

**STRATEGIES FOR THE IMPLEMENTATION OF TRAFFIC
REGULATIONS WITHIN THE PUBLIC TRANSPORT SECTOR IN
NAIROBI CITY COUNTY, KENYA**

**BY
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DECLARATION

This project is my original work and has not been presented for examination in any other university.

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APPROVAL

The Research Project has been submitted for examination with my approval as the university supervisor.

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DEDICATION

This Research Project is dedicated to my loving Wife Victoria Ndila, my daughter Esther Nthangu, my sons Onesmus Ngui, Brian Mutua and my Mum Esther Nthangu who have been my constant source of inspiration. They gave me the drive and courage to tackle the study with enthusiasm and determination. Without their love, understanding and support this project would not have been made possible. I dedicate this research to you all.

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ABBREVIATIONS AND ACRONYMS

GOK	:	Government of Kenya
NCBD	:	Nairobi Central business District
NTSA	:	National Transport and Safety Authority
O/I	:	Industrial Organization
PSV	:	Passenger Service Vehicles
RBV	:	Resource Based View
SACCO	:	Savings and Credit Cooperative Organizations
SPSS	:	Statistical Package for Social Sciences
TRRL	:	Transport research Laboratories

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ABSTRACT

The purpose of this paper was to investigate the strategies used to implement traffic regulations within the public transport sector in Nairobi City County, Kenya. The study focused majorly on NTSA, Matatu Sacco Officials, PSV Drivers and Passengers as the most appropriate strategic areas that the government uses to implement the traffic regulations in the transport sector. The study analyzed the response rate of NTSA Officers, Matatu Sacco officials, PSV drivers, passengers and pedestrians with regard to transport regulations. The study employed a descriptive research design and the target population was drawn from the stakeholders within public transport sector in Nairobi City County. In addition, the study adopted stratified random sampling where the population of interest was divided into three strata depending on the area of service. This study used primary data, before processing the responses and completed questionnaires were edited for completeness and consistency.

A content analysis and descriptive analysis was employed. The content analysis was used to analyse the respondents' views about the extent to which Matatu Sacco officials, PSV Drivers and passengers influence transport sector. The data was coded to enable the responses to be grouped into various categories. Descriptive statistics such as means and standard deviation were used to help in data analysis. Tables and other graphical presentations as appropriate were used to present the data collected for ease of understanding and analysis. Further, correlation and regression analysis was conducted to study the relationship between NTSA Officers, Matatu Sacco officials, PSV Drivers and passengers and implementation of traffic regulations.

The study established that NTSA Officers, Matatu Sacco officials, PSV Drivers and passengers are the major strategies that the government has employed in implementing road traffic regulations within Nairobi City County and the study further established that NTSA Officers, Matatu Sacco officials, PSV Drivers and passengers positively influences implementation of road traffic regulations in Nairobi City County. The study offered recommendations of which if implemented by the relevant Government agencies would bring normalcy and regulate the runaway public transport services within Nairobi County.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Public transport in Kenya and especially in urban areas is dominated by Matatu vehicles. In 1973, President Jomo Kenyatta, responding to lobbying from Matatu operators declared that Matatus were a legal mode of transport which could carry fare paying passengers without obtaining special licenses to do so but had to comply with existing insurance and traffic regulations (Aduwo 1990). According to Nzuve *et al.* (2011), Nairobi is the capital and largest city in Kenya. Road transport plays a significant role in the Kenyan economy encompassing 80% of the land transport demand. As a result of steady economic growth over the last decades, traffic on the national highways has grown by 6 to 7.5% per year (The World Bank, 2007a).

Transport is an important contributor to the well-being of any economy. The impact of the public transport sector to the economic growth and to other sectors of the economy depends fully on the sanity in the sector. Sanity is brought about by appropriate public transport regulations and proper regulations' implementation strategies. Stakeholders in the transport sector such as NTSA, Matatu Sacco officials, PSV drivers and passengers most likely affect the implementation of traffic regulations through their commitment and awareness either positively or negatively. Transport is a crucial ingredient in modern economies and societies. These economies intensify and institutionalize labor divisions, breaking up production processes alongside specialized functions. Modern societies demand a workforce that is mobile in its mindset and physical means. To cater

for these, transport systems (infrastructure) and services need to evolve into one of the specialized sectors of the economy. In case transport sector fails to perform; the change towards modern economies and societies is distorted, leading among others prevailing poverty (Kamuhanda *et al.* 2005).

The need for increased mobility in today's society has resulted in the development of transportation systems in which the 'human operator' is the central element. However, any system which relies on the individual actions, behavior and needs of many different operators is invariably bound to result in some form of conflict and the role of human error has been well documented as one of the main contributing factors in the majority of road accidents. The magnitude of this problem is reflected in the large amount of road safety research which has focused on attitudinal and behavioral approaches to better understand the relationship between the 'human operator' and road accident prevention and causation (Grasmick *et al.*, 1993).

Notably, Traffic (Amendment) Act Cap 403 is not clear, it has many amendments and it does not clearly address transport management of the ever changing modern transport trends. The new Transport and Safety Authority Act 2012 that repealed the Transport Licensing Act Cap 404 is not keen on addressing the most pertinent issues of an integrated modern transport system.

Ministry of Roads and Infrastructure has eight (8no) State Corporations and National Transport and Safety Authority (NTSA) is one of the parastatals. Research on road transport in the public transport sector related challenges has been done and continues to be done in order to formalize the sector. This study focuses mainly on the strategies used to implement traffic rules within the public transport sector in Nairobi.

1.1.1 Concept of Strategy

A Strategy must be formulated for it to be implemented. Nonetheless, formulation of Strategy focuses on the theoretical perspective while the implementation aspect of strategy is the administrative aspect and the actual translation of chosen strategy into the organizational action so as to achieve the desired strategic goals and objectives. Strategic formulation includes the setting of the mission, goals and objectives for the organization and it is also the analysis of the external environment on how it affects the organization together with its internal resources and the choice of strategic alternatives (Thompson *et al.* 2003).

Distance is seen as hindrance to the necessary, cross-functional team spirit in the organization which forms physical barriers in strategy implementation. However, interpretive barriers are formed by the different ways different units interpret and comprehend the strategy. Personality barriers reflect the personal characteristics of key personnel, as well as between different groups in the organization's hierarchy. In addition, varied goals or targets within the organization and various departments are also barriers to strategy implementation.

According to Noble's perspective, the organization consists of different units and functional groups. In his contribution to effective implementation, he alluded that the strategist must create unofficial communication networks (Noble 1999). However, limited resources for strategy implementation are viewed as a challenge with good research and studies being shelved for lack of not only funds but also Human Resource personnel to undertake the job. The challenges of strategy implementation are illustrated by the unsatisfying low success rate (only 10 to 30%) of intended strategies (Raps *et al.* 2005).

Institutional challenges like political influences and corruption affects proper implementation of Strategies. Lack of the good will by management, poor organizational structure with people who lack patience and the ability to deliver remains a hindrance to successful implementation of strategy. The key to success is an integrative view of the implementation process (Raps *et al.* 2005). Awino (2001) identified four challenge areas affecting successful strategy implementation. He cited lack of fit between strategy and structure; inadequate information and communication systems; resource allocation and failure to impart new skills. He identified most challenges as concerning connecting strategy formulation to implementation; i.e. Organizational resource allocation; the match between structure with strategy, he also linked performance and pay to strategies and the creation of a strategy supportive culture in organizations.

Transport industry in Nairobi Central business District (NCBD) is 'Informal' yet governments and local authorities issue out licenses to operators for purposes generating revenue for the County. Notably, informal transport thrives best where authorities are reluctant on matters of law enforcement and do not use the modern transport system - Intelligent Transport Systems (ITS) as there is normally no data regarding the operations. Where ITS technology is not in use, tracking trends and individual driver behavior is often difficult leading to impunity on roads. This hinders organizations and the government's ability to track down road traffic law breakers.

1.1.2 Challenges of strategy implementation

Implementation of strategy poses some challenges which include, Insufficient leadership attention for the strategy i.e. Managers may have poor understanding of the broader scope and goal of the strategy being implemented as such pose indirect resistance, In addition, the use of brute force approach, personality differences, politics and insufficient buy in from all the stakeholders are other obstacles to strategy implementation efforts. Beer and Eisenstat (2000) attempted to capture much of this description of six killers of strategy implementation which include, Top down management style, unclear strategy, poor vertical communication, poor coordination across functions, businesses or boards and inadequate down the line leadership skills.

