CRIME AND CRIME PREVENTION ON PUBLIC TRANSPORT – REDUCING CRIME ON PUBLIC TRANSPORT IN SOUTH AFRICA APPROPRIATENESS OF CRIME PREVENTION STRATEGIES

OLIVER PAGE

CSIR/TRANSPORTEK, PO Box 395, Pretoria 0001
Tel: 012 841 4362, Fax: 012 841 4054, Email: opage@csir.co.za

1.   INTRODUCTION

Durban UniCity (DUC), the third largest metropolitan area in South Africa, covers an area of approximately 2,300 square kilometres and has an estimated population (year 2001) of 3.02 million persons[1]. The DUC is also one of the major tourist, convention centre and transport hub locations in the Southern African region.

With regard to the travel needs of the DUC population, a 1999 study revealed that approximately 56 per cent of all peak period person trips in the metro area were by public transport, an estimated 90 per cent or more of the passengers being low income travellers[2].   Public transport continues to play a major role in meeting the travel needs of the majority of DUC residents. Nevertheless, the potential for travellers being affected by crime whilst undertaking their journey is very real.

In collaboration with the Human Sciences Research Council (HSRC) the CSIR completed a twenty-four month study (ending in October 2000) on crime and crime prevention on board public transportation in three South African cities, namely: Pretoria (Belle Ombre Modal Interchange (MI)), Durban (Berea Road MI) and Cape Town (Wynberg MI). This paper presents a discussion of the results emanating from the Durban Commuter Survey (conducted in October 1999).

2.   CONTEXT

The South African Government, through its White Paper on National Transport Policy (1996)[3], places a high value on the level of service afforded to all public transport users, where the Government envisages a system that should:

'Provide safe, reliable, effective, efficient and a fully integrated transport operations and infrastructure which will best meet the needs of freight and passenger customers at improving levels of service and cost, in a fashion which supports Government strategies for economic and social development whilst being environmentally and economically sustainable.'

To consolidate the National Government's view and commitment to public transport provision as contained in the above statement, recommendations emanating from the Durban Inner City Interim Transport Plan (January 1999) emphasised that there was a need for the Durban Metro Council (now renamed the DUC) to[4]:

- Actively promote the use of public transport in preference to cars;
- Identify and implement steps to increase commuter rail usage in the Metro area, and
- Develop strategies to encourage commuters using public transport to continue doing so.

In order for the DUC to realise the above recommendations there is a need for formal public transport stakeholders to change negative commuter perceptions about public transport, as well as for both formal and informal stakeholders to become actively involved in reducing the menace of crime on public transport.

3.   OBJECTIVE

This paper seeks to assess the appropriateness of 'operational' crime prevention strategies that have been used by both the transport providers and commuters to reduce the incidence of crime on public transport (with a focus on commuter rail). With respect to the term 'appropriateness,' the following discussion will concentrate not on the financial cost implications of crime prevention strategies on public transport but on commuter's acceptance of and response to such strategies. The objective of this paper is therefore to:

- Present an overview of the types of crime (and the public transport locations where they were perpetrated) that have affected commuters in the DUC;
- Determine the appropriateness (in a South African context) of some of the many crime prevention strategies that are available, and
- Recommend strategies that can be engaged in to increase the responsiveness of commuters to crime prevention initiatives.

4.   METHODOLOGY:

The methodology used in the study was primarily derived from quantitative methodologies, e.g. surveys of commuters; supplemented by in-depth on-the-spot observations and discussions with all the key stakeholders. In addition, various documents and the internet were consulted to supplement the information gained.

5.   THE DURBAN COMMUTER SURVEY

In October 1999 the CSIR undertook a survey of Durban commuters to ascertain the incidence of crime affecting public transport users.

The objectives of this survey were to determine:

- The extent of crime experienced by commuters, either whilst getting to and from the system, travelling on the system or being in the system (e.g waiting for a taxi);
- The extent of crime witnessed on the transport system, and where exactly the crime had been witnessed;
- The types of crimes perpetrated and witnessed on the system;
- The level of reporting of crime being subject to it or having witnessed it, and lastly
- Commuters' views on which agency they hold responsible for their travelling safety.

The methodology utilised in this survey was the personal interview technique, which was based on structured questions contained in a survey form. The enumerators followed the procedure that:

- All commuters in all areas within the study area were potential interviewees;
- Interviewees were to be selected to cover the range of individuals using the Berea Road Modal Interchange, in terms of their race, gender, age, etc., and
- All demographic groups (except persons under the ages of 14 years) of the population were to be given the opportunity of being interviewed.

6. SURVEY CHARACTERISTICS

Key survey facts are summarised as follows:

- The survey took place (from Wednesday 20th October to Wednesday 27th October (excluding Saturday and Sunday) in and around the Berea/Warwick Avenue Junction area of DUC. This area falls entirely within the Central Business District (CBD);
- The Berea/Warwick Junction area represents the busiest MI in the DUC;
- 1,908 persons were interviewed, of which 1107 were male (58 per cent) and 801 were female (42 per cent). This represents approximately half of one per cent of the estimated 300,000 persons who pass through the area on a daily basis;

Figure 1 – The Durban Commuter Survey Study Area

- Of the 1908 respondents, 303 had personally been victims of crime on public transportation. The types of incidents experienced by these respondents are presented in Figure 2. This result indicates that approximately 16 per cent or 1 in 6 of the respondents interviewed had personally been a victim of a criminal incident. With regard to gender breakdown, 100 respondents (33 per cent) were female and 203 respondents (67 per cent) were male[5], and
- All modes of transport pass through the study area, including Spoornet heavy rail services,
- The majority of suburbs/townships in the DUC can be reached directly from the study area by public transport.
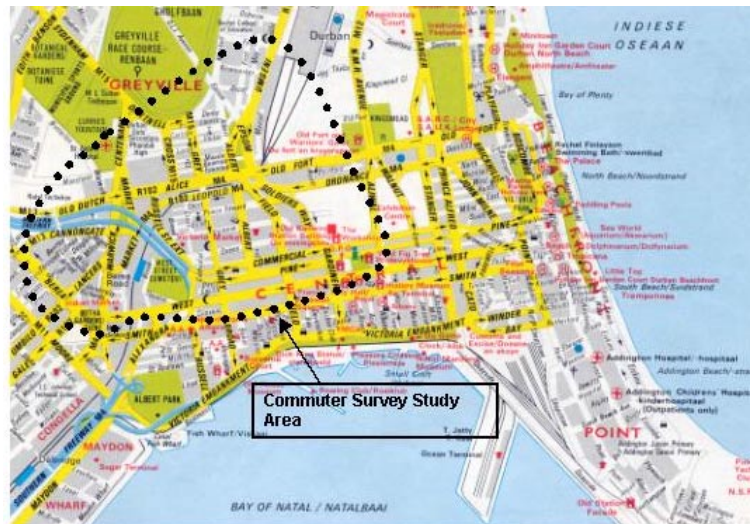
7. VICTIMS OF CRIME

Key statistics with respect to respondents who had personally been subject to a crime incident whilst using public transport in the DUC, can be summarised as follows:

- The 303 victims surveyed experienced a total of 487 incidents. This represents an average of 1.6 incidents per respondent who had been a victim of crime. It should be noted that, of the 303 victims surveyed, each respondent may have a been victim to more than one criminal incident in the preceding 9 month period (January – October 1999), or on the other hand, more than one crime may have been committed at the same time, e.g. bag snatching and stabbing. In this analysis each incident was counted separately. Thus the number of incidents is more than 303.
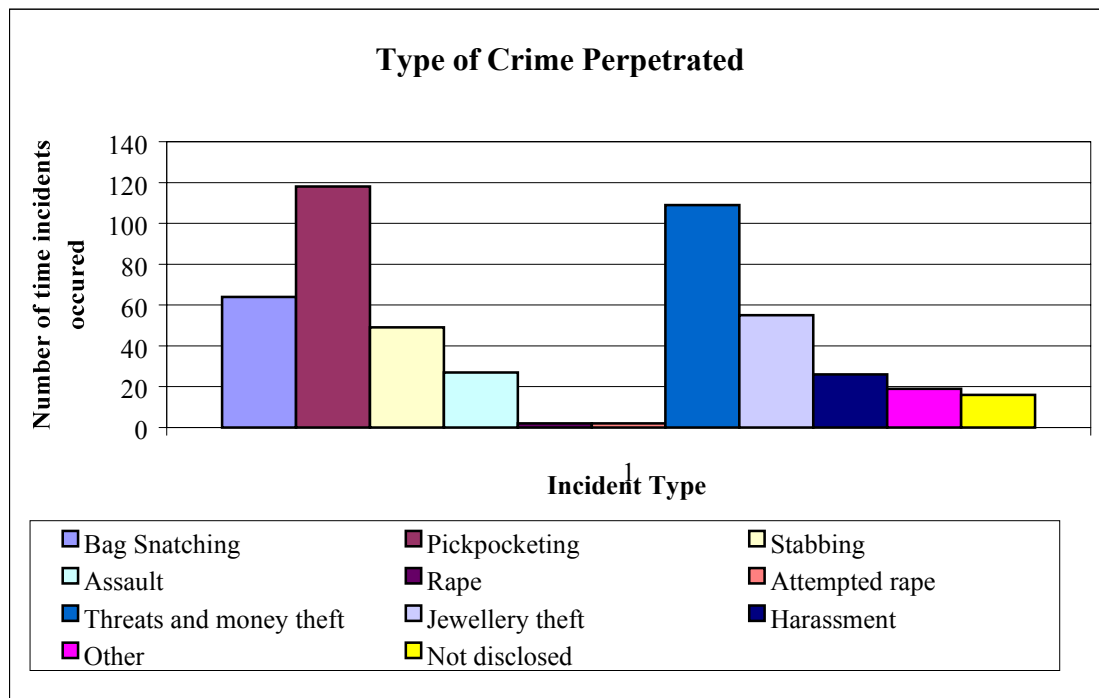
Type of Crime Perpetrated

Legend:
- Bag Snatching
- Pickpocketing
- Stabbing
- Assault
- Rape
- Attempted rape
- Threats and money theft
- Jewellery theft
- Harassment
- Other
- Not disclosed

Figure 2 - Number and description of criminal incidents on Public Transportation [5]

- All crimes effected (and reported to the enumerators) were against the person, rather than against infrastructure.
- The four most common incidents affecting the public transport users surveyed (pickpocketing, threatening behaviour and money being taken by force, bag and jewellery snatching) usually results in financial enrichment of the criminal, in that the criminal committing such acts, gains money immediately in the process of committing the crime or sells the stolen item (at a later stage) for money.

8.   CRIMINAL INCIDENT LOCATIONS

With respect to the public transport locations/vehicles in the study area in which the crimes were perpetrated, key points are summarised as follows (see also Figure 3):

- Of all the locations at which the 303 respondents indicated that they had been victims, facilities related to commuter rail, e.g. either on board or at the station, showed by far the highest level of occurrence.
- The market place also offered opportunities for crime, as evidenced by the 'at nearby traders' being the third most common location of crimes against the respondents. The market place is also the place where a potential victim is likely to be studied by the criminal to see any display of money.
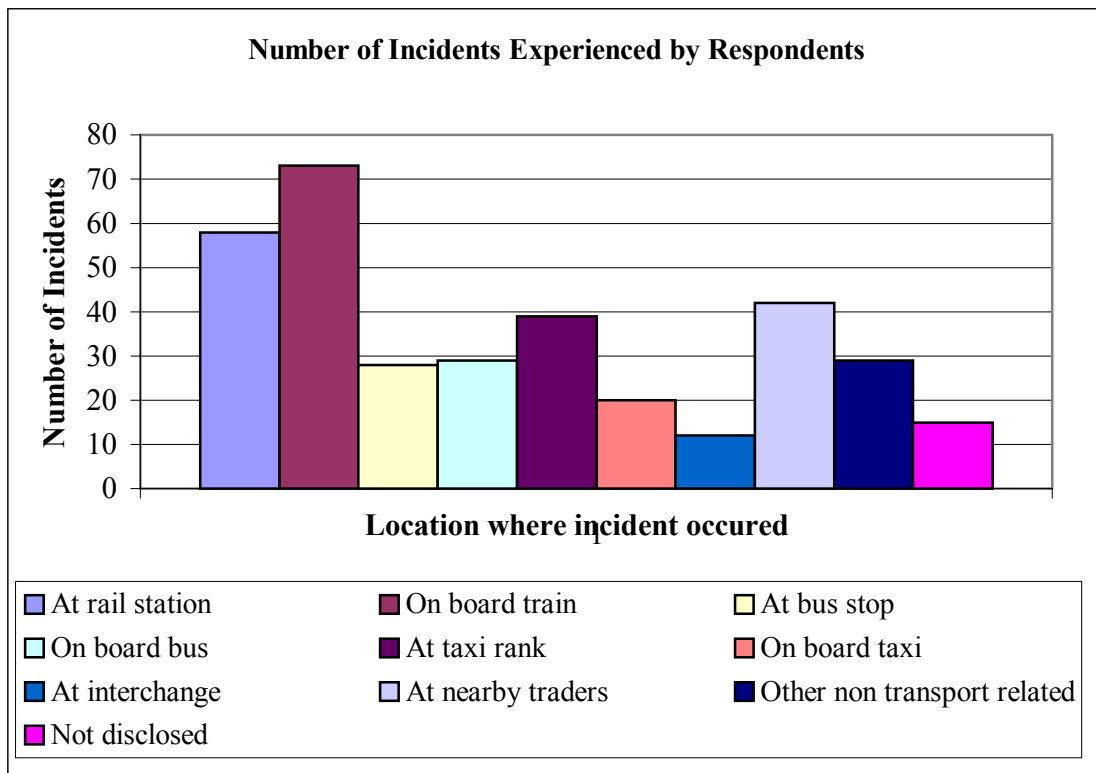- The fourth most frequent crime site was at the minibus taxi rank.

Number of Incidents Experienced by Respondents

Location where incident occured

Legend:
- ☐ At rail station
- ☐ On board train
- ☐ At bus stop
- ☐ On board bus
- ☐ At taxi rank
- ☐ On board taxi
- ☐ At interchange
- ☐ At nearby traders
- ☐ Other non transport related
- ☐ Not disclosed

Figure 3 – Locations of Criminal Incidents Surveyed [5]

9. CRIME PREVENTION FOCUS

Following on from the key points presented in sections 7 and 8, the focus of the appropriateness of crime prevention strategies being presented in this paper is on:

- On persons who commit 'economic' crimes to public transport commuters, and
- On commuter rail and associated facilities, e.g. stations.

10. CRIME PREVENTION STRATEGIES THROUGH ACCESS CONTROL

This section discusses the appropriateness of crime prevention strategies which target potential criminals who act (negatively) against the bona fide commuter. Discussions with various transport providers (in South Africa, Europe and the USA) revealed that there is a strong and definite link between fare evaders and people who commit crime on the public transport system. Therefore a potential strategy of the transport provider is to increase the difficulty of fare-evading passengers entering the transport system. This form of crime prevention (through access control) can be achieved through automated or manual/mechanical systems. An example of manually operated access control is shown in Figure 4.

Figure 4 – Manually operated access control (Turnstyle)

The appropriateness of controlling access at different stages of the journey is presented in Table 1[5]. The extent of using automated access control systems on the commuter rail network in South Africa is limited, owing to the financial constraints of commuter rail service providers.

11.   OTHER CRIME PREVENTION STRATEGIES

A selection of crime prevention strategies that are being implemented by transport providers and communities is discussed in this section. It should be noted that the appropriateness of the interventions to be discussed are not based solely on the responses of the respondents interviewed as part of the Durban Commuter Survey, but also includes responses from interviews conducted with commuters in the Kwesine – Kathlehong area of the East Rand during April/May 2001.

11.1   COMMUNITY INVOLVEMENT

Currently, in South Africa community participation in the development of their communities is being encouraged, which, it is hoped, will lead to community ownership (i.e. protection) of public assets. This is one strategy that has been used in order to reduce the incidence of criminal activity against public assets.   Nevertheless, its appropriateness can be limited, as the mere upgrading of a public transport asset does not necessarily stimulate community ownership of it. The process of developing community ownership of public transport assets must follow a step-by-step approach. Such an approach will entail transparency (from all stakeholders), high levels of service (i.e. public transport operation), regular and effective communication, and active participation by community members.

11.2   UPGRADING OF FACILITIES AT THE EXPENSE OF LEVEL OF SERVICE

With respect to commuter rail, having an upgraded station whilst the level of service provided is low, e.g., if trains are continually delayed, such delays only annoy and alienate the commuter from the commuter rail provider. This situation is exacerbated if many of the commuters are captive users, owing to their personal circumstances.   The mere fact that commuter rail travel often offers the lowest fare between two points, should not allow commuter rail service providers to become complacent by providing mediocre service, knowing that the commuter has no choice but to take the train. Such a strategy will backfire on the commuter rail service provider, as some recent incidents may testify, e.g. the Pretoria Station fire in February 2001[6].

11.3   ENVIRONMENTAL DESIGN

Crime Prevention Through Environmental Design (CPTED) is an established design philosophy in North America and Europe.   CPTED (pronounced 'sep-ted'), a branch of situational crime prevention, is based on the theory that: 'the proper design and effective use of the built environment can lead to a reduction in the incidence and fear of crime and an improvement in the quality of life.'

The appropriateness of CPTED in the South African context is evidenced by commuter rail service providers applying its principles in the redesign of vehicles and upgrading of stations. Despite the initial cost of redesign the increase in personal security offered and increased attraction to all members of the community are strong benefits in favour of CPTED.

Table 1: Advantages and disadvantages of access versus exit control commuter rail transportation

LOCATION	EFFECTED	ADVANTAGES	DISADVANTAGES
At start of journey, e.g. at station	Ticket inspection on entry to the system	• Limits access to system to ticket holders only. • Counts bona fide passengers entering the system. An estimate of system ridership can therefore be achieved.	• Fare evaders can purchase tickets to the next stop just to enter the system and then travel beyond the price paid. • Fare evaders can locate open stations and enter the system and exit at a station which is either open or which only has entry control. • Persons who need to travel (for genuine reasons, e.g. job searching) but do not have the necessary finance are denied access.
At end of journey, e.g. at station	Ticket inspection at exit from the system	• Can focus enforcement energies at a busy station or terminus. • Counts bona fide passengers exiting the system. An estimate of system ridership can therefore be achieved.	• Fare evaders can claim that they boarded at the previous stop. Can be difficult for a ticket inspector to confirm this. • At peak times travellers who are being interrogated by the ticket inspectors because of discrepancies with their tickets can cause disruption to other passengers, e.g. by increasing congestion at station exit.
On the train	Ticket inspection whilst onboard the system, either in the vehicle or on the platform	Potential to identify those without tickets whilst they are actually in or using the system (prosecution should be easier in this case, if the fare evader does not have a valid reason for not having a ticket).	• At peak travel periods the level of congestion may limit the number of tickets checked. • Fare evaders can alight or move to another carriage if a ticket inspector is seen.

Source: Crime and Crime Prevention on Public Transport - Final Report November 2000 [5]

Examples of CPTED principles in a commuter rail environment are indicated in Figures 5 and 6.

Figure 5 – The interior of a refurbished Commuter Rail Carriage

Figure 6 – CPTED principles evident at Pilot Station (East Rand)

Figure 5 illustrates the interior of new style (refurbished) carriages. Seats are back up against the wall of the carriage and offer passengers a 180 degree horizontal view. The wide area between the seats offers space for standing passengers. Plenty of holding rails and overhead luggage racks are also evident. In Figure 6, ramps are evident which permit wheel chair access at Pilot Station (in the East Rand). The reader should also note the grilling on all walkways/ ramps permitting uninterrupted views of people. All walkways and ramps are covered, offering protection from the elements.

11.3   FORMAL SECURITY PROVISION

Increased security provision (in the form of SAPS officers) in the transport environment is one strategy that can impact positively on the personal security of the commuter. The emphasis placed on the SAPS providing security protection of commuters has been determined from the commuters themselves (in this case the Durban Commuter Survey)[5]. The appropriateness of this strategy with respect to commuter responsiveness is indicated through the following statistics:

- The 303 respondents who were personal victims of crime on public transport (having experienced a total of 487 incidents), only 114 (37 per cent) of these victims reported the incident experienced to an appropriate authority;
- The majority of crimes that victims experienced and which were reported, were reported to the SAPS (over 80 per cent);
- The second most frequented reporting agency was Metrorail (25 per cent), which implies that these crimes were related to commuter rail, and
- It is clear that the number of crimes reported to informal crime prevention organisations, e.g. Crime Prevention Forums, was very low (less than 10 per cent). This may be due to a lack of awareness by the victim of such organisations.

11.4   COMMUNICATION

Regular and effective communication that is easily understood by the recipient is one of the steps that leads to success in service delivery. Since public transport in South Africa is still developing effective communication strategies, it would be inappropriate at this time to single out a particular transport provider for its lapse in this case. Nevertheless, it is not just communicating a message but sharing the information that gave rise to the message, that is essential.

The appropriateness to the commuter of effective communication as a crime prevention strategy is very similar to that of CPTED, in that an environment in which crime has been designed out is also one which has effective communication, either visual or oral. Figure 7 illustrates how effective communication can be used in a multi-lingual and multi-cultural environment. Figure 7 illustrates signage using both words and pictures (of familiar objects some of which are cultural but can cause physical harm if used inappropriately).

12.   RECOMMENDATIONS

Recommendations made in light of this research are as follows:

- Implementation of crime prevention strategies at other MI

  There needs to be an implementation of crime prevention strategies, e.g. access control, environmental design, community involvement and formal security provision in other MI around South Africa.

- Monitoring Mechanisms

Figure 7 – Effective Signage

  Coupled with the implementation of crime prevention strategies (with a focus on public transport) there is need to ensure that appropriate monitoring mechanisms are also in place, to gauge the success (i.e. appropriateness) of such strategies.

- Increased and effective public relations

  Public transport providers should be engaged in more public relations exercises on an on-going basis to educate commuters (and potential commuters) about the 'social' ownership of public transport assets. In addition, owing to the unsophisticated nature of the typical public transport commuter, it may be possible for transport providers to provide a simple 'back-to-basics service'. Such a strategy may go a long way to satisfying commuters.

- Continued research into crime prevention on public transport.

  There is still a need to ascertain commuter's views and requirements of personal security whilst using public transport. Additional research in the area of crime prevention on public transport which in turn can improve transportation security, has been suggested a number of researchers in the transport arena, e.g., Morgan [7] and Page [5].

13.   CONCLUSION

Effective implementation of crime prevention initiatives is a strategy that can positively impact on commuter's perceptions of public transport. Nevertheless, such strategies cannot be considered in isolation from other initiatives that can also enhance the community in which a person lives. The need to tackle crime from a holistic perspective calls for a multi-pronged and coordinated approach, which in turn will increase the appropriateness of such strategy within a community. This conclusion was reached in the Crime and Crime Prevention On Board Public Transport study [5], which stated that 'the single most important finding of the study was that an integrated approach was required to prevent crime on public transport and in communities in the Warwick Triangle area

of Durban. This finding is in line with the National Crime Prevention Strategy [8] of the South African Government, which postulates that a multifaceted and comprehensive approach involving formal governmental criminal justice agencies and informal civilian groups is a prerequisite for crime prevention in South Africa.'

14.   REFERENCES

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CSIR/TRANSPORTEK, PO Box 395, Pretoria 0001
Tel: 012 841 4362, Fax: 012 841 4054 Email: opage@csir.co.za

CURRICULUM VITAE

NAME	**PAGE** OLIVER ANTHONY
POSITION IN FIRM	Senior Researcher
EDUCATION	Rand Afrikaans University (South Africa) 2000
	Certificate in Logistics Management
	University of South Africa (UNISA) 1995
	IsiZulu (Special Course)
	University of Savoy (France) 1990
	Certificate Pratique de la langue Francaise
	University of Southampton (United Kingdom) 1989
	MSc Transportation Planning and Engineering
	University of Wales (United Kingdom) 1985
	BSc (Hons) Maritime Studies (International Transport Option)

KEY ACHIEVEMENTS
- Winner of the DNA Logistics Trophy for best logistics management student (Rand Afrikaans University) 1999
- Over ten years experience in the fields of transportation planning, economics and traffic engineering
- Presented an overview of Crime and Crime Prevention on Public Transport before the South African Parliamentary Portfolio Committee on Transport in June 2001.

MEMBERSHIP OF PROFESSIONAL SOCIETIES
Member of Chartered Institute of Transport (United Kingdom)
Member of the Institute of Highways and Transportation (United Kingdom)

CURRENT KEY	Transport Planning, Logistics/Freight Analysis,
COMPETENCE AREAS	Transport Economics and Public Transport
COUNTRIES OF WORK	South Africa, Swaziland, United Kingdom and Zimbabwe

EXPERIENCE RECORD

1997 - to date	Transport Specialist, Transportek, CSIR
1996 - 1997	Transport Planner/Economist, Africon Engineering International Limited (South Africa)
1994 - 1996	Transport Statistician/Economist, Africon Engineering International Swaziland
1991 - 1993	Senior Transport Planner, Harare City Council (Zimbabwe)
1990 - 1991	Traffic Modeller, Bexley London Borough (United Kingdom)
1988 - 1990	Transportation Planner, WS Atkins Planning and Management Consultants Ltd (United Kingdom)
1987 - 1988	Study at Southampton University (United Kingdom)
1985 - 1987	Transportation Technician, Berkshire County Council (United Kingdom)

PUBLICATIONS AND PAPERS PRESENTED

Crime and Crime Prevention on Public Transport – Rail Commuter Action Towards Enhancing Their Travelling Security: paper presented at the South African Transport Conference, Pretoria, July 2000.

An Overview of Freight Flow Databases in South Africa: paper presented at the Transportation Research Board 80th Meeting, Washington DC, January 2001.