

AN OVERVIEW OF RECENT RESEARCH INTO RURAL TRANSPORT MATTERS: A SOCIOLOGICAL PERSPECTIVE

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ABSTRACT

This paper presents findings from and commentary on a selection of four recent research projects that were carried out by students from the Sociology Discipline at the University of Natal with the financial and other support of the National DoT's Eastern Centre of Transport Development (ECOTD). The research projects selected for presentation are all based on transportation related issues facing residents of rural cum semi rural areas in various parts of KwaZulu Natal.

Obviously the scope of these investigations is limited by the constraints inherent in students' independent work and hence the results cannot be expanded to give generalities. Nonetheless, the projects are considered to give a useful initial insight of rural transport issues.

People commuting from a rural area of Vulindela to the urban centre of Pietermaritzburg are the subject of the first two projects. Whilst one project dealt with users of minibus taxis, the other dealt with bus passengers. The main issues arising from these projects were the cost and low level of public transport services. However, the basic pattern of land use development - low residential densities and large distances between settlements - are not conducive to the provision of a high standard of road infrastructure or a viable public transport service.

Elderly people accessing state grants are the subject of the third project. Again travel costs were a major issue with this group of people: low incomes and relatively large fares must inevitably result in a cause for concern. However, the main issues for these people related primarily to the conditions under which they had to queue for grant payments at the end point of their trips.

The fourth and final project deals with the provision of transport services as opposed to the usership issues of the other projects. In this case the subject of study is small hauliers. As may be expected the issues arising are similar to those pertaining to service users. The problems created by the pattern of land use development in rural areas are a common denominator - as are low income levels.

It is suggested that attention should be given to the possibility of a change in settlement patterns but that the social implications of such a change are examined very carefully. Experience shows that many social disasters were created in the latter half of last century in Europe by moving people out of their communities and into high density developments.

1. INTRODUCTION

The ECOTD is one of three regional centres that have been established by the National DoT with the aim of developing transport professionals to meet South Africa's current and future needs. Since transport is a multidisciplinary subject, the centres involve various fields of study including- inter

alia - the "classical trio" of economics, engineering and land use planning. However, the ECOTD differs from the other centres in that it also includes the discipline of sociology. This, the "human element", is seen to be particularly important in the treatment of road safety, transportation and land use planning as well as public transport. Funding from the National DoT facilitated the development of a new sociology curriculum at honours level that concentrated on transport related issues. One of the main objectives of this honours programme was to produce students who would subsequently pursue a "sociology and transport" masters programme. This paper presents an overview of recent investigations carried out by four graduates of the "sociology and transport" programmes; two at honours level and two at masters level.

These four investigations have the common basis of dealing with transportation issues that face people who live in rural cum semi rural areas. Obviously the scope of these investigations is limited by the constraints inherent in students' independent work. Consequently, the results cannot be expanded to give generalities. Nonetheless, the results are considered to give a useful initial insight of rural transport issues.

Three distinct viewpoints are covered by the four investigations. Firstly, attention is focused on commuters in a semi rural area who use bus and minibus taxi services (Ngcobo, 2001 and Wanda, 2001). By way of contrast, Nzama's (2001) dissertation is concerned with transport problems experienced by the elderly in accessing social services in rural areas. Finally, Majozi's (2001) dissertation deals with the issues in transport service provision by small hauliers in rural and also in urban areas. For comparison, reference can be made to an earlier "sociology and transport" programme based paper by Roebuck and Marcus (2001) that dealt with goods transport in rural areas from the users point of view, ie small traders.

2. COMMUTERS

It is noted that the definition of the term commuter has mutated in recent years; the National Land Transport Transition Act (2000) for example restricts the term to public transport users "...traveling daily between home and work...". In this paper the more traditional definition is adopted: a person who travels between home and work on a regular basis - using any mode.

2.1 Study Area and Populations

Both Ngcobo's (2001) and Wanda's (2001) investigations pertain mainly to commuters normally resident in the Vulindela magisterial district - a rural cum semi-rural area situated some 40 kilometres west of Pietermaritzburg. Transport services in Vulindela include buses and minibus taxis and hence the investigations covered both modes.

The people interviewed in the studies were found to be from the low-income group - a fact to be expected since they had no option but to use public transport. Typically the respondents interviewed were employed as domestic workers, shop assistants, security guards and the like.

2.2 Trip characteristics

Travel distances varied according to two main factors. Firstly, the respondents destination, which would typically be in the centre of Pietermaritzburg or in a suburb. Secondly, some of the respondents only traveled from Vulindela at the weekends because they found it necessary to stay away from home during the week. This matter is discussed further in the commentary section. However, most of the respondents had a one-way trip of some 30 or more kilometres. In many cases the respondents had to walk considerable distances as part of their commuting trips. This situation arose either due to the need to save costs or because the commuters lived some distance from tarred roads and the transport services did not (would not) run on gravel roads. Consequently, journey times often ranged up to two hours - each way.

