

**AN INVESTIGATION INTO THE IMPACT OF THE TAXI
RECAPITALISATION PROGRAMME FOCUS
IN THE
RUSTENBURG AREA**

Submitted by

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SPECIAL THANKS MUST GO TO THE ALMIGHTY GOD. FOR THIS GOD IS OURS FOREVER AND EVER, HE WILL BE OUR GUIDE EVEN TO THE END - PSALM 48:14. EVEN IF WHEN I SAY "I CAN'T DO IT..." GOD WILL SAY "I CAN DO EVERYTHING THROUGH HIM WHO GIVES ME STRENGTH"- PHILLIPIANS 4:13.

This (book) mini-dissertation is dedicated to my very dear family and friends. Not forgetting Prof Sam Lubbe for always keeping on my toes and the whipping that made me focus.

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Abstract

The study will be an investigation into the effects of the taxi recapitalisation programme focus in the Rustenburg area. The taxi recapitalisation programme was introduced by government in consultation with affected parties to bring about safe, effective, reliable, affordable and accessible taxi industry in South Africa by introducing new taxi vehicles. The minibus taxi recapitalisation project is a current initiative (started in 1996) to formalise the South African minibus taxi industry (Suffla & van Niekerk, 2004). A Total of 219 respondents of the taxi industry participated in this study by completing questionnaires. The importance of the programme is also addressed as well as the problems that existed and caused concerns in the taxi drivers. The requirements and the challenges of the programme are highlighted as per questionnaire responses received. The response that we received showed that the challenge was the duration of the payment of the scrapping allowance and the amount given for scrapping your old taxi vehicle. The other challenge was that there is no specific taxi vehicle approved that they must acquire to comply with the taxi recapitalisation programme. The overall challenge was that the taxi recapitalisation programme is not showing results. The taxi industry in South Africa has its roots in the informal economy; operating predominantly outside the legal, commercial and fiscal spheres of the economy. Despite its informal character, the taxi industry has become the preferred mode of public transport. Therefore, the regulation of the industry should not summarily be taken as a superior alternative. On the other hand startlingly poor road safety, poor security and low profit margins are threatening the survival of the industry (Fourie & Pretorius, 2005). The objective is to ensure that the taxi industry is not undermining labour's control and state regulation of the economy in terms of both taxes and social legislation.

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Chapter 1

OVERVIEW OF THE STUDY

1.1 INTRODUCTION

The study will be an investigation on the taxi recapitalisation effectiveness in the Rustenburg area. The study will be conducted mainly in the Rustenburg area. The taxi recapitalisation programme was introduced by government in consultation with affected parties to bring about safe, effective, reliable, affordable and accessible taxi industry in South Africa by introducing new taxi vehicles. The affected parties are taxi operators, commuters, government and financial providers. The taxi operators are the owners/drivers of the taxi vehicles. The commuters are the users or passengers ferried from one point to another.

The Government is the regulator and funder for taxi vehicle to be scrapped. The financial provider has to be able to assist the taxi operator with finance to acquire New Taxi Vehicles. The programme incorporates and integrates safety, reliability and affordable of the new taxi vehicles. The programme is a mechanism to ensure that a new taxi industry which will cater for all. The programme involved everyone to ensure that it becomes a success.

This study would help clarify the strength of relationship between the taxi operators, commuters and the Department of Transport. Further, this study intends to grow the body of knowledge in this vital subject.

The objective of this study is to investigate the effect the taxi recapitalisation programme has. In order to explore the research problem, objectives are deemed necessary because these will provide context and direction to the study.

The effectiveness of the programme will be the focus of the study. The research will examine how it is assisting the stakeholders. The investigation will be able to outline whether or not it is successful, all the stakeholders understands it. The information will be gathered from the taxi operators of the area. The taxi operators will be interviewed personally and by a way of questionnaire.

1.2 BACKGROUND TO THE PROBLEM STATEMENT

The industry started in the late 1970s to meet the demand of people for transport. Some of the new operators tried to use a loophole in the Road Transportation Act that allowed them to operate if they left one seat empty. But it was difficult to get the permits, so many operators worked illegally. They were punished with fines or by having their vehicles confiscated. Generally, Local government also made life difficult for the operators by closing taxi ranks (Magubane & Manicom, 2003).

According to Barrett, (2003) a study by the International Labour Organisation based on research done by the SA Transport and Allied Workers Union two years before, estimated the taxi industry turnover at around R11 million a day and over R12 billion a year.

The taxi industry by far transports the biggest number of passengers on any given day, compared to both rail and bus transport. Taxi industry has been completely de-regulated. After the new dispensation, the Government set up a National Taxi Task Team in 1996, made up of Government, taxi industry, civil society and religious groups. The National Taxi Task Team made recommendations that government should intervene by formalising regulating and creating economic empowerment opportunities for the taxi industry (Walters, 2008).

The Taxi Recapitalisation Programme was introduced as an intervention by Government in consultation with affected parties to bring about safe, effective, reliable, affordable and accessible taxi industry in South Africa by introducing New Taxi Vehicles. The rapid deregulation was the rise of taxi associations, which have been directly associated with the violence that has shadowed the industry since 1987. Permit enforcement ceased to be a priority and the industry was soon flooded with aspirant drivers, resulting in heightened competition for passengers and routes as too many operators entered the domain too rapidly (Sekhonyane & Dugard, 2004).

1.3 PROBLEM STATEMENT

Walters, (2008) argues that South Africa is part of the global economy, the South African Taxi industry is faced with challenges from the commuters and the

general public and the contribution they make to the economy. The taxi industry transports the biggest number of passengers on any given day. The minibus taxi industry (mostly operating 16 seater minibus vehicles) transports an estimated 65% of all commuters in the country (Walters, 2008: 98-108).

There is lack of the necessary institutions for regulation in place viz Offices of the Permit Board Administration, the Taxi Registrar and Special Law Enforcement (Sekhonyane & Dugard, 2004). This leads to maladministration and service rendering to the taxi operators.

The industry is not restructured according to the changes of the society, no policies and laws regulating the industry. The safety of the passengers is also compromised as the changes of the society are not considered. There is lack of information to the taxi operators pertaining to the Taxi Recapitalisation Programme in terms of accessibility to funds and financing of new vehicles. No performance evaluation methods which will show the effectiveness of the programme. There is no comparison of the unregulated taxi industry and the programme which the government is trying to regulate the industry (Dugard, 2001).

1.4 AIMS AND OBJECTIVES

The primary purpose of this research is to assess the impact of Taxi Recapitalisation Programme on the taxi industry in South Africa.

(a) General objective

To investigate economic empowerment for the industry through the provision of a once-off subsidy in the form of scrapping allowance.

(b) Specific objectives. These are to:

- Investigate the process how to renew the aged and unsafe taxi fleet
- Suggest ways to improve accessibility to public transport for people with special needs.
- Suggest ways to address road fatalities in the public transport generally promoting road safety records for taxi vehicles
- Suggest ways to regulate the taxi industry

1.5 RESEARCH DESIGN

In this research quantitative research techniques will be used. In respect of quantitative technique the researcher shall use questionnaires which will be closed questions to solicit for the necessary information from the respondents. No open-ended questions will be conducted since the population will not give enough details of the study. In respect of statistical tools in analysing the research findings the researcher shall use the Chi-square Analysis, Regression Analysis and Correlation Analysis for testing. In this research the researcher shall use Rustenburg Municipality as the main cluster. In this cluster the researcher shall select a total respondent of 50 elements (respondents).

Among the respondents the researcher shall include taxi operators who are directly involved and select them through accidental (convenient sampling) techniques. The researcher found this to be useful method of selecting the respondent since they are not situated in one place. As the researcher knows that the taxi operators are always on the road, the questionnaires will be handed as the researcher come in contact with them (accidental sampling system) targeting a sample of 400.

1.6 VALUE ADDED WITH THE RESEARCH

Government recognises that the sustainability of its interventions in the industry do not lie ONLY in the scrapping of old taxi vehicles, which remains the primary and immediate goal of the TRP. Also key to the success of government interventions in the industry are effective regulation, its integration into the public transport system, effective law enforcement as well as empowerment. To this end, the rollout strategy identifies the need in the short-term for the removal of the very oldest and unroadworthy taxi vehicles from South African roads putting the safety of commuters first (Magubane & Manicom, 2003).

1.6.1 Scrapping of existing taxi vehicles

With regard to the scrapping of old taxi vehicles; Government intends to remove old and unroadworthy vehicles from the roads. The first opportunity will be to invite a taxi operator who wish to exit the industry to voluntarily hand in their vehicles and permits/operating licenses. These operators will be invited to register in the next three months their intention to exit the industry with effect

from August this year. A marketing communications campaign will be embarked upon to inform and encourage taxi operators across the country to register with the Operating Licensing Boards (OLBs) in their respective Provinces. The OLBs will register applications, evaluate them and verify the validity of permit/operating licenses linked to the taxi vehicle (Fourie, 2003). The payment of a scrapping allowance of R50 000,00 to taxi operators handing-in their vehicles will only take place after this verification process has been completed (Walters, 2008).

1.6.2 Regulating the industry

The introduction of the amended National Land Transport Transition Act (NLTTA) is to strengthen the regulation of the taxi industry. Among key amendments to be introduced is to ensure that Municipalities take control of taxi ranks and their management. Taxi ranks and routes will no longer be under the control of taxi associations and/or bodies. The financial contribution of members to associations will also be scrutinised. The Department of Transport, in consultation with the industry, is considering the need for a regulatory body to facilitate the integration of the taxi industry into the formal public transport system (Dugard, 2001).

1.6.3 Law Enforcement

With regard to effective law enforcement, the Road Traffic Management Corporation (RTMC) has been tasked to finalise a detailed Business Plan, which aims at strengthening the capacity of the State to enforce the law. The law enforcement strategy must include strengthening of capacity of existing public transport law enforcement units in the various provinces and establish such units where necessary (Sekhonyane & Dugard, 2004).

1.6.4 Economic Growth

The renewal of the taxi fleet would not be sustainable if not accompanied by the empowerment of the industry and changes in the nature of taxi operations. The Transport Sector BEE Charter will elaborate further on the strategy. However, the taxi industry empowerment process will be driven by the industry itself with Government providing support mechanisms. The strategy will also take into account the interests of taxi drivers. The Department of Transport is currently finalising a programme directed at taxi drivers who have been in the industry for

many years and/or whose employers will be exiting the industry. This programme will give taxi drivers the opportunity to graduate to taxi operator status in their own right and participate in related economic activities (Magubane & Manicom, 2003).

It is a fact that the minibus taxi industry is the most critical pillar of our public transport sector. It is estimated that more than 65% of commuters rely on minibus taxis for their daily mobility (Govender & Allopi, 2006). The process of transforming the minibus taxi industry started after it was realised that any solution to the problems facing transport had to include the minibus taxi industry. Rustenburg's public transport system remains a challenge for the Government and the 2010 World Cup organisers as it is still considered unreliable and unsafe (Walters, 2008).

Although the government has intervened by introducing programmes that will see the transport system integrated, the taxi industry is the biggest obstacle to authorities' intentions of creating a safe and reliable transport system. The government believes that transport is the heartbeat of our country's economy. The mandate of this democratically government is to use the resources at its disposal to bring forth the possibility of the achievement of this very important goal and strategic objective (Magubane & Manicom, 2003). Public transport must break the obstacles and the barriers to meaningful participation in the livelihood of the communities.

1.7 LIMITATIONS

In view of the financial constraint and the limited period of this study it will be restricted to Rustenburg Municipality area. This study will be conducted from the researcher's personal income since it is a private research work for the fulfilment of the MBA degree programme.

1.8 LAYOUT OF THE STUDY

The study contains five chapters, references and appendices as follows:

Chapter 2 is about the effectiveness of the taxi recapitalisation programme. The researcher will explain how to solve problems of the effectiveness of the taxi recapitalisation programme. This chapter discusses effectiveness of the taxi recapitalisation and the limitations encountered.

Chapter 3 entails the questionnaire formulation and the handing out to the taxi operators as sampled. The questions are based on the problems encountered about the taxi recapitalisation programme. The chapter discusses the justification for the type of research design used for the study.

Chapter 4 covers the collection of questionnaire documents from the taxi operators. The questionnaires are collected in order to consolidate them for a solution the problems.

Chapter 5 is the overall findings of the taxi operators' responses to the questionnaires. The chapter will conclude with an explanation of the significance of the findings of the study.

1.9 CONCLUSION

The chapter was highlighting the areas that research will be undertaken. In the chapter, the duration and resources that will be needed for the successful completion of the research.

In conclusion the chapter will examine the methods that will solve the problem on the problem statement. The solutions will bring change in having an effective Taxi Recapitalisation programme. The researcher will give more information for better understanding of the effectiveness of the taxi recapitalisation programme. The taxi operators will be able to understand the programme better and work hand-in-hand with the government and the passengers. The chapter will add value in such a way that more information will be shared between the stakeholders of the taxi industry. All the stakeholders will be the same position of understanding looking towards making the programme a success. The taxi operators will be viewing the programme with a different view as they will be more involved and understanding their role.

The next chapter will explain what was done in terms of the problem. The researcher will address all aspects using some of the available literature, becoming a reader in this topic. Also, the research questions, based on the work that was not solved will be structured.

Chapter 2

LITERATURE REVIEW

2.1 INTRODUCTION

By the early 1990s the bus company Putco was in real difficulty. The rapid growth of the minibus taxi industry during the previous decade had drastically reduced its passenger numbers – the taxi had come from nowhere to take some 65 per cent of the public passenger transport market (Browning, 2001).

Therefore it is in the interest of the taxi industry to provide a service that can compare with the speed, efficiency and affordability of the private vehicle. Given the inefficiency-cost resulting from congestion on South African roads it is also in the interest of the government to promote public transport as an attractive alternative to private vehicle use. Therefore, government and the taxi industry will have to work together to provide a successful public transport system. According to Dabson (2000) it has the aim of trying to "persuade people to use their cars a little less and public transport a little more". The Minibus Taxi Recapitalisation Project is a current initiative (started in 1996) to formalise the South African minibus taxi industry (Suffla & van Niekerk, 2004).

Research has been conducted on various aspects of the taxi industry. The study will examine the Taxi Recapitalisation programme, Public Transport, Law Enforcement, Employment in the Taxi Industry, Economic Empowerment and growth, Financial resources, Regulating Taxi Industry, Structuring the taxi industry and Minibus Taxi. The information related to the keywords mentioned was gathered from the various search engines such as ordinary search engines (<http://www.google.com>), meta-search engines (<http://www.search.com>) and useful site for IS & T professionals and students.

This chapter entails 10 key points that will assist in the investigation of the effectiveness of the programme in detail. Taxi Recapitalisation Programme was introduced as an intervention by Government in consultation with affected parties to bring about safe, effective, reliable, affordable and accessible taxi industry in South Africa by introducing New Taxi Vehicles. A good transport system is required to support the livelihood activities of the growing rural and

urban population, the macro-economic fundamentals shows a negative effect on the public transport available.

2.2 TAXI RECAPITALISATION

This programme entails scrapping old minibus taxis and replacing them with new, more appropriate vehicles. This programme was initiated in the interests of road safety and as a tool to get minibus taxi operators to convert their radius-based licenses to route specific licences (Adams & Fraser Consulting Civil Engineers, 2006). The aim of the taxi recapitalisation is to replace the existing 16 seater vehicles with new 14 -18 seaters as well as new 19 – 35 seat vehicles. The replacement of these vehicles will improve the safety and reliability record of the taxi industry because of the new higher quality and safer vehicles.

The Government's Recapitalisation Scheme is aimed at restructuring and developing the taxi industry. The scheme is intended to empower taxi owners, improve the quality and safety of public passenger transport and regulate the industry. The new vehicles need to comply with the South African Bureau of Standards (SABS) safety requirements and are certified once compliance is verified (Walters, 2008: 98-108). The scheme offer taxi owners a scrapping allowance for existing taxis. The funds may be used to finance new, larger taxis. The programme also has as an objective the aim of formalising the taxi industry. Speeding up the taxi recapitalisation programme could bring a taxi driver into the ambit of minimum wage legislation, or lead to his or her retrenchment.

Adams and Fraser Consulting Civil Engineers (2006) also states that the programme offers operators once off capital subsidies or a 'scrapping allowance' amounting to a financial value equal to a quarter of the price of a new vehicle in exchange for their old vehicles and the conversion of their current licenses, some of which are valid for an indefinite period, to route specific licences with a validity period of five years. As part of the deal taxi operators would have to observe the conditions of the basic employment act, register as taxpayers, insure and regularly maintain their vehicles. While the programme will improve the situation somewhat – especially in the area of road safety, although this could be achieved without the programme by simply removing unroadworthy vehicles from the road and other measures – and to a degree prevent the oversupply of minibus taxis, it unfortunately effectively entrenches the existing

operator-driven system and will consequently do little towards providing an integrated, regular and dependable customer-oriented public transport system.

The TRP initially was aimed at legalising paratransit operations, formalising the sector's business structures and labour practices, establishing a hierarchical representative structure from within the industry, and providing for the renewal of the vehicle fleet through a fixed scrapping allowance on surrender of old vehicles (Schalekamp & Behrens, 2009).

Winkler *et al.* (2006) state that this policy ('Taxi') simulates the effects of a shift from petrol to diesel minibus taxis. We simply assume that this policy results in diesel taxis increasing their share from 4.5% in the base year to 100% by the end of the period. The shift from petrol to diesel taxis results in 10% change in net energy demand in the minibus taxi sector per annum when compared to the reference scenario. This is because diesel taxis have slightly lower final energy intensities per passenger kilometre than petrol taxis. This results in an overall saving of 0.6%/annum in the transport sector as a whole. A 4% annual savings can be seen in greenhouse gases (GHGs) as diesel taxis have slightly higher global emission factors than petrol taxis, but the diesel taxis have lower energy intensities. The net effect is a reduction of global pollutants.

In 2005, the Government approved a detailed strategy for the rollout of the Taxi recapitalisation programme (TRP). This includes introducing safety requirements for the new taxi vehicles (NTVs), scrapping existing vehicles, effective regulation of the taxi industry, and effective law enforcement in respect of public transport and empowerment of the taxi industry (Dibben, 2006). The taxi recapitalisation programme ensures that owners have a permit to operate, are registered with the provincial Department of Transport, and belong to a recognised taxi association. A R50 000 is offered as a once-off scrapping allowance to operators that either wish to trade in their old vehicles for new approved vehicles, or wish to exit the industry.

The amount is the form of a capital subsidy to assist operators in acquiring new vehicles. In order to participate in the Taxi Recapitalisation Programme it is a requirement that operators provide proof that they pay income taxes and that their tax affairs are in order. A tax clearance certificate from South African

Revenue Services is required before a taxi operator can participate in the taxi recapitalisation programme. (Walters, 2008: 98-108).

The Land Transport Bill was extensively modified to incorporate a transition period which would allow the minibus-taxi industry to be formalised and for various measures to be taken to promote the industry. For transport systems, which comprise energy consumption, the policy assumes a shift from private to public rail (from 49% to 79% public by 2020); petrol taxis replaced completely by diesel vehicles due to taxi recapitalisation, but also switching to bio-diesel and low sulphur diesel driven by policy. Low-sulphur diesels are included in the reference case since a phase-in is already mandated; we assume biodiesel grows to a market share of 15% by 2020 (Winkler *et al.*, 2006).

Cooper (2007) stated that the continuing move to diesel-fuelled private vehicles and the imminent taxi recapitalisation plan (to replace petrol minibus taxis with diesel vehicles), will result in the product mix moving to an even greater diesel short situation. (It is noted that the entire taxi recapitalisation programme has yet to be finalised. The focus seems to be moving to safety and a mix of different engine vehicles). Having insufficient refining capacity to meet demand is not in itself a problem, as the product can be sourced from international refineries. The programme aims to turn the commuter based service into a viable, customer-based public transport system. The key factor to achieve this is to increase the demand of public transport, to make maximum use of optimal mode for a given demand and distance, and to improve the transportation to meet the changing needs of customers.

2.3 PUBLIC TRANSPORT

The fact that formal (bus and rail) and informal (taxi) modes of transport have always been viewed separately has resulted in the current disjointed and uncoordinated structure of public transport in South African (Fourie & Pretorius, 2005). An efficient and cost effective public transport system essentially connects people to daily life. For most South African citizens, 'public' transport translates into unsafe, insecure, uncomfortable, and relatively costly minibus taxis or poor quality private bus companies. The lack of a safe and cost-effective public transport option has left many South Africans disenfranchised from

participating in employment and social service opportunities (Adams & Fraser Consulting Civil Engineers, 2006).

Curitiba has one of the most widely reported public transport systems in the world, the reason being its efficiency, while being cost-effective. This system is further considered to be sustainable in terms of a city with significant social challenges and relatively limited financial resources, similar to what is encountered in South African cities. It is characteristic of South African public transport monitoring that very little area specific passenger needs and satisfaction research are being undertaken. According to Pienaar *et al.* (2005) Curitiba has one of the most widely reported public transport systems in the world, the reason being its efficiency, while being cost-effective. This system is further considered to be sustainable in terms of a city with significant social challenges and relatively limited financial resources, similar to what is encountered in South African cities.

If undertaken, it is either on a very broad basis or focussed on existing passengers. This ignores the very essence of business principles, which is the continuous investigation into opportunities and potential for expanding and optimising your product or service rendered. The NLTT Act lists the following public transport benchmarks: safety, security, punctuality, frequency, reliability, quality, speed/travel time, affordability, meeting special needs of passengers, modal integration, and reduced environmental impact (Pienaar *et al.*, 2005).

Public transport was split into public rail, public bus and minibus taxi, which was in turn split into petrol and diesel taxis. The passenger kilometres were once again calculated from fuel use and final energy intensities as well as vehicle ratios from the NaTiS database. For transport systems, which comprise most energy consumption, the policy assumes a modal shift from private to public rail (from 49% to 79% public by 2020); petrol taxis replaced completely by diesel vehicles due to taxi recapitalisation, but also switching to bio-diesel and low-sulphur diesel driven by policy. Low-sulphur diesels are included in the reference case since a phase-in is already mandated; we assume biodiesel grows to a market share of 15% by 2020 (Winkler *et al.*, 2006).

A first-rate public transport system is one of the critical building blocks of any world-class economy. A good public transport system is an essential

cornerstone for a high performance country. Given the South Africa's drive for increased economic growth, employment creation and social integration – public transport has the potential to accelerate all these processes (Fourie, 2003). In line with the constitution of this country and the agreed constitutional principles, the responsibility for public transport and the setting of its policy are also changing. The assignment of various functions and powers to lower tiers of government, the revised administrative and political boundaries, the introduction of new sources of funding and the transformation of institutional structures, hold significant implications for the passenger transport industry (Maharaj, 1995:8-9).

Public transport is a network of passenger vehicles for use by the public running on set routes, usually at set times and charging set fares. Public transport was planning and land-use planning goes hand-in-hand because compact city can contribute towards an efficient public transport system, while such a public transport system is necessary to make a compact city function well. The challenges and options to deal with public transport demand in urban areas must be examined.

According to Pantouvakis and Lympelopoulous, (2008) due to the specific character of services, the development of customer relationships is important in a range of service markets. Factors other than the obvious interactive elements of the offering should be included in the relationship equation. In this way, relationships may be managed and developed in order to achieve higher customer satisfaction. Customer satisfaction is recognised as a key intermediary objective in service operations representing an affective self-evaluation based on price and quality trade-offs.

According to McLennan & Bennetts (2003), the health risk from the journey to work is the second area for the facilities manager to consider. The effects of commuting stress are suggested to impact health, psychological adjustment, and work performance. A large study into the relationship between journey to work in London on public transportation (bus, train and underground) and sickness absence reported the complexity of the journey, expressed in number of stages or changes, as an important factor in commuter comfort. However, the results found no clear correlation between the journey and sickness absence.

The challenges and options may include the necessity to create an enabling environment, reduction in costs and influencing cheaper modes of public transport. The public have coping strategies which includes walking, cycling for the easing of demand on the public transport. The population increase has a direct relationship with the demand for public transport because the demand increases with the increase in population. This leads to increase in the number of privately operated public transport vehicles the majority being mini bus taxis (Maharaj, 1995:8-9). In order to assess the success of various types of public transport systems, the extent to which the systems meet certain pre-defined criteria can be evaluated. Most cities inherently differ more than is obvious (in terms of travel/social perceptions, availability and status value of owning a car, topography, etc.) as stated by Pienaar *et al.* (2005).