Weak and inappropriate strategy is another factor to failures in strategy implementation which brings about resistance to change. Strategy implementation is about change from the usual way of doing things to unusual approaches and normally people fear change because of the uncertainties that come with it. To bring about change, some variables ought to be incorporated which includes, building on the behavior change, social factors, organizational arrangements, physical settings and the technological adaptation. To redirect an organization, the overlapping and related issues should be addressed first and the resultant impression needing change be created ‘everything at once’ can be overwhelming, (Maginson, 2002).

1.1.3 Implementation of Road Traffic Regulations

The Kenya Traffic (Amendment) Act, 2012 part of it states that “This law affects both public and private motorists so that anyone driving under influence of alcohol would be fined KSHs 500, 000.00 or serve 10 years in jail or both. And overlapping, obstruction, driving on a pavement or through a petrol station to avoid traffic attracts a fine of between KSHs 100,000.00 to KSHs 300,000.00 or one year in jail or both”. Notably, road traffic rules are in place but the trend in the development of motor transport requires application of adequate regulatory measures which include strict enforcement of the law.

It is the objective of an urban set up to regulate and segregate motor transport in order to avoid safety risks for the population and to limit emission of harmful gases, noise pollution and vibrations and support of walking citizens and cycling modes. It also aims at promotion for quality and cleaner life in the city. In order to realize the objective an integrated and synchronized approach in handling transport is crucial. The bottom line in this scenario being the improvement in quality of transport affairs within the city by increasing traffic flow, improving road safety and lowering negative effects of traffic, including the reduction of accidents, injuries, deaths, material damages, emissions, noise pollution.

1.1.4 Public Transport Sector in Kenya

In Kenya public transport is offered through various forms which include; use of buses, trains, air, and water, 'matatus' which is a smaller form of transport, Lorries, cycling, use of human back and use of animals like donkeys. According to Asingo, (2004), Transport was inconsistent with studies showing that until 2004, there was no comprehensive transport policy for both road and the entire transport sector. However, traffic Act 1975 was in place to guide the sector. In 1st November, 2010 Ministry of Transport issued a Policy directive through the transport licensing Board that required all Public Transport Companies to join and form SACCOs.

National Transport and Safety Authority (NTSA) the body which was enacted under the National Transport and Safety Authority Act, Act No. 33 of 2012 was charged with the mandate of overseeing motor vehicle Registration, transport Licensing, Motor Vehicle Inspection, Road Safety, driver testing and by extension law enforcement roles. Public transport especially in Nairobi- Kenya has been a challenge due to various transportation related challenges which include, lack of inters- modal integration, inadequate funds for development and maintenance, ineffective axle load control, inadequate legal framework, poor condition of the road networks, careless driving, and bad condition of the vehicles, inappropriate modal split and lack of security amongst other factors.

1.2 Research Problem

Provision of Public transport in Nairobi City is a key element towards the achievement of vision 2030 and all National development policies. Kenya's Transport Policy recognizes the key role of provision of safe transport which triggers development. In recognition for the key role that transport sector plays in economic development, the Government enacted road traffic regulations to guide and bring order in not only the public transport but also the entire transport sector. However, Kenya and in particular Nairobi City County continues to experience public transport related challenges which include road accidents, drunk driving, careless driving by matatu drivers, overlapping, noise pollution, corrupt traffic police service amongst other challenges.

The law enforcement agencies are up and running and strategies for the implementation of traffic regulations are in place but still public transport in Nairobi is a nightmare. To bring order and control in the Nairobi transport business, the Government formed Matutu Saccos and introduced the use of cashless pay system which failed miserably at the implementation stage. It was rejected by the public transport players in the sector. Proper implementation of the same would attract taxation and reduction of corrupt practices within the public transport sector.

Notably, Public Transport sector in Nairobi City County appears as 'Informal' or not properly regulated but the National Transport and Safety Authority (NTSA) issues out licenses to the public transport players, matatu operators Saccos for purposes generating revenue for the City. Public transport business seems to thrive best where authorities are reluctant on matters of law enforcement and regulation. Public Transport Saccos in Nairobi City County are reluctant on the implementation of cashless pay system and Modern transport system - Intelligent Transport Systems (ITS) to avoid being monitored and regulated because with the system in place it would translate to monitoring and control on the transport sector operations. Where ITS technology is not in use, tracking trends and individual driver behavior is often difficult leading to impunity on roads. This hinders organizations and the government's ability to track down road traffic law breakers.

Notably, studies to establish the reasons as to why implementation of strategies and policies sometimes becomes a challenge have also been done for instance, Anoff (1965) noted that strategic problems are harder to pin point and they require special attention.

He observed that unless specific provisions are made for concern with strategy, the firm may misplace its efforts in pursuit of operating efficiency. In addition, Muthuiya (2004) researched on strategy implementation and its challenges in non –profit making organization in Kenya and observed that strategy formulation is easier as opposed to the implementation aspect.

Other researchers are include, Arumonyang (2009), who did a survey on strategy implementation and looked at the challenges facing regional development authorities in Kenya, while Njoki (2009), looked at the challenges of strategy implementation at oxfam great Britain-Kenya, Omollo (2007), in his study which focused on challenges in implementing strategic decisions at Kenya Armed Forces established that an organization needs formulate clear and well documented strategies in order to realized good results.

Strategic formulations of transport regulations have been in place for example, Traffic act Cap 403 and local authorities by-laws but seemingly, the strategies used to implement of road traffic regulations in public transport business in Nairobi have continued to be a challenge and enforcement of the same has faced resistance from the public transport operators and people with vested interests in the transport sector. This study focuses on the key areas on the strategies for the implementation of traffic regulations in public transport sector within Nairobi City County, Kenya with a view to fill in the gaps to effective implementation of public transport regulations.

1.3 Research Objectives

The objectives of this study are;

1. To determine the strategies that the Government has adopted to regulate the public transport business in Nairobi City County.
2. To establish the factors affecting the implementation of road traffic regulations within the public transport sector in Nairobi City County.

1.4 Value of the study

The findings from this study will assist the Government examines its public transport regulations with a view to overcome the challenges to implementation of road traffic regulations in public transport sector within Nairobi City County. Secondly, the findings will enable the Government address issues related to road traffic matters. Finally, the outcome of the study will assist students in doing transport related research and anybody or an organization who may wish to venture in public transport business by providing insights about some of the factors associated with the business success.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the critical points of current knowledge including substantive findings, as well as theoretical and empirical contributions to the strategies used to implement strategies. It will also capture in challenges encountered during strategy implementation.

2.2 Theoretical foundation

This study is based on two theories namely game theory and strategy theory and the two theories are discussed below;

In game theory the strategist has to anticipate the reactions of competitors. The competitor in game theory is aware of the interdependencies which are there and the likely course of action by the opponent. To assess competitive forces and the context within which the organization operates choice of strategy can indeed appear like forces pushing or pulling an organization to change. The likely choices made by an organization are important because they offer guidance and direction for the organization. On the other hand they act as motivators to individuals through development of a visionary leadership style hence increased production and revenue through minimal wastage of resources. Prudent evaluation of choices provides basis for expressing the value system in the organization.

According to Peters *et al.* (1999), about vision and organizational behavior, ‘one all-purpose bit of advice for management’ in quest of excellence is ‘figure out your value system’. Best choices will help to articulate the value base in the organization. On the other hand, strategy theory is apprehensive on the firm’s performance in a competitive environment (Porter, 1991) there are various strategy perspectives and the strategy process perspective is about ‘what competitive advantage is and what is based on’. While resource based view (RBV) and industrial organization (I/O) may be seen as content based approaches variance theories in (Markus *et al.* 1988). In strategic Management, the process based view focuses mainly on the processes through which contents are created and managed over time. Studies have shown that Organization with clear Strategic vision and direction thrive faster as opposed to those without.

2.3 Empirical Literature Review

According to Orero *et al.*, (2012), there are several government departments that are in charge of implementing transport strategies in Kenya, they include: the National Transport and Safety Authority (NTSA), the Registrar of Motor Vehicles, the Traffic Police, the Motor Vehicle Inspection Unit and the Driving Test centre. Coordination and cooperation within these strategy implementation agencies is necessary for the transport policies to be successful.