The cost of fares obviously varied according to trip distance and also the number and type of modes that had to be used to complete a journey. However, at the time of the surveys, in 2001, minibus taxi users were paying five rands each way from Vulindela to the centre of Pietermaritzburg, ie a total fare of ten rands per day for daily commuters. In addition, a "seasonal surcharge" of 50 cents per trip was reported to be applied in parts of December and January. This matter is discussed further in the following section.

2.3 Commuters' Issues

Fares are obviously an issue with the commuters since the cost per day - ten rands or more - is a significant part of the daily income of low income workers. Not only is the cost a burden, the service provided is viewed by the commuters to be less than satisfactory. For example, minibus taxi users complained about issues such as crowding, walking distances to routes, lack of access along routes, low frequency services and lack of services late evening and early morning. Moreover, the commuters were concerned about the lack of liaison/communication systems for voicing their concerns to the operators/owners. Indeed it appeared that the prevalent feeling was that they would suffer harm if they made complaints. As an example, the 50 cents seasonal surcharge is levied in order to pay a "bonus" to taxi owners. On challenging this practice a commuter reported that he was made to appear to be a "bad man" in the community because he was challenging the traditional authority in the area.

Bus users generally suffered from the same problems as the minibus taxi users - except for the "bonus" payments and the fear of coming to harm if they complained. However, bus drivers were reported to be abusive at times when passengers complained about the service.

2.4 Discussion and Comments on Commuters

A low level of supply of transport capacity is perhaps the basic problem being experienced by these commuters. This low supply results in crowding, inability to board transport at places other than at termini and a lack of services at off-peak times. However, this situation can be expected to arise since the supply of transport services - especially profit oriented minibus taxis - is related to the level of demand. In this case the total demand is implicitly low since only a small number of vehicles serve the area and being rural the densities are low. To look at the situation another way the pattern of demand is probably the least conducive to the operation of a cost effective public transport service.

Long walking distances and the need to walk to tarred roads to reach transport services are largely to be expected in a rural situation. Low residential densities and the cost of linking all settlements with tarred roads being the stumbling blocks. Whilst these problems could be overcome with "unlimited funds", pragmatism suggests that a different solution must be reached.

It is noted that some of the commuters are resolving some of their problems themselves. "Weekend" commuting - forced on shift workers by the lack of off-peak services but undertaken voluntarily by others - obviously reduces travel costs and time. Moreover, these commuters may also be able to have access to higher levels of transport service if they reside in areas of high transport demand. Unfortunately everything has its price and the resulting separation can be expected to give rise to social problems.

A solution to some of the problems being experienced by commuters in rural areas is to change the pattern of land use development over time and indeed South Africa does have a somewhat distorted pattern of development - arising from the Group Areas Act and similar legislation. However, before embarking on long term difficult plans to effect change, the aspirations of the commuters need to be identified.

For example, do they prefer to live in rural areas and hence would like to have work opportunities moved closer to home or are they victims of circumstance and cannot shift their place of residence nearer to work?

The seeming "oppression" of the commuters by the operators is a cause for concern. Experience shows that this may not be a feature that is unique to rural areas but on the other hand it is not universal. Perhaps a solution in this case could be the formation of "commuter associations".

3. ACCESS TO STATE GRANTS

3.1 Study area and population

Nzama's (2001) investigation pertains largely to elderly people residing in Maphumulu - a rural area situated some 40 kilometres from Tugela Mouth. The travel issues studied relate to collection of pensions and/or similar state grants and also to attending health care centres. In this paper, however, attention is focused on traveling to collect pensions and other state grants since this is undertaken on a regular basis and hence the problems experienced are on-going.

A sample of 170 people was taken of whom over 80% were female and 85% were aged over 60 years. Most of these people, over 75%, were not literate and for 90% of the sample, the pension or other state grant was the main source of income for their household. Generally, other household support was derived from very small-scale agricultural activities. Over a half of the people interviewed were taking care of young children - because their parents were sick, unemployed or had died - and/or unemployed adults. Although not a transport issue per se the question arises as to what will become of these dependents when the elderly people die and hence the pensions will no longer be paid?

To put the travel issues into perspective it is considered necessary to review the general health of the people interviewed. In this regard little more than 10% described themselves as being "in good health", most described themselves as being sick to very sick - high blood pressure, diabetes and arthritis being commonly cited conditions.