In turn it has also increased capacity in substantial way. The suppliers of public transport must face the challenge of demand by providing an efficient, reliable, safe and affordable public transport service. Urban commuters have come up with number of strategies to cope with high transport costs as well as an inadequate and unreliable public transport system. The other coping strategy is that some people are cycling to work. There are employers, notable security companies have come up with credit schemes for the purchase of bicycles to assist their employees.

The large numbers of low income employees are moving to residential areas which are close to their work places to enable them to walk instead of using public transport. In the area called Noord in Rustenburg which just across the street to town, most of the houses are rented out in order to accommodate the people who prefers to walk and mainly are low income employees. The unreliable, unsafe and affordable public transport system has increased car sharing or lifts clubs. Those with their private transport (cars, pickups, lorries) are carrying passenger to and from work; although this is illegal the law enforcement officials have turned a blind eye to the practice. This is leading company vehicles being abused by drivers who carry unauthorised passengers for a fee (Seftel & Somaru, 2006).

An increase of the urban public transport network as new services was introduced in some local authorities that were not served by public transport

before deregulation. There must be an improvement in the quality of service as shown by considerable reduction in average passenger waiting times. The public transport vehicles that were bought at the time of deregulation had reached their economic life and needed to be replaced, it is then when the Taxi Recapitalisation programme was affected by macro-economic challenges of high inflation and an unpalatable economic environment. From the provider's point of view, resource usage from a traffic flow or aggregated flow is a reasonable basis on which pricing of this particular traffic flow can be based.

In the case of a transport network, thus, it is desirable to perform resources dimensioning for the provision of each service provided taking into consideration the traffic profiles of the traffic flows or aggregates of each customer. Thus the service provider has to give his customers the incentives to describe their traffic profiles in the most accurate way, so that he will get a realistic estimate of the resources to be devoted to all the traffic aggregates belonging to each service class (Bouras & Sevasti, 2004).

While a transport system is required to support the livelihood activities of the growing urban population, the macro-economic fundamentals have a negative effect on the provision of public transport. Too much long waiting times as well as walking distances characterise the current urban public transport situation. The Department of Transport is responsible for providing road and public transport infrastructure in the province. Road networks and accessible public transport are often key to the viability of informal businesses and important to informal workers in getting to and from work.

Minibus taxis are the most commonly used form of public transport in South Africa. The government has for several years been trying to formalise the sector through registration of taxi owners, regulation of routes, and planned minimum wages and conditions for employees. These initiatives have made slow progress to date. Both employers and employees are predominantly male and black. Trade unions have made some progress in organising the drivers (Budlender *et al.*, 2004). The four strategic challenges facing the urban passenger transport system are (Department of Transport, 1999)

- Lack of Affordable Basic Access

Thirteen percent or 2.8 million of urban customers are “stranded” owing to the lack of finances and or do not have the physical access to the public transport system. Even though government spent R2.8 billion in 1997 on bus and rail subsidies, only forty percent (40%) of stranded customers indicated that they actually had access to a bus and only twenty percent (20%) to a train, while seventy-eight percent (78%) indicated they could access unsubsidised and more expensive minibus-taxi mode.

- An Ineffective Public Transport System

The public transport is essentially failing its customers. For most indicators including access time, journey time, safety, security and fares, customer goals are not being met for large numbers of passengers. Public transport supply is mostly characterised by a “one size fits all” service geared towards the lowest cost to the operator.

2.4 LAW ENFORCEMENT

The government is enforcing the law through its legal authorities, the public safety officer, the South African Police Services and the traffic officers. The Road Traffic Act (Act No 29 of 1989) is designed to bring about a fundamental restructuring of the laws regulating land transport in the country, with the emphasis on passenger transport. It was decided that the full policy of the National Department of Transport (NDoT), as formulated in consultation with the provinces, could not be implemented immediately because it had to dovetail with the new and proposed local government legislation. The Act therefore sets the scene for long-term restructuring of the land transport system.

The National Land Transport Transition Act (Act 20 of 2000) has the following objectives:

- To ensure that appropriate attention is given to regulation and law enforcement;
- To promote best practices in land transport through research, technology developments and human resources development.

Part eighteen of the Act deals with law enforcement that the Member of the Executive Committee (MEC) for transport, Transport Authorities and municipalities must take active steps to develop systems to improve land

transport law enforcement in their respective jurisdictions. The MEC for transport may also appoint employees as inspectors to monitor compliance with the Act and to assist with the investigation and prevention of offences. According to Jian-zhi *et al.* (2008) urban traffic is a complex system, the basic elements of which are people, vehicles, transport facilities (network and station) and the environment. According to Tavares *et al.* (2008) the efficiency management system that is able to solve problems related to vehicles circulation in road networks can be measured through its capacity to obtain optimized routes.

Jian-zhi *et al.* (2008) elaborate that in the research, to effectively analyse the relative stability of the links between various elements of the urban traffic system, the order, manifestations of the intrinsic relationship between time and space and the orderly nature of the overall, urban transport system is divided into traffic demand subsystem, traffic supply subsystem, traffic management subsystem, traffic environment subsystem, and each subsystem also includes many sub-subsystems.

According to Byrne and Polonsky, (2001) the regulatory environment is of great concern to automobile manufacturers, as significant reductions in emissions or even in some cases, zero emissions for new vehicles may be required. Unfortunately, most governments fail to provide rewards or reinforcement incentives for greening and sustainability. Additionally, they are also unwilling to implement penalties on traditional fuels and thus provide limited incentive for consumers to change purchase behaviour, as gasoline vehicles are still the most cost-effective and convenient option, and while environmental sensitivity remains a worthwhile goal it is somewhat ethereal.

According to May (2005) transport is a major consumer of energy, particularly oil, and in consequence is a significant source of emissions of acidifying pollutants, eutrophying compounds, ozone precursors and particulate matter. To discuss further May (2005) stated that the average distance travelled per person per day increased from a few kilometers to 40 kilometres in the period from 1800 to 200. The dominant mode of transport shifted from walking and horse power to the train and then to driving by car. Technological developments such as the internal combustion engine, in combination with growing income, allowed people to buy faster modes of transport over. Thus transport was responsible for about

28 per cent of CO₂ emissions in 1998 and growth between 1990 and 2000 increased the emissions from the sector by over 20 per cent.

2.5 EMPLOYMENT IN THE TAXI INDUSTRY

The growth in informal employment, the precarious nature of this form of work, and the variability and low level of incomes that informal economy workers earn, raise the issue of what measures might be provided by government to support workers in the informal economy. Whereas informal sector is based on assessing the nature of the enterprise, the informal economy assesses the nature of the employment situation. Where the work is characterised as insecure and where the worker is not covered by the normal provisions of employment such as leave and pension, the worker is classified in the informal economy (Budlender *et al.*, 2004). A commonly heard phrase in transport is “You are never better than your last load”. A transport manager may not be appreciated for 99 per cent success but may be judged by the 1 per cent that did not go to plan as stated by Holter *et al.*, (2008).

According to Budlender *et al.* (2004), a minibus taxi driver: Minibus taxis are the most commonly used form of public transport in South Africa. The government has for several years been trying to formalise the sector through registration of taxi owners, regulation of routes, and planned minimum wages and conditions for employees. These initiatives have made slow progress to date. Both employers and employees are predominantly male and black. Trade unions have made some progress in organising the drivers.

Glover *et al.* (2007) stated that American transit labour leaders and management are discovering that training is an investment where their interests converge. Creating a high performance transit industry in the future depends on developing further innovative approaches to labour-management cooperation. Training offers an early opportunity for labour and management to partner in developing a well-trained maintenance workforce with important performance and service outcomes for transit agencies and the public they serve. The National Land Transport Transition Act (Act 20 of 2000) has the objective to promote best practices in land transport through research, technology developments and human resources development. The recapitalisation programme is having a major impact on employment in the taxi industry, with some 180 000 workers

estimated to be presently employed in the industry (Barrett, 2003), of whom a significant number are likely to lose their jobs if, and once recapitalisation happens, as fewer drivers will be required to carry a number of passengers.

Barrett (2003) states that despite the certainty of job loss, the largest trade union organising the drivers in the minibus taxi industry, the South African Transport and Allied Workers Union (SATAWU), has supported the recapitalisation programme on the basis that the formalisation of the industry is likely to positively impact on collective bargaining and to improve the enforcement of labour legislation. Indications are that a minimum wage for taxi drivers is likely to be introduced before recapitalisation happens. Other unions have, however, oppose the recapitalisation programme on the grounds that the larger sized taxis will lead to job losses as the average carrying capacity of vehicles increases. The Taxi Recapitalisation Programme will have an impact in the industry on the following points:

- The taxi operator can exit the industry

The taxi operator receives the scrapping allowance and uses it for other purposes and not continuing with his/her business result in employee being laid-off or retrenched.

For example if a taxi owner have 4 paid-up vehicle and having 4 drivers if the taxi owner decides to go for the scrapping allowance it means he/she will only be able to acquire one new minibus taxi and still pay instalment for the hire purchase amount. The owner will opt to take the scrapping allowance and not continue with business.

It means 4 taxi drivers will be unemployed with no income and their families will not be affected.

- Affordability forces the taxi operator to exit the taxi industry

The taxi owner scraps the old taxi and receives the R50,000 allowances and the financial service provider can grant finance to the owner. Therefore the taxi owner will be out of business unwillingly. The taxi owner is out of business which is resulting in the unemployment of the taxi owner and driver. The scrapping allowance is not enough to ensure that the taxi operator can afford a new minibus taxi.

- Downsizing of the business

The taxi owner tends to scrap his all his old minibus taxi in order to be able to afford instalments on hire purchase or even buy a new minibus taxi for cash. For instance if the taxi operator is 56 years old and scrapped 5 taxi which will be R50,000 per taxi then he can buy a new minibus taxi cash because he/she cannot be afforded the hire purchase finance due to the age factor. This will result in 4 taxi drivers unemployed and only one working. The taxi operator might be in a situation of not being able to afford to pay a driver and paying vehicle instalment plus insurance.

The employment in the taxi industry will be affected by the Taxi Recapitalisation Programme because it will lead to too many lay-offs of taxi drivers due to the above points mentioned. The Taxi Recapitalisation Programme does not accommodate the new entry into the taxi industry and it shows that the main aim is to reduce the number of minibus-taxis and it is also having the impact on the high numbers of unemployment. The issue of expansion and employment on the Taxi Recapitalisation Programme is not core.

Training is an enabler for many technology improvements and innovations in maintenance policies and practices. For example, if an agency wants to adopt a more aggressive program of preventive maintenance, its workers need strong diagnosis skills to make it effective. As a result, rather than simply reacting to operator complaints, mechanics are able to identify problems in advance and make the needed changes. A trained workforce with a solid base of skills makes fewer mistakes, is more flexible, and adapts to changes more quickly (Glover *et al.* 2007).

The minibus-taxi is being threatened by this programme in terms of employment and expansion, and later on it will be a forceful exit of taxi operators by implementing regulations which will work against them operating. With new entries in the taxi industry through Taxi Recapitalisation Programme will lead to more people being employed and increased revenue for the South African Revenue Services (SARS) which can be used to improve the South African schools, roads, bridges and address other important aspects of the government (Govender & Allopi, 2006).

2.6 ECONOMIC EMPOWERMENT AND GROWTH

The minibus-taxi industry has developed into the dominant public transport provider in South Africa and is a beacon of black economic empowerment (Fourie, 2003). With the South African economy rapidly opening up markets and becoming integrated into the world economy, there is increasing competition locally from business all over the world. This is putting pressure on all South African businesses, especially the small firms (Sithole, 2006).

Initially, urban transportation system remains low balance, and traffic supply can meet traffic demand. When economy develops to a higher level and urban motorization improves, proportion of residents' flexible travel increases, daily average travel of people and vehicles grows, traffic demand in urban areas is greatly raised, all these cannot be coordinated with inefficient traffic management system and supply system such as static traffic facility and network facility which maintains a balance with low-traffic demand, its performance is that the traffic congestion is serious and the traffic environment is deteriorated (Jianzhi *et al.* 2008).

Of the numerous measures that can be used to promote environmentally sustainable distribution, those which yield economic as well as environmental benefits generally command the greatest support and are the easiest to implement. One such measure is benchmarking of the utilisation and energy efficiency of truck fleets. This invariably reveals that some fleets are operated more efficiently than others and usually gives the managers of under-performing fleets an incentive to raise their efficiency (McKinnon, 2009).

The business with people outside the minibus-taxi industry (McKinnon, 2009):

- Business deals should be properly protected by legal agreements or contracts between members of the mini-bus taxi industry as individuals, associations and external business people;
- The minibus-taxi industry should be considered as a group, instead of considering only an individual member of the industry who might not represent the operators or if he/she does represents them, consideration should be given to what would happen if he/she were to be voted out.

Jian-zhi *et al.* (2008) stated that urban transport system is an important factor in supporting and restricting urban economic development. Because of the longstanding division of the department and management, system's defects and lack of awareness of scientific development of traffic, China's development of the urban transport system is separated by region, which exerts some side effects, such as coordination of road rank in network construction, in coordination among dynamic transport system and static traffic system lack of views of urban traffic's development in the coordinated system, less efficiency in the equal input. With the rapid economic development and the dramatic increase in traffic demand, how to co-ordinately develop the traffic system, to ensure the general operation of transport system and maximum its carrier function is a tough task of urban transport development in new situation.

One of the goals of the National Department of Transport is to broaden the economic participation base in terms of the provision of public transport. In order to attain this goal, the department will identify how ownership and participation influence the various transport sectors and how these will be enhanced by policies in place. A key goal of the government is to build South Africa's competitiveness in international trade by ensuring that the region's competitive advantages can be accessed and marketed. This will require minimum transport costs for level of service, or an increase in the quality of the service for a given level of cost, or both (Department of Transport, 1996:4/5).

2.7 FINANCIAL RESOURCES

Financing is crucial issue for an attractive urban public transport system. The government is well aware of the problems in the public transport industry, but it does not have the necessary funding available to redress the situation, specifically in regard to those systems that are reliant on subsidies.

The National Land Transport Transition Act (Act 20 of 2000) has the objective to ensure appropriate funding. The challenge is that the government do not have financial resources to upgrade transport infrastructure and the public transport systems. In 1996, the transport strategy stated that financial and technical assistance will be offered to minibus-taxis to enable them to obtain permissions and or contracts and to improve their economic viability. But since then only two main forms of financial assistance are contemplated: a scrapping allowance for

minibus-taxi operators who consent to surrender their vehicles to the authorities; and an operational subsidy for contracted operators servicing the planned “Integrated Mass Rapid Public Transport Networks” (Lomme, 2006).

The Taxi Recapitalisation Programme is offering R50,000 each for scrapping of old minibus taxis, the intention is to subsidise the taxi owner with the amount as a deposit for a new minibus taxi. The crux of the matter is that some of the taxi operator apply for vehicle finance with the financial institutions are they are declined because of various reasons which are as follows (Pienaar *et al.*, 2005):

- Not credit worthy

This means that the taxi operator does not have assets or financial records that can convince the financial grantor to grant him/her credit. The government gives you R50, 000 and no letter of guarantee that you can be allowed credit to replace your scrapped minibus taxi. During the period when the taxi operator's minibus has been destroyed he/she has to wait for minimum of 3 months for that scrapping allowance without daily income of taxi fares from passengers. This lead to no banking by the operator for certain period of time and in the long run the waiting period work against the taxi operator when applying for vehicle finance.

- No source of income

When the operator is waiting for the scrapping allowance there is no deposits made by the taxi operator because the source of finance which was the scrapped minibus taxi. The waiting period of the scrapping allowance destroys the banking patterns of the taxi operator and the credit record is also affected because they were told that the scrapping allowance will be paid out in less than a month's period. The waiting period is disadvantaging the taxi operator because the scrapping allowance in most cases is used as a deposit for a new minibus taxi.

- No affordability

This means that if there is no deposit on regular basis in your bank account then you cannot afford to do the repayments for a hire purchase of new minibus taxi. The R50, 000 scrapping allowance as deposit does not permit the taxi operator approval of the hire purchase of the new minibus taxi. The scrapping allowance is a once off payment the financial grantor argues that you do not have

guarantee that you will be able to generate an x amount of taxi fares per day or even per month in order to repay the instalment, insurance, household needs, family maintenance and even the instalment of the housing bond.

- High risk

The high risk comes from the fact that you cannot guarantee that you will be ferrying or doing trips that can yield so much income on daily, weekly or monthly basis. The other issue is that some of the taxi operators do not have bank accounts which make it difficult to see the patterns of income and banking by the taxi operator for a certain period. The taxi operator might also be list with the credit bureaux and does not have quantifiable assets even if he/she claims that his business is profitable.

The financial resources are available but they are not favourable to all taxi operators due to different reasons. The scrapping allowance has been R50,000 which is a fixed amount since 1996 on the inception of the Taxi Recapitalisation Programme. The main concern is that the amount is inflation linked and is not increasing even though the minibus-taxi prices have been changing over the years. Therefore the affordability of the taxi operators is not considered and the revision of the scrapping allowance is not done at all.

The National Department of Transport should also assist the taxi operators but increasing the scrapping allowance on yearly basis or link it to inflation in order to encourage the taxi operator to scrap their old minibus taxis. The department must give the taxi operators letter of guarantee for those who wish to use the scrapping allowance as a deposit. This process will encourage taxi operators to be part and support the Taxi Recapitalisation Programme for them to achieve its objectives.

2.8 REGULATING TAXI INDUSTRY

According to Cameron (2005) the establishment of transport authorities was never intended to be a country-wide phenomenon. Persons responsible for the thinking behind national transport policy and the enactment of legislation were most concerned with the highly complex transport situation which exists in large metropolitan areas. It was never envisaged that transport authorities should be developed in a district or rural context.

It has been observed that poor regulation has led to overtraded routes. The taxi industry came into being as a result of the convenience and speed that taxis provided were far superior to any other form of public transport. Initial high profits in an unregulated industry, as well as the profit potential by competing with other modes of transport, attracted many newcomers to the industry. Apart from the fierce competition that came into play between different taxi operators, taxis also started operating on high-demand corridors serviced by bus and rail. Taxi operators took this step in an attempt to boost their income as the original taxi routes have become so contested (Fourie & Pretorius, 2005).

Cameron (2005) said that there is, in general, a lack of skilled manpower to undertake essential functions in all levels of government. In municipal government, the situation is chronic. At present, the Department of Provincial and Local Government has specialists assisting in 139 "at risk" municipalities. Universities and technikons have not been producing sufficient quantities of skilled graduates and technicians for the transport sector, particularly in the fields of civil engineering, transportation engineering and transport economics. The planning and financial skills required for successful implementation of the National Land Transport Transition Act presently go well beyond those that are available. There seems to be little sense in establishing and starting transport authorities when posts would have to be filled by unqualified persons.

According to Jian-zhi *et al.* (2008) urban traffic is a complex system, the basic elements of which are people, vehicles, transport facilities (network and station) and the environment. Magubane and Manicom, (2003) state that an unregulated transport industry results in an unsafe public transport industry. It can be defined as an industry which is driven by profit from fares in which speed, reckless driving and overloading override concerns for the safety and comfort of passengers. It is an industry in which there is no protection against overloading and in which there are no rules to govern the suitability of vehicles to act as safe public transport. It is an industry in which competition for the more profitable routes often finds expression in violence (*ibid*). The increase in demand for taxis was followed by an increase in the purchase of kombis.

The price of input costs, for example petrol, spares and maintenance increased faster than the rate of inflation (Department of Transport, 1994:7). Statistics

show that there was a decrease in the number of taxis purchased in the 1990s. It was estimated that in the 1980s, 9100 taxis were purchased. There was a sharp decrease in the early 1990s, when only 2000 taxis were purchased (Cox, 2001:8). This suggested a need for the government to intervene in order to assess the situation faced by the taxi industry. Jian-zhi *et al.* (2008) elaborate that in the research, to effectively analyse the relative stability of the links between various elements of the urban traffic system, the order, manifestations of the intrinsic relationship between time and space and the orderly nature of the overall, urban transport system is divided into traffic demand subsystem, traffic supply subsystem, traffic management subsystem, traffic environment subsystem, and each subsystem also includes many sub-subsystems.

Taxis are not obvious candidates for economic regulation. Taxis, unlike natural monopolies, have neither the attributes of network economies nor the substantial sunk costs of utilities. But for regulatory constraints, taxi markets would have the hallmarks of perfect competition. The narrow purpose of regulation was “to fix a maximum of charge to be made for services rendered.” The exclusive mandate of regulation was to protect consumers from overcharging. Consumer welfare has been the principal stated objective of taxi regulation throughout, but its remit has broadened over time. Taxi regulation traditionally applied to market entry and service quality (Koehler, 2004).

This Department of Transport is responsible for the regulation of an economically significant component of the informal economy – the minibus taxi industry. Not only is the taxi industry a significant informal employer, but it is likely to be the dominant mode of transport for those working in the informal economy - to transport themselves and also their goods. In the absence of regulation, vehicles have been under-maintained and there have often been clashes (sometimes violent) between associations of drivers over lucrative routes. Since the mid-1990s national government has been talking about a taxi recapitalisation programme, aimed at introducing new, safer and bigger vehicles (Budlender *et al.*, 2004).

Fourie (2003) states that the taxi industry is a business, where forces of supply and demand will determine its future. The most cost-effective way (whether formal or informal) of serving their customers, will dictate the evolution of the

industry. The overall objective of the taxi industry is to provide public transport to commuters in an economically sustainable manner. As with any business in a free market, customers exercise their choice by buying the product that provides them with the best value for money. Here the product is transport and commuters will base their decision on the affordability, speed, reliability, safety and convenience of the service. Likewise, taxi operators will only participate in the industry if they can run profitable businesses. One might argue that this is not necessarily true of public transport as governments generally subsidise these services. However, governments worldwide are reducing their subsidies and privatising elements of public transport. There is increasing pressure on the providers of public transport to become self-sustaining.

According to Lomme (2006) the main aim of regulating the taxi industry is to make sure that the taxi industry becomes part of the economy. The history of the development of the minibus-taxi industry, many organisations, people and the new government had high expectations that the minibus-taxi industry would develop into a giant formal and united business.

The formalisation policy rests of an extensive array of legal provisions meant to promote operational integration of minibus taxis, but which have been overshadowed by the least operationally conceived one, that is the “recap programme”, although prioritised on all the other and more apt ones. The policy first intends to legalise the trade of minibus taxi operators, by requiring that they incorporate and register as a company and be subsequently taxable as such, which should affect their profitability and competitiveness against formal modes of public transport (Lomme, 2006).

According to Lomme (2006), the formalisation policy also intends to build on self-regulation of the minibus taxi industry by the operator’s associations, which are not only legally recognised but also legally required to play an active role in the formalisation process: they are to be registered, to adopt a standard minimum constitution compliant with minimum requirements prescribed by public authorities; they have to commit to impose on their members a Code of Conduct consistent with the one prescribed by public authorities and to discipline those of their members who do not comply with their legal and regulatory obligations or

violate the Code of Conduct, and inform public authorities of any existing or looming conflict with other associations.

These expectations were close to being realised when the recapitalisation process was announced. Then the process was not in plan as it happened so many times during the development of the minibus-taxi industry. The minibus-taxi industry has stood on the brink of the final phase of formalisation and of starting to reap the fruits of unity and formal business practices, the process becomes unmanaged. Although there are many speculations about why this happened, it is not possible to put a finger on the reason or persons responsible for the derailment (Cox, 2002).

The crucial question is whether regulating and legalising the taxi industry is the solution to the challenges of the Taxi Recapitalisation Programme. The question can be answered by determining the cost of changing the de-regulated taxi industry to become regulated through Taxi Recapitalisation Programme and also compare the cost efficiency of being regulated with the benefits from the regulation (Koehler, 2004).

There can be two ways of regulating the taxi industry:

- One way is the de-regulated sector which is seen as an result of the decentralisation and reorganisation of the taxi industry through Taxi Recapitalisation Programme on global level
- The second way is founded on the observation that informal activities are performed beyond the law in developing countries, as a result of inadequate legislation.