Aosa (1992) Strategy is an important element of management process. According to Johnson *et al.* (2002) have defined strategy as the direction and scope of an organization over the long term which achieves advantage for the organization through its configuration of resources within a changing environment to meet the needs of markets and fulfil stakeholder expectations. Strategic Management involves specifying the mission, vision and objectives of an organization and implementing of the strategies through analysis. Strategy has to harness the efforts of all the stake holders to realize the intended results.

Strategic Management gives organizations framework to develop abilities for anticipating and coping with changes in the environment. Strategy is also the application of the concepts of business strategy. It represents an organization's ability to analyze the strengths, weakness, opportunities and threats facing an organization with a view to develop scope , resources, competitive advantage and synergy and create organizational flexibility in order to respond to changes in the environment (Pearce *et al.* 1997).

According to Gicheru *et al.* (2011) Provinces, and indeed, the whole country, majority of the SACCOs were registered in 2010 and 2011 as evident from the increased number of SACCOs registered which brought sanity in the public transport sector. According to Aosa (1992), once Strategy has been developed, they need to be implemented in order to achieve the desired results because they will be of no value unless they are effectively translated into actions.

A poor and vague Strategy may limit Strategy implementation process and efforts. Good executions plans alone cannot overcome or correct the shortcomings of a bad or poor strategic planning effort (Hrebiniak, 2006). Alexander (1985) believes that need to start with a formulated strategy that involves a good idea or concept often promotes successful implementation, According to Bresser *et al.* (2003), formalization is the degree to which norms of the organization are explicitly defined.

He further distinguished between formalization referring it to whether the norms are written down in manuals and other documents. Strategy formulation according to Allio (2005), a starts with good strategic input which results into good implementation because the soup is as good as the ingredients. In Strategy formulation environmental scanning and continuous implementation, in Environmental scanning the organization needs to understand what might affect organizational performance and make necessary adjustments.

According to Ansoff (1984), all strategic decisions making should revolve around customers. Hedley (1976) wrote that strategic planning should enable a firm to develop an edge over competitors in the market place. The tools also include annual plans, policies and functional strategies. According to Mobisa (1997), these tools work as guide lines for action, directing and channeling efforts and activities of organization's members. There is need for annual work plans which provide basis for resource allocation and evaluation of staff performance through efficient and effective monitoring and evaluation of the activities towards the set targets.

A proper Strategy which has been developed and has not implementation is futile. It is just like having good plans or intentions about something without actions, the plans are as good as nothing. According to Dannenmaier and Dannemaier (2008), best results are always achieved from properly developed and thought strategy. In order to have workable strategic ideas, it is good to plan and execute the plans by setting clear priorities in the implementation plan. Planning without execution is useless in itself.

Alexander (1985) alluded that; there should be comprehensive implementation plan, with clearly defined action lines, responsibilities and timeframes which enables the implementation process. In addition, the strategy of an organization must be matched to the external environment; it must also fit the multiple factors responsible for its implementation (Betemen *et al.* 1993). According to David, (1997) successful strategy implementation must consider issues to its implementation which includes, matching organizational structure to strategy, creating supportive organizational culture among other issues.

Strategy implementation faces various impediments during and after the time of execution of the strategy. Part of the hurdles includes poor understanding of the broader scope and goals of the strategy being put in place; this is as a result of lack of involvement, sensitization, transparency, trust, political or environmental related issues and also low levels of understanding. Personality problems, poor communication, power struggles and leadership also contribute to failures in strategy implementation Beer *et al.* (2000).

In the attempt to capture this in their description of the six silent killers of strategy implementation wrote that top down, unclear strategy and conflicting priorities, ineffective management team, poor communication and reversed priorities also hinder strategy implementation process. According to Alexander (*ibid*), the three most frequently occurring strategy implementation problems include underestimating the time needed for implementation and major problems surfacing that had not been anticipated, in addition uncontrollable factors in the external environment had an adverse impact. There are three essential factors for successful strategy implementation. First of all, the change process should be systemic. This means that both the human and systemic aspects of the organization should fit with each other in the organization. This is a very important point.

The large volume of literature relating to the deterrence based approach to traffic law enforcement suggests that, in order to be effective, policing activities need to be structured so as to pose a meaningful and immediate deterrence threat to the would-be traffic offender. One of the fundamental problems hindering this process, which has been consistently identified in the research literature, is the inability of authorities to maintain the necessary high levels of enforcement (Rothengatter, 1990).

Due to the high detection and prosecution rates resulting from the use of automated enforcement devices some critics have argued about the fairness and morality of such devices and their use as a means of raising revenue. Southgate & Mirrlees-Black (1991) have indicated that the perceived fairness of enforcement is an important

variable in police community relations and can have a significant impact upon policing efforts to educate drivers and promote appropriate road user behavior. Southgate & Mirrlees-Black (1991) have stated that the use of automated enforcement has a significant deterrent effect due to the increase in detection and prosecution rates but argue that if automated enforcement is to bring about a change in societal attitudes towards deviant road user behavior then it is essential that public perceptions and acceptance regarding the use of such devices are high.

Seat belts have been known to reduce road accident trauma in several ways, firstly they prevent occupants from hitting the steering wheel or windscreen in all but the most severe accidents. Secondly, they prevent ejection from the vehicle in an accident situation, an event that increases the risk of death by between 200% and 400% (Hedlund, 1985). Thirdly, during an accident severe forces are inevitably brought to bear on vehicle occupants and seat belts are effective in spreading these accident forces onto the strongest parts of the body. Finally, seat belts reduce the peak deceleration level endured by the occupant in an accident situation by allowing the stopping process to begin earlier in the accident sequence.

Traffic policing encompasses the area of enforcement activity aimed at moderating road user behavior by policing the laws and regulations that govern the use of the road network. The primary aim of traffic policing, as stated by Searles (1985), is to create, promote and maintain a safe road environment by ensuring that road users adhere to the traffic laws.

The use of enforcement techniques is a fundamental aspect of traffic policing and this has resulted in numerous studies relating to the development and implementation of strategies designed to improve the effectiveness and efficiency of policing operations.

Solomon (1987) specified three ways in which traffic enforcement techniques are used to achieve adherence to traffic laws. Firstly, by deterring unsafe road user behavior, secondly, by educating the public to adopt safer road user behavior and lastly, by punishing, when necessary, those road users who breach traffic laws. The mechanism used to achieve behavioral change is that of deterrence which may be simply defined as the omission of an act as a response to the perceived risk and fear for contrary behavior. The underlying principle of deterrence, as a means of social control, and as it relates to traffic law enforcement (Homel, 1988), is that the behavior of human beings can be modified by making them fearful of the consequences of committing illegal acts.

In many countries the control of drunken driving behavior relies heavily on the criminal justice system. Traditional drunk driving countermeasures usually place the emphasis on the individual road user to separate drinking and driving activities. If the road user cannot be persuaded or educated to modify their drunk driving behavior then reliance is typically placed on the law enforcement system to deter, apprehend and punish. To speak therefore of 'drink-drive countermeasures' as they currently operate, is by and large, equivalent to discussing the operation of the police, courts, licensing agencies and prisons (Homel, 1988).

Inadequacy of resources for strategy implementation is another challenge. This may be as a result of lack of resources which include financial and human or indivisibility of resources. Established organizations may experience changes in the business environment that can make a large part of their resource base redundant resources, which may be unable to free sufficient funds to invest in the new resources that are needed and their cost base will be too high (Johnson and Scholes, 2002).

Before any strategy can be implemented, it must be clearly understood. Clear understanding of a strategy gives purpose to the activities of each employee and allows linking whatever task is at hand to the overall organizational direction (Byars, 1996). Lack of understanding of a strategy is one of the obstacles of strategy implementation (Aaltonen *et al.* 2001). They point out that many organizational members typically recognize strategic issues as important and also understand their context in generic terms.

Effective and efficient implementation process of a strategy calls for a committed team, Shared understanding without commitment may result in “counter effort” and negatively affect performance (Wooldridge and Floyd, 1989). Guth *et al.* (1986) asserts that the shared understanding of middle management and those at the operational level to the top may fail if the strategy does not enjoy support and commitment by the majority of employees and middle management. The system may fail if all the stakeholders were not consulted during the development phase (Heracleous, 2000).

Involvement and commitment should also be developed and maintained throughout the implementation process. If middle and lower level managers and key subordinate staff are involved in the planning and detailed implementation of the plan, their commitment is likely to increase.