3.2 Trip characteristics

The pensions and grants are paid out on a monthly basis from a series of paypoints. Although these paypoints are distributed around the study area, most of the interviewees were traveling over ten kilometres from their homes to reach a paypoint. However, some people were traveling as far as Ladysmith and Durban - because they had moved home and had been told by the payout clerks that the grants would stop if they changed paypoints. Over a half of the interviewees walked to the paypoints; of those traveling less than ten kilometres the majority walked because of the cost of using motorised or other wheeled transport.

Minibus taxis were the main mode of motorised transport used by the respondents whilst some used hired cars. Many of those people using minibus taxis had to walk significant distances - taking up to an hour or more - because of the difficult access conditions. It is interesting to note that five per cent of the interviewees were transported to the pay points in wheelbarrows - a service that had to be paid for. On the subject of payment the average cost of traveling was reported to be in the region of R20 with most people paying less than R70. However, those people who were traveling out of the study area were paying some R200 per return journey.

3.3 Grant Receivers' Issues

The main transport issue of the people involved in this study is the cost of traveling to the pay points. Also, many respondents were sensitive to bad weather conditions since these obviously have a particularly adverse effect on, mainly elderly, sick people walking on untarred roads.

Additionally, robbery was reported to be a problem on the return trip from the payout points. However, most of the complaints pertained to various aspects of waiting/queuing at the paypoints. Although not strictly a transport issue it has a significant effect on people's round journey travel times. Time spent in queues was raised as a major issue; over a half queued for more than an hour and a quarter queued for more than five hours. This situation is exacerbated by the lack of seating and toilet facilities and also the lack of shelter from the sun or rain. A further cost issue was raised in that it appears that local councilors charge a two rand "queue levy" to pay for queue control and also to resolve any problems of non-payment of pensions by the authorities.

3.4 Discussion and Comments on Grant Receivers

The situation for the grant receivers in Maphumulo is similar in many respects to that for commuters in Vulindela; long walking distances and the need to walk to tarred roads to reach transport services. Unsatisfactory as they may be - especially for people who are elderly and/or not in good health - these conditions are largely to be expected in a rural situation where residential densities are low and settlements are scattered in difficult terrain. However, the main issues are not seen to be transport related as such. "Bridging difficult gaps" with transport systems is unlikely to be the optimum solution to cost reduction and waiting times. It is suggested rather that attention is given to the possibility and acceptability of a change in settlement patterns and also possible changes to the system of grant payments.

4. SMALL HAULIERS

4.1 Study area and population

Majozi's (2001) investigation is concerned with people operating small haulage businesses in three different types of area: the urban centre of Pietermaritzburg, Greytown - a rural/market town, and the rural area of Maphumulo - the subject of Nzama's (2001) study. Although the areas in which these businesses are operated are ostensibly very different, there are many similarities in the study population's circumstances and issues. Some differences do arise however - as highlighted in the section dealing with the hauliers' views.

A sample of some 148 haulage enterprises formed the basis of this investigation: 38 from Pietermaritzburg, 50 from Greytown and 60 from Maphumulo. All of them may be described as micro cum survival enterprises that were embarked upon either as an alternative to unemployment or because the operation of a haulage business was seen as a means of improving living standards.

With regard to demographics, the owners were mainly African males with an average age of some 40 years. Most were married and the family size was mainly four to five people. Some 60 per cent of the owners were functionally literate and 80 per cent had work experience prior to establishing their haulage business. However, the prior work experience was typically unskilled though some were retrenched teachers. In most cases, haulage was the only source of family income.

4.2 Business characteristics

Nearly two thirds of the haulage enterprises are "one man businesses" though the balance employ one to two people thus providing employment for a further 100 or so people. However, most of the employees are family members - a situation that helps to maximise household income. Consequently, although various definitions of business size are in use (small, medium, micro etc) these enterprises are largely the absolute minimum, ie one person, that can exist. As predominantly "one man businesses", they are all restricted to operating one vehicle and in keeping with the small scale enterprises the vehicles used are light delivery vehicles in the half to one ton range.

Over a quarter had been in business for less than a year at time of the investigation and nearly two thirds had been operating for one to four years. Consequently, there is some question about the sustainability of these enterprises.

With regard to the nature of the businesses, nearly a half would haul "anything" - so long as it paid. However, some of the hauliers tended to concentrate on specific goods - such as perishable foodstuffs and beverages. Other typical payloads included building materials and livestock. Additionally, some of the hauliers would carry people - primarily the Greytown and Maphumulu operators. Passenger transport provided mainly to serve infrequent trips - such as those to pension payout points and health services -as well as regular trips to schools.