According Fourie (2003) to become part of the formal economy, informal operators needs to adhere to existing regulation and legislation. Furthermore there are different types and stages of legality (Fourie, 2003).

- Becoming legal

The basic idea underlying the registration of taxi associations, taxi operators is to acknowledge the legal existence of the business, to identify it as an economic unit subject to tax obligations and also to ensure safety and reliability standards are met. The cost involved for entry to legality is the totality of the time needed for registration, financial cost of registration and money spend on amendments.

Even if the process is taking too much time, the cost of legal registration is usually not quantifiable in terms of de-regulated taxi industry. The biggest disbursement is to bring the minibus-taxi to a level that adheres to the effective, reliable, affordable and accessible standards set by the authorities in terms of Taxi Recapitalisation Programme.

- Being legal

The process of becoming legal mainly constituted administrative steps; the practice of staying legal requires the fulfilment of different obligations. The main operational costs related to these obligations are tax and labour requirements. Taxes include municipal licences or permits, income tax as well as value-added tax. Taxi driver wages are quite significant as it represents a fixed cost, independent of size and economic performance. Labour legislation requires the payment of legal minimum salaries and the fulfilment of various social security obligations. Unlike tax obligations, labour requirements are not differentiated according to size of operations and annual profits.

The National Land Transport Transition Act (Act 20 of 2000) has the following objectives:

- To promote integrated transport planning;
- To restructure the provision of road- and rail- based public passenger transport services in terms of regulated competition.

Regulated competition is dealt with in part ten of the Act. It is based on the issue that the competition should be “for routes but not on routes”. The minibus-taxi industry needs to become partners in the development projects, not necessarily by running a project but rather by benefiting from the spin-offs and profits produced by the development. Taxi parking and ranking should always be protected by legal means, such as land-use zoning or by registering servitude on the property. Government will have to speed up the process of regulation and control. Law enforcement should be made more effective to protect the legal taxi operators. Corruption has to be eradicated by removing corrupt people from both the private and public sectors. If public transport is a priority then local authorities ought to devote more of their budget to upgrading the transport infrastructure.

Koehler (2004) stated that where a limitation of licenses is effective and licenses are transferable we would expect licenses to acquire a market value equal to the capitalised value of the excess of earnings over opportunity costs. Minibus taxis are the most commonly used form of public transport in South Africa. The government has for several years been trying to formalise the sector through registration of taxi owners, regulation of routes, and planned minimum wages and conditions for employees. These initiatives have made slow progress to date. Both employers and employees are predominantly male and black. Trade unions have made some progress in organising the drivers.

Entry restrictions, combined with the independent-contractor system for drivers, means that taxi license owners make good profits off each license while leaving the drivers to bear most of the financial and customer-service risk and liabilities (Moore & Balaker, 2006). The following can be key issues in terms of regulating the taxi industry:

- Entry Regulation

The regulating of taxi industry means the protection of the market boundaries and creating a framework for competition. The overriding regulatory motivation was to charge for use of infrastructure and protect consumers. Operating licences acquired value once restrictions had been imposed in order to enter the taxi industry. According to Koehler (2004), as soon as their numbers were of any consequence, they became subject to regulation. It is widely believed that regulation from the start was a means of protecting market boundaries and creating a framework for competition. The following sections show the overriding regulatory motivation was to charge for use of infrastructure and protect consumers. Operating licenses acquired value once restrictions had been imposed. Entry restrictions, combined with the independent-contractor system for drivers, means that taxi license owners make good profits off each license while leaving the drivers to bear most of the financial and customer-service risk and liabilities (Moore & Balaker, 2006).

- Fare Regulation

Taxi operators are aware of the demand fluctuations and opportunities for differential pricing. They tend to increase taxi fare when fuel price increases and no taxi fare reduction when the fuel price drops. Fare policies are not set in the

interest of consumers rather than of the owners. The purpose of price regulation was transformed into profit protection comparatively late. The rise in license values since the introduction of economic regulation has been remarkable (Koehler, 2004).

- A New Deal for Taxis

The purpose of price regulation throughout the years was to protect customers from excessive charging. The funds will then be used to finance the new, larger taxis. The programme also has as a major objective the aim of formalising the taxi industry. The adaption of fare regulation and entry restriction means the protection of drivers' income, commuters' safety, reliable transport system which is accessible to everyone.

It seems apparent that removing barriers to entry would increase the number of taxis operating and increase service levels. This means that more taxis are available in any given hour of the day, which makes the service more attractive to riders (Moore & Balaker, 2006). When doing the regulatory changes focused on the questions: Can the special problems of the taxi market only be solved by restricting entry and controlling prices? The taxi operators are compelled to disclose their income with the South African Revenue Services (SARS) because the tax clearance certificate of good standing is required for a taxi permit or operating licence.

The Taxi Recapitalisation Programme requires the tax clearance also before the scrapping allowance can be paid, these leads to delays in pay-outs of scrapping allowance. The scheme will offer taxi owners a scrapping allowance for existing taxis. There are other factors that need to be looked into to prevent the challenges in the regulation of the taxi industry. The modification of regulating the industry is to ensure the commuter safety, reliability, affordability and extra mile service. Increasing service levels is an important outcome. Greater service levels overall usually means greater service to the poorer sections of the city. The more competitive the taxi market, the better these areas tend to be served. Traditionally, poor areas of town receive the lowest levels of taxi service. At the same time, in poor areas general levels of mobility are often lower, and demand for taxi services higher (Moore & Balaker, 2006).

The formalisation policy aims at improving labour standards in the minibus taxi industry, it has to abide by sectorial labour regulation that requires a minimum salary and maximum working hours for minibus taxi drivers and other employees (according to trade unions, the minibus taxi industry employs about 180 000 people). If implemented, such a regulation, promoted by the trade unions, should significantly improve working conditions, given that nine out of ten minibus taxi drivers in urban metropolitan areas work more than twelve hours a day and four out of five work seven days a week, very few being paid for working overtime, but it should also heavily weigh on financial sustainability of minibus taxi operations (Lomme, 2006).

The taxi industry in South Africa has its roots in the informal economy. Despite its informal character, the taxi industry has become the preferred mode of public transport. Therefore, the regulation of the industry should not summarily be taken as a superior alternative. On the other hand startlingly poor road safety, poor security and low profit margins are threatening the survival of the industry (Fourie & Pretorius, 2005). The objective is to ensure that the taxi industry is not undermining labour's control and state regulation of the economy in terms of both taxes and social legislation.

The common feature underpinning the expansion of regulating taxi industry is the de-regulated of formal activities. This refers to situations in which taxi industry seek to evade regulations governing employment protection and labour security, by establishing their revenue, which make the taxi drivers vulnerable to exploitation. The core of de-regulated is to get around labour regulations and minimise taxi driver costs. The crux of the taxi industry in Rustenburg is developed under similar conditions where profitability is increased through the exploitation of taxi drivers.

For instance during peak period (Easter weekend, Christmas period) the taxi driver is set a target or is expected to do given trips per days, for example when the taxi driver is ferrying the commuter from Rustenburg to Lesotho, he/she is expected to start as early as 3am and park the taxi at 11pm. This shows that in order for the taxi driver to do four (4) return trips from Lesotho in order to reach the set target, he/she is supposed to work more than eight hours without rest. According to Tavares *et al.* (2008) the efficiency management system that is

able to solve problems related to vehicles circulation in road networks can be measured through its capacity to obtain optimized routes.

During peak period the taxi drivers rest or sleep for less than 6 hours a day and it is leading to fatigue which will comprise the issue of safety on the road and resulting in road accidents. The regulation by government is very important in the aspect of working hours and saving people from being exploited. The taxi operators tend to do that because they have to ensure that they generate enough revenue in order to pay the instalments of their scrapped minibus-taxi for new ones because with a R50,000 deposit it means you will not be able to cover your business overheads and also maintain the family with the revenue (Browning, 2001).

According to Byrne and Polonsky (2001) the regulatory environment is of great concern to automobile manufacturers, as significant reductions in emissions or even in some cases, zero emissions for new vehicles may be required. Unfortunately, most governments fail to provide rewards or reinforcement incentives for greening and sustainability. Additionally, they are also unwilling to implement penalties on traditional fuels and thus provide limited incentive for consumers to change purchase behaviour, as gasoline vehicles are still the most cost-effective and convenient option, and while environmental sensitivity remains a worthwhile goal it is somewhat ethereal.

To emphasise more according to May (2005) transport is a major consumer of energy, particularly oil, and in consequence is a significant source of emissions of acidifying pollutants, eutrophying compounds, ozone precursors and particulate matter. To discuss further May (2005) stated that the average distance travelled per person per day increased from a few kilometres to 40 kilometres in the period from 1800 to 2000. The dominant mode of transport shifted from walking and horse power to the train and then to driving by car. Technological developments such as the internal combustion engine, in combination with growing income, allowed people to buy faster modes of transport over. Thus transport was responsible for about 28 per cent of CO₂ emissions in 1998 and growth between 1990 and 2000 increased the emissions from the sector by over 20 per cent.

2.9 STRUCTURING THE TAXI INDUSTRY

According Pienaar *et al.* (2005) it is characteristic of South African public transport monitoring that very little area specific passenger needs and satisfaction research are being undertaken. If undertaken, it either on a very broad basis or focused on existing passengers. This ignores the very essence of business principles, which is the continuous investigation into opportunities and potential for expanding and optimizing your product or service rendered.

The National Land Transport Transition Act (Act 20 of 2000) has an objective to create appropriate institutional structures such as Provincial Permissions Boards, Provincial Taxi Registrars, Transport Authorities, etc. An additional advantage of the new structure is the fact that conflict and violence will be reduced. It was mentioned earlier that in the absence of state regulation, taxi associations often use violence as a means of protecting routes and operations. With a properly organised route network which is effectively monitored and controlled, this type of behaviour will become unnecessary and will greatly improve the security situation in the taxi industry. The restructuring will undoubtedly evoke high emotion and resistance from operators and therefore it is crucial that operators be consulted in the process and educated in terms of the benefits the new structure will hold for them. In addition, a well-designed change management programme should also be implemented (Fourie & Pretorius, 2005).

Part eight and fifteen of the Act provide that each Member of the Executive Committee (MEC) for transport must establish a single provincial board for the province, and appoint members who are impartial and have no financial interest in the public transport industry. Such boards will be responsible for dealing with applications for the granting, renewal, amendment or transfer of operating licences. Part nine and 16 of the Act deal with matters of national and provincial concern regarding operating licences. Any permit authorising such services issued before the date of commencement of the Act, will remain valid only for a limited period, within which the holder will have to apply to the relevant provincial board to convert it to an operating licence. Minibus-taxi operators must register as public transport operators and hold an operating licence, formerly they were awarded radius-based operating permits, which allowed them to serve a vaguely

defined area and had no time limit in their validity. The Taxi Recapitalisation Programme is granting operating licences which are for a limited period of time and entitling operators to serve an only narrowly defined particular route.

Part eleven of the Act provides for the Minister to designate an officer in his department to keep and maintain a National Transport Register. In such register must be recorded the information about associations, public transport services and operators, and related information. The purpose is to create a database to monitor the implementation and formalisation of the public transport plan and programme. The Taxi Recapitalisation Programme can be successful if the Minister adhered and complies with the Act. The challenges of the success of the programme emanates from non-compliance of the Act by relevant personnel.

Part twelve Act also emphasis that the provincial department deals with the registration of minibus-taxi associations, their members, and persons who do not belong to such associations. A National Taxi Register must be established to contain information related to such registration, and a provincial taxi register for each province. The Taxi Recapitalisation Programme statistics were based on old information that is the reason the budget could not cater for all the scrapping application made. The National Taxi Register is one of the elements that are hampering the smooth running of the programme because the coordination of registration of the minibus-taxi associations and their members was not handled in such a way that it will have accurate or at least update the register on regular basis. The institutional is helping the taxi operators with the support service of taxi permits and operating licences.

These structures are important in order for the taxi operator to operate in designated routes legally without duplicating taxi permits and causing taxi wars for specific routes. The institutional structures are also influencing the taxi wars because the can issue one route to two different taxi associations. For example in Rustenburg a Taxi permits for one taxi association has one of the routes of the different association which is leading to conflict. Taxi operators, owners, drivers as well as the users/commuters should especially be educated as to the reasons for the changes and the long-term benefits of the restructuring. Sufficient time should be allowed for the implementation of the process (Fourie & Pretorius, 2005).

The root cause can be that they are interest in the business, favouritism or bribery might be one of the factors because no proper procedures according to policies are followed when issuing operating licences or taxi permits. The correct allocation of routes on the taxi permits and operating licences can be the solution to the taxi wars and they are required for finance of new minibus-taxis. The taxi associations play an effective role in organising service provision and adjusting it to the demand. They segment the oversupplied market among their members in manner allowed by local authorities. Minibus-taxi is different among taxi operators in the profitable and less or non-profitable routes are rotated among operators. The taxi permit or operating licence must take into account these operational practicalities. Other taxi associations play a defensive role in protecting their turf from being entered by competitors which means dealing with illegal operators operating without any taxi permit or operating licence because of lack of law enforcement. The South African public authorities see the minibus taxi industry as being unruly and also for being particularly hazardous for safety of its passenger as well as other road users and being disruptive of road traffic in general (Browning, 2001).

According to Pienaar *et al.* (2005) elaborate the criteria generally being used are normally similar, and refer to:

- The travel needs of passengers
- The motivation/evaluation of new systems or system elements
- The level of accessibility and mobility available to people in the city
- The compliance of services (by operators/contractors) rendered to specifications and user needs

The programme also has as a major objective the aim of formalising the taxi industry. Despite the certainty of job loss, the largest trade union organising the drivers in the minibus taxi industry, the South African Transport and Allied Workers Union (SATAWU), has supported the recapitalisation programme on the basis that the formalisation of the industry is likely to positively impact on collective bargaining and to improve the enforcement of labour legislation. Indications are that a minimum wage for taxi drivers is likely to be introduced before recapitalisation happens. Other unions have, however, oppose the

recapitalisation programme on the grounds that the larger sized taxis will lead to job losses as the average carrying capacity of vehicles increases.

There have been many delays in the implementation of the recapitalisation programme, as some of the interest groups involved, in particular the owners of minibus taxis, have failed to reach agreement with government to implement the programme. Since recapitalisation is sure to lead to some rationalisation of the industry and will formalise the industry, some of the owners of minibus taxis have felt particularly threatened. The minibus taxi sector is currently almost totally informal, although the minimum wage and other initiatives are intended to help it 'formalise' (Budlender *et al.*, 2004).

Public authorities have recently acknowledged the role of the minibus taxi industry in providing mobility as well as business and job opportunities to the poor: according to the incumbent minister of Transport, the taxi industry has been able to respond to and meet passenger demand more than any other public transport mode. It was able to take advantage of the gaps in the formal public transport system, and positioned itself as the public transport mode of choice (Lomme, 2006). The taxi industry has traditionally been a male-dominated industry and with which led to discrimination of gender therefore the restructuring of the industry those issues need to be addressed.

2.10 MINIBUS TAXI

The minibus industry constitutes the bulk of public transport and is often characterised by substandard vehicles, overloading and other high-risk driving behaviour, such as speeding and 'reckless driving'. Generally, the contribution of substandard vehicles to traffic collisions is debatable since drivers may drive with greater caution. But when substandard vehicles are overloaded and travel at excessive speeds, it can be expected that the risk of collision and injury would increase. Increasing growth of the minibus taxi industry and greater competition further exacerbates the situation. Most commuters rely heavily on this mode of transport and are therefore at increased risk of injury and death (Suffla & van Niekerk, 2004).

The minibus taxi industry in South Africa has grown from a negligible informal sector activity in townships to the dominant mode of public transport in South

Africa. The expansion was not easy. The National Land Transport Transition Act (Act 20 of 2000) defines the “minibus” as (9 to 18 seated person excluding the driver) and the “midibus” as (19 to 35 seated persons excluding the driver) have been formulated to provide for the Taxi Recapitalisation vehicles used for minibus-taxi type services. The historical inequitable distribution of funding, subsidy and support has contributed to the underdevelopment of mini-bus taxi businesses. The minibus-taxi industry lays a moral claim to subsidy, based mainly on the fact that the bus and rail operators receive subsidy. Barrett,(2003) stated that The National Taxi Task Team (NTTT) (1996) considered the argument for subsidy in three ways; in terms of:

- A moral argument

In the new era, all operators should be treated the same without discrimination.

- A comparability argument and

The minibus-taxi industry argues that it provides the same kind of commuter service as that of the bus and rail operators. It is merely a different mode in the same way that bus and rail are different modes, but both of these are subsidised. The comparability argument may, however flounder on the simple fact that the two forms of operation (bus and minibus-taxi) are not comparable. This argues not so much for a subsidy as for a programme of development to ensure that the playing fields are indeed levelled and all modes can participate in subsidy schemes on equal basis. The comparability debate is not decisive, but it does suggest that some of the arguments of the minibus-taxi industry do not wholly hold together.

- A practicability argument

In the short term there is no practical means of opening the minibus-taxi industry to the present subsidy system. There is a potential delivery mechanism, but no mechanism for reception and distribution. The National Taxi Task Team (NTTT) (1996) has concluded that there is no realistic prospect of the minibus-taxi industry receiving funds from the existing Department of Transport's subsidy system. The future system, in terms of the National Transport Policy, will be based on the tender/contract system. User-side subsidies may also be considered. The minibus-taxi industry is at present in no position to participate in either. What is needed is to begin now with a development programme, which

will in as short a time possible enable minibus-taxi operators to operators to participate in the new forms of subsidy schemes (National Taxi Task Team, 1996: 17/18).

The bulk of public transport is often having below standard vehicles, overloading and other high-risk driving behaviour of speeding and reckless driving. When a substandard minibus taxi is overloaded and travelling over the speed limit, in case of an accident there is a high risk of collision and injury. Many people use this mode of transport and they are exposed to these increased risks. The implementation of the recapitalisation programme, as some of the interested groups involved, in particular the owners of minibus taxis, have failed to reach agreement with government to implement the programme. The recapitalisation is sure to lead to some rationalisation of the industry and will formalise the industry, some of the owners of minibus taxis have felt particularly threatened.

The 2004 Estimates of National Expenditure do not mention the planned sectorial determination for minibus taxi drivers and other employees, despite the fact that work on this started some years previously. Minibus taxi operations by black operators were only legalised in the 1980s, but mushroomed quickly to the extent that the sector is seriously overtraded. Most of the owners have only a few vehicles, and employ others to drive them. Because of the cut-throat competition and informality of the sector, the drivers work long hours, in poor conditions, for low pay (Budlender *et al.*, 2004).

2.11 RESEARCH QUESTIONS

The investigation will be undertaken to examine the effectiveness of the taxi recapitalisation programme in the Rustenburg area. The following section of the research problem has not been solved by previous research and needs to be answered:

The investigation will consist of questionnaires as stated below:

1. Do people understand what the taxi recapitalisation is?
2. What is the importance of the taxi recapitalisation programme for operators?
3. What are the challenges faced by taxi operators in the taxi recapitalisation programme?

2.12 SUMMARY

In this section of the study, a Taxi Recapitalisation Programme overview was given. In South Africa the minibus taxi industry is faced with the challenge of the effectiveness of Taxi Recapitalisation Programme. The problem is magnified in the Rustenburg area, as they do not have the financial resources, government full support and the effective monitoring of the programme, as it is also not empowering the taxi operators but making them poor.

The programme has a huge impact on the employment number concerning the taxi operators exiting and laying-off taxi drivers. This chapter has indicated the conditions of competition that exist in the South African public transport arena that require further attention in order for South Africa commuter bus and minibus taxi can be integrated. This does not imply that South African bus companies and taxi operators intend to compete on subsidies from government, but the National Taxi Task Team stresses the competition based on subsidy allocation.

The Taxi Recapitalisation Programme scrapping allowance has been a fixed or same amount since the inception irrespective of the vehicle price change and inflation rates changes, to name only few factors that affect the livelihood of all South African citizens. The regulatory and the structuring of the taxi industry have been addressed which also plays a major role in order for the Taxi Recapitalisation Programme to be successful roll-out.

The following chapter will reflect the effectiveness of the Taxi Recapitalisation Programme in the South Africa but the main focus being the Rustenburg area.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter outlines the research methodology used to collect the data, which is used to answer the hypotheses for the qualitative as well as the quantitative stages of this research. The previous chapter provide the theoretical base and issues relevant to this research. The aim of the study is to determine the effect of the taxi recapitalisation programme in the Rustenburg area. To validate this, it is important to collect information from the targeted population using correct methodology and analyse the responses.

The research questions arrived at was: 1) Do people understand what the taxi recapitalisation is? 2) What is the importance of the taxi recapitalisation programme for operators? 3) What are the challenges faced by taxi operators in the taxi recapitalisation programme?

The approach a researcher uses to investigate a subject is termed the methodology. Methodology refers to the philosophical basis on which the research is founded. The particular techniques used to collect data and information are termed methods (White, 2003). The methodology to be used for a particular research problem must always take into account the nature of the data that will be collected in the resolution of a problem (Leedy & Omrod, 2005).

Overall, this chapter is organised around the response data, the collection procedures, and the treatment of the data. And also the data collection method system chosen, types of questions that can be asked and development of the questionnaire, the survey population and sample size determination; data handling and concludes with the discussion of a researcher's compliance with research ethics.

3.2 RESEARCH TYPES

The term research type is used here to identify the general research approach. While authorities in the field seem to differ as to how the types of research are classified, the following approaches, which are most often used in educational

research, represent some of the options available to you as a researcher (Glatthom & Joyner, 2005).

3.2.1 Qualitative and Quantitative

Qualitative and quantitative methods have come to be associated particularly with one or other of these approaches; both find a place in most fields of study. *To qualify* is to ascribe a quality, or to describe a thing. The study of literature, for example, could be seen as largely qualitative. Quantity, however, is an amount that can be counted or measured (Preece, 1994). A research perspective, as used here, is a general view and use of research approaches and methods. There are two major perspectives: quantitative and qualitative (Glatthom & Joyner, 2005).

According to Glatthom and Joyner (2005) quantitative perspective derives from a positivist epistemology, which holds that there is an objective reality that can be expressed numerically. As a consequence the quantitative perspective emphasises studies that are experimental in nature, emphasises measurement, and search for relationships.

If a study uses language such as the following, it probably has used a quantitative perspective: variable, controls, validity, reliability, hypothesis, statistically significant. To quantify is used in the sense of to ascribe a quantity to a thing, and the process is known as quantification (Preece, 1994). White (2003) stated that quantitative research involves an objective way of studying things. Quantitative research, sometimes referred to as positivist is scientific in approach. It aims to be objective and collects and uses numerical data.

The epistemological foundation of most social science inquiry throughout the 20th century was logical positivism, a school of thought that maintains that all knowledge is derived from direct observation and logical inferences based on direct observation. To a great extent, the notion of objectively studying human beings is derived from a love affair social scientists have had with the natural sciences, which sought to understand nature by isolating phenomena, observing them, and formulating mathematical laws to describe patterns in nature. Current research in the social sciences is very steeped in the empirical and quantitative traditions (Rudestam & Newton, 2001).

On the other hand, qualitative perspective emphasises a phenomenological view in which reality inheres in the perceptions of individuals. Studies deriving from this perspective focus on meaning and understanding, and take place in naturally occurring situations (McMillan, 1996). Glatthorn and Joyner (2005) states that if a study uses a language such as the following, it probably has used a qualitative perspective: naturalistic, field study, case study, context, situational, constructivism, meaning, multiple realities.

White (2003) stated that qualitative approach assumes that this is difficult and the research is subjective. Qualitative research, takes the view that it is very difficult for researchers to stand back and be objective, since they are really part of the process being researched. This type of research is sometimes called relativist or phenomenalist. The researcher who employs experimental and quasi-experimental designs attempts to control the playing field of the study as much as possible, restrict the focus of attention to a relatively narrow band of behaviour (often manipulating experimental conditions in order to further narrow the object of study to a single variable), and to get out of harm's way as a detached and objective observer of the action.

A countervailing trend in social science research calls for sidestepping the artificiality and narrowness of experimental studies by promoting studies that allow researchers to be more spontaneous and flexible in exploring phenomena in their natural environment (Rudestam & Newton, 2001). So far, so good; qualitative and quantitative methods can be seen as complementary, with different emphases in different disciplines, but sharing a heritage of logical thought and empiricism (Preece, 1994).