There is need to vet SACCOs that register because currently anybody can purport to own vehicles hence qualify to register a SACCO/company leaving loophole for gangs to take advantage of this and form their own SACCOs/companies on certain routes with the purpose of exhorting money from vehicles owners who according to the directive, have to show their affiliation to such organisations in order to get operating license (Orero *et al.*, 2012). A study by Okumus (2003), found that the main barriers to the implementation of strategies include lack of coordination and support from other levels of management and resistance from lower levels and lack of or poor planning activities.

Meldrum and Atkinson (1998) found out a number of implementation pitfalls such as isolation, lack of stakeholder commitment, strategic drift, strategic weakening, and strategic separation, failure to understand progress, initiative fatigue, impatience, and not celebrating success. Sterling (2003), identified reasons why strategies fail as unanticipated market changes; lack of senior management support; effective competitor responses to strategy; application of insufficient resources; timeliness and distinctiveness; lack of focus; and bad strategy-poorly conceived business models.

There is need to use the carrot and stick approach in transport strategy implementation in order to have the buy in from all Transport operators and to ensure involvement and that they are all registered and compliant to both Tax and Traffic laws.

There is observed improvement in relations between the operating crews and the passengers. Queuing by passengers as they board and airing their grievances either directly to the SACCOs management or through the SACCO clerks manning the termini has been effective in the implementation of traffic rules. Officially all SACCOs are required to display their contact telephone numbers and have suggestion boxes in each vehicle (Orero *ibid*).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter involves a blueprint for research methodology which presents the research design, population, sample size, sampling technique, nature of data to be used by the study, data collection tools, pretesting of research instruments, data collection procedure, measurement and analysis. Therefore, this section sets to answer the research question raised in the study. To achieve the objective of this chapter, it therefore included research design, target population, data collection instruments, data collection procedures and finally data analysis techniques.

3.2 Research Design

The study employed a descriptive research design as descriptive research design helps describe the state of affairs as it is at present. The research used descriptive cross-sectional survey research design. A descriptive study attempts to describe or define a subject, often by creating a profile of a group of problems, people, or events, through the collection of data and tabulation of the frequencies on research variables or their interaction as indicated by Cooper and Schindler (2003). According to Singleton (1988), descriptive cross-sectional survey is a comprehensive design that enables large and diverse amounts of data to be collected within a short time frame and analysed quantitatively, giving a credible presentation of results.

Kombo *et al.*, (2006) notes that the choice of descriptive survey research design is made in a study when the research is interested on the state of affairs already existing in the field and no variable would be manipulated. The descriptive approach is employed in diverse methods like questionnaires, interviews and reference documents which will ensure proper arrangement of conditions for collection and analysis of data in a manner that aims at combining relevance to the research purposes with economy in procedure (Singleton, *et al.*, 1988).

These descriptions of a descriptive research matched the purpose of this study, as the intention of this study was to determine the strategies that the Government has adopted to regulate the public transport business in Nairobi City and to establish the effects of road traffic rules within the public transport sector in Nairobi City. The main reason for using descriptive research design in this study was to ensure the in depth description of the state of affairs as it exists at the present. To study the relationship between NTSA Officers, Matatu Sacco officials, PSV Drivers, passengers and traffic rules the study used the following regression model:

$$Y = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \alpha_4 X_4 + \varepsilon$$

$Y = \text{Traffic Rules}$; $\alpha_0 = \text{Constant Term}$; $\alpha_1, \alpha_2, \alpha_3, \alpha_4 = \text{Alpha Constants}$; $X_1 =$

NTSA Officers ; $X_2 = \text{Matatu Sacco Officials}$; $X_3 = \text{PSV Drivers}$; $X_4 = \text{Passengers}$;

$\varepsilon = \text{Error Term}$

3.3 Target Population

Nairobi County covers an area of 696 km² with a population of 3,138,295 (GoK, 2009 Census). The unit of analysis for the study includes NTSA Officers, Matatu Sacco officials, PSV Drivers and passengers, with a sample population of 195 respondents. According to Cooper *et al.*, (2000), population refers to the entire group of individuals or objects to which researchers are interested in generalizing the conclusions. The target population for the study will be 195 participants comprising of 20 NTAS be stakeholders within public transport sector in Nairobi city. The respondents in the study will be randomly picked from the Public transport sector within Nairobi City.

Presently, there are approximately 603 registered Matatu Saccos all over the Country and those operating within Nairobi City are estimated to be 30 Saccos (NTSA website). The Saccos operate in different routes within the City so as to cover the entire Nairobi County. Approximately 45,000 Public Service Vehicles (PSV) operates in the country of which about 10,000 operates within the City of Nairobi (NTSA website).

3.4 Sampling Techniques

Sampling refers to selecting a given number of subjects from a defined population as representative of that population (Orodho, 2002). Stratified random sampling is a procedure that is used to reduce chance variation between a sample and the population it represents (Cooper *et al.*, 2000). It is also considered as a fair way of selecting a sample from a given population since every member is given equal opportunities of being selected. The study adopted stratified random sampling where the population of interest was divided into three strata depending on the area of service. NTSA Officers, Saccos Officials, PSV drivers and passengers were selected randomly from each stratum constituting the study. This method gave equal chances to the stakeholders in public transport within Nairobi and was sampled at a representative of 30% of the NTSA Officers, Matatu Saccos Officials operating in Nairobi city, PSV Drivers operating in different routes within Nairobi Public transport and passengers.

Table 3.1: Sample sizes for the Study

	Frequency	Percentage
NTSA Officers	20	10.3
Matatu Sacco Officials	25	12.8
PSV Drivers	50	25.6
Passengers	100	51.3
Total	195	100

Source: 2014

3.5 Data Collection Methods and Procedure

The study used interview and questionnaire approach in data collection. Respondents were interviewed and questionnaires were completed and returned by respondents, this was due to the fact that the method was less expensive, procedure was fast and respondents were literate and co-operative.

3.5.1 Type and Sources of Data

This study collected primary data by using questionnaires. The data was collected from NTSA Officers, Matatu Sacco Officials, PSV Drivers and Passengers.

3.5.2 Data Collection Instruments

Primary data was collected by the use of questionnaires distributed to the respondents who are stakeholders in the public transport sector. A structured questionnaire was used as the research instrument to collect the data. A questionnaire is a collection of items to which respondents are expected to react, usually in writing. The study was concerned with variables which cannot be directly observed such as opinion, perception and feelings of respondents which can best be obtained through a questionnaire. A questionnaire is used to collect a lot of information over a short period of time. It was used since all the respondents are literate. Again information required could easily be described in writing. The questionnaire was developed to address the research objectives. Questions to address each research question were included.

3.5.3 Validity of research instruments

According to Fraenkel and Wallen (2000) validity is the quality attributed to proposition or measures to the degree to which they conform to establish knowledge or truth. An attitude scale is considered valid, to the degree to which its results conform to other measures of possession of the attitude. Validity therefore refers to the extent to which an instrument can measure what it ought to measure. It therefore refers to the extent to which an instrument asks the right questions in terms of accuracy. Mugenda and Mugenda (2003) validity is the accuracy and meaningfulness of inferences, which are based on research results.

The content validity of the instrument determined in two ways. First the researcher discussed the items in the instrument with the supervisors and lecturers from the department. These people are expected to indicate by tick or cross for every item in the questionnaire if it measures what it is supposed to measure or not. The advice includes suggestions, clarifications and other inputs in order. Secondly, content validity of the instrument was determined through piloting, where the responses of the subjects are checked against the research objectives. This also gives a reason as to why content was used. For a research instrument to be considered valid, the content selected and included in the questionnaire must be relevant to the variable being investigated argues Mutai (2000).

3.5.4 Reliability of Research Instruments

Reliability refers to the consistency of measurement. Reliability is increased by including many similar items on a measure, by testing a diverse sample of individuals and by using uniform testing procedures. Reliability gives the internal consistency of data collected. This ensures that the data has certain internal consistent pattern. When no pattern is found in the responses, this indicates that probably the test is too difficult and as a result the respondents just guess the answers randomly.

