AN INVESTIGATION INTO THE CONTRIBUTION OF INFORMAL PUBLIC TRANSPORT SYSTEM ON TRAFFIC CONGESTION. A CASE STUDY OF BODA BODA TRANSPORT IN KAMPALA CENTRAL BUSINESS DISTRICT.

BY

BY: NAMUYIGA WINNIE

REG NO.: 14/U/12432/EVE

ADISSERTATION SUBMITTED TO THE DEPARTMENT OF ARCHITECTURE AND PHYSICAL PLANNING IN PARTIAL FULFILLMENT FOR THE AWARD OF THE DEGREE OF BACHELOR OF UBAN AND REGIONAL PLANNING OF MAKERERE UNIVERSITY, KAMPALA

February 2018
DEFINITION OF KEY TERMS

Traffic flow is the movement of vehicles, people and other living creatures for a particular purpose. It involves study of interactions between vehicles, drivers and infrastructure (including highways, signage and traffic control devices) with the aim of understanding and developing an optimal road network with efficient movement of traffic and minimal traffic congestion. (Bang, 1995)

Boda Boda is a term in East Africa which original referred exclusively to bicycle taxis and has in recent years, been expanded to refer to motorcycle taxis as well. For the purposes of this paper, the term will refer exclusively to motorcycle taxis. This term is interchangeable with the term, “Boda.”

Boda rider this is a term which, for the purposes of this paper, refers exclusively to the operator of the motorcycle. The word “passenger” will be used to describe those using the services of the Boda rider.

Boda stage is the smallest form of organization for Boda Bodas and typically comprised of 10 to 20 riders. The stage is also the location where Boda riders station themselves to pick up passengers and their effective base of operations.

Informal transport. The term is used to reflect the context in which this sector operates informally and illicitly. It involves more vehicles for hire services such as taxis and can be found in most cities of the world.

Operation of boda boda. This is work in a particular way or a particular place. Provision of Boda boda services on short distances and from a stage. Boda boda associations used to regulate activities of boda boda operators.
DECLARATION

I Namuyiga Winnie do hereby declare that the work presented in this report is my own original work, except where it is acknowledged and that to the best of my knowledge it has never been submitted for any degree program to Makerere University or any other university.

Signed .................................................................

Date .................................................................

SUPERVISOR

Dr. Karungi Doreen

Signed .................................................................

Date .................................................................
DEDICATION

This report is dedicated to my parents for the continuous support and encouragement throughout my studies. To my beloved supervisor also who has provided me with unconditional support to forthcoming academic achievement. May the loving God bless you abundantly.
ACKNOWLEDGEMENT

With great honor my first sincere appreciation and thanks goes to the Almighty God for the life and strength to pursue my academic career. Extraordinary thanks go to my supervisor Dr. Karungi Doreen offering me her valuable time and technical guidance while working on my project proposal and thanks also goes to fellow students who keep encouraging me.
ABSTRACT

The research study explored the objectives like to find out the frequency of boda boda usage, to find out the contribution of boda boda transport to traffic congestion, to find out the laws that governs the Boda boda transport and to suggest measures on how traffic congestion caused by boda bodas can be improved and these objectives were used to formulate the research questions which were used in the field to gather findings which can be used to solve the problem of boda boda congestion, literature can also be derived from this study for further reading on how traffic congestion can be solved.

The literature was reviewed from different articles, textbooks and documents by different authors from which a description of the contribution of the informal public transport, concept of operation of the boda bodas, Causes of slow traffic flow and provides the Strategies to improve traffic flow. Basing on the literature review, the major, No Transits oriented, no park and ride that can help to reduce traffic congestion, with Stockholm, no fly overs to help in reducing congestion, no pedestrians way, bicycles are not provided

Transport is perceived as the movement of humans, animals and goods from one location to another. Modes of transport include air, land (rail and road), water, cable and pipeline. They can be divided into infrastructure, vehicles and operations, different modes of transport is used in various countries for example Land transport which includes road and railway and road is commonly used due to its flexibility and lack of fixed schedules, Water transport is the movement by means of a watercraft such as boat, ship or sailboat, Air transport is the fastest method of transport. Traffic congestion is a condition on road networks that occurs as use increases, and is characterized by slower speeds, longer trip times, and increased number of vehicles stand in line. Traffic congestion increases in the travel time and charger costs.

