to transport sick people or transport people from one community to another for recreational purposes.

4.4. Special road user groups

From the focus group discussions it emerged that there is at least three special types of transport user groups that need to be defined. Firstly, elderly people and disabled people were clustered together when discussed in the focus groups. It was mentioned that there is no dedicated or specific transport for disabled and elderly people in most of the focus groups conducted. Secondly, emergency transportation for ill or injured people were deemed problematic and highlighted as an issue in some of the areas visited. The third category is that of learner transport which was defined as private (parents contracting learner transportation from local operators) or learner transport provided by the Department of Education (DoE) (subsidised contract learner transport). In some communities' visited both of these types of learners transport were present. Learner transport is for the purpose of this document also included as a "special" group of people as learner transport is not fixed or associated with only one specific mode of transport.

Disabled people: In only one of the focus groups (metropolitan, low income area) did participants indicate that public transport were accessible to disabled people. Buses in this

community were modified, and suitable for disabled passengers. In rural, urban and all the other metropolitan areas, it was indicated that public transport is not suitable. A low income rural participant indicated that: *“Physically disabled people have no choice but to use the same transport used by able bodied people. There are no facilities for the disabled; even the ones that are on the bus are not good enough. Here there are not many people using wheelchair. Even if we have disabled people we need to think about their needs”*.

Emergency services: Emergency service transport in events of serious illness or injury were described as problematic, especially in rural and in some of the urban areas, across income groups. One medium income rural participant described the situation as: *“Travelling to hospital is a problem, especially if it is an emergency. An ambulance would take 5 hours to arrive”*.

Learner transport: Personal costs associated with learner transport are high and participants prefer subsidised transport for children to school. The implication is that only parents who have the means to pay for such a service can make use of the second service. In all other instances children walk to school. In some of the areas, schools are close to where the learners stay but in the majority of the rural areas, schools are far, and learners have to walk some distance to and from school. In a few of the focus groups it was indicated that some of the parents send their children to “better” schools outside of the community. These learners make use of private vehicles, buses and trains to get to school. In the minority of the communities visited the focus group participants stated that some learners attend boarding schools in other areas. It was interesting to find that in one of the low income rural areas, learners stayed in boarding schools because of a lack of transport that could ferry children to and from school every day as well as due to the condition of the road. In the other low income, rural area, children attended boarding school, because their parents wanted a better education for the children.

5. CONCLUSION

Current factors influencing choice of mode as well as factors influencing the *choice to shift from one mode* to another were explored utilising focus groups as a qualitative data collection method.

Modal choice was found to be associated with a community/income group “perceived freedom” to make choices. This was again associated with the level of income as well as physical access and affordability of specific modes of transport. Findings from this research indicated that firstly there is a diversity of views with regard to mode choice in South Africa. There also seem to be a large void between what is “available” to people and what people “prefer” as their ideal mode of transport. It was interesting that different communities in different provinces of South Africa (regardless of income) were only knowledgeable and able to comment on modes of transport that is known to them. With the exception of perhaps the metropolitan areas, communities were not familiar with the concept of integrated transport networks. The findings from the study indicate that there are differences in how people from different provinces and income groups view and choose specific modes of transport based on personal, social and environmental factors. It was also found that the less you earn and depending on where you live, your choice becomes limited.

6. RECOMMENDATIONS

The research indicates that there is an opportunity for the Department of Transport to better understand the diverse communities that the Department serve. One way to embark on such an endeavour is to implement a panel study to assess the feasibility of such networks in even remote areas of the country. In order to promote public transport the Department it is essential that public transport be promoted as one service.

REFERENCES:

- Banyard, V. and Miller, K.E, 1998. The powerful potential of qualitative research for community psychology. *American Journal of Psychology*, 26 (4), p. 485-505.
- Department of Rural Development and Land Reform: Comprehensive rural development programme South Africa 2010. Retrieved 27 October 2010, from http://www.ruraldevelopment.gov.za/DLA-Internet//content/document_library/documents/CRDP-Documents/Report.pdf
- Graneheim, U.H. and Lundman, B, 2003. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24, p. 105-112.
- Green, J, 2009. Walk this way': Public health and the social organisation of walking. *Social Theory & Health*, 7 (1), p. 20-38.
- Guell, C., Panter, J., Jones, N.R. and Ogilvie, D, 2012. Towards a differentiated understanding of active travel behaviour: Using social theory to explore everyday commuting. *Social Science and Medicine*, 75, p.233-239.
- Malterud, K, 2001. Qualitative research: standards, challenges and guidelines. *The Lancet: Qualitative Research Series*, 358, p. 483-488.
- Mokonyama, M. and Venter, C, 2007. Forecasting household car ownership in SouthAfrica: alternative models and future trends. *Journal of the South African Institution for Civil Engineering*, 49(3) p.2-10.
- Morgan, D. L., & Spanish, M. T, 1984. Focus Groups: A New Tool for Qualitative Research. *Qualitative Sociology*. *Qualitative Sociology*, 7(3) p.253.
- Politis, I. Papaioannou, P. and Basbas, S, 2012. Integrated Choice and Latent Variable Models for evaluating Flexible Transport. *Research in Transportation Business & Management*, 3 p.24-38.
- Walters, J, 2013. Overview of public transport policy developments in South Africa. *Research in Transportation Economics*, 39 p. 34-45.