Reliability of the research instrument was enhanced through a pilot study that was done stakeholder in the transport sector, other than those used in this study, selecting a pilot group of 30 respondents (5 NTSA Officers, 5 Matatu Sacco officials, 10 PSV Drivers and 20 Passengers). The respondents were conveniently selected since statistical conditions are not necessary in the pilot study (Cooper and Schindler, 2003). The pilot data was not included in the actual study. The pilot study allowed for pre-testing of the research instrument. This reliability estimate was measured using Cronbach Alpha coefficient (α). Nunnally (1978) recommends that instruments used in research should have reliability of about 0.70 and above.

3.5.5 Administration of Research Instruments

The questionnaires were self-administered with the guide of hired Research Assistants. However, in some situations especially drivers who were willing to respond but were on duty (driving) were interviewed by the research assistants.

3.6 Data Analysis

The study used completed questionnaires and quantitative analysis to derive the information collected; it involved examining what had been collected and making deductions and inferences (Kombo and Tromp 2006). The study employed descriptive statistics to analyze the data obtained. Descriptive statistics involved the collection, organization and analysis of all data relating to some population or sample under study.

Quantitative data was analyzed using measures of central tendency while qualitative data was analyzed using factor analysis. According to Breakwell (2006), descriptive research design is commonly represented by use of frequency charts, graphs, and pie charts to tabulate the information gathered appropriately. Statistical Package for Social Sciences (SPSS) was used to analyze the data. This package is known for its efficiency and ability to handle large amounts of data. Given its wide spectrum for statistical procedures purposefully designed for social science, it developed appropriate holding frame to come up with reliable results according to the responses in the questionnaires.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter covers data analysis and findings of the research. The study aimed to assess strategies used to implement traffic rules within the public transport sector in Nairobi Kenya. It therefore sought to answer the following research questions, what are the strategies that the Government has adopted to regulate the public transport business in Nairobi City? What are the influences of road traffic rules within the public transport sector in Nairobi City?

The data is summarized and presented in the form of proportions, means, and tables. Data was collected from twenty (20) NTSA officers, twenty five (25) Matatu Sacco officials, fifty (50) PSV drivers and one hundred (100) passengers. The collected data was analyzed and interpreted in line with the aims of the study namely, to determine the strategies that the Government has adopted to regulate the public transport business in Nairobi City and to establish the effects of road traffic rules within the public transport sector in Nairobi City. The respondents were drawn from public transport sector.

4.1.1 Response Rate

Table 4.1 Response Rate

	NTSA Officers	Matatu Sacco Officials	Drivers	Passengers
Response	16	21	48	97
Non Response	4	4	2	3
Total Respondents	20	25	50	100
Percentage	80	84	96	97

Source: 2014

Out of the 100 passengers sampled 97 responded giving a response rate of 97%, out of 50 drivers sampled, 48 responded giving a response rate of 96% while all the 20 NTSA officers sampled responded giving response rate of 100%. On average, 182 respondents responded to the questionnaires with an average response rate of 94.7%. This response rate was adequate and conforms to Mugenda and Mugenda (2003) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. This response rate was due to extra efforts made by making call backs and thorough probing of the respondents.

4.2 Reliability test results

A pilot study was carried out to determine reliability of the questionnaires. The pilot study involved 30 respondents (5 NTSA Officers, 5 Matatu Sacco officials, 10 PSV Drivers and 20 Passengers). Reliability analysis was subsequently done using Cronbach's Alpha which measures the internal consistency by establishing if certain items within a scale measure the same construct as presented in Table 4.2

Table 4.2: Reliability Analysis; Source: Research Data 2014

Statistic	Cronbach's Alpha
NTSA Officers	0.967
Matatu Sacco officials	0.914
PSV Drivers	0.809
Passenger	0.709

Source: 2014

Nunnally (1978) recommends that instruments used in research should have reliability of 0.70 and above, thus forming the study's benchmark. Cronbach Alpha was established for every objective which formed a scale. The table below shows that NTSA Officials had the highest reliability ($\alpha = 0.967$), followed by Matatu Sacco officials ($\alpha = 0.914$), then PSV Drivers ($\alpha = 0.809$) and finally passenger was ($\alpha = 0.709$). This illustrates that all the four scales were reliable as their reliability values exceeded the prescribed threshold of 0.7. This therefore depicts that the research instrument was reliable and therefore required no amendments.

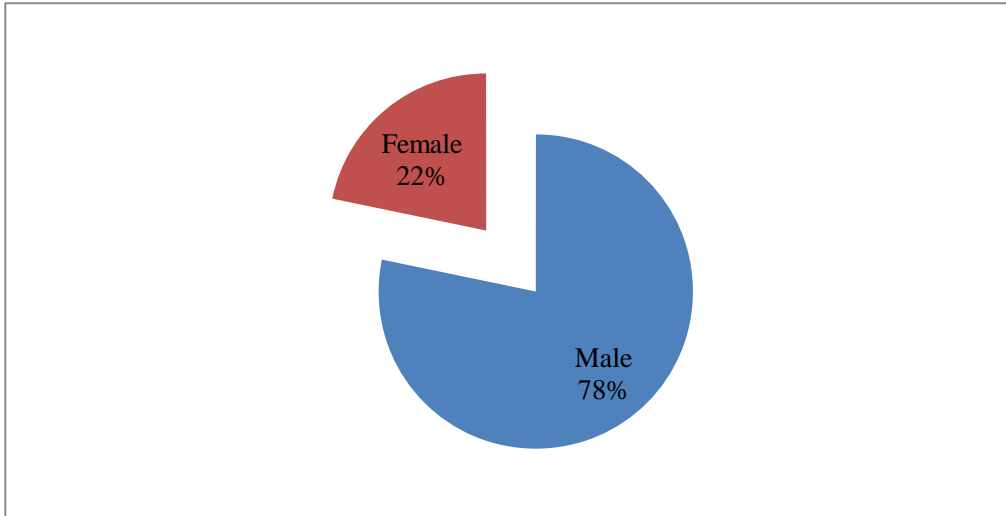
4.3 Demographic Information of the Employees

The study sought respondents' information on demographic characteristics which included gender, age, education level and duration of service in the public transport sector. The outcome were analyzed, discussed and presented as shown in Figure 4.1.

4.3.1 Gender

The study sought to establish the gender distribution of the respondents.

Figure 4.1: Gender Distribution



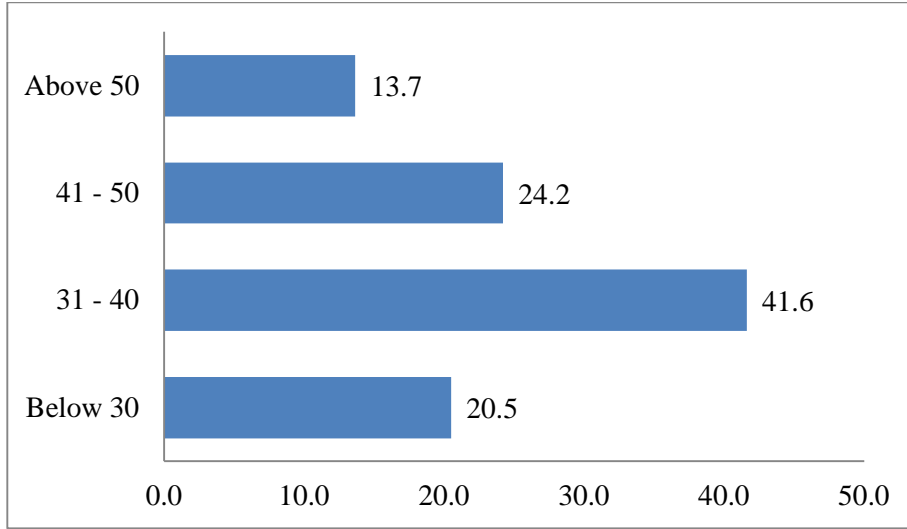
The above figure indicate that 78% of the respondents sampled were male while 22% were females.

4.3.2 Age Distribution of the respondents

Further, the study aimed at establishing the age bracket in which respondents age fell.

Figure 4.2 presents the age distribution data in percentage.