An increasing number of people in the city most especially with young men who can operate motor cycles congregate at major intersections, offering different road sections for example the bus lane and other transport means. In Uganda the number of people carried per route is very low which leads to congestion on the road and boda bodas also carry maximumly 2 people per route which could also be a problem in causing traffic congestion.
The challenges to boda boda transport is illegal boda boda operators to hang around bus terminals and coax waiting customers to hop board a nearby van. The laws governing boda bodas to ease its operation include regulation on permits, helmets, reflective wear. The regulations should be enforced, designate boda bodas to specific areas/ routes especially outside the city centre. There is need to implement the enforcement of helmet law and there is need to increase access to helmets by exploring cost cutting measures such as tax reductions.

During field work different methods of data collection were used in this study which included use of questionnaire, photography interviews, measurement. Sampling techniques were also used and this include the random among the boda boda riders and purposive techniques which was for a specific person like the physical planner at Central Division used during the interviews included how boda boda transport can be improved in the CBD, the laws governing boda boda transport among others and data processing and analysis process which was done in form of tables and graphs.

The key findings out during the study included that were found and the discussion on the contribution of the informal public transport and its effects on the traffic flow and these include; versatility of boda bodas where they can move from one place to another, the boda boda riders can move from one place to another, it has lacks restrictions and fixed departure times and rates charged, time of convenient for operations, Poor road maintenance in the CBD, inadequate and unplanned parking facilities, reckless driving and riders due to lack of driving skills, improper traffic controls and management as far as obeying traffic rules is concerned among others. During boda boda operations, they have different laws that govern them in order reduce on traffic congestion and the occurrence of several accidents and these include; Awareness of traffic rules and regulation governing boda boda transport, registration of boda bodas, carrying of one passenger, compliance with road safety rules and regulations, acquisition of boda boda riding skills, some laws still in process, wearing of helmets,
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CHAPTER ONE

1.0 INTRODUCTION
This research is about the contribution of boda boda transport on traffic congestion in the CBD of Kampala district. A case study of boda boda transport in the CBD of Kampala District. The over growing traffic congestion are gradually taking away the pedestrian spaces pushing the pedestrians into the carriage ways which reduces the vehicular traffic speed and this culminates into traffic congestion and also road safety.

Kampala is chocking on traffic jams which is one of the economic city in Uganda, macro-economic stability and economic prosperity resulting in wealth accumulation for individuals (Kamp, J. 2006). This has economically empowered Ugandans into owning vehicles and unlawfully owning of boda bodas, justifying the jam problem.

A combination of broken and narrow roads, floods, high population growth rate, poor physical planning resulting in construction of unplanned structures and among others, has mocked and rendered Kampala behind as a city and one of Africa’s model cities in the 1960s. (New vision Monday, October 31st, 2016).

Traffic congestion challenges caused by boda boda transport in the CBD is because of boda boda transport which do not have specific routes taken, lack of demarcated stages for boda bodas among others. Many strategies have been put forward to reduce on the congestion for example registration of some Boda Bodas, sensitization of the motorists and issuing of driving permits but still the problem persists.

The research also involved different methods that were used to collect data for example traffic counting, Observation, Interviewing, Recording among others where detailed data was collected. In additional boda bodas are one of the affordable forms of motorized transport in many parts of the country and the informal sector is generally undeveloped.

The first sight to Uganda’s capital city, Kampala encounters is a high volume of traffic jams throughout the city and this is mostly composed of boda bodas and vehicles. This inefficiency in transportation is due in large part to the abundance of privately owned boda bodas that operate
throughout the poorly planned streets of the CBD. Before the current system, a more efficient bus system existed that was privatized to transport people in big numbers.

While attempts by local government, particularly Kampala Capital City Authority (KCCA) to control the activities of boda boda riders have been frustrated in the past and this forced the Boda bodas riders to organize themselves into associations throughout Kampala and other districts in the country. As the KCCA continues to pursue regulation and organization of their transportation sector, understanding the role and impact of boda boda associations will become more vital.

1.1 BACKGROUND TO THE STUDY

Transport is defined as a service that creates place utility by moving people and goods from one geographical location to another (Gerishon and Mary 2010), they further argue that in many developing cities, informal public transport is an important component of its overall transport services. Boda bodas are one of the most affordable forms of motorized transport in many parts of the world and for most of the world’s population, they are also the most common types of motor vehicle (Minju 2011).

Road transport offers a complete freedom to road users to offer them with different lanes which are used by different means of transport for example boda bodas, vehicles, pedestrians and cyclists, walking which can also be used in reducing traffic congestion.

Informal transport is the most successful form of suitable transport in the world, although transport sector in Africa are generally underdeveloped and this constitutes a major challenge to the development of the continent. More significantly is the fact that most of transport investments in Africa focus on promoting motorized transport. Accordingly less than 1% of the households in Africa have access to private motorized transport which has enormous costs (Layton et al 2008).