Considering financial aspects, revenue was reported to vary according to season with notable increases around Christmas. In a "typical" month, however, over 80 percent of the hauliers reported revenues of R2000 per month or less and just over ten per cent received more than R5000 per month. Estimating true net income is complicated by the fact that over 80 percent of the hauliers did not keep records of income and expenditure.

4.3 Hauliers' Views and Issues

In spite of the seeming low incomes, the majority of the hauliers perceive that they are "doing well to very well" whilst about a third feel satisfied but still think that there is room for improvement. Less than ten per cent reported that they considered that they had a bad performance. From this basis, a half of the hauliers see that their enterprises offer themselves and their families more opportunities than they would have as employees. However, over a third were encouraging their children to gain a "good education" so that they would not have to work in the family business.

These small enterprises face a range of problems some of which vary in degree according to the area of operation. As may be expected, however, the main problem common to all operators is that of raising the necessary capital to purchase a vehicle. Very few used bank loans - for obvious reasons. Most of the hauliers obtained their capital from savings, retrenchment payments, borrowing from relatives or other "informal" sources.

Looking at factors that were perceived to inhibit growth of the businesses, these varied in extent according to the area of operation: urban, rural town and rural. All of these small hauliers were providing a service to people on low incomes and hence the hauliers saw their incomes as being inextricably linked to the prospects for their clients. Just over a third of the urban hauliers deemed this to an inhibiting factor whilst over a half of the rural hauliers voiced this concern. The restricted market - community size - that was served received similar ratings. With regard to infrastructure problems, as may be expected the rural operators deemed this to be a much greater problem than did the urban operators: over a half versus one fifth respectively. However, crime as a growth inhibitor reversed the trend in that over a third of urban hauliers cited this as a problem versus just over a quarter of the rural hauliers.

4.4 Discussion and Comments on Hauliers

Without exception, these enterprises were established either out of necessity or because the people concerned perceived that their business would support a better standard of living than would formal employment. Although some of the hauliers did not intend to operate their businesses into the long term others did so. However, most of the businesses have not been operating for very long and hence there is some question about their sustainability. This problem is discussed here from two sides; likelihood of continuing income and capitalisation.

Considering sustainability of income, there must be some doubt about the situation in the rural areas.

The major issue here is seen to be the underlying poverty of the majority of the rural residents since they provide the market base. Moreover, loss of grant income from the elderly can be anticipated in the not too distant future.

Unlike the small traders discussed by Roebuck and Marcus (2001), these small hauliers require a substantial amount of capital to purchase the "all essential" vehicle. Obviously these vehicles will need to be replaced and/or undergo major repairs at some stage. The problem here is seen to be the low gross revenue that most of the hauliers receive. This revenue has to cover all direct operating costs plus wages in some instances whilst providing an essential income to the owners in all instances. There is some doubt, therefore, that money is being set aside for vehicle replacement and/or that there is sufficient net income to service a loan. Most of the hauliers in this study used savings or retrenchment payments to finance their businesses initially. Obviously such funds are unlikely to be regenerated and hence it is possible that a number of these businesses will cease when the time comes for vehicle replacement.

5. CONCLUSION

As stated initially, the research programmes reported on here were constrained in extent.

However, the following major transport related issues are considered to arise from these studies.

- Virtually all of the people who formed the subject of the research discussed here can be described as being "low income". Moreover, for all these people transport is essential to them obtaining an income and the cost of this transport is to say the least significant.
- The lack of or low standard road infrastructure gives rise to high costs, long travel times and difficult travel conditions for many people. Obviously, the greater the distance between a person's place of residence and a tarred road, the greater are the difficulties.
- Sustainability is in question for the communities that are dependent on state grants and also for the small hauliers. To a certain extent these are linked because the rural small hauliers are dependent upon the welfare of the rural communities.
- The basis of many problems for the people reported on in this paper is seen to be the basic nature of rural areas. Settlements are scattered resulting in low densities that do not support a high level of transport service or infrastructure. In consequence, people tend to have to travel long distances at high cost and often under arduous conditions. As discussed above, "bridging difficult gaps" with transport systems is unlikely to be a pragmatic let alone optimum solution. It is suggested rather that attention is given to the possibility of a change in settlement patterns. However, it is imperative that the social implications of such a change are examined very carefully. Many social disasters were created in the latter half of last century in Europe by moving people out of their communities and into high density "modern" developments.

6. ACKNOWLEDGEMENTS & DISCLAIMER

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Biography

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... born and educated in England obtaining a Bachelor's degree in Civil engineering, a masters in the economics of highway design and a PhD in traffic simulation.

Experience commenced in contracting, dealing with cable and water tunnels, followed by employment in a local authority – latterly as County Road Safety Officer. Came to South Africa to work at the CSIR in Pretoria then moved to a consulting practice in Durban.

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