Figure 4.2: Age Distribution of the Respondents

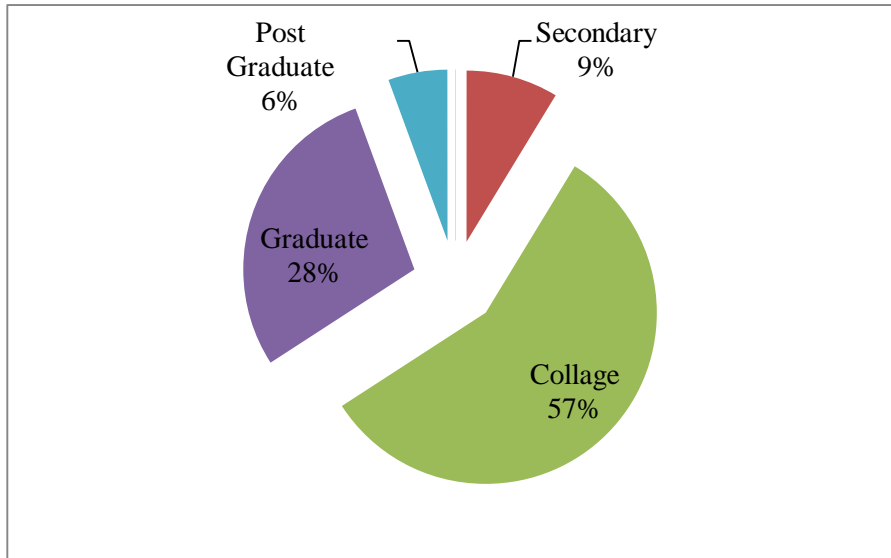


Most of the respondents, 41.6%, were aged between 31 and 40 years, 24.2% were between 41 and 50 years of age, while 20.5% and 13.7% were below 30 years and above 50 years respectively. This illustrates that majority of the respondents were above 30 years and thus were considered mature and therefore beneficial to the study as they would give reliable information as sought by the study.

4.3.3 Highest Level of Education of the Respondents

The study also required that the respondents gave their highest level of education. The research data are as presented in Figure 4.3.

Figure 4.3: Highest Level of Education of the Respondents

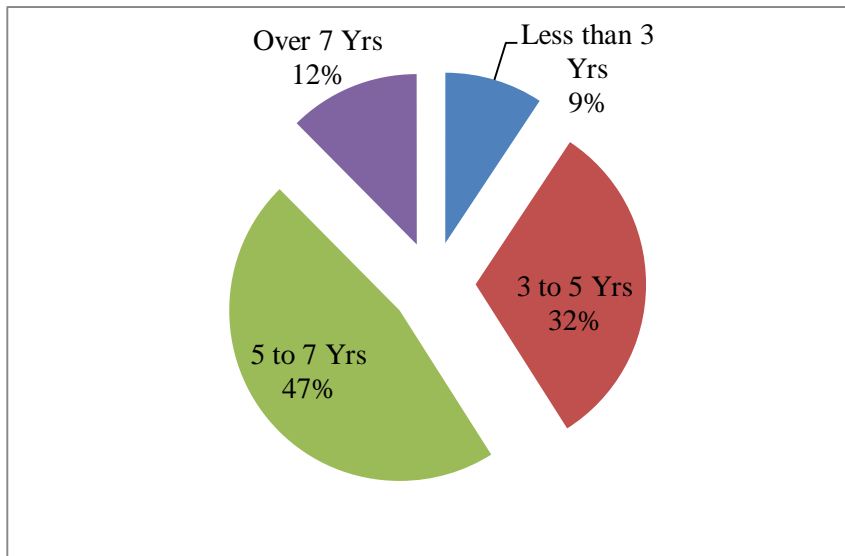


From the table 4.3 above, majority of the respondents (57%) had collage as their highest level of education, 28% were graduates, 9% were secondary school levers while 6% had Post – Graduate as their highest education level. This indicates that the respondents in this study had high level of academic qualification and thus were considered ideal in this study as they would be relied upon to give informed opinion as sought by the study.

4.3.4 Duration of service in the public transport sector

The study sought to establish the respondents duration of service in the public transport sector.

Figure 4.4: Duration of service in the public transport sector

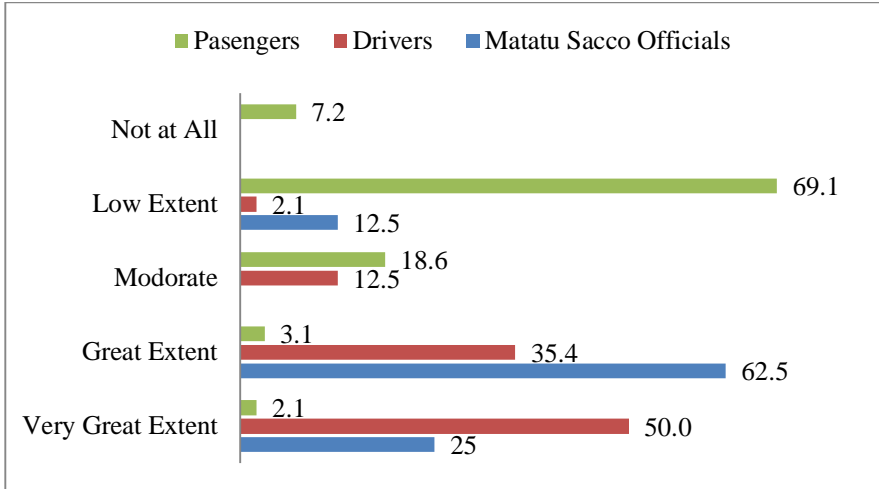


The above Figure 4.1 indicates that most of the respondent (47%) indicated that they had worked in the public transport sector between 5 and 7 years, 32% indicated that they had worked in the public transport sector for between 3 and 4 years, 12% for over 7 years while 3% said that they had been in public transport sector for less than 3 years. This illustrates that majority of the respondents (47%) had been in the public transport sector for at 5 years and more which depicts that they had been in the organization long enough and could therefore offer reliable information as sought by the study.

4.3.5 Factors influencing transport sector

The study sought to establish the Extent of factors influencing transport sector. The results are as indicated in the figure 4.5.

Figure 4.5: Extent of factors influencing transport sector



The Figure 4.5 above shows that;

62.5% of the sampled respondents feel that Matatu Sacco officials influence transport sector to a great extent, 25% said that it influences to a very great extent while 12.5% indicated that it influences to a low. This depicts that Matatu Sacco Officials influences transport sector to a great extent.

From the research findings, majority of the respondents, 50%, feels that PSV Drivers influence transport sector to a very great extent, 35.4% said that it influences to a great extent while 12.5% and 2.1% indicated that it influences to a moderate and a low extent respectively. This depicts that PSV Drivers influences transport sector to a very great extent. According to the findings, majority of the respondents, 69.1%, passengers influence transport sector to a low extent, 18.6% said that it influences to a moderate extent, 7.2% Not at all while 2.1% and 3.1% indicated that it influences to a very great extent and great extent respectively. This depicts that passengers' influences transport sector to a very great extent.

Majority of the respondents (52%) do not like public transport in Nairobi while 59% of the respondents feels that the County government of Nairobi is not doing enough to implement and enforce road traffic rules. The findings further reveals that 79% of the public road users feels that the traffic police officers are not doing enough to interms of the traffic law enforcement. The study established that 80% of the respondents have never ben arrested and taken to court of law for any road traffic related offence.

4.4 Inferential Statistics

Pearson's product moment correlation analysis was used to assess the relationship between the variables while multiple regressions was used to determine the predictive power of effects of NTSA officials, Sacco officials, PSV Drivers and passengers on road traffic regulations within the public transport sector in Nairobi City County.

4.4.1 Correlation analysis

	Road traffic regulations	NTSA officials	Sacco officials	PSV Drivers	Passengers
Road traffic regulations (r) (p) (2 tailed)	1.000				
NTSA officials(r) (p) (2 tailed)	0.806 0.011	1.000			
Sacco officials(r) (p) (2 tailed)	0.752 0.017	0.118 0.047	1.000		
PSV Drivers (r) (p) (2 tailed)	0.793 0.014	0.128 0.019	0.247 0.047	1.000	
Passengers (r) (p) (2 tailed)	0.667 0.024	0.254 0.029	0.254 0.0464	0.380 0.014	1.000

Source: 2014

Table 4.3: Pearson Correlation

The data presented above on the effects of NTSA Officers, Sacco Officials, PSV Drivers and Pasengers on road traffic rules were computed into single variables per factor by obtaining the averages of each factor. Pearson’s correlations analysis was then conducted at 95% confidence interval and 5% confidence level 2-tailed. The table above indicates the correlation matrix between the factors (NTSA Officers, Sacco Officials, PSV Drivers and Pasengers) and road traffic regulations in Nairobi City. According to the table above, there is a positive relationship between traffic rules implementation and NTSA Officers, Sacco Officials, PSV Drivers and Pasengers of magnitude 0.806, 0.752, 0.793 and 0.677 respectively. Positive correlation indicates that there is a direct relationship between the factors and the road traffic regulations in Nairobi city with NTSA Officials having the highest positive correlation value.