Informal public transportation is commonly defined in the sense of how it works. IPT providers lack licenses, their vehicles are unregistered and they pick up passengers in undesignated places. (Dumba, S. (2017)1-16), Informal Public Transport works especially in the urban areas. The
informal public transportation can be characterized by the flexibility of the drivers to accommodate a variety of demands and uses and it fills gaps where formal public transportation networks end and where their coverage is lacking, do not always follow fixed routes and do not normally pay revenue to the government.

Formal Public Transport is one which is normally registered by the government to facilitate their operations in terms of paying revenue. These can be characterized by fixed routes and stops, ticketing systems which incorporate proof of payment (either a paper ticket, card or token system).

Various aspects prompted the researcher to do this research and these include the following; having been a daily user of the CBD from Makerere to Bukoto during my internship period most of researcher’s time of travel would be consumed in the CBD. Whereas walking along the same roads the researcher realized that she would predominantly use the carriage way as the pedestrian walk ways would be occupied by vendors. Boda boda riders and display of goods on streets, these arouse my concern about the cause of traffic congestion. Traffic Congestion in Kampala like any other African cities is a very serious problem which has resulted into prolonged travel times, high vehicle operating costs and environmental degradation.

Consequently, traffic congestion by the boda bodas has resulted into high costs of operating business and a disincentive to investors. Government of Uganda and Development Partners are working to address the problem, if this challenge is not addressed quickly, Kampala will ground to a close down and majority of foreign investors might relocate to other better organized cities of various countries. Over time Kampala has been experiencing a problem of traffic congestion caused by Boda Boda transportation which is normally evidenced during the rushing hours of mornings and evenings, many complaints have also come up from different people that normally use the CBD leading to an irritation.

**1.2 STATEMENT OF THE PROBLEM**

The competition for road space by the formal and informal transport means is becoming disastrous and a major cause of traffic congestion in the CBD. Day by day the city’s traffic jam is seen tremendously increasing. The roads and streets cannot accommodate the ever increasing
traffic volumes yet the available space is not properly managed. Transport facilities in the city take care of less than 10% of the urban people and 90% who walk and cycle, do not have adequate facilities, the little space left is taken up by vendor business and also full of open man halls and trenches.

Traffic congestion caused by the informal public transport sector most especially Boda Boda transport has led the process of mass motorization as they manufacture, sell, operate and repair of boda bodas as compared to cars. It affects the travelers, businesses in the core of the town and this is brought about by lack of demarcated stages for the Boda bodas and also they do not have specific routes to be followed in order to reduce on the traffic congestion. Different arguments have come up to solve the problem of boda boda transport but most of them have failed because the problem still is not solved, however boda boda transport is sustainably growing despite the threatening accidents which have been faced by many people.

1.3 OBJECTIVES OF THE STUDY

- To find out the frequency of boda boda usage
- To find out the contribution of boda boda transport to traffic congestion.
- To find out the laws that governs the Boda boda transport.
- To suggest measures on how traffic congestion caused by boda bodas can be improved.

1.4 RESEARCH QUESTIONS

- How frequently are boda boda used compared with other modes of transport in the CBD?
- How do boda bodas contribute to traffic congestion?
- What are the laws that govern the Boda boda transport?
- What are the measures that can be undertaken to improve traffic congestion of boda boda transport?

1.5 SIGNIFICANCE OF THE STUDY

The study is important to solve the problem of boda boda congestion in the CBD. The finding will also form a base upon which recommendations can be used to solve the problem, can also be used by KCCA to overcome the problem of boda boda traffic congestion.
This study will be of significance in the following ways:
The research will help in finding out how the use of boda boda transport affects the traffic flow and this will bring to light the dangers of mis use of boda bodas to urban authorities and urban councils.
The study results may be of great importance to the policy makers and statutory bodies for instance KCCA, Boda boda Associations, URA and UNRA among others since it will bring out the strategies on how boda boda transport can be held can be restricted from causing traffic congestion.
The study will guide future researchers of related subject to pursue their academic goals since it will be added to the existing literature.
The research will provide measures on how traffic flow can be improved in the CBD.

1.6 JUSTIFICATION OF THE STUDY
Boda boda transportation is one of the major problems in Kampala especially in the CBD which contributes to traffic jam in Kampala and also the occurrence of severe accidents. Many attempts have been made but still the problem persists. While literature on the subject of Boda Bodas in Uganda exists, there is a distinct lack of information regarding the impact of Boda Boda Associations on the riders’ welfare and the impact they have had on the services the riders provide, this gap in literature that justifies the aims of this study: to explore the ways in which the organization of this informal transportation sector is providing benefits to both riders and passengers in terms of safety, accountability, and social capital building.