3.2.2 Research Methods used in this Thesis

Qualitative research can be accused of being unscientific, unrepresentative, open to bias and, even to manipulation, conscious or unconscious. Clearly if a researcher is to achieve the ideal of seeing as the subject sees then the researcher would need to lose any external frame of reference and to understand no more than the subject; this seems neither possible nor desirable (Preece, 1994). This study is approached with a quantitative research approach methodology as the study aims at examining the effect of the taxi recapitalisation programme in the Rustenburg area. According to Preece (1994) quantitative

approaches are valued for hypothesis testing, for their logical rigor, for universal argument, or generalisation, and for their apparent objectivity.

3.2.3 Primary and Secondary Data

White, 2003 states that information is classified into primary material and secondary material. A distinction is commonly made between primary and secondary sources of information in research. This distinction is much more than just a classification of information sources but represents different types of information and arguments (Preece, 1994).

Information which is new and original at its date of publication is termed primary material. It is always up-to-date, detailed and accurate. Consequently, fewer people want to use it as it is expensive to buy and sometimes difficult to trace. The primary sources provide details of previous research (White, 2003). According to Preece (1994) the essence of a primary source of information is that it involves the researcher in direct experience and observation of the real world, in so far as that term has meaning. Thus possible distortions, deliberate or inadvertent, by other observers are avoided. In this sense, the emphasis on the use of primary sources is clearly in the empirical tradition. A primary source is the original report (Glatthom & Joyner, 2005).

Secondary material contains information which has been published before. An example of a secondary source is a textbook. The author has used a number of different sources in preparing this book. Secondary material is, therefore, less specialised and not so up-to-date. As more people want to use it, it is usually less expensive and easier to get hold of. Secondary material gives general background and theory (White, 2003). Secondary sources, on the other hand are those where the information has already been sifted and structured by someone else, albeit for quite legitimate reasons. Though such information is likely to be true, it may not be the whole truth. Books and other writings prepared for publication are the most obvious examples here (Preece, 1994). A secondary source is an article that refers to the primary source (Glatthom & Joyner, 2005).

Preece (2004) stated that while primary information forms the substance of research, secondary sources are particularly useful in the earlier stages of definition of the research problem and its relation to existing work. According to

Glatthom and Joyner, (2005) good researchers do not rely on a secondary source; they search for and retrieve the primary source. Secondary sources may sometimes distort the findings of the primary source and they do not provide sufficient detail.

3.3 DATA COLLECTION METHOD

3.3.1 Methods for collecting primary data

There are several types of research methods that can be used to collect primary data. Interviewing is probably the most common data gathering method in qualitative research (Leedy & Ormrod, 2005). It can be described as the meeting of two persons to exchange information and ideas through questions and responses, resulting in communication and joint construction of meaning about a particular topic (McMillan, 1996). In qualitative studies, interviews are often quite open-ended, however in survey research interviews are fairly structured (Leedy & Ormrod, 2005).

(a) Interviews

According to White (2003) an interview is a popular form of data collection and can provide, when properly conducted, a rich source of material. Interviewing is a technique peculiar to the social sciences and there is no analogy with the natural sciences. Nevertheless there is a need for an objective approach to interviewing technique. This in the broad sense should be scientific in requiring detachment, objectivity, uniform treatment and an awareness of possible influences arising from the subtlety of communication, not only of verbal inflection but of body language (Preece, 1994).

(b) Survey

A survey is a way of describing and explaining some aspect of a population. Surveys are used, for example, in market research, opinion surveys and attitude surveys. Surveys are carried out by either interviews or questionnaires, or both (White, 2003).

3.3.2 Questionnaire

According to Preece (1994) questionnaire surveys can be conducted in public or semi-public places such as in a street, beauty-spot or workplace, or privately in

respondents' homes. Questionnaires may be presented to the respondents either directly by a surveyor or indirectly by post or by hand delivery. The questionnaire can be self-administered, that is filled in by the respondent, in which case it should be remembered that a substantial minority cannot read or write well if at all, and, in any case, the instructions must be very clear. White (2003) says questionnaires generate data in a very systematic and ordered fashion. For research purposes a questionnaire is regarded as a series of questions, each one providing a number of alternative answers from which the respondents can choose. Types of questionnaires according to White (2003) are as follows:

- Postal questionnaires - Questionnaires sent by mail and either returned by mail or collected individually. Questionnaires are now being sent using e-mail.
- Self-administered questionnaires - It is where the questionnaire is filled in by the researcher asking respondent a series of questions. This is in a sense very structured interview and the advice given for this type of interview still applies. Questionnaires like this can sometimes be completed using telephone. Also there is the case where the interviewer leaves a questionnaire with a respondent and agrees to call back at a later date and time to collect it when completed.

In order to help maximise the number of responses to the questionnaire, a number of questions will be limited to ensure that the questionnaires will be completed. The questionnaire will consist of 2 sections. The first section of the questionnaire will be aimed at gathering biographical data on the respondents including age, gender, qualifications and frequency as well as the level of decisions that are normally made by the respondent, while the second section will focus on specific questions with regards to the taxi recapitalisation programme importance, requirements and challenges in the Rustenburg area. Responses are made on 5-point scales scored so that a high score was indicative of greater uncertainty or complexity. Other questions will require yes or no answer and others will be open ended questions where the respondent is expected to support their response by providing more details. To ensure that

respondents shared common notion of information quality, a definition will be given in the questionnaire. The table below refers to the questionnaire outline.

Table 3.2: Questionnaire Outline

A short disclaimer describing the purpose of the study	
Questionnaire	
'Covering letter'	
Part 1- Questions 1-9	Gathers biographical data on the respondents including age, gender, and qualifications.
Part 2- Questions 10-15	Focuses on the understanding of the taxi recapitalisation programme in the Rustenburg area.
Part 2- Questions 16-19	Focuses on the importance of the taxi recapitalisation programme in the Rustenburg area.
Part 2- Questions 20-25	Focuses on the challenges of the taxi recapitalisation programme in the Rustenburg area.

3.3.3 Sampling method

There are two basic ways of choosing samples according to White (2003): random (probability) sampling and non-random (non-probability) sampling. Random sampling works best with very accurate and up-to-date sampling frame and is the preferred method if you intend to carry out any form of statistical analysis. With random sampling every sampling unit or member of the population has an equal chance of being selected (White, 2003). White (2003) stated that there are often situations where it is impossible to determine accurately the sampling frame. Also because of the nature of the research and dissertation, you do not need to make detailed statistical analyses. In such instances you can use what are termed non-random sampling techniques. With some qualitative research you need to sample with definite purpose, and the approach therefore is subjective. The participants will have to meet the following criteria to be included in the sample:

- The participants must be leaders involved in decision making
- The participants must be taxi operators/owners and passengers in the Rustenburg

The population (N) of the taxi operators and passengers in the Rustenburg area = ± 3500 and the researcher desired to take a sample size (S) of 400. Therefore a maximum 400 completed questionnaires will be required for meaningful conclusions to be drawn from the data gathered from the survey.

3.3.4 Types of variables

A variable is some measure of a phenomenon which both varies and whose variation can be measured, or at least recorded in some way, even if only in terms of its presence or absence (Preece, 1994).

According to Preece (1994) an Independent Variable is a condition which, ideally, can be varied directly by an experimenter and, again loosely, may be thought of as a possible cause of some effect. Dependent Variable is a condition which can only, if at all, be changed indirectly by the experimenter by way of the independent variable; the dependent variable may be thought of as an effect, or at least as a possible effect. A combination of variables will be used in the survey. In order to identify participants, nominal and ordinal variables would be used. Survey questions would vary from ordinal to ratio variables, depending on how the questions are posed.

3.3.5 Data Analysis Approach

The great benefit of including this statement is that it forces you to think through how you will treat the data from your dissertation at the time the proposal is generated, rather than after the data are collected (Rudestam & Newton, 2001). Rudestam and Newton (2001) states that this section is particularly difficult for a number of reasons, beyond the fact that students may not be prepared to apply statistics to their own research. First, statistical analysis is virtually never a one-shot affair. Data may be analysed and reanalysed many times before the researchers are satisfied that the data have been given the correct treatment. A technique that initially seemed perfectly reasonable will later seem inappropriate because of the number of cases or distribution presented by the completed sample. Second, interesting questions often arise after initial analyses are completed. If a hypothesis is not supported, one may search for control variables that might help explain the lack of support.

3.4 ETHICAL CONSIDERATIONS PERTAINING TO THE STUDY

According to Glatthom and Joyner (2005) the researcher must be certain that the study is consonant with generally accepted ethical principles. The following principles should be kept in mind at all times.

- Equity. The study does not reflect or support discrimination based on age, ethnicity, gender, sexual orientation, social class, or disability.
- Honesty. The study is characterised by honesty and openness. If the study requires deception, the researcher should be sure that the results will warrant the deception, that there are no alternative methods available, and that those deceived are informed as soon as possible.
- Humane consideration. The study does not require or result in emotional or physical pain for participants.

If this type of research has been conducted by other researchers, it will be ensured not to commit plagiarism and to give credit to all authors that were drawn from to compile the body of knowledge for the research study.

3.5 LIMITATIONS

This study is restricted to Rustenburg Municipality area. Data integrity may also be a limitation. Time constraint may clash with work and studies. Availability of respondents at certain times due to the reason that they are always on the road.

3.6 CONCLUSION

The chapter also provided information on sampling methods, sources of data and methods used to analyse the data. It has broadly explained the rationale behind the methodology, how the research will be conducted and what steps will actually take place to ensure the validity of the data.

Furthermore, it has looked at instrumentation, research type, population, sampling method, and data gathering methods from a theoretical perspective and how the research will be conducted and what steps will be taken to ensure the validity of the data. The next chapter presents the study findings that would be used in rejecting or accepting the raised questions.

Chapter 4

DATA DISCUSSION

4.1 INTRODUCTION

The research questions purpose was to answer the question of the effectiveness of the Taxi Recapitalisation Programme in the Rustenburg area. The research questions covered different areas in order to be able to get the answers concerning the Taxi Recapitalisation Programme. The research questions arrived at was: 1) Do people understand what the taxi recapitalisation is? 2) What is the importance of the taxi recapitalisation programme for operators? 3) What are the challenges faced by taxi operators in the taxi recapitalisation programme?

Overall, this chapter is organised around the response data, the collection procedures, and the treatment of the data. And also the data collection method system chosen, types of questions that can be asked and development of the questionnaire, the survey population and sample size determination; data handling and concludes with the discussion of a researcher's compliance with research ethics. The questionnaire feedback will be discussed in detail on this chapter. The interpretation of the questionnaire will be made. The questionnaires collected will be analysed in order to get the answers. The entire chapter will be analysing the questionnaire data collected.

4.2 RESPONSE RATE

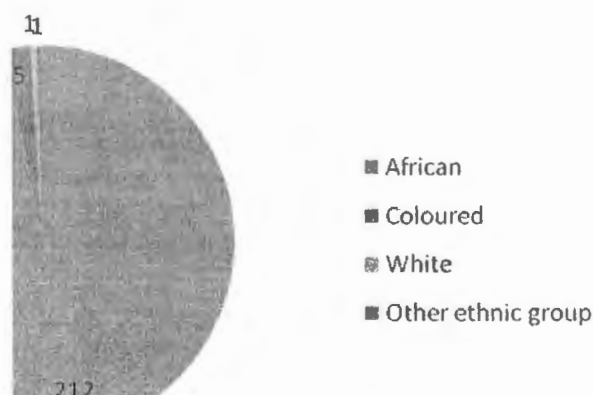
The response rate is the number of completed questionnaires that were received. The Rustenburg area entails the Bafokeng areas, Geelhoutpark, Rustenburg Noord and East, Protea Park, Safari Gardens, Waterfall, Cashan, Zinniaville and Tlhabane. The questionnaires were distributed in such a way that most of the areas are covered. The sample was selected randomly and mostly it was a convenient sample because of the geographic spread of your respondents. The data was summarised on spreadsheet and xlSTAT used to do the stats. There were 400 questionnaires distributed to different taxi organisations, taxi operators, taxi owner and taxi commuters in the Rustenburg area. 150 completed questionnaires were received and struggled to get the

other 250 completed questionnaires back. The face-to-face completion of questionnaire as and when meeting a role player in taxi industry. The exercise helped to get 69 more questionnaires to be completed which resulted in total of 219 completed questionnaires for the research.

4.3 DEMOGRAPHICS

This section will cover demographics in detail. The section will describe the various elements of demographics in graphs, charts, histograms and tables based on the completed questionnaire. The various elements of demographics highlighted are: 1) Ethnicity of the respondents; 2) Proprietorship of the respondents; 3) Taxi licence and drivers' licence of the respondents; 4) Age profile of the respondents; 5) Gender of the respondents; 6) Number of taxies of the respondents; 7) Years in taxi business of the respondents; 8) Residence of the respondents; 9) Years in Rustenburg of the respondents and; 10) Qualification of the respondents. The section will analyse the completed questionnaires in order to answer the questions according to the various elements of demographics.

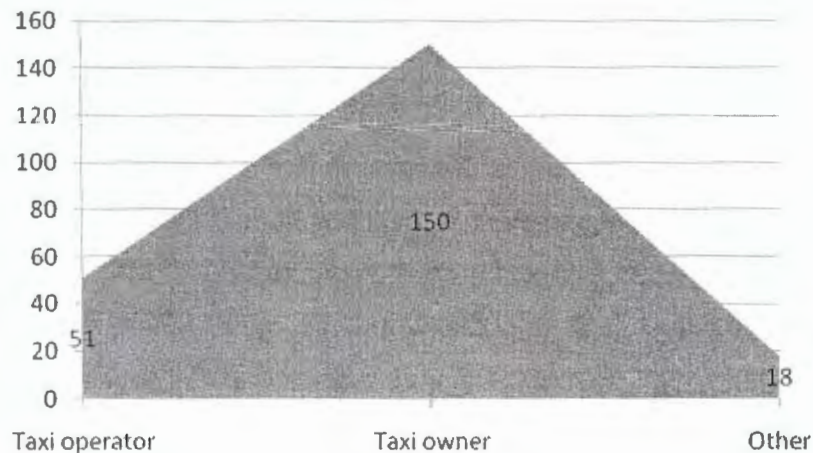
Figure 4.1 Ethnicity of the respondents



This section shows that 219 questionnaires were completed. There were 212 (97%) Africans who completed the questionnaires out the 219 total sample completed. There were 5 (2,3%) coloured, 1(0,5%) white and 1(0,5%) other ethnic group that completed the questionnaires distributed. This shows that majority were Africans who completed the questionnaire as they are the

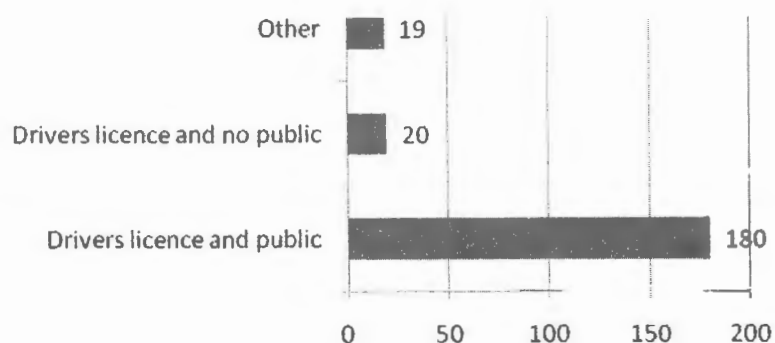
dominating population in the Rustenburg Area. The minibus-taxi proprietorship based on the race group will be explained in the Figure 4.2.

Figure 4.2 Proprietorship of the respondents



The proprietorship of respondents indicates the taxi operators, taxi owners and other. The taxi operators are the ones who are driving the minibus taxi's to ferry passengers from one place to another. The total number of 51(23,3%) taxi operators completed questionnaires of the total sample 219 respondents. The taxi owners refers to the owner of the minibus taxi and 150 (68,5%) completed questionnaires of the total sample of 219 respondents. The other refers to the passengers who are the users of the minibus-taxis to go from one place to another and the communities in which they operates, who do not own and operates or drives the minibus taxis. There were 18 (8,2%) questionnaire was completed by other of the total sample of 219 respondents. In summary it shows that majority of the completed questionnaires were completed by the black taxi owners of minibus taxis.

Figure 4.3 Taxi licence and drivers' licence of the respondents



The respondents are in three categories namely the other, drivers licence and no public, drivers licence and public. The other represents the passengers and community members that do not have driver licence or drive minibus taxis. 19 (8,7%) of respondents falls under the category of other which means they do not have driver licences and do not operate/drive the minibus taxis. The drivers licence and no public are the taxi operators who are driving minibus taxi but do not have the public drivers licence. This means that they are not allowed to drive minibus taxis ferrying passenger from one place to another. There were 20 (9,1%) completed questionnaires of drivers licence and no public completed the questionnaire of the total sample of 219 respondents. The drivers licence and public are those who allowed ferrying passenger as they have the requirements to do that. A total number of 180 (82,2%) completed questionnaires were received of drivers licence and public completed questionnaires of the total sample of 219 respondents. The summary showed that majority of the respondents have the drivers licence and public which means they are adhering to the requirements of ferrying passengers.

Table 4.1 Age profile of the respondents

20-30	29
31-40	32
41-50	156
50+	11
No answer	2

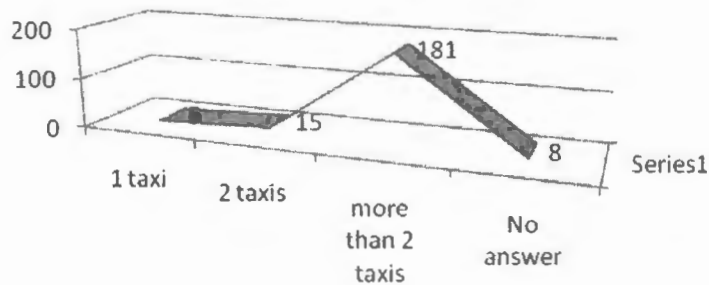
The respondent's ages started from a minimum of 20 years and to 50 years plus+. They accounted for 230 completed questionnaires. Only 2 (0,9%) respondents did not want to disclose their age. The respondents are taxi operators, taxi owners, passengers and community members which the taxis operate in. There respondents are in the taxi industry based on various reasons because cannot find employment, started a business in the taxi industry, did not have money to go to school or tertiary institutions, started as small vendor and used their money to buy minibus-taxis, used their pension money payouts to buy minibus-taxis, inheritance from the parents and some of them they are driving their parents minibus-taxi.

Figure 4.4 Gender of the respondents



The majority in the taxi industry in the Rustenburg area are male based on the 209 analysed questionnaires. This is shown by the 160 (76,6%) completed questionnaires compared to the 39 (18,7%) female respondents. The challenge is that females in the taxi industry in the Rustenburg have to compete with the males in the industry. These female respondents are taxi owners and operators. They are in the business to ferry passengers with no advantages like in the regulated work environment or business sector. Only 10 (4,8%) did not respond to the gender question. Their reasons may vary but they did not want to disclose their gender status.

Figure 4.5 Number of taxies of the respondents

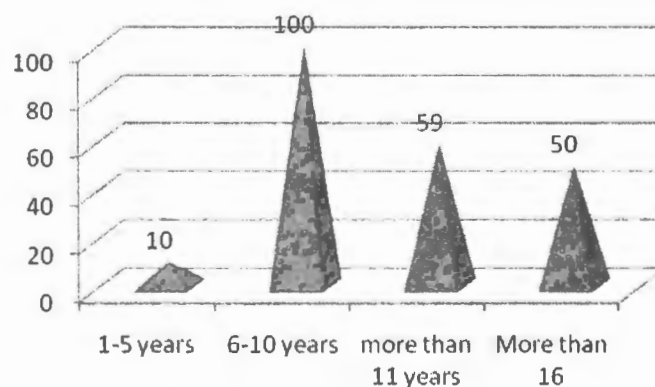


This section shows the number of taxis owned by the respondents. The total population of respondents was 209. There were 5 (2,4%) respondents who owns 1 taxi, 15 (7,2%) respondents by owners of 2 taxis, 181 (87%) completed questionnaires by those who own more than 2 taxis and 8 (3,9%) respondents did not answer concerning ownership.

The business with people outside the minibus-taxi industry (McKinnon, 2009):

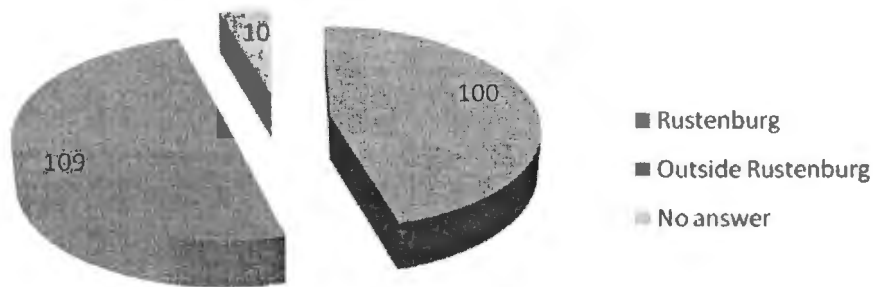
- Business deals should be properly protected by legal agreements or contracts between members of the mini-bus taxi industry as individuals, associations and external business people;
- The minibus-taxi industry should be considered as a group, instead of considering only an individual member of the industry who might not represent the operators or if he/she does represents them, consideration should be given to what would happen if he/she were to be voted out.

Figure 4.5 Years in taxi business of the respondents



The section shows the number of years that the respondents have been in the taxi industry. It shows in Table 4.1 that the age of the respondents started at the age of 20. The required age to get a valid driver's licence is 18 therefore it shows that the taxi operators are complying with the laws of the country. There were 219 completed questionnaires. There were 10 (4,6%) respondents that shows an experience of 1 to 5 years in the industry. A total of 100 (46%) respondents are in the 6 to 10 years' experience, 59 (27%) respondents are in the taxi industry for more than 11 and lastly 50 (23%) respondents have more than 16 years' experience in the taxi industry. The numbers shows that majority of the respondents have been in taxi industry for more six (6) years which means they are able to sustain their business for such a period. Their experience shows the financial expertise and that they comply with the laws namely South African Revenue Services in terms of tax payments. The graph shows also that the respondents with more than 11 years in the taxi business reduce as time goes on.

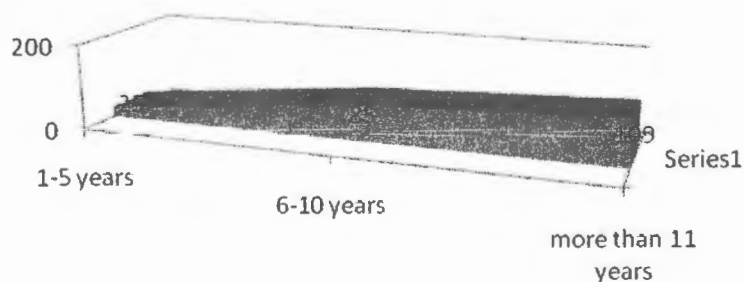
Figure 4.5 Residence of the respondents



There are many opportunities in the Rustenburg area. The opportunities are the mines which are surrounding Rustenburg. There are also businesses and the industrial sites in the Rustenburg area enticing people to come and invest in the transport sector. Rustenburg area has employment opportunities and that creates need for transport of those employees to and from work. There are 100 (46%) completed questionnaires by people in Rustenburg, 109 (50%) were completed questionnaires by people outside Rustenburg and only 10 (4%) did

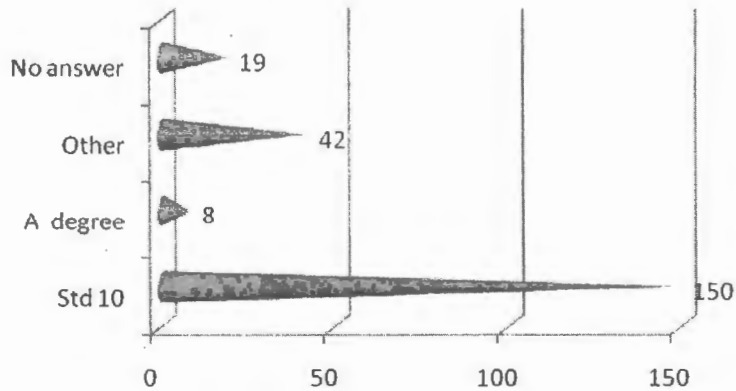
not respond concerning their residence status out of the sample of 219. Respondents came to Rustenburg to work then saw an opportunity in the taxi business that they explored so that is the reason the statistics are nearly 50/50 concerning the residence status.

Figure 4.5 Years in Rustenburg of the respondents



The graph shows that the respondents have stayed in the Rustenburg area for different years. Completed questionnaires were 219. There were 25 (11%) respondents who have stayed in the Rustenburg area for a period of 1 to 5 years. 85 (39%) completed questionnaires are by respondents who stayed for a period of 6 to 10 years and lastly 109 (50%) respondents stayed more than 11 years. With reference to the age of the respondents on the taxi industry as per Table 4.1 it shows that started from a minimum of 20 years and to 50 years plus+. The majority of taxi owners respondents are in the taxi industry for a period between 6 to 10 years. This shows that the minibus taxis have been in existence for a long period and respondents have been part of the taxi industry in the Rustenburg as a passenger, taxi operator and taxi owner. The opportunities of employment in the Rustenburg area created a need for minibus taxi to transport workers to different working areas. There are employers, notable security companies have come up with credit schemes for the purchase of bicycles to assist their employees. The large numbers of low income employees are moving to residential areas which are close to their work places to enable them to walk instead of using public transport. In the area called Noord in Rustenburg which is just across the street to town, most of the houses are rented out in order to accommodate the people who prefer to walk and mainly are low income employees.

Figure 4.6 Qualification of the respondents



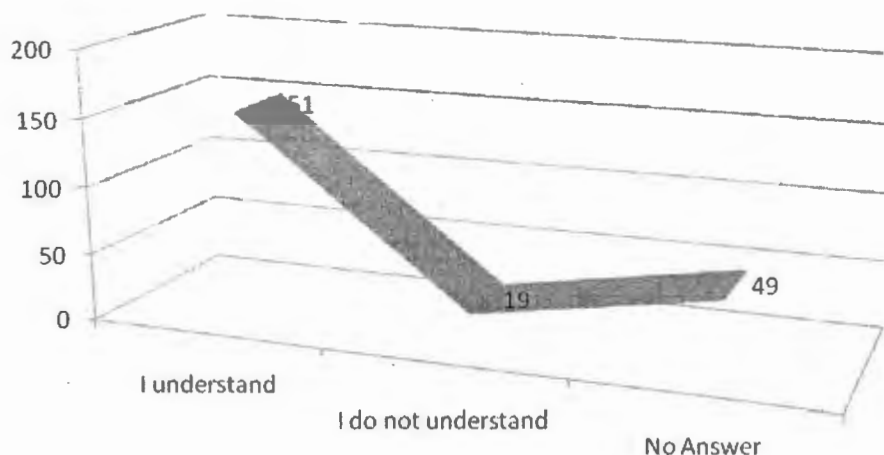
The 219 completed questionnaires showed different categories on answers. Firstly 19 (8,7%) respondents did not answer the qualification question. Secondly 42 (19,2%) respondents answered the qualification question as other which can be either no qualification or other qualification not mentioned to choose from. Thirdly 8 (3,7%) respondents have a degree qualification. The reason can be that the person cannot find employment after completing the qualification, some were doing the qualification to satisfy the parents wish of having a learned child as they were forced to register for programmes chosen by the parents, was doing the qualification to have a fall-back so that when the business does not be successful they can look for employment, the taxi operator was studying part-time so he/she is looking for employment and avoid to idle to keeping him/herself busy in the taxi industry and the other ones are forced to take over the family business as the parents no longer able to manage it. Fourthly 150 (68,5%) respondents are having a Standard 10 qualification. The standard 10 is the equivalent of grade 12 in the recent years; since majority have been in the taxi industry from the olden days they understand the standard 10 qualification. The growth in informal employment, the precarious nature of this form of work, and the variability and low level of incomes that informal economy workers earn, raise the issue of what measures might be provided by government to support workers in the informal economy. Whereas informal sector is based on assessing the nature of the enterprise, the informal economy assesses the nature of the employment situation. Where the work is characterised as insecure and where the worker is not covered by the normal

provisions of employment such as leave and pension, the worker is classified in the informal economy (Budlender *et al.*, 2004).

4.4 Taxi Recapitalisation (TRP) details

The following section explains the Taxi Recapitalisation programme in detail. The understanding of the programme by respondents will be outlined. The information provided, transparency about programme will be explained in full. The commitment by stakeholders is explored according the respondents. The progress of the programme and the satisfaction is discussed in detail. There are also more issues discussed in length such as improvement in taxi industry by the programme, programme meeting requirements, the implementation, the access to finance by the taxi owners, scrapping allowance amount and the duration of the scrapping allowance.

Figure 4.7 Understanding of the taxi recapitalisation by the respondents



The understanding of the taxi recapitalisation programme had 3 options of answers on the questionnaire namely; I do not understand, I do not understand and No answer. The respondents also answered according to those options. 151 (69%) respondents understands the programme, this is the majority response in relation to the total sample of 219. There were 19 (8,7%) respondents who do not understand the programme in relation to the total sample of 219, because there was no information or workshop that were conducted by whoever who runs the programme. There were 49 (22,4%) respondents who chose no answer

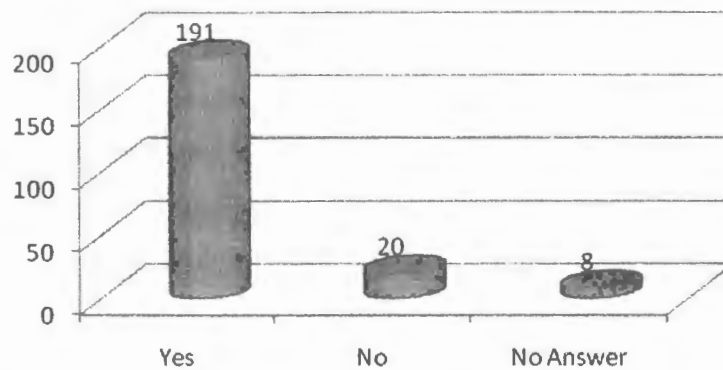
which is either they do not have information, they understand or basically they do not understand at all. On these 49 (22,4%) respondents some mentioned that since their names are written on the questionnaire they are scared that they might not get assistance from the government in terms of the taxi permits and tax clearance documents even when clarity and explanations were given before the start of the completion of the questionnaire. Some were afraid of their taxi association because they will be called sell-out to the government. Some do understand partly but have issues concerning the scrapping allowance amount which has been fixed since the start of the programme whereas the prices are increasing. Some do not understand how the programme is assisting them in terms of accessing finance with the financial institutions.

Figure 4.8 TRP is communicated to all stakeholders of the taxi industry



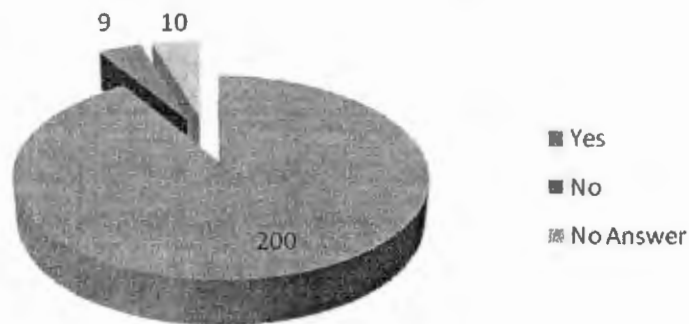
This section deals with the communication of the taxi recapitalisation programme to the stakeholders. The stakeholders of the taxi industry are the taxi operators, taxi drivers, the department of transport, passengers and South African Receiver of Revenue. A total of 189 (86%) respondents said that the programme was communicated to them out of a sample of 219. There were 20 (9%) respondents who said that the programme was not communicated at all to them out of a sample of 219. There were 10 (4,5%) respondents who did not answer about the communication issue out of a sample of 219. They may be aware or not aware and programme is imposed. The statistics shows that majority of the stakeholders the programme was communicated to them.

Figure 4.9 TRP transparent



There 219 completed questionnaires which were received. Out of that 191 (87%) respondents stated that the programme is transparent meaning everything is done in an open manner for everyone. There were 20 (9%) respondents who stated that the programme is not transparent. Some said the programme is not highlighting the minibus taxi to buy in the information. The scrapping allowance payment duration is not stated and there is no standard of the turnaround time as per information of the Department of Transport. The programme is not saying anything about the access to finance if a taxi owner has scrapped the minibus taxi. There were 8 (3,7%) respondents who did not answer because they say the government is imposing the programme, taking forever to pay the scrapping allowance and no guidance to access finance.

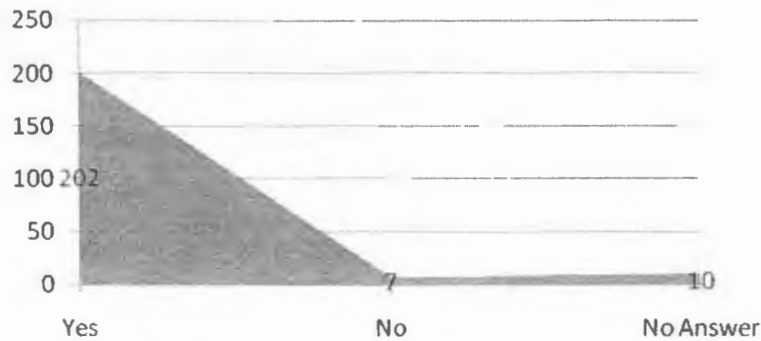
Figure 4.10 Stakeholders feel committed to TRP



The commitment by the stakeholders towards the programme showed different statistics based on the answers allocated on the questionnaire. A total of 200 (91%) respondents out of the 219 of the total sample showed that the stakeholders are committed to the programme. There were 9 (4,1%)

respondents out of the 219 of the total sample who did not answer as they can feel nor cannot feel the commitment. Only 10 (4,6%) out of the 219 of the total sample said that there feel no commitment from the stakeholders towards the programme. They said that the wait for the scrapping allowance for more than 3 months which is taking them out of business. The scrapping allowance amount cannot able them to acquire or afford new minibus taxis.

Figure 4.11 Satisfied with the Management of TRP



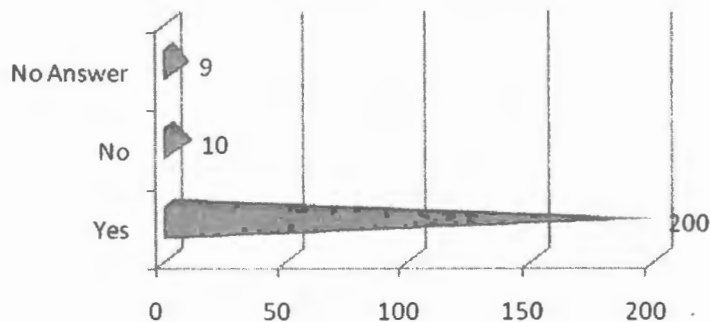
A total number of 7 (3,2%) out of the 219 of the total sample said that they are not satisfied with the management of programme. The responds said that the scrapping allowance payment is not paid in a short period of time meaning less than 30 days. The scrapping allowance is not linked to inflation as it has been the same amount since the start of the programme. The access to finance is not available to them since they do not have payslips or proof of income when the minibus taxi is in scrapping process. The scrapping allowance that takes a long time to be paid out minimises the chances of them getting finance by the financial institutions. A total of 10 (4,6%) respondents out of the 219 of the total sample did not want to answer this question because they cannot say nor say that they were satisfied with the management of the programme. They are not happy and happy with other issues of the programme so that is the reason they cannot be satisfied with the overall management of the programme.

Figure 4.12 Stakeholders satisfied with the progress of the TRP



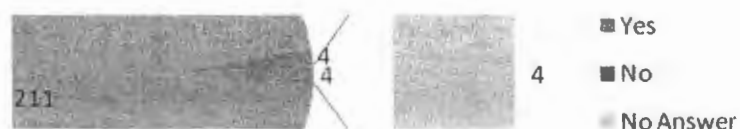
There were 11 (5%) respondents who are not satisfied about the progress of the programme out of the total sample of 219. The reason that they said concerning the progress is that they struggle to access finance which hampers them to acquire new minibus taxis. The progress concerning the scrapping allowance payment is taking more 3 months which is taking them out of business. The new vehicle that they are supposed to buy they do not know it because even the information provided does not show it. There were 199 (91%) respondents out of the total sample of 219 who said that they are satisfied about the progress of the programme. There were 9 (4,5%) respondents who are not satisfied nor satisfied with the progress of the programme. Their reason was that concerning the progress they just see taxi operators not being able to afford the new minibus taxis which resulting in exiting the taxi industry. The programme resulted in increasing the unemployment of taxi driver because due to affordability of the taxi owners they opt to drive for themselves. The programme has even brought the repossession of new minibus taxis that the taxi owner cannot keep up with the instalments after using the scrapping allowance of R50,000 as a deposit of minibus taxi of R252,000 excluding finance charges and Value Added Tax (VAT).

Figure 4.13 TRP shows an improvement in the transport



There were 219 completed questionnaires which were received. 200 (91%) of the respondents stated that the programme shows improvement in the transport sector. There were 9 (4,5%) respondents who stated that the programme shows improvement or no improvement in the transport sector. They stated that concerning the improvement they just see taxi operators not being able to afford the new minibus taxi which resulting in fewer minibus taxis. The programme resulted in increasing the unemployment of taxi driver due to the point that taxi owner take the scrapping allowance and exit the taxi industry. 10 (4,5%) respondents stated that the they do not see improvement in the transport sector because there is a shortage of transport resulting from people exiting the taxi industry.

Figure 4.14 Taxi recapitalisation requirements met



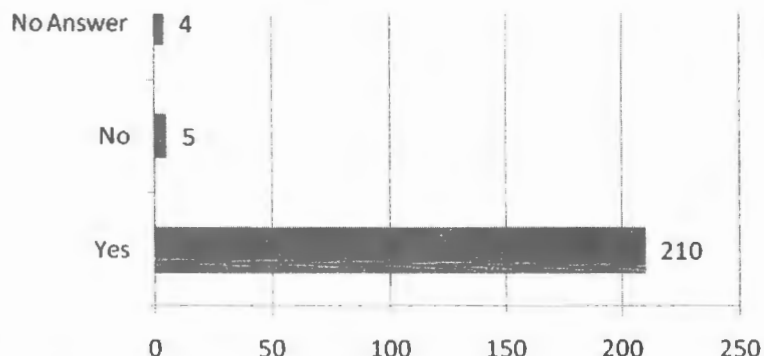
There were 219 completed questionnaires regarding the requirements being met of the programme. The requirements is include introducing safety requirements

for the new taxi vehicles (NTVs), scrapping existing vehicles, effective regulation of the taxi industry, and effective law enforcement in respect of public transport and empowerment of the taxi industry. The taxi recapitalisation programme ensures that owners have a permit to operate, are registered with the provincial Department of Transport, and belong to a recognised taxi association. A total of 211 (96%) respondents stated that the requirements of the programme has been met. 4 (1,8%) of respondents stated that the requirements of the programme are not met. There were 4 (1,8%) respondents who could not state whether the requirements of the programme have been met or not met. They said that the safety requirements are not specific and they do not know the minibus taxi to buy. The taxi industry is not regulated as part of the programme because they work long hours and they do not have salary ranges which known or monitored by the government. In order to participate in the Taxi Recapitalisation Programme it is a requirement that operators provide proof that they pay income taxes and that their tax affairs are in order. A tax clearance certificate from South African Revenue Services is required before a taxi operator can participate in the taxi recapitalisation programme.

According to Lomme (2006) the formalisation policy also intends to build on self-regulation of the minibus taxi industry by the operator's associations, which are not only legally recognised but also legally required to play an active role in the formalisation process: they are to be registered, to adopt a standard minimum constitution compliant with minimum requirements prescribed by public authorities; they have to commit to impose on their members a Code of Conduct consistent with the one prescribed by public authorities and to discipline those of their members who do not comply with their legal and regulatory obligations or violate the Code of Conduct, and inform public authorities of any existing or looming conflict with other associations. The main operational costs related to these obligations are tax and labour requirements. Taxes include municipal licences or permits, income tax as well as value-added tax. Taxi driver wages are quite significant as it represents a fixed cost, independent of size and economic performance. Labour legislation requires the payment of legal minimum salaries and the fulfilment of various social security obligations. Unlike

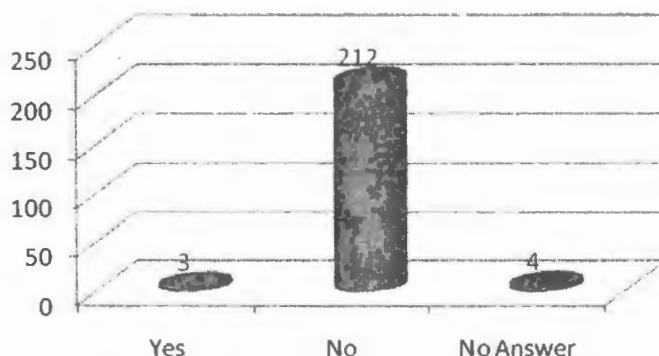
tax obligations, labour requirements are not differentiated according to size of operations and annual profits.

Figure 4.15 Was TRP implementation done as agreed



The implementation process received 219 respondents. 210 (96%) of the respondents stated that the implementation of the programme was done as per the requirements. A total of 5 (2,3%) respondents stated the implementation process was not done as per the requirements. There were 4 (1,8%) respondent who did not state whether the implementation was done as agreed or not implemented as agreed. They mention that the formalisation is the taxi industry is not as the taxi operators do not have trade unions. They said that their working conditions are not changing and they work abnormal hours as they must be able to meet the target of the daily taxi fares by the taxi owner. The minibus taxi for the programme was never introduced. The scrapping allowance is paid after the taxi owner is out of business.

Figure 4.16 TRP showing results

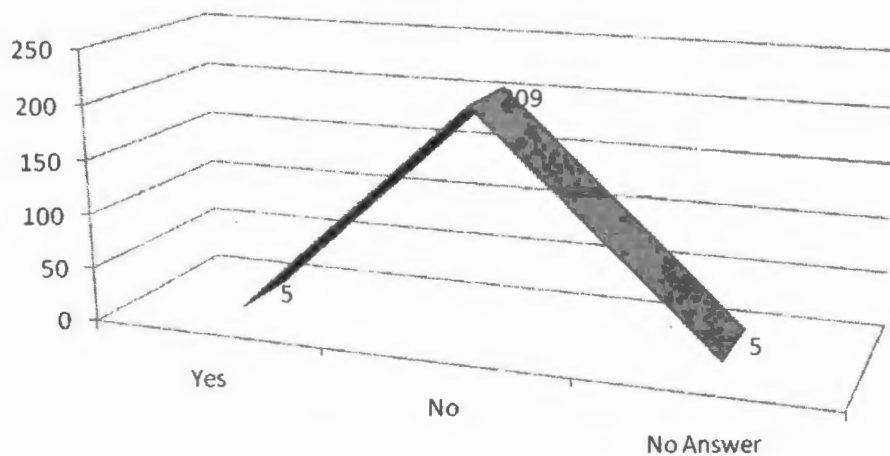


A total of 219 completed questionnaires were received from respondents answering the question; is the programme showing results. This programme

entails scrapping old minibus taxis and replacing them with new, more appropriate vehicles. This programme was initiated in the interests of road safety and as a tool to get minibus taxi operators to convert their radius-based licenses to route specific licences. The government's Recapitalisation Scheme is aimed at restructuring and developing the taxi industry. The scheme is intended to empower taxi owners, improve the quality and safety of public passenger transport and regulate the industry. A total of 3 (1,4%) out of 219 respondents stated that the programme is showing results. There were 212 (97%) respondents who stated that the programme is not showing results. They said that the results expected of restructuring and developing the taxi industry is not visible. The access to finance is the main challenges as they cannot be assisted with the scrapping allowance amount as a deposit. The commercial are needing a deposit of R120, 000 on a R252,000 excluding finance charges and Value Added Tax (VAT) because they are repayable in 36 months and in order to afford the monthly instalments. A total of 4 (1,8%) respondents did not know whether the programme is showing results or not. The regulating of taxi industry means the protection of the market boundaries and creating a framework for competition. The overriding regulatory motivation was to charge for use of infrastructure and protect consumers. Operating licences acquired value once restrictions had been imposed in order to enter the taxi industry. According to Koehler as soon as their numbers were of any consequence, they became subject to regulation. It is widely believed that regulation from the start was a means of protecting market boundaries and creating a framework for competition. The National Land Transport Transition Act (Act 20 of 2000) has an objective to create appropriate institutional structures such as Provincial Permissions Boards, Provincial Taxi Registrars, Transport Authorities, etc. An additional advantage of the new structure is the fact that conflict and violence will be reduced. It was mentioned earlier that in the absence of state regulation, taxi associations often use violence as a means of protecting routes and operations. With a properly organised route network which is effectively monitored and controlled, this type of behaviour will become unnecessary and will greatly improve the security situation in the taxi industry. The restructuring will undoubtedly evoke high emotion and resistance from operators and therefore it is crucial that operators be consulted in the process and educated in

terms of the benefits the new structure will hold for them. In addition, a well-designed change management programme should also be implemented (Fourie & Pretorius, 2005).

Figure 4.17 Access finance for new taxis



There were 219 completed questionnaires received. The taxi owner scraps the old taxi and receives the R50,000 allowances and the financial service provider can grant finance to the owner. Therefore the taxi owner will be out of business unwillingly. The taxi owner is out of business which is resulting in the unemployment of the taxi owner and driver. The scrapping allowance is not enough to ensure that the taxi operator can afford a new minibus taxi. There were 5 (2,3%) respondents stating that they have access to finance after receiving the scrapping allowance. There was another 5 (2,3%) respondents who stated that they have access to finance and they do not have access meaning they are in between. A total of 209 (95,4%) respondents said they do not have access to finance. They said they expected government to have arranged with a financial institution that will help them concerning financing their new minibus taxis. They also said that because of their credit profiles, proof of income, affordability and high risk they cannot be granted finance by any financial institutions. Adams & Fraser Consulting Civil Engineers, (2006) also states that the programme offers operators once off capital subsidies or a 'scrapping allowance' amounting to a financial value equal to a quarter of the price of a new vehicle in exchange for their old vehicles and the conversion of

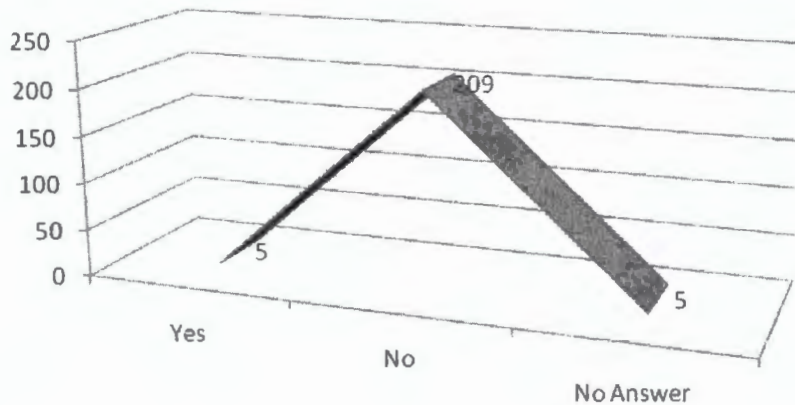
their current licenses, some of which are valid for an indefinite period, to route specific licences with a validity period of five years. As part of the deal taxi operators would have to observe the conditions of the basic employment act, register as taxpayers, insure and regularly maintain their vehicles. Thirteen percent or 2.8 million of urban customers are “stranded” owing to the lack of finances and or do not have the physical access to the public transport system. Even though government spent R2.8 billion in 1997 on bus and rail subsidies, only forty percent (40%) of stranded customers indicated that they actually had access to a bus and only twenty percent (20%) to a train, while seventy-eight percent (78%) indicated they could access unsubsidised and more expensive minibus-taxi mode. The taxi owner scraps the old taxi and receives the R50,000 allowances and the financial service provider can grant finance to the owner. Therefore the taxi owner will be out of business unwillingly. The taxi owner is out of business which is resulting in the unemployment of the taxi owner and driver. The scrapping allowance is not enough to ensure that the taxi operator can afford a new minibus taxi. In 1996, the transport strategy stated that “financial and technical assistance will be offered to minibus-taxis to enable them to obtain permissions and or contracts and to improve their economic viability” But since then only two main forms of financial assistance are contemplated: a scrapping allowance for minibus-taxi operators who consent to surrender their vehicles to the authorities; and an operational subsidy for contracted operators servicing the planned “ Integrated Mass Rapid Public Transport Networks” (Lomme, 2006).

Figure 4.18 Which taxi vehicles to buy?



This programme entails scrapping old minibus taxis and replacing them with new, more appropriate vehicles. This programme was initiated in the interests of road safety and as a tool to get minibus taxi operators to convert their radius-based licenses to route specific licences (Adams & Fraser Consulting Civil Engineers, 2006). The aim of the taxi recapitalisation is to replace the existing 16 seater vehicles with new 14 -18 seaters as well as new 19 – 35 seat vehicles. The replacement of these vehicles will improve the safety and reliability record of the taxi industry because of the new higher quality and safer vehicles. The programme aims to turn the commuter based service into a viable, customer-based public transport system. The key factor to achieve this is to increase the demand of public transport, to make maximum use of optimal mode for a given demand and distance, and to improve the transportation to meet the changing needs of customers. There were 219 completed questionnaires. A total of 208 (95%) respondents stated that they do not know which taxi vehicles to buy. 6 (2,7%) respondents stated that they know which taxi vehicles to buy. Only 5 (2,3%) respondents stated that they are in between knowing and not knowing which taxi vehicle to buy. They said the programme is intending to replace 16 seater vehicles with the new 14 -18 seaters as well as new 19 – 35 seat vehicles but the challenge is that which brand should they buy. The other challenge was that the 19 – 35 seater vehicles cannot be provide permits by the Department of Transport and they are classified as busses. The new 14 -18 seaters as well as new 19 – 35 seat vehicles are not specific in terms of the requirements of the programme as they cannot take their hard earned money and explore on things that the Department of Transport has not tested not given way forward of the brand to be bought. They have tried the Gazelle bus which is an 18 seater but it was not a user friendly transport due to the weather conditions in South Africa as it is a Russian vehicle. The Gazelle bus gave them problems that they reported to the Department of Transport and unfortunately there was no solution to their problem.

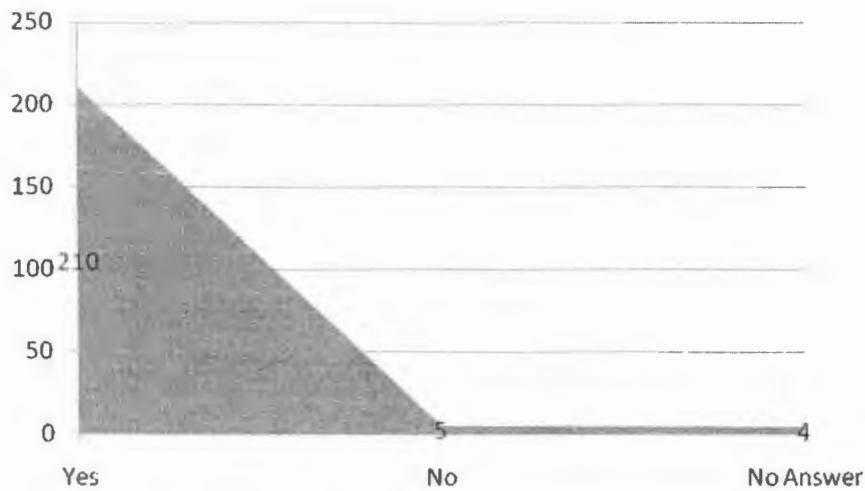
Figure 4.18 Taxi operators satisfied with scrapping allowance of R50 000



Therefore, government and the taxi industry will have to work together to provide a successful public transport system. According to Dabson (2000) it has the aim of trying to persuade people to use their cars a little less and public transport a little more'. The Minibus Taxi Recapitalisation Project is a current initiative (started in 1996) to formalise the South African minibus taxi industry (Suffla & van Niekerk, 2004). A R50 000 is offered as a once-off scrapping allowance to operators that either wish to trade in their old vehicles for new approved vehicles, or wish to exit the industry. The amount is the form of a capital subsidy to assist operators in acquiring new vehicles. The Taxi Recapitalisation Programme is offering R50,000 each for scrapping of old minibus taxis, the intention is to subsidise the taxi owner with the amount as a deposit for a new minibus taxi. The crux of the matter is that some of the taxi operator apply for vehicle finance with the financial institutions are they are declined because of various reasons such as not being credit worthy, no source of income, no affordability and high risk (Pienaar *et al.*, 2005). There 219 respondents in total and 5 (2,3%) stated they are satisfied with the scrapping allowance of R50 000. Only 5 (2,3%) respondents stated that they are either satisfied nor dissatisfied with the scrapping allowance amount. A total of 209 (95,4%) respondents stated they are not satisfied by the scrapping allowance amount. They said that the R50 000 scrapping allowance is not realistic as the amount has been fixed since the inception of the programme in 1996. They also said that all other things like petrol and vehicle prices has been increasing but the allowance has stayed

constant for more than 10 years. The main concern is that the amount is inflation linked and is not increasing even though the minibus-taxi prices have been changing over the years. Therefore the affordability of the taxi operators is not considered and the revision of the scrapping allowance is not done at all.

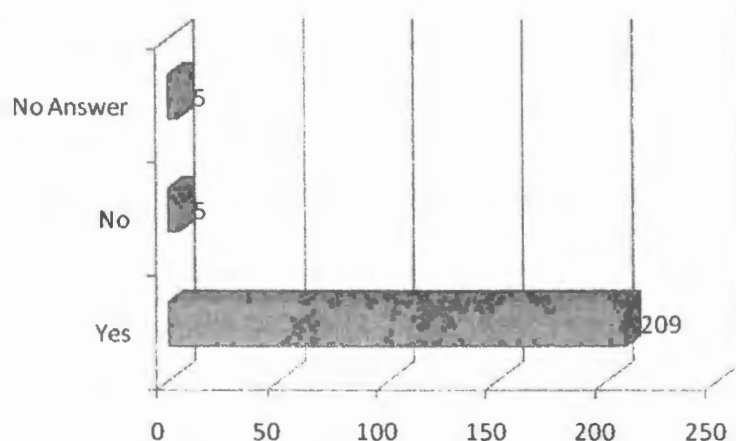
Figure 4.19 Duration of payment of a scrapping allowance a problem



Adams & Fraser Consulting Civil Engineers, (2006) also states that the programme offers operators once off capital subsidies or a 'scrapping allowance' amounting to a financial value equal to a quarter of the price of a new vehicle in exchange for their old vehicles and the conversion of their current licenses, some of which are valid for an indefinite period, to route specific licences with a validity period of five years. In order to participate in the Taxi Recapitalisation Programme it is a requirement that operators provide proof that they pay income taxes and that their tax affairs are in order. A tax clearance certificate from South African Revenue Services is required before a taxi operator can participate in the taxi recapitalisation programme. (Walters, 2008: 98-108). A total of 219 responded to the questionnaires issued. There were 4 (1,8%) respondents who stated that they either not having nor having a problem with the scrapping allowance payment. Only 5 (2,3%) respondents stated that they did not have a problem with the payment of the scrapping allowance. A majority of 210 (96%) respondents stated that they had and still having problems with the scrapping allowance payment. They said the Department of Transport is only making speeding payment to the chairperson of certain associations so that they can entice the association members. They said the Department scrapped their

vehicle then they were told that there are no funds which mean the taxi owners did not have a source of income for more than 6 months. The financial institutions could not even assist them with letters confirming that the Department will be paying their scrapping allowances in the bank accounts. Some said they even opted to exit the taxi industry because their cars were repossessed due to affordability of instalments.

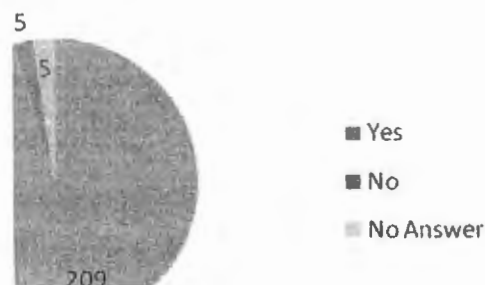
Figure 4.20 Process of obtaining operating license with new taxi understandable



The regulating of taxi industry means the protection of the market boundaries and creating a framework for competition. The overriding regulatory motivation was to charge for use of infrastructure and protect consumers. Operating licences acquired value once restrictions had been imposed in order to enter the taxi industry. According to Koehler (2004), as soon as their numbers were of any consequence, they became subject to regulation. It is widely believed that regulation from the start was a means of protecting market boundaries and creating a framework for competition. The following sections show the overriding regulatory motivation was to charge for use of infrastructure and protect consumers. Operating licenses acquired value once restrictions had been imposed. Entry restrictions, combined with the independent-contractor system for drivers, means that taxi license owners make good profits off each license while leaving the drivers to bear most of the financial and customer-service risk and liabilities (Moore & Balaker, 2006). There were 5 (2,3%) respondents who stated that they understand or don't understand the process of obtaining the operating licence. Only 5 (2,3%) respondents stated that they don't understand

the process of obtaining the operating licence. The radius permit was specific about the route that you have operate on because it was saying you can operate at a radius of 25kilometers away from town of Rustenburg and in Rustenburg, which was not stating the place and it led to different interpretation and duplication of operating routes. They said that in the early they used the radius permit which caused a lot of taxi riot then they changed to taxi permit which was precise about the area that you need to operate on. With the programme they reverting back to radius permits so they are confusing ours and themselves. A majority of 209 (95,4%) respondents stated that they understand the process of obtaining the operating licence. Koehler stated that “Where a limitation of licenses is effective and licenses are transferable we would expect licenses to acquire a market value equal to the capitalised value of the excess of earnings over opportunity costs. Regulated competition is dealt with in part ten of the Act. It is based on the issue that the competition should be “for routes but not on routes”. The minibus-taxi industry needs to become partners in the development projects, not necessarily by running a project but rather by benefiting from the spin-offs and profits produced by the development. The prerogative of a taxi regulator to intervene in the structure of taxi markets is uncontroversial. However, even if detriment to licence owners as a consequence of regulatory actions may not be actionable under legal terms, social and political considerations put obstacles in the way of implementation.

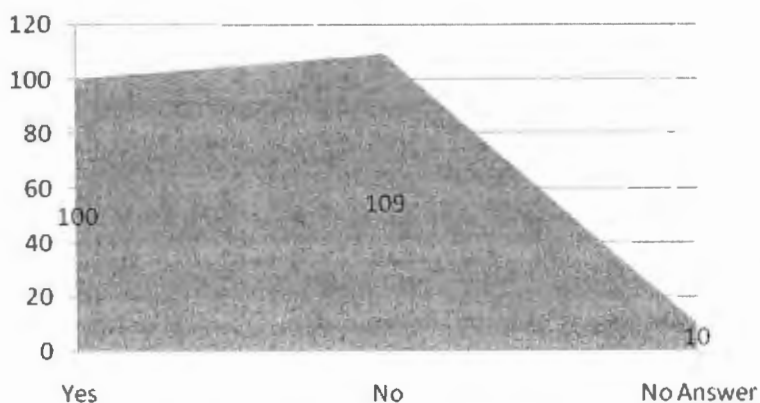
Figure 4.21 Process done as per policies and guidelines of the programme



There were 219 completed questionnaires received. This programme entails scrapping old minibus taxis and replacing them with new, more appropriate vehicles. This programme was initiated in the interests of road safety and as a

tool to get minibus taxi operators to convert their radius-based licenses to route specific licences (Adams & Fraser Consulting Civil Engineers, 2006). The aim of the taxi recapitalisation is to replace the existing 16 seater vehicles with new 14 - 18 seaters as well as new 19 – 35 seat vehicles. The replacement of these vehicles will improve the safety and reliability record of the taxi industry because of the new higher quality and safer vehicles. Only 5 (2,3%) respondents stated that they either agree or disagree that the process was done as per policies and guidelines of the programme. There was also 5 (2,3%) respondents stated that the process was not done as per policies and guidelines of the programme. They said that the scrapping allowance payment were not highlighted that they are paid from the budget of the National Department of Transport. The government's Recapitalisation Scheme is aimed at restructuring and developing the taxi industry. The scheme is intended to empower taxi owners, improve the quality and safety of public passenger transport and regulate the industry. The new vehicles need to comply with the South African Bureau of Standards (SABS) safety requirements and are certified once compliance is verified (Walters, 2008: 98-108). The scheme will offer taxi owners a scrapping allowance for existing taxis. The funds will then be used to finance the new, larger taxis. The programme also has as a major objective the aim of formalising the taxi industry. Speeding up the taxi recapitalisation programme could bring our taxi driver into the ambit of minimum wage legislation, or lead to his or her retrenchment. A total of 209 (95,4%) respondents stated that the process was done as per policies and guidelines of the programme.

Figure 4.22 Any support offered by the department to make the TRP a success



The responses of 219 questionnaires were received from respondents. There were 10 (4,6%) respondents stated that they are in between pertaining to the issue of support or no support being offered by department to make the programme a success. Adams & Fraser Consulting Civil Engineers, (2006) also states that the programme offers operators once off capital subsidies or a 'scrapping allowance' amounting to a financial value equal to a quarter of the price of a new vehicle in exchange for their old vehicles and the conversion of their current licenses, some of which are valid for an indefinite period, to route specific licences with a validity period of five years. As part of the deal taxi operators would have to observe the conditions of the basic employment act, register as taxpayers, insure and regularly maintain their vehicles. While the programme will improve the situation somewhat – especially in the area of road safety, although this could be achieved without the programme by simply removing unroadworthy vehicles from the road and other measures – and to a degree prevent the oversupply of minibus taxis, it unfortunately effectively entrenches the existing operator-driven system and will consequently do little towards providing an integrated, regular and dependable customer-oriented public transport system. A total of 100 (46%) respondents stated that there was support by the department to ensure the success of the programme. There were 109 (50%) respondents stated that there was no support by the department to ensure the success of the programme. They said that a R50 000 is offered as a once-off scrapping allowance to operators that either wish to trade in their old vehicles for new approved vehicles, or wish to exit the industry. The government has for several years been trying to formalise the sector through registration of taxi owners, regulation of routes, and planned minimum wages and conditions for employees. These initiatives have made slow progress to date. Both employers and employees are predominantly male and black. Trade unions have made some progress in organising the drivers (Budlender *et al.*, 2004). The access to finance support is not in place and also the income lost during the scrapping allowance payment delay process.

4.5 MEASURES OF ASSOCIATION

Probably the most often used descriptive statistic is the mean. The mean is a particularly informative measure of the "central tendency" of the variable if it is

reported along with its confidence intervals. As mentioned earlier, usually readers are interested in statistics (such as the mean) from a sample only to the extent to which they can infer information about the population. The confidence intervals for the mean give a range of values around the mean where the reader expect the "true" (population) mean is located (with a given level of certainty. Correlation is a measure of the relation between two or more variables. The measurement scales used should be at least interval scales, but other correlation coefficients are available to handle other types of data. Correlation coefficients can range from -1.00 to +1.00. The value of -1.00 represents a perfect negative correlation while a value of +1.00 represents a perfect positive correlation. A value of 0.00 represents a lack of correlation.

4.5.1 Correlation

Correlation, assumes that two variables are measured on at least interval scales, and it determines the extent to which values of the two variables are "proportional" to each other. The value of correlation (i.e., correlation coefficient) does not depend on the specific measurement units used; for example, the correlation between height and weight will be identical regardless of whether inches and pounds, or centimetres and kilograms are used as measurement units. Proportional means linearly related; that is, the correlation is high if it can be "summarised" by a straight line (sloped upwards or downwards).

Table 4.2 Correlation between qualifications, years in the area, taxi operator, have a licence and number of taxis that a respondent can own

Summary statistics:

Variable	Observations	Obs. with missing data	Obs. without missing data	Min	Max	Mean	Std. deviation
Taxi operator	3	0	3	18.00	150.00	73.00	68.695
Have licence	3	0	3	19.00	180.00	73.00	92.666
Taxis number	3	0	3	5.000	181.00	67.00	98.853
Years in area	3	0	3	25.00	109.00	73.00	43.267

Qualification	3	0	3	8.000	150.000	66.67	74.144
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Correlation matrix (Pearson):

Variables	Taxi operator	Have licence	Taxis number	Years in area	Qualification
Taxi operator	1	-0.272	-0.656	0.000	-0.490
Have licence	-0.272	1	-0.548	-0.962	0.972
Taxis number	-0.656	-0.548	1	0.755	-0.336
Years in area	0.000	-0.962	0.755	1	-0.872
Qualification	-0.490	0.972	-0.336	-0.872	1

Values in bold are different from 0 with a significance level $\alpha=0.05$

p-values:

Variables	Taxi operator	Have licence	Taxis number	Years in area	Qualification
Taxi operator	0	0.825	0.544	1.000	0.674
Have licence	0.825	0	0.631	0.175	0.151
Taxis number	0.544	0.631	0	0.456	0.782
Years in area	1.000	0.175	0.456	0	0.326
Qualification	0.674	0.151	0.782	0.326	0

Values in bold are different from 0 with a significance level $\alpha=0.05$

Coefficients of determination (R^2):

Variables	Taxi operator	Have licence	Taxis number	Years in	Qualification
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	or		area		
Taxi operator	1	0.074	0.430	0.000	0.240
Have licence	0.074	1	0.300	0.926	0.945
Taxis number	0.430	0.300	1	0.570	0.113
Years in area	0.000	0.926	0.570	1	0.760
Qualification	0.240	0.945	0.113	0.760	1

The minimum frequency for taxi operator is 18 and the maximum is 150 with a mean of 73 and a SD of 68.695. The SD is large (SD shows how far away from the mean one is and this shows that the taxi operator is not a big issue since the representativity of the taxi operator were not equal in this regard). The correlation between taxi operator and have a licence is a negative -0.272. Not large but enough to show that taxi operators have the opportunity to operate with their own taxi and have a licence. They might not own their own taxis and not have a licence. There is a 5% opportunity that they might either not have their own taxi or a licence or both. Minibus taxis are the most commonly used form of public transport in South Africa. The government has for several years been trying to formalise the sector through registration of taxi owners, regulation of routes, and planned minimum wages and conditions for employees. These initiatives have made slow progress to date. Both employers and employees are predominantly male and black. Trade unions have made some progress in organising the drivers (Budlender *et al.*, 2004).

The minimum frequency for having a licence is 19 and the maximum is 180 with a mean of 73 and a SD of 92.666. The SD is large (SD shows how far away from the mean one is and this shows that having a licence is not a big issue since the representativity of having a licence were not equal in this regard). The correlation between taxi operator having a licence and taxi owners is a negative -0.656. The level of significance between this variables (p-value) is 0.025 which is more than 0.05, this shows that no significant linear relationship between the variables. The coefficient of determination (R^2) between having a licence and taxi owners is 0.074, which tells us that the variance accounted for by the correlation is 7% variability of taxi operator is reflected in its relationship with

having a licence. The effect of the taxi operator having a licence is therefore not the determinant of whether the respondents are positive or negative about the effects of the taxi recapitalisation programme.

The minimum frequency for taxi owners is 5 and the maximum is 181 with a mean of 67 and a SD of 98.853. The SD is large (SD shows how far away from the mean one is and this shows that the taxi owners is not a big issue since the representativity of having a licence were not equal in this regard). The correlation between taxi owners and having a licence is a negative -0.548. The level of significance between this variables (p-value) is 0.631 which is more than 0.05, this shows that no significant linear relationship between the variables. The coefficient of determination (R^2) between taxi owners and having a licence and taxi owners is 0.300, which tells us that the variance accounted for by the correlation is 30% variability of taxi operator is reflected in its relationship with having a licence. The effect of the taxi operator having a licence is therefore not the determinant of whether the respondents are positive or negative about the effects of the taxi recapitalisation programme.

The minimum frequency for years in the area is 25 and the maximum is 109 with a mean of 73 and a SD of 43.267. The SD is small (SD shows how far away from the mean one is and this shows that the years in the area is a big issue since the representativity of the years in the area having a licence were not equal in this regard). The correlation between having a licence and years in area is a negative -0.962. The level of significance between this variables (p-value) is 0.175 which is more than 0.05, this shows that no significant linear relationship between the variables. The coefficient of determination (R^2) between having a licence and years in area is 0.926, which tells us that the variance accounted for by the correlation is 93% variability of having a licence is reflected in its relationship with years in area. The effect of the taxi operator having a licence is therefore not the determinant of whether the respondents are positive or negative about the effects of the taxi recapitalisation programme.

The minimum frequency for qualification is 8 and the maximum is 150 with a mean of 66.667 and a SD of 74.144. The SD is large (SD shows how far away from the mean one is and this shows that the qualification is not a big issue since the representativity of the years in the area and having a licence were not

equal in this regard). The correlation between qualifications and having taxi operators is a negative -0.490. The level of significance between this variables (p-value) is 0.782 which is more than 0.05, this shows that no significant linear relationship between the variables. The coefficient of determination (R^2) between qualification and having a licence and taxi owners is 0.760, which tells us that the variance accounted for by the correlation is 76% variability of having a licence is reflected in its relationship with years in area. The effect of the taxi operator having a licence is therefore not the determinant of whether the respondents are positive or negative about the effects of the taxi recapitalisation programme.

Table 4.3 Correlation between race, age and years as a taxi owner

Summary statistics:

Variable	Observations	Obs. with missing data	Obs. without missing data	Min	Max	Mean	Std. deviation
ethnicity	4	0	4	1.00	11.00	54.75	104.850
Age	4	0	4	10.00	100.00	54.75	66.648
Years as taxi owner	4	0	4	0	0	0	36.927

Correlation matrix (Spearman):

Variables	ethnicity	Age	Years as taxi owner
ethnicity	1	-0.105	-0.316
Age	-0.105	1	0.600
Years as taxi owner	-0.316	0.600	1

Values in bold are different from 0 with a significance level alpha=0.05

p-values:

Variables	ethnicity	Age	Years as taxi owner
ethnicity	0	0.917	0.750
Age	0.917	0	0.417
Years as taxi owner	0.750	0.417	0

Values in bold are different from 0 with a significance level alpha=0.05

Coefficients of determination (Spearman):

Variables	ethnicity	Age	Years as taxi owner
ethnicity	1	0.011	0.100
Age	0.011	1	0.360
Years as taxi owner	0.100	0.360	1

The minimum frequency for ethnicity is 1 and the maximum is 212 with a mean of 54.7 and a SD of 104.85. The SD is large (SD shows how far away from the mean one is and this shows that ethnicity is not a big issue since the representativity of age were not equal in this regard). The correlation between ethnicity and age is a negative -0.105. The level of significance between this variables (p-value) is 0.917 which is more than 0.05, this shows that no significant linear relationship between the variables. The coefficient of determination (R^2) between ethnicity and age is 0.011, which tells us that the variance accounted for by the correlation is 1.1% variability of ethnicity is reflected in its relationship with age. The effect of the ethnicity is therefore not the determinant of whether the respondents are positive or negative about the effects of the taxi recapitalisation programme. According to Budlender *et al.* (2004) both employers and employees are predominantly male and black. Whereas informal sector is based on assessing the nature of the enterprise, the informal economy assesses the nature of the employment situation. Where the work is characterised as insecure and where the worker is not covered by the normal provisions of employment such as leave and pension, the worker is classified in the informal economy.

The minimum frequency for years as the taxi owner is 10 and the maximum is 100 with a mean of 54.7 and a SD of 36.927. The SD is small (SD shows how far away from the mean one is and this shows that years as the taxi owner is not a big issue since the representativity of ethnicity were not equal in this regard). The correlation between years as the taxi owner and ethnicity is a negative -0.316. The level of significance between this variables (p-value) is 0.750 which is more than 0.05, this shows that no significant linear relationship between the variables. The coefficient of determination (R^2) between years as the taxi owner and ethnicity is 0.10, which tells us that the variance accounted

for by the correlation is 10% variability of years as the taxi owner is reflected in its relationship with ethnicity. The effect of the years as the taxi owner is therefore not the determinant of whether the respondents are positive or negative about the effects of the taxi recapitalisation programme. The taxi owner tends to scrap his all his old minibus taxi in order to be able to afford instalments on hire purchase or even buy a new minibus taxi for cash. For instance if the taxi operator is 56 years old and scrapped 5 taxi which will be R50,000 per taxi then he can buy a new minibus taxi cash because he/she cannot be afforded the hire purchase finance due to the age factor. This will result in 4 taxi drivers unemployed and only one working. The taxi operator might be in a situation of not being able to afford to pay a driver and paying vehicle instalment plus insurance. The employment in the taxi industry will be affected by the Tax Recapitalisation Programme because it will lead to too many lay-offs of taxi drivers due to the above points mentioned.

The minimum frequency for age is 11 and the maximum is 156 with a mean of 57 and a SD of 66.648. The SD is small (SD shows how far away from the mean one is and this shows age is not a big issue since the representativity of years as the taxi owner were not equal in this regard). The correlation between age and years as the taxi owner is 0.6. The level of significance between this variables (p-value) is 0.417 which is more than 0.05, this shows that no significant linear relationship between the variables. The coefficient of determination (R^2) between age and years as the taxi owner is 0.36, which tells us that the variance accounted for by the correlation is 36% variability of age is reflected in its relationship with years as the taxi owner. The effect of the years as age is therefore not the determinant of whether the respondents are positive or negative about the effects of the taxi recapitalisation programme.

Table 4.4 Correlation between requirements met and TRP agreed principles

Summary statistics:

Variable	Observations	Obs. with missing data	Obs. without missing data	Minimum	Maximum	Mean	Standard deviation
Req met	3	0	3	4.00	211.000	73.0	119.512

						00	
TRP						73	
agree				4.00	210.	.0	118.64
d	3	0	3	0	000	00	7

Correlation matrix (Pearson):

Variables	Req met	TRP agreed
Req met	1	1.000
TRP agreed	1.000	1

Values in bold are different from 0 with a significance level $\alpha=0.05$

p-values:

Variables	Req met	TRP agreed
Req met	0	0.003
TRP agreed	0.003	0

Values in bold are different from 0 with a significance level $\alpha=0.05$

Coefficients of determination (R^2):

Variables	Req met	TRP agreed
Req met	1	1.000
TRP agreed	1.000	1

The minimum frequency for requirements met is 4 and the maximum is 211 with a mean of 73 and a SD of 119.512. The SD is large (SD shows how far away from the mean one is and this shows requirements met is not a big issue since the representativity of TRP agreed were not equal in this regard). The correlation between requirements met and TRP agreed is 1. The level of significance between this variables (p-value) is 0.003 which is more than 0.05, this shows that no significant linear relationship between the variables. The coefficient of determination (R^2) between requirements met and TRP agreed is 1, which tells

us that the variance accounted for by the correlation is 100% variability of requirements met is reflected in its relationship with TRP agreed. The effect of the requirements met is therefore not the determinant of whether the respondents are positive or negative about the effects of the taxi recapitalisation programme.

The minimum frequency for TRP agreed is 4 and the maximum is 210 with a mean of 73 and a SD of 118.647. The SD is large (SD shows how far away from the mean one is and this shows TRP agreed is not a big issue since the representativity of requirements met were not equal in this regard). The correlation between TRP agreed and requirements met is 1. The level of significance between this variables (p-value) is 0.003 which is more than 0.05, this shows that no significant linear relationship between the variables. The coefficient of determination (R^2) between TRP agreed and requirements met is 1, which tells us that the variance accounted for by the correlation is 100% variability of requirements met is reflected in its relationship with TRP agreed. The effect of the TRP agreed is therefore not the determinant of whether the respondents are positive or negative about the effects of the taxi recapitalisation programme. The Taxi Recapitalisation Programme does not accommodate the new entry into the taxi industry and it shows that the main aim is to reduce the number of minibus-taxis and it is also having the impact on the high numbers of unemployment. The issue of expansion and employment on the Taxi Recapitalisation Programme is not core. The minibus-taxi is being threatened by this programme in terms of employment and expansion, and later on it will be a forceful exit of taxi operators by implementing regulations which will work against them operating. With new entries in the taxi industry through Taxi Recapitalisation Programme will lead to more people being employed and increased revenue for the South African Revenue Services (SARS) which can be used to improve the South African schools, roads, bridges and address other important aspects of the government (Govender & Allopi, 2006).

4.5.2 t-Test

The *t*-test for dependent samples helps to take advantage of one specific type of design in which an important source of *within-group variation* (or so-called, *error*) can be easily identified and excluded from the analysis. Specifically, if two

groups of observations (that are to be compared) are based on the same sample of subjects who were tested *twice* (e.g., *before* and *after* a treatment), then a considerable part of the within-group variation in both groups of scores can be attributed to the initial individual differences between subjects. Note that, in a sense, this fact is not much different than in cases when the two groups are entirely independent where individual differences also contribute to the *error variance*; but in the case of independent samples, we cannot do anything about it because we cannot identify (or "subtract") the variation due to individual differences in subjects.

Table 4.5 t-Test for taxi recapitalisation, TRP was communicated and it was transparent

Summary statistics:

Variable	Observations	Obs. with missing data	Obs. without missing data	Min	Max	Mean	Std. deviation
Know taxi recap	2	0	2	19.00	151.00	85.000	93.338
TRP communicated	2	0	2	20.00	189.00	104.500	119.501
Transparent	2	0	2	20.00	191.00	105.500	120.915
Committed	2	0	2	9.00	200.00	104.500	135.057

One-sample t-test / Two-tailed test:

95% confidence interval on the mean:

] -753.610 923.610 [

	85.00
Difference	0
t (Observed value)	1.288
t (Critical value)	12.706
DF	1

p-value (Two-tailed)	0.420
alpha	0.05

Test
interpretation:

H0: The difference between the means is equal to 0.

Ha: The difference between the means is different from 0.

As the computed p-value is greater than the significance level $\alpha=0.05$, one should accept the null hypothesis H0.

One-sample t-test / Two-tailed test (TRC communicated):

95% confidence interval on the mean:

] -969.174 1178.
, 174 [

	104.5
Difference	00
t (Observed value)	1.237
t (Critical value)	12.706
DF	1
p-value (Two-tailed)	0.433
alpha	0.05

Test
interpretation:

H0: The difference between the means is equal to 0.

Ha: The difference between the means is different from 0.

As the computed p-value is greater than the significance level $\alpha=0.05$, one should accept the null hypothesis H0.

One-sample t-test / Two-tailed test (Transparent):

95% confidence interval on the mean:

] -980.881 1191.
, 881 [

	105.5
Difference	00
t (Observed	1.234

value)	
t (Critical value)	12.70
DF	6
p-value (Two-tailed)	0.434
alpha	0.05

Test interpretation:

H0: The difference between the means is equal to 0.

Ha: The difference between the means is different from 0.

As the computed p-value is greater than the significance level $\alpha=0.05$, one should accept the null hypothesis H0.

One-sample t-test / Two-tailed test (Committed):

95% confidence interval on the mean:

1108.943 , 1317.943 []-

Difference	104.500
t (Observed value)	1.094
t (Critical value)	12.706
DF	1
p-value (Two-tailed)	0.471
alpha	0.05

Test interpretation:

H0: The difference between the means is equal to 0.

Ha: The difference between the means is different from 0.

As the computed p-value is greater than the significance level $\alpha=0.05$, one should accept the null hypothesis H0.

The minimum frequency for taxi recap is 19 and the maximum is 151 with a mean of 85 and a SD of 93.338. The level of significance between this variables (p-value) is 0.42 which is more than 0.05, this shows that no significant linear relationship. The respondents also answered according to those options. 151

(69%) respondents understands the programme, this is the majority response in relation to the total sample of 219. The government's Recapitalisation Scheme is aimed at restructuring and developing the taxi industry. The scheme is intended to empower taxi owners, improve the quality and safety of public passenger transport and regulate the industry. The new vehicles need to comply with the South African Bureau of Standards (SABS) safety requirements and are certified once compliance is verified (Walters, 2008: 98-108). The scheme will offer taxi owners a scrapping allowance for existing taxis. The funds will then be used to finance the new, larger taxis. The programme also has as a major objective the aim of formalising the taxi industry. Speeding up the taxi recapitalisation programme could bring our taxi driver into the ambit of minimum wage legislation, or lead to his or her retrenchment. In 2005, the Government approved a detailed strategy for the rollout of the Taxi recapitalisation programme (TRP). This includes introducing safety requirements for the new taxi vehicles (NTVs), scrapping existing vehicles, effective regulation of the taxi industry, and effective law enforcement in respect of public transport and empowerment of the taxi industry (Dibben, 2006). The taxi recapitalisation programme ensures that owners have a permit to operate, are registered with the provincial Department of Transport, and belong to a recognised taxi association. A R50 000 is offered as a once-off scrapping allowance to operators that either wish to trade in their old vehicles for new approved vehicles, or wish to exit the industry. The amount is the form of a capital subsidy to assist operators in acquiring new vehicles. In order to participate in the Taxi Recapitalisation Programme it is a requirement that operators provide proof that they pay income taxes and that their tax affairs are in order. A tax clearance certificate from South African Revenue Services is required before a taxi operator can participate in the taxi recapitalisation programme. (Walters, 2008: 98-108).

The minimum frequency for TRP communicated is 20 and the maximum is 189 with a mean of 104.50 and a SD of 119.501. The level of significance between this variables (p-value) is 0.433 which is more than 0.05, this shows that no significant linear relationship. Majority of 189 (86%) respondents said that the programme was communicated to them out of a sample of 219. The statistics

shows that majority of the stakeholders the programme was communicated to them.

The minimum frequency for transparent is 20 and the maximum is 191 with a mean of 105.50 and a SD of 120.915. The level of significance between this variables (p-value) is 0.434 which is more than 0.05, this shows that no significant linear relationship. A significant total of 191 (87%) respondents stated that the programme is transparent meaning everything is done in an open manner for everyone. While a transport system is required to support the livelihood activities of the growing urban population, the macro-economic fundamentals have a negative effect on the provision of public transport. Too much long waiting times as well as walking distances characterise the current urban public transport situation. The Department of Transport is responsible for providing road and public transport infrastructure in the province. Road networks and accessible public transport are often key to the viability of informal businesses and important to informal workers in getting to and from work. The public transport is essentially failing its customers. For most indicators including access time, journey time, safety, security and fares, customer goals are not being met for large numbers of passengers. Public transport supply is mostly characterised by a "one size fits all" service geared towards the lowest cost to the operator (Budlender *et al.*, 2004). The National Land Transport Transition Act (Act 20 of 2000) has the objective to promote best practices in land transport through research, technology developments and human resources development. The recapitalisation programme is having a major impact on employment in the taxi industry, with some 180 000 workers estimated to be presently employed in the industry (Barrett, 2003), of whom a significant number are likely to lose their jobs if, and once recapitalisation happens, as fewer drivers will be required to carry a given number of passengers.

Barrett (2003) states that despite the certainty of job loss, the largest trade union organising the drivers in the minibus taxi industry, the South African Transport and Allied Workers Union (SATAWU), has supported the recapitalisation programme on the basis that the formalisation of the industry is likely to positively impact on collective bargaining and to improve the enforcement of

labour legislation. Indications are that a minimum wage for taxi drivers is likely to be introduced before recapitalisation happens. Other unions have, however, oppose the recapitalisation programme on the grounds that the larger sized taxis will lead to job losses as the average carrying capacity of vehicles increases. The employment in the taxi industry will be affected by the Taxi Recapitalisation Programme because it will lead to too many lay-offs of taxi drivers due to the above points mentioned. The Taxi Recapitalisation Programme does not accommodate the new entry into the taxi industry and it shows that the main aim is to reduce the number of minibus-taxis and it is also having the impact on the high numbers of unemployment. The issue of expansion and employment on the Taxi Recapitalisation Programme is not core. The minibus-taxi is being threatened by this programme in terms of employment and expansion, and later on it will be a forceful exit of taxi operators by implementing regulations which will work against them operating (Govender & Allopi, 2006).

The minimum frequency for stakeholders' commitment is 9 and the maximum is 200 with a mean of 104.50 and a SD of 119.501. The level of significance between this variables (p-value) is 0.471 which is more than 0.05, this shows that no significant linear relationship. The majority of the completed questionnaires stated that the stakeholders show commitment towards the success of the programme.

4.5 CONCLUSION

In this chapter statistical analysis of the data being collected has been done, using different approaches such as correlation coefficients to determine the relationship that exist between two or more variables. In this case different patterns have been identified and conclusions could be made. The data has been represented by using graphs and tables. During the analysis of data, the results have showed that majority of the respondents were male African and their ages were between 41-50. Most of the respondents have been in the taxi industry for a period of 6 to 10 years. The majority of them own more than 2 taxis.

The majority of respondents understand the taxi recapitalisation programme. They stated that the programme was communicated and transparent therefore

they are committed to it to make it a success. They also highlighted that they are satisfied with the programme and the progress that it is showing. They mentioned that the programme showed improvement in the transport sector. The programme had major challenges were respondents were not happy with the results of the programme. The majority of respondents said they do not have access to financing new taxi vehicles. They also stated that they do not know which the approved new taxi vehicle is. They have to wait for a period more than 3 months to receive their scrapping allowance payments which are frustrating them.

The following chapter will come up with recommendations to the study being undertaken, and these recommendations will seek to answer the research questions being pointed out in order to add value to the literature that already exists on the study. Finally future research on the area of this research will be given and the limitations to the study be identified to encourage further research.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The aim of this study is to identify the effect of the Taxi Recapitalisation Programme focus in the Rustenburg area. The effect of the Taxi Recapitalisation Programme is analysed in terms of the understanding by the taxi owners, operators and the commuters. The importance of the programme is also addressed. The requirements and the challenges of the programme are highlighted as per questionnaire responses received. The response that we received showed that the challenge was the duration of the payment of the scrapping allowance and the amount given for scrapping your old taxi vehicle. The other challenge was that there is no specific taxi vehicle approved that they must acquire to comply with the Taxi Recapitalisation programme. The overall challenge was that the Taxi Recapitalisation programme is not showing results.

The current chapter further covers the summary of the study being undertaken and the findings which will answer the research questions and identify future research opportunities on the phenomenon being investigated. The conclusion and recommendations drawn from the study will be given at the end.

5.2 SUMMARY OF THE STUDY

The findings showed the importance, requirements, impact and challenges of Taxi Recapitalisation Programme in detail. The understanding of the programme was looked into. The study showed that 69% of the respondents do fully understand.

The majority of respondents that is 87% stated that the programme was communicated to them and also it is very much transparent. On the other hand 97% of respondents stated the programme is not showing results.

5.3 ANSWERS TO RESEARCH QUESTIONS

The findings of the study and the answer the research question pertaining to the importance, requirements, impact and challenges which will be discussed below

and each research question will be followed by discussion on what has been discovered during the analysis of data.

•Do people understand what the Taxi Recapitalisation is?

The understanding of the programme has been proved by the 69% of the respondents on the study. Taxi Recapitalisation Programme was introduced as an intervention by Government in consultation with affected parties to bring about safe, effective, reliable, affordable and accessible taxi industry in South Africa by introducing New Taxi Vehicles. A good transport system is required to support the livelihood activities of the growing rural and urban population, the macro-economic fundamentals shows a negative effect on the public transport available.

The government's Recapitalisation Scheme is aimed at restructuring and developing the taxi industry. The scheme is intended to empower taxi owners, improve the quality and safety of public passenger transport and regulate the industry. The new vehicles need to comply with the South African Bureau of Standards (SABS) safety requirements and are certified once compliance is verified (Walters, 2008: 98-108).

•What is the importance of the Taxi Recapitalisation Programme for operators?

The importance of the Taxi Recapitalisation Programme for operators is based on various reasons which are outlined in detail by Fourie and Pretorius, (2005) to provide a safe, reliable and affordable service the industry requires re-investment and continuous upgrading to ensure safety and efficiency of the service is maintained.

A response rate of 91% confirms that the programme has shown an improvement in the transport system. It is a fact that the minibus taxi industry is the most critical pillar of our public transport sector. It is estimated that more than 65% of commuters rely on minibus taxis for their daily mobility (Govender & Allopi, 2006). The process of transforming the minibus taxi industry started after it was realised that any solution to the problems facing transport had to include the minibus taxi industry.

Although the government has intervened by introducing programmes that will see the transport system integrated, the taxi industry is the biggest obstacle to authorities' intentions of creating a safe and reliable transport system. The government believes that transport is the heartbeat of our country's economy. The mandate of this democratically government is to use the resources at its disposal to bring forth the possibility of the achievement of this very important goal and strategic objective (Magubane & Manicom, 2003).

The Taxi Recapitalisation Programme was introduced as an intervention by Government in consultation with affected parties to bring about safe, effective, reliable, affordable and accessible taxi industry in South Africa by introducing New Taxi Vehicles. The rapid deregulation was the rise of taxi associations, which have been directly associated with the violence that has shadowed the industry since 1987. Permit enforcement ceased to be a priority and the industry was soon flooded with aspirant drivers, resulting in heightened competition for passengers and routes as too many operators entered the domain too rapidly (Sekhonyane & Dugard, 2004). The majority of 87% of respondents concluded that the programme is open and no hidden issues are no highlighted.

The taxi industry by far transports the biggest number of passengers on any given day, compared to both rail and bus. Taxi industry has been completely de-regulated. After the new dispensation, the Government set up a National Taxi Task Team in 1996, made up of Government, taxi industry, civil society and religious groups. The National Taxi Task Team made recommendations that government should intervene by formalising regulating and creating economic empowerment opportunities for the taxi industry by Walters,(2008).

The Minibus Taxi Recapitalisation Project is a current initiative (started in 1996) to formalise the South African minibus taxi industry (Suffla & van Niekerk, 2004). Therefore it is in the interest of the taxi industry to provide a service that can compare with the speed, efficiency and affordability of the private vehicle. Given the inefficiency-cost resulting from congestion on South African roads it is also in the interest of the government to promote public transport as an attractive alternative to private vehicle use. Therefore, government and the taxi industry will have to work together to provide a successful public transport system.

These operators will be invited to register in the next three months their intention to exit the industry with effect from August this year. A marketing communications campaign will be embarked upon to inform and encourage taxi operators across the country to register with the Operating Licensing Boards (OLBs) in their respective Provinces. The OLBs will register applications, evaluate them and verify the validity of permit/operating licenses linked to the taxi vehicle (Fourie, 2003). A total of 91% of respondents confirmed that they are committed to the programme.

With regard to effective law enforcement, the Road Traffic Management Corporation (RTMC) has been tasked to finalise a detailed Business Plan, which aims at strengthening the capacity of the State to enforce the law. The law enforcement strategy must include strengthening of capacity of existing public transport law enforcement units in the various provinces and establish such units where necessary (Sekhonyane & Dugard, 2004).

The 91% of the respondents confirms the satisfaction with the progress of the programme. This programme will give taxi drivers the opportunity to graduate to taxi operator status in their own right and participate in related economic activities (Magubane & Manicom, 2003).

•What are the challenges faced by taxi operators in the Taxi Recapitalisation Programme?

A finding of 97% of respondents stated that the programme is not showing results. They said that the results expected of restructuring and developing the taxi industry is not visible. The access to finance is the main challenge as they cannot be assisted with the scrapping allowance amount as a deposit. The Land Transport Bill was extensively modified to incorporate a transition period which would allow the minibus-taxi industry to be formalised and for various measures to be taken to promote the industry. For transport systems, which comprise most energy consumption, the policy assumes a modal shift from private to public rail (from 49% to 79% public by 2020); petrol taxis replaced completely by diesel vehicles due to taxi recapitalisation, but also switching to bio-diesel and low sulphur diesel driven by policy. Low-sulphur diesels are included in the reference case since a phase-in is already mandated; we

assume biodiesel grows to a market share of 15% by 2020 (Winkler *et al.*, 2006).

Cooper (2007) said that the continuing move to diesel-fuelled private vehicles and the imminent taxi recapitalisation plan (to replace petrol minibus taxis with diesel vehicles), will result in the product mix moving to an even greater diesel short situation. (It is noted that the entire taxi recapitalisation programme has yet to be finalised. The focus seems to be moving to safety and a mix of different engine vehicles.) Having insufficient refining capacity to meet demand is not in itself a problem, as the product can be sourced from international refineries. The programme aims to turn the commuter based service into a viable, customer-based public transport system. The key factor to achieve this is to increase the demand of public transport, to make maximum use of optimal mode for a given demand and distance, and to improve the transportation to meet the changing needs of customers.

There is a 95% response rate of the completed questionnaire that there is no access to finance for new taxis. They said they expected government to have arranged with a financial institution that will help them concerning financing their new minibus taxis. They also said that because of their credit profiles, proof of income, affordability and high risk they cannot be granted finance by any financial institutions. Adams & Fraser Consulting Civil Engineers, (2006) also states that the programme offers operators once off capital subsidies or a 'scrapping allowance' amounting to a financial value equal to a quarter of the price of a new vehicle in exchange for their old vehicles and the conversion of their current licenses, some of which are valid for an indefinite period, to route specific licences with a validity period of five years. As part of the deal taxi operators would have to observe the conditions of the basic employment act, register as taxpayers, insure and regularly maintain their vehicles. Thirteen percent or 2.8 million of urban customers are "stranded" owing to the lack of finances and or do not have the physical access to the public transport system. Even though government spent R2.8 billion in 1997 on bus and rail subsidies, only forty percent (40%) of stranded customers indicated that they actually had access to a bus and only twenty percent (20%) to a train, while seventy-eight percent (78%) indicated they could access unsubsidised and more expensive

minibus-taxi mode. The taxi owner scraps the old taxi and receives the R50 000 allowances and the financial service provider can grant finance to the owner. Therefore the taxi owner will be out of business unwillingly. The taxi owner is out of business which is resulting in the unemployment of the taxi owner and driver.

This programme entails scrapping old minibus taxis and replacing them with new, more appropriate vehicles. This programme was initiated in the interests of road safety and as a tool to get minibus taxi operators to convert their radius-based licenses to route specific licences (Adams & Fraser Consulting Civil Engineers, 2006). The aim of the taxi recapitalisation is to replace the existing 16 seater vehicles with new 14 -18 seaters as well as new 19 – 35 seat vehicles. The replacement of these vehicles will improve the safety and reliability record of the taxi industry because of the new higher quality and safer vehicles. The programme aims to turn the commuter based service into a viable, customer-based public transport system. The key factor to achieve this is to increase the demand of public transport, to make maximum use of optimal mode for a given demand and distance, and to improve the transportation to meet the changing needs of customers. A finding of 95% respondents confirmed that they do not know which taxi vehicles to buy.

A R50 000 is offered as a once-off scrapping allowance to operators that either wish to trade in their old vehicles for new approved vehicles, or wish to exit the industry. The amount is the form of a capital subsidy to assist operators in acquiring new vehicles. The Taxi Recapitalisation Programme is offering R50 000 each for scrapping of old minibus taxis, the intention is to subsidise the taxi owner with the amount as a deposit for a new minibus taxi. The crux of the matter is that some of the taxi operator apply for vehicle finance with the financial institutions are they are declined because of various reasons such as not being credit worthy, no source of income, no affordability and high risk (Pienaar et al., 2005). A total finding of 95,4% respondents stated they are not satisfied by the scrapping allowance amount. They said that the R50 000 scrapping allowance is not realistic as the amount has been fixed since the inception of the programme in 1996. They also said that all other things like petrol and vehicle prices have been increasing but the allowance has stayed constant for more than 10 years.

Adams & Fraser Consulting Civil Engineers, (2006) also states that the programme offers operators once off capital subsidies or a 'scrapping allowance' amounting to a financial value equal to a quarter of the price of a new vehicle in exchange for their old vehicles and the conversion of their current licenses, some of which are valid for an indefinite period, to route specific licences with a validity period of five years. In order to participate in the Taxi Recapitalisation Programme it is a requirement that operators provide proof that they pay income taxes and that their tax affairs are in order. A tax clearance certificate from South African Revenue Services is required before a taxi operator can participate in the taxi recapitalisation programme (Walters, 2008: 98-108). A finding of 96% respondents stated that they had and still having problems with the scrapping allowance payment. They said the Department of Transport is only making speeding payment to the chairperson of certain associations so that they can entice the association members.

Adams & Fraser Consulting Civil Engineers, (2006) also states that the programme offers operators once off capital subsidies or a 'scrapping allowance' amounting to a financial value equal to a quarter of the price of a new vehicle in exchange for their old vehicles and the conversion of their current licenses, some of which are valid for an indefinite period, to route specific licences with a validity period of five years. As part of the deal taxi operators would have to observe the conditions of the basic employment act, register as taxpayers, insure and regularly maintain their vehicles. While the programme will improve the situation somewhat – especially in the area of road safety, although this could be achieved without the programme by simply removing unroadworthy vehicles from the road and other measures – and to a degree prevent the oversupply of minibus taxis, it unfortunately effectively entrenches the existing operator-driven system and will consequently do little towards providing an integrated, regular and dependable customer-oriented public transport system. A finding of 46% respondents showed that there was support by the department to ensure the success of the programme, and 50% respondents stated that there was no support by the department to ensure the success of the programme. They said that a R50 000 is offered as a once-off scrapping allowance to

operators that either wish to trade in their old vehicles for new approved vehicles, or wish to exit the industry. The government has for several years been trying to formalise the sector through registration of taxi owners, regulation of routes, and planned minimum wages and conditions for employees. These initiatives have made slow progress to date. Both employers and employees are predominantly male and black. Trade unions have made some progress in organising the drivers (Budlender *et al.*, 2004). The access to finance support is not in place and also the income lost during the scrapping allowance payment delay process.

5.4 LIMITATIONS OF THE STUDY

Although there is a limited number of factors that can be attributed to the effectiveness of the Taxi recapitalisation Programme focus in the Rustenburg area, the independent variables presented in this research are not exhaustive. However, it is encouraged for future researchers to study other possible independent variables that can influence the importance, requirements, impact and challenges of the programme and devise a path model that can illustrate or correlate the relationship between the variables and effectiveness of the programme. The majority of the respondents in the Rustenburg area are black, male of the age between 41-50 years. A concerted effort of specialists in the fields of transport planning, operational analysis, labour relations, finance and the informal sector will be able to make a powerful contribution. Constituting the sample as a convenient sample was problematic but with the taxi industry in chaos it was problematic to use another method.

5.5 MANAGEMENT GUIDELINES

Based on the results of the study, there are areas which need to be improved in order for the Taxi Recapitalisation Programme to be effective focusing on the Rustenburg area. There were areas which showed high ratings such as the understanding, communication, transparency of the programme, the commitment by the stakeholders, the satisfaction with the management of the programme, the improvement in the transport system and that the requirements of the programme are met. More attention needs to be given to results of the programme, access to finance new taxis, which vehicles to buy, scrapping allowance amount and the

duration of the payout. It is very important to continually to monitor the programme so that its effectiveness can be seen and targets set by the Department of Transport for each area, province is being met.

- TRP results

The Department of Transport must have a database of all taxi operating licence in the province per area. The Department must have all the name of the taxi associations in province per area. They must have a database of taxi vehicles which will show the model and the year it was manufactured and bought. With that information they can be able to set targets of the taxi vehicles that they want to be in the programme in the province per area. The exercise will help the Department with the budget projections. The taxi association will be contacted in order to communicate with their member concerning the targets of the programme per taxi association in each area of the province. Based on the budget monitoring process the Department can be able to detect which area in the province is not participating in the programme. The continuous monitoring will show the total number of the taxi vehicles recapitalised against the set target per area, which taxi owners exited the taxi industry and the budget compared to actual scrapping allowance payouts. The department must also check the statistics of traffic in the area as one the objectives of the programme is to reduce traffic of the public roads. According to Adams & Fraser Consulting Civil Engineers, (2006) the number of minibus taxis required for certain designated areas should be determined and licenses issued to those operating within the areas for all the routes within that area. The formal bus route which the minibus taxis will be excluded from operating on must be specified in detail and licenses must clearly state that no operations along the formal bus route will be permitted.

- Access to finance new taxis

Financing is a crucial issue for an attractive urban public transport system. The Department of Transport must have an agreement with financial institutions to assist taxi operators, owners and new entrants into the taxi industry with finance. The other alternative is set-up a directorate which coordinates finance based on the fact that you have scrapped the old taxi vehicle. Therefore this can be the solution to the duration of the scrapping allowance payment problem. In terms of

finance, the first Action Agenda met with success by articulating a vision that was clear and compelling enough to win the support of Cabinet. To date, R3,7 Billion in new and additional monies have been set aside for public transport and non-motorised transport infrastructure and systems investments, with priority to venues supporting the 2010 soccer events. The Department of Transport now oversees these monies under the Public Transport Infrastructure and Systems Fund (PTIF). The PTIF has been created as a vehicle to accelerate the pace of implementation of investment in sustainable mobility infrastructure. One of the objectives of this update of the Action Agenda was to quantify and detail the scale and nature of investment needed in other areas of the transport sector, as well as to bring them to the attention of the country. (Department of Transport: Transport Action Plan for 2010 Version 1 2006).

- Taxi Vehicles to buy

The taxi operators and owners must be given specific requirements and dealerships which are selling required new taxi vehicles. The Department of Transport must be specific about the new taxi vehicles that they need and provide the list of approved dealers and list of new taxi vehicles. The Department of Transport can also introduce an incentive programme for the taxi owners or operators who comply with the requirements of the programme. This programme can be a letter of guarantee by the Department of Transport that they will support the taxi operator and owner with the administration of accessing finance and tax amnesty negotiation with the South African Receiver of Revenue. According to the Department of Transport:

Public Transport Action Plan Phase 1 (2007 – 2010): Catalytic Integrated Rapid Public Transport Network Projects (2006) as part of the implementation of Taxi Recapitalisation Programme (TRP), mandatory distinguishing markers for New Taxi Vehicles (NTVs) entering the market as part of the TRP have been introduced through a regulation in the Government Gazette in January 2007. Funds for the introduction of the distinguishing markers have been earmarked by the Department of Transport for utilisation by Provinces. NTVs that comply with the mandatory safety requirements as certified by the South African Bureau of Standards (SABS) continue to enter the market. To date thirteen types of NTVs that comply with the safety requirements had been certified by the SABS.

- Scrapping allowance amount and the duration of payment

The scrapping allowance amount needs to be reviewed pertaining to the cost of living. The amount needs to be at least be linked to the inflation rate escalation. The petrol, vehicle price, oil price, tyre prices, windscreen price and insurance are not constant so there must be a close alignment to those variables. In the majority of the countries, financial support is negotiated as a lump sum at the beginning of each financial year. This then serves as a fixed contract between the subsidy provider and the operator who renders such services. There is usually scope for top-up payments, but this is supposed to be for unforeseen events. Some countries enforce this more rigidly than others. In countries where there are tendered contracts, negotiations are still required to allow for any inflationary costs.

5.6 FUTURE RESEARCH

Findings from this present research cannot be generalised to the whole of South Africa since this study was only restricted to Rustenburg in North-West province. There is a need to replicate this study in other areas of the province and other provinces in South Africa before we can generalise the finding to the whole country. There are other independent variables like price or cost of the taxi fares, the access to finance by taxi owners, credit worthiness of taxi owners and the type of taxi vehicle to be bought that require close examination for future researchers.

5.7 CONCLUSION

The taxi industry in South Africa has its roots in the informal economy; operating predominantly outside the legal, commercial and fiscal spheres of the economy. Despite its informal character, the taxi industry has become the preferred mode of public transport. Therefore, the regulation of the industry should not summarily be taken as a superior alternative. On the other hand startlingly poor road safety, poor security and low profit margins are threatening the survival of the industry (Fourie & Pretorius, 2005). The objective is to ensure that the taxi industry is not undermining labour's control and state regulation of the economy in terms of both taxes and social legislation.

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Appendix A: Matrix

Article	Theme/Thesis	Taxi Recapitalisation	Public Transport	Law Enforcement	Employment in the Taxi Industry	Economic Empowerment & Growth	Financial Resources	Regulating Taxi Industry	Structuring the taxi industry	Taxi Industry sustainability	Minibus Taxi
N		a	b	c	d	e	f	g	h	i	j
1	11th Conference on competition and ownership in land passenger transport		1	1		1	1	1	1		1
2	2010 Transport Action agenda developed and that the World Cup Public Transport Infrastructure and Systems Fund - Minister of Transport, Mr Jeff Radebe October 2006 announcement		1	1	1	1	1	1	1		1
3	A call for the radical restructuring	1	1	1	1		1	1	1		1

	ring of the mini-bus taxi industry in South Africa									
4	A framework for purchasing transport services in small and medium size enterprises			1				1		
5	Address at the Scrapping Event of Old Taxi Vehicles by Mr Jeff Radebe (MP) Minister of Transport Mahwel ereng Stadium, Limpopo 24 February 2007		1		1					1
6	An innovative survey in the transportation and distribution sector		1		1			1		
7	Benchmarking road freight transport			1						1
8	Budgets and the Informal Economy : An Analysis of the	1	1		1	1	1	1	1	1

	Impact of the budget on Informal Workers in South Africa									
9	Building a major transport infrastructure in Hong Kong in the historical context of the 1997 retrocession					1	1			
10	Building an apprenticeship and training system for maintenance occupations in American transit industry		1	1	1	1			1	
11	Cape Town energy futures: Policies and scenarios for sustainable city energy development	1	1		1	1				1
12	Career development drives up customer service at Dial-a-Cab				1				1	1
13	Civil Engineering Septemb	1	1	1	1	1	1		1	1

	er 2006 Vol 14 No 9									
1 4	Combini ng vertical and horizont al collabora tion for transport optimisa tion		1		1			1		
1 5	Consider ations with regards to BRT for Tshwane		1							1
1 6	Coping with demand for urban passenge r transport in Zimbabw e: Challeng es and Options		1	1						1
1 7	Corporat e commut er manage ment: the wider perspecti ve for facilities manage ment		1							
1 8	Crime, Violence and Injury Preventi on in South Africa; Develop ments and Challeng es		1	1	1	1		1		1

19	Developing the Gauteng inter-governmental transport charter: combining politics, process and intellectual endeavour	1	1	1	1	1	1	1	1
20	Development of an urban component of the second economy strategy	1	1	1	1	1			1
21	Energy and transport issues for Gauteng, South Africa	1	1	1					1
22	Government wants to see new taxis, but old problems exist	1		1	1				1
23	Impediments to consumer adoption of sustainable transportation								
24	Louis J. DeLamar: can he save a dying industry?		1	1		1			
25	Mercatus Policy Series comment no.3 Taxing	1	1	1	1	1	1		1

	Alternatives: Poverty Alleviation and the South African Taxi/Minibus Industry										
26	New Developments Concerning Discrimination and Sexual Harrassment in the Transportation Industry			1			1				
27	New developments in public transport and progress in existing projects	1	1				1		1	1	
28	Official Journal of the Institute of Municipal Finance Officers Vol 8 Number 4 Winter 2008										1
29	Overview of public transport policy developments in South Africa	1	1	1		1	1	1	1	1	1
30	Pocket Guide to South Africa 2005/06	1	1	1	1	1			1	1	

38	Should South African minibus taxis be scrapped? Formalizing informal urban transport in a developing country.		1	1	1	1	1	1	1
39	Smart Transport		1	1		1			1
40	Some logistics realities in Indochina					1		1	
41	Taxi Recapitalisation Programme -TRP Project Office Dept of Transport 8 June 2007		1	1			1		1
42	Taxi-owners perceptions of the government's recapitalisation scheme: A case study of taxi-owners in Pietermaritzburg		1	1	1	1		1	1
43	The case for municipal transport authorities revisited		1	1					1

44	The impact of advanced telecommunication technologies (ICTs) on Transport and the built environment	1	1	1					1
45	The importance of maths innovation		1		1			1	
46	The journey to work: a descriptive UK case study		1						
47	The road to empowerment of the minibus-taxi industry is full of pitfalls: Our experience and observations over many years		1	1	1		1	1	1
48	The South African experience with negotiated versus competitively tendered bus contracts		1	1	1	1		1	1
49	The taxi industry and	1	1	1		1	1		1

	governm ent at loggerhe ads										
5 0	Theoreti cal analysis on coordina ted develop ment of urban transport system		1		1		1		1		1
5 1	Towards 2020: Public Transport strategy and action plan		1	1	1	1	1		1		1
5 2	Towards a new mobility concept for cities: architect ure and program ming of semi- autonom ous electric vehicles		1								
5 3	Towards a new rationalit y in the planning and manage ment of passenge r transport systems in South African cities?		1	1		1		1	1		1
5 4	Towards a safer minibus taxi industry in South Africa		1	1				1			1

55	Transport for trade in Mozambique: The 'Golden Highway to development'?	1	1	1	1	1	1	1	1	1
56	Transport in Europe: where are we going?		1	1		1		1		
57	Transportation information: a review of grey literature by format, language and availability		1							
58	Unsafe taxis 'on the way out'		1							
59	Urban dynamic real-time distribution services		1							
60	Wealth on Wheels? The Mini-bus Taxi, Economic Empowerment and the new passenger transport policy		1	1	1	1		1	1	1
61	Organizing in the informal economy: A case study of the		1					1		1

Appendix B: RESEARCH QUESTIONS construction

Research Questions	Survey Questions	Variable(s) and or Relationships measured	Statistical Test
1. Do people understand what the taxi recapitalization is?	<p>1.1 Is the programme communicated to all the stakeholders of the taxi industry?</p> <p>1.2 Was the programme fully understood by all the stakeholders?</p> <p>1.3 Is the programme transparent in details?</p> <p>1.4 Are all the stakeholders' role players in the programme?</p> <p>1.5 Are all the stakeholders allocated responsibilities in the programme?</p> <p>1.6 Do the stakeholders feel committed to the programme?</p> <p>1.7 Are you satisfied with the management of the programme?</p>	<p>Ordinal / Nominal</p> <p>Variables:</p> <p>1.1 Yes/No</p> <p>1.2 Yes/No</p> <p>1.3 Yes/No</p> <p>1.4 Yes/No</p> <p>1.5 Yes/No</p> <p>1.6 Not within scope, poorly, fairly, mostly, completely</p> <p>1.7 Not within scope, poorly, fairly, mostly, completely</p> <p>1.8 Yes/No</p>	<p>Descriptive Stats – frequency tables, bar charts</p> <p>Numerical description – location, spread, distribution, cross tabulation</p> <p>Measures of association – Phi, Crammers V</p> <p>Convert nominal to ratio 0,1,2,3,4 and do correlation co-efficient testing with personal info –</p>

	<p>1.8 Are all the processes followed of the programme?</p> <p>1.9 Are the stakeholder abiding or complying to the regulations of the programme?</p> <p>1.10 Is there an update session of the programme in terms of the statistics?</p> <p>1.11 Is the stakeholders satisfied with the progress of the programme?</p>	<p>1.9 Yes/No</p> <p>1.10 Yes/No</p> <p>1.11 Yes/No</p>	<p>Pearson and Spearman Rho</p> <p>Normal and z-distribution</p>
<p>2.What is the importance of the taxi recapitalization programme for operators?</p>	<p>2.1 Are the stakeholders' part of the implementation?</p> <p>2.2 Was the implementation process communicated to all stakeholders?</p> <p>2.3 Was the implementation process done as agreed with all the stakeholder?</p> <p>2.4 Is the programme showing results?</p> <p>2.5 Do the stakeholders see the importance</p>	<p>Ordinal / Nominal Variables:</p> <p>2.1 Yes/No</p> <p>2.2 Yes/No</p> <p>2.3 Yes/No</p> <p>2.4 Yes/No</p> <p>2.5 Yes/No</p>	<p>Descriptive Stats – frequency tables, bar charts</p> <p>Numerical description - location, spread, distribution, cross tabulation</p> <p>Measures of association – Phi, Crammers</p>

	<p>of the programme?</p> <p>2.6 Are the stakeholders seeing the value of the programme?</p>	2.5 Yes/No	<p>V</p> <p>Convert nominal to ratio</p> <p>0,1,2,3,4</p> <p>and do correlation co-efficient testing with personal info – Pearson and Spearman Rho</p> <p>Normal and z-distribution</p>
3.What are the challenges faced by taxi operators in the taxi recapitalization programme?	<p>3.1 Are the taxi operators having access to information pertaining to the programme?</p> <p>3.2 Are taxi operators given guidance to access finance for new taxis?</p> <p>3.3 Are the taxi operators given guidance of which taxi vehicles to buy?</p> <p>3.4 Are the taxi operators monitored on</p>	<p>Ordinal /</p> <p>Nominal</p> <p>Variables:</p> <p>3.1 Yes/No</p> <p>3.2 Yes/No</p> <p>3.3 Yes/No</p> <p>3.4 Yes/No</p>	<p>Descriptive Stats – frequency tables, bar charts</p> <p>Numerical description - location, spread, distribution, cross tabulation</p> <p>Measures of association – Phi,</p>

	<p>the purchases of new taxi vehicles according to guidelines and standards of the programme?</p> <p>3.5 Are taxi operators satisfied with the scrapping allowance amount of R50 000?</p> <p>3.6 What is the duration of payment of a scrapping allowance?</p> <p>3.7 Is the taxi operator satisfied with the duration of payment?</p> <p>3.8 Is the process of obtaining an operating license understandable?</p> <p>3.9 Do the taxi operator have access to the offices to do an operating license?</p> <p>3.10 How long does it take to apply for an operating license?</p> <p>3.11 Is there a financial support when the taxi operator has recapped the old taxi vehicle?</p>	<p>3.5 Yes/No</p> <p>3.6 30, 60, 90, 120 or 180 days. (1, 2, 3, 4 or 6 months)</p> <p>3.7 Yes/No</p> <p>3.8 Yes/No</p> <p>3.9 Yes/No</p> <p>3.10 30, 60, 90, 120 or 180 days. (1, 2, 3, 4 or 6 months)</p> <p>3.11 Yes/No (If any please explain)</p> <p>3.12 Yes/No</p> <p>3.13 Yes/No</p>	<p>Crammers V</p> <p>Convert nominal to ratio 0,1,2,3,4 and do correlation co-efficient testing with personal info – Pearson and Spearman Rho</p> <p>Normal and z-distribution</p>
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	<p>3.12 Is the tax operator satisfied with the process of the tax recapitalization programme?</p> <p>3.13 Is the process done as per the policies and guidelines of the programme?</p> <p>3.14 Is there any additional support or guidance that can be offered by the department to make the programme a success?</p>	<p>3.14 Yes/No (please explain)</p>	
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Appendix C: letter

P. O. Box 207

Tlhabane

0309

Dear Respondent

I am an employee of North-West University (Internal Audit Unit) and currently completing the research component of a Masters in Business Administration (MBA) with the North-West University.

Towards this end, I would really appreciate your input in understanding the effect of the taxi recapitalization programme in the Rustenburg area. I have attached a questionnaire which will assist me in collating the required data.

May I request for your assistance in the following:

- 1) Please complete the questionnaire to the best of your ability.
- 2) The completed questionnaire will be picked up by me personally.

The questionnaire will not take more than 15 minutes to fill in.

Thanking you in advance for your contribution in this regard.

Kind Regards,

Clement Mabe

018 299 4846

082 362 2129

Appendix D: Questionnaire

VOLUNTARY QUESTIONNAIRE FOR UNIVERSITY STUDENTS

"AN INVESTIGATION INTO THE EFFECTS OF THE TAXI RECAPITALISATION PROGRAMME FOCUS IN THE RUSTENBURG AREA"

Department of Commerce & Administration

North West University

Researcher: Clement Mabe

Supervisor: Prof. Sam Lubbe

Note to the respondent

- The researcher needs your help to understand the effects of the Taxi Recapitalisation programme in the Rustenburg area.
- Although the researcher would like you to help him, you do not have to take part in this survey.
- If you do not want to take part, just hand in the blank questionnaire at the end of the survey session.
- What you say in this questionnaire will remain private and confidential. No one will be able to trace your opinions back to you as a person.

The questionnaire as four parts:

Part 1 asks permission to use your responses for academic research.

Part 2 asks general personal particulars like your age, gender and home language.

Part 3 asks about the Taxi Recapitalisation programme, importance, requirements and challenges.

How to complete the questionnaire

1. Please answer the questions as truthfully as you can. Also, please be sure to read and follow the directions for each part. If you do not follow the directions, it will make it harder for us to do our project.
2. We are only asking you about things that you and your fellow students should feel comfortable telling us about. If you don't feel comfortable answering a question, you can indicate that you do not want to answer it. For those questions that you do answer, your responses will be kept confidential.
3. You can mark each response by making a tick or a cross, or encircling each appropriate response with a PEN (not a pencil), or by filling in the required words or numbers.

Thank you very much for filling in this questionnaire.

PART 1: PERMISSION TO USE MY RESPONSES FOR ACADEMIC RESEARCH

I hereby give permission that my responses may be used for research purposes provided that my identity is not revealed in the published records of the research.

Initials and surname _____

Signed: _____

Postal address: _____

Postal code: _____

Contact numbers: Home: _____ Cell: _____

1	I am: ❖ African ❖ Coloured ❖ Indian ❖ White ❖ a member of another ethnic group ❖ I do not want to answer this question	2	I am: ❖ Taxi Operator(driver) ❖ Taxi Owner ❖ Other: (please specify) _____
3	I have: ❖ a drivers licence & public ❖ a drivers licence & no public ❖ Other _____ (please specify) I do not want to answer this question	4	I am _____ years old I do not want to answer this question
5	I am a: ❖ Male ❖ Female ❖ I do not want to answer this question	6	I have: ❖ 1 taxi ❖ 2 taxi's ❖ More than 2 taxi's ❖ I do not want to answer this question
7	How many years have you been in the taxi business: ❖ 1-5 ❖ 6-10 ❖ 11-15 ❖ more than 16 years	8	I grew up: ❖ in Rustenburg ❖ outside Rustenburg _____ ❖ I do not want to answer this question
8	How many years have you been staying in this area: ❖ 1-5 ❖ 6-10 ❖ more than 11 years	9	I have: ❖ a standard 10 ❖ a degree ❖ Other ; (please specify) ❖ I do not want to answer this question
PART 3: TAXI RECAPITALISATION PROGRAMME (TRP), IMPORTANCE, REQUIREMENTS, IMPACT AND CHALLENGES.			
10	Do you know of the Taxi Recapitalisation Programme (TRP): ❖ I understand ❖ I don't understand ❖ I do not want to answer this question	11	Is the TRP communicated to all the stakeholders of the taxi industry? ❖ Yes ❖ No ❖ I do not want to answer this question
12	Is the TRP transparent in details? ❖ Yes ❖ No ❖ I do not want to answer this question	13	Do the stakeholders feel committed to the TRP? ❖ Yes ❖ No ❖ I do not want to answer this question
14	Are you satisfied with the management of the TRP? ❖ Yes ❖ No ❖ I do not want to answer this question	15	Is the stakeholders satisfied with the progress of the TRP? ❖ Yes ❖ No ❖ I do not want to answer this question
16	Has the TRP shown an improvement in the transport system? ❖ Yes ❖ No ❖ I do not want to answer this question	17	Have all Taxi recapitalisation requirements been met? ❖ Yes ❖ No ❖ I do not want to answer this question
18	Was the TRP implementation process done as agreed with the entire stakeholders? ❖ Yes ❖ No ❖ I do not want to answer this question	19	Is the TRP showing results? ❖ Yes ❖ No ❖ I do not want to answer this question
20	Are taxi operators given guidance to: a) access finance for new taxis? ❖ Yes ❖ No ❖ I do not want to answer this question b) which taxi vehicles to buy? ❖ Yes ❖ No ❖ I do not want to answer this question	21	Are taxi operators satisfied with the scrapping allowance amount of R50 000? ❖ Yes ❖ No ❖ I do not want to answer this question
22	Is the duration of payment of a scrapping allowance a problem? ❖ Yes ❖ No ❖ I do not want to answer this question	23	Is the process of obtaining an operating license with the new taxi understandable? ❖ Yes ❖ No ❖ I do not want to answer this question
24	Is the process done as per the policies and	25	Is there any additional support or guidance that can be

	guidelines of the programme? ❖ Yes ❖ No ❖ I do not want to answer this question		offered by the department to make the TRP a success? ❖ Yes ❖ No ❖ I do not want to answer this question
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