This notwithstanding, all the factors had a significant p -value ($p < 0.05$) at 95% confidence level. The significance values for NTSA Officers, Matatu Sacco officials, PSV Drivers and passengers were 0.011, 0.017, 0.014 and 0.024 respectively. This indicated that all the factors were significant with NTSA Officials the most significant factor followed by PSV Drivers then Sacco officials while passengers awareness to the traffic rules was the least significant.

4.4.2 Regression analysis

In addition, the researcher conducted a multiple regression analysis so as to test relationship among variables (independent) on traffic rules within Nairobi city. The researcher applied the Statistical Package for Social Sciences (SPSS Version 20.0) to code, enter and compute the measurements of the multiple regressions for the study.

Table 4.4: Model Summary

Model	R	R Square	Adjusted R Square	STD Error of the Estimate
1	0.919	0.845	0.789	0.627

Source: 2014

Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (traffic rules) that is explained by all the four independent variables (NTSA Officials, Matatu Sacco officials, PSV Drivers and Passengers).

The four independent variables that were studied, explain only 84.5% of the effects of public transport stakeholders on traffic rules as represented by the R^2 . This therefore means that other factors not studied in this research contribute 15.5% of the effects of public transport stakeholders on traffic rules in Nairobi City County.

4.4.3 Analysis of Variance

Table 4.5 ANOVA Table

	Sum of Squares	df	Mean Square	F	Sig. (p)Value
Regression	2.534	2	1.267	9.475	0.0179
Residual	9.307	48	2.327		
Total	3.465	58			

Source: 2014

The study used ANOVA to test the relationships since the sample size was small, and the variables are few. Further ANOVA removes some of the random variability so that significant differences can be found more easily and also helps look at interactions between factors. The sum of squares is a mathematical approach to determining the dispersion of data points. The degree of freedom (df) is the number of independent components minus the number of parameters estimated. F-statistics is a measure of the correlation between variables drawn at different levels of a subdivided population. Residual of a sample is the difference between the sample and the estimated function value.

Significance is the indicator of the relationship between variables. The significance value is 0.0179 which is less than 0.05 thus the model is statistically significant in predicting how NTSA Officials, Matatu Sacco officials, PSV Drivers and Passengers affects traffic regulations implementation in Nairobi city. Further, the F critical (critical test value) at 5% level of significance was 3.23. In this test, the relationship is deemed significant if the calculated F statistic is greater than the critical test value. This regression is statistically significant at the 0.05 level since F calculated (calculated F statistic) is greater than the F critical (value = 9.475).

Table 4.6: Coefficient of determination

Model	Un - standardised Coefficient		Standardised Coefficients	t	Sig.
	Alpha	Std Error	Alpha		
Constant	1.144	1.2235		1.615	0.367
NTSAOfficers	0.752	0.1032	0.152	4.223	0.0192
Matatu Sacco officials	0.687	0.3425	0.054	3.724	0.0269
PSV Drivers	0.745	0.2178	0.116	3.939	0.0251
Passengers	0.639	0.1937	0.263	3.247	0.0354

Source: 2014

Multiple regression analysis was conducted as to determine the relationship between implementation of road traffic rules and the four variables. The regression equation becomes:

$$Y = 1.144 + 0.752X_1 + 0.687X_2 + 0.745X_3 + 0.639X_4$$

According to the regression equation, taking all factors into account (NTSA Officials, Matatu Sacco officials, PSV Drivers and Passengers) constant at zero, traffic rules implementation will be 1.144. However, the model had positive coefficients. This means that the variables are positively associated indicating that an increase in the independent variable (NTSA Officials, Matatu Sacco officials, PSV Drivers and Passengers) leads to an increase in the dependent variable (traffic rules implementation). Taking all other independent variables at zero, a unit increase in NTSA Officers commitment will lead to a 0.752 increase in rate of road traffic implementation; a unit increase in Matatu Sacco officials commitment will lead to a 0.687 increase in rate of traffic rules implementation, a unit increase in PSV Drivers awareness will lead to a 0.745 increase in rate of traffic rules implementation and a unit increase in passengers awareness will lead to a 0.639 increase in rate of traffic rules implementation.

This infers that NTSA Officers has the greatest effect on traffic rule implementation. At 5% level of significance and 95% level of confidence, NTSA Officers had a 0.0192 level of significance, Matatu Sacco officials showed a 0.0269 level of significance, PSV Drivers showed a 0.0251 level of significance and passengers showed a 0.0354 level of significance hence the most significant role is NTSA Officers.

4.5 Discussion of research findings

The findings provide clear understanding about the relationships between variable and the reliability level of the various tests. The study established that matatu Saccos operating within Nairobi City County would influence the transport sector at a rate of 62.5% which is quite significant. Further, the study found that 69.1% of passengers with Nairobi County would have a low influence to the sector and the government is not doing enough to safeguard the public transport sector. In addition, Traffic police officers were not doing enough to bring sanity in the sector. The results indicated above depict that public transport in Nairobi city is doing badly and should be redeemed by implementing the traffic regulations in place.

The findings fit in the game theory whereby the strategy should anticipate reaction of competitors. Public transport in Nairobi is one of the lucrative business which attracts many players hence the anticipated push and pull forces. The findings are consistent with the current theories on competition and market forces which requires prudent formulation, implementation and monitoring of strategies. Traffic Regulations are laws formulated to bring order and sanity within the transport sector which public transport business belongs. Failure to implement the regulations brings about confusion and chaos of which by extension nose dive the economy of a country as a result of unaccounted for revenue and taxes. The finding explicitly provide clear insights on the areas which requires improvement and successes. The findings may also be used as a tool to bring about improvement and change in public transport sector in Nairobi City County.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary of the findings from chapter four, and it also gives the conclusions and recommendations of the study based on the objectives of the study.

5.2 Summary of findings

The ratio of Male to Female respondents in the study was 78:22. The study indicates that majority of the respondents were above 30 years of age with most of them between 30 and 40 years. It was also established that majority of the respondents had reached collage level of education. The study further indicates that majority of the respondents had been in the service in the public transport sector for between 5 and 7 years. Drivers and Matatu Saccos were found to affect the transport sector according to the research findings.

The study shows that 52% do not like public transport in Nairobi while 59% of the respondents feels that the County government of Nairobi is not doing enough to implement and enforce roadtraffic rules. The findings further reveals that 79% of the public road users feels that the traffic police officers are not doing enough to interms of the traffic law enforcement. The study indicates that 80% of the respondents have never ben arrested and taken to court of law for any road traffic related offence.

The study also established that there is a correlation between the factors and the traffic rule implementation with NTSA Officers having the highest value and passengers having the lowest correlation value. From the regression analysis the following regression equation was formulated;

$$Y = 1.144 + 0.752X_1 + 0.678X_2 + 0.745X_3 + 0.639X_4$$

From the above regression equation, it can be deduced that NTSA Officers has the greatest effect on traffic rules implementation followed by Matatu Sacco officials while passengers came last. At 5% level of significance and 95% level of confidence, the most significant factor is NTSA Officers.

5.3 Conclusion

Based on the results from data analysis and findings of the research, one can safely conclude the following, based on the objectives of the study; NTSA Officers, Matatu Sacco officials, PSV Drivers and passengers are the major strategic areas employed by Government in implementing road traffic regulations within Nairobi City County. The study concludes that NTSA Officers commitment in the execution of their mandate positively influence the implementation of road traffic regulations. Matatu Sacco officials' adherence to the NTSA policy would significantly support the implementation of road traffic regulations. Finally, PSV Drivers awareness and passengers awareness positively influences implementation of road traffic regulations in Nairobi City County.

5.4 Recommendations

The study recommends that the NTSA be given enough resources to implement its policies on the road safety as the study finds it as a major factor influencing the implementation of the road traffic regulations this should include expansion of offices at all county levels with adequate human resources. The study also recommends registration of drivers at the national level as well as promoting awareness on the importance of road safety. Matatu saccos be held responsible for any misconduct of drivers registered under them as well as setting stiff penalty to rogue drivers who do not want to comply with road safety regulations. Finally, NTSA should conduct sensitization on passengers and other minor road users on the importance of adhering to traffic regulations through understanding of traffic lights, road signs and the role of traffic police officers. All these will not only help in reducing the road crimes but also the road carnage.

5.5 Implications of the Study

The study will be relevant in the implementation of the formulated policies in the Traffic (Amendment) Act Cap 403 by NTSA which will reduce the number of road traffic accidents, reduce corruption level in the traffic police service, increase adherence to road traffic regulations and by extension the overall well-being of the public through improved economy of Nairobi City County. In addition, the study will be helpful in the future studies on public transport to students and researchers.

The study will further provide insight to the Ministry of Transport and Infrastructure on the best public transport practices. The study will shade light to the matatu owners on the involvement in the implementation of the traffic regulations as such be the agents of change during the implementation period by sensitizing their drivers and passengers (public) on the importance of adhering to the laid down traffic regulations.

5.6 Limitations of the Study

The study focused on strategies used to implement traffic regulations within the public transport sector within Nairobi City County in Kenya. The study was limited to the 10,000 PSVs registered by the 30 Matatu Saccos operating within Nairobi County. Future research on implementation traffic regulations within the public transport sector should focus on bicycle transport (Boda boda), personal vehicles and cargo on a wider geographical area.

5.7 Suggestions for further research

The study looked at the strategies used to implement traffic regulations within the public transport sector in Nairobi City County, Kenya. The study recommends that further studies should be done on the implementation traffic regulations within the public transport sector focusing on large transit vehicles and minor road users e.g. personal vehicles and bicycle transport (Boda boda) covering a wider geographical area.

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APPENDICES

Appendix 1: Questionnaire

QUESTIONNAIRE ON THE IMPLEMENTATION OF TRAFFIC REGULATIONS.

Dear Respondent:

This questionnaire aims at analysing and assessing strategies used to implement traffic rules within the public transport sector in Nairobi City. This survey is purely conducted for academic purpose. The responses to this questionnaire will be kept strictly confidential. This Questionnaire consists of three parts:

Part - A: General Information

The aim of this section is to gain an overall understanding about the respondent.

Part - B: Government Commitment

The aim of this section is to gain an understanding about the Government commitment with regard to public transport rules.

Part-C: Influence of Road Traffic Rules within Transport in Nairobi City

The aim of this section is to gain an understanding about the effects of road transport rules within the Nairobi city.

Instruction

Please indicate your response to the following questions by filling in the appropriate box with a tick [√].

PART A: General Information

1. What is your gender?

Male []

Female []

2. What age bracket do you belong?

- Below 30 Years []
- 31 – 40 Years []
- 41 – 50 Years []
- Above 50 Years []

3. What is your highest level of education?

- Primary level []
- Secondary level []
- College []
- Graduate []
- Post Graduate []

4. How long have you used public transport?

- Less than 3 Years []
- 3 to 5 Years []
- 5 to 7 Years []
- Over 7 Years []

5. To what extend are the following factors influencing transport sector.

Factors	1	2	3	4	5
Matatu Sacco Officials					
Drivers					
Passengers					

[1] = Very Great Extent; [2] = Great Extent; [3] = Moderate Extent; [4] = Low Extent; [5] = Not at All.

PART B: Government Commitment

6. To what extent are you satisfied with the following Stakeholders in Transport Sector?

Factors	1	2	3	4	5
Traffic law enforcers					
NTSA					
Matatu Sacco Officials					
Passengers					
Pedestrians					

[1] = Very Dissatisfied; [2] = Dissatisfied; [3] = Neither Satisfied nor Dissatisfied; [4] = Satisfied; [5] = Very Satisfied

7. If you were to leave choose alternative mode of transport, what factors would be your reason for your choice?

Factors	1	2	3	4	5
Implementation of road traffic rules					
Kenya Traffic Police					
NTSA Management					
Leadership in the Government					

[1] = Very Weak; [2] = Weak; [3] = Neutral; [4] = Strong; [5] = Very Strong

PART C: Influence of Road Traffic Regulations within Public Transport in Nairobi.

How would you rate the contribution of Road Traffic Rules on Public Transport within Nairobi County?

Factors	1	2	3	4	5
Compliance by Traffic Police					
Compliance by Passengers					
Compliance by Drivers					
Public Transport in General					

[1]= Very Weak; [2] = Weak; [3] = Neutral; [4] = Strong; [5] = Very Strong

8. Do you like the Public Transport in Nairobi Kenya?

Yes [] No []

9. Is the County Government of Nairobi doing enough to implement and enforce Road Traffic Rules?

Yes [] No []

10. Are Traffic Police Officers doing enough in terms of traffic law enforcement?

Yes [] No []

12. Have you ever been arrested and taken to a court of law for any traffic related offence?

Yes [] No []


Thank You for Participating!

Appendix 2: Project Budget

	Item	No	Cost Per Unit (KSHs)	Total Cost (KSHs)
1	Stationary			
	<i>i) Pens</i>	6	20.00	120.00
	<i>ii) Pencils</i>	7	15.00	105.00
	<i>iii) Writing Pads</i>	6	130.00	780.00
	<i>iv) Rubber</i>	7	25.00	175.00
	<i>v) Sharpener</i>	7	25.00	175.00
2	Printing	3 copies	10.00	1560.00
3	Binding	3copies	350.00	1,050.00
4	Research Assistants	6	1,500.00	9,000.00
5	Transport	6	200.00	1,200.00
6	Data Analysis	1	20,000.00	20,000.00
7	Lunch	6	500.00	3,000.00
			TOTAL	37,145.00

Appendix 3: Project Supervision Allocation Form

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CHAIRMAN
ADMINISTRATION DEPT.
UNIVERSITY OF NAIROBI
DEPARTMENT OF BUSINESS
NAIROBI

UNIVERSITY OF NAIROBI
DEPARTMENT OF BUSINESS ADMINISTRATION
MBA PROJECT SUPERVISION ALLOCATION FORM

SECTION A: (To be completed by the student) all details are mandatory.

Name of student: STEPHEN KYALO NGUI Mobile phone No: 0720832443

Reg. No.: D.01/79389/2012 Email address: kyalo@cims.knu.ac.ke
ngui.stephen@yahoo.com + go.ke

Proposed Title of the Study: IMPEDIMENT TO IMPLEMENTATION OF TRANSPORT RULES IN INFORMAL TRANSPORT BUSINESS IN NAIROBI-KENYA

Specialization (Tick as appropriate)

Marketing	[]
Human Resource Management	[]
Strategic Management	[]
International Business	[]
Insurance / Risk Management	[]
Other (specify) _____	[]

Preferred Supervisors (in order of preference):

1. Mr. JEREMIAH KAGWE, 2. DR. JOHN YABS, 3. DR. E. B. NDEMI

Signature of student: [Signature] Date: 20/05/2014

SECTION B: (To be completed by Allocation Committee)

Name of Supervisor Allocated: Dr. Ndemu Mobile No: 0722389301

Name of Co-Supervisor, if any: _____ Mobile No: _____

Total number of students allocated to the supervisor within the year to date: _____

Name of person who will Moderate the Proposal: Dr. Awino

Committee Secretary:

Name: _____ Signature: _____ Date: _____

Thematic Coordinator:

Name: Ogutu Signature: [Signature] Date: 4/6/14

Chairman of Committee:

Name: _____ Signature: _____ Date: _____

Chairman of Department:

Name: Dr. Mwangi Signature: [Signature] Date: 5/6/14

Note:

- This form is available in the department. Students get their copies later from the department after allocation is done.
- The approved copy of this must be attached to the proposal when submitting for moderation and presentation.

Original to be filled in the Department
 Copy 1 (photocopy) to be filed by Thematic Coordinator
 Copy 2 (photocopy) to be filed by the Supervisor
 Copy 3 (photocopy) to be filed by the student

Appendix 4: Confirmation Letter from the University



**UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA PROGRAMME**

Telephone: 020-2059162
Telegrams: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 30197
Nairobi, Kenya

DATE.....

9/09/2014

TO WHOM IT MAY CONCERN

The bearer of this letter

STEPHEN K-YACO NJUJI

Registration No.....

D 01/79389/2012

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

**PATRICK NYABUTO
MBA ADMINISTRATOR
SCHOOL OF BUSINESS**