Beyond the safety, accountability, and social capital benefits of organization, the study also explored the ways in which the services of the Boda Bodas can be utilized beyond taxi roles. A sector employing such a large number of individuals capable of effectively navigating difficult terrain and traffic conditions, when organized, has the potential to provide additional services to local communities that could include ambulance services, transportation of goods, and political mobilization and advocacy.
1.7 SCOPE OF THE STUDY

1.7.1 CONTENT SCOPE
The research focuses on the study of boda boda contribution to traffic congestion in the CBD and their impacts on the pedestrian and vehicular traffic flow. The stages of boda boda transport will be covered, their population and the routes they take. The traffic flow in the context of this research is the motorcycle, vehicular and pedestrian traffic.

1.7.2 GEOGRAPHICAL SCOPE
The study is carried out in the Central Business District of Kampala. The study will take an effort of finding the changes that had occurred over time in the aspect of boda boda transportation in the CBD.
CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter presents the literature about the contribution of boda boda transport to traffic congestion in the CBD which includes growth of informal transport sector, unemployment, versatility in terms of movement and operation of boda boda, it also summarizes the information from other researchers who have carried out their research in the same field of study.

2.1 Transport

Transport or transportation is the movement of humans, animals and goods from one location to another. Modes of transport include air, land (rail and road), water, cable and pipeline. They can be divided into infrastructure, vehicles and operations. Transport is important because it enables trade between people which is essential for the development of urbanisation and civilization. (Maino Eric 2002, June). Transport can also refer to the movement of people from one place to another with their properties.

Transport infrastructure consists of fixed installations including roads, railways, pipelines and terminals such as airports, railway stations, bus stations, warehouses, refueling depots and seaports. Terminals may be used both for interchange of passengers and cargo for maintenance. Vehicles traveling on these networks may include automobiles, bicycles, boda bodas and buses.

Operations deal with the way the vehicles are operated, and the procedures set for this purpose including financing, legalities, and policies. In the transport industry, operations and ownership of infrastructure can be either public or private depending on the country and mode.

Passenger transport may be public or private where operators provide scheduled services. Freight transport has become focused on containerization, although bulk transport is used for large volumes of durable items. Transport plays an important part in economic growth and globalization, but most types cause air pollution and use large amounts of land most especially road transport that causes a lot of pollution and also need space in the provision of utilities like roads, railway lines and stations. While it is heavily subsidized by governments, good planning of transport is essential to make traffic flow and restrain urban sprawl.
2.2 Modes of transport

Mode of transport is a term used to distinguish substantially different ways to perform. The different modes of transport are air, water, and land transport which includes rail, road and off-road transport. Other modes also exist, including pipelines, cable transport, human-powered transport and animal-powered transport are also sometimes regarded as their own mode, but these normally also fall into the other categories. (Howe, John and Annabel Davis 2002). Some of the modes of transport are used by people due to their flexibility, speed of travel and the time of scheduling an also the means of acquisition of the means of transport depends on the nearness of the means to demands of the customer.

In general, transportation is used for the movement of people, animals, and other things. Each mode of transport has a fundamentally different technological solution and some require a separate environment. Each mode has its own infrastructure, vehicles, and operations. Land transport covers all land-based transportation systems that provide for the movement of people, goods and services. Land transport plays a vital role in linking communities to each other and also a key factor in urban planning for example rail and road.

2.2.1 Road transport

A road is an identifiable route, way or path between two or more places. Roads are typically smoothed, paved, or otherwise prepared to allow easy travel and historically many roads have simply recognizable routes without any formal construction or maintenance. In urban areas, roads may pass through a city or village and be named as streets, serving a dual function as urban space easement and route.

The most common road vehicle is the automobile; a wheeled passenger vehicle that carries its own motor. Other users of roads include buses, motorcycles, bicycles and pedestrians. As of 2010, there were 1.015 billion automobiles worldwide. (Agaba, Vivian 2014, March 21). Road transport offers a complete freedom to road users to transfer the vehicle from one lane to the other and from one road to another according to the need and convenience. This flexibility of changes in location, direction, speed, and timings of travel is not available to other modes of transport. It is possible to provide door to door service only by road transport.
Automobiles provide high flexibility with low capacity but require high energy and area use, and are the main source of noise and air pollution in cities, buses allow more efficient travel at the cost of reduced flexibility and in 2002 there were 591 million automobiles worldwide. Boda bodas offer high flexibility but are deemed with high energy and space use, and one of the main sources of noise and air pollution in cities.

2.2.2 Rail transport

Rail transport is a means of conveyance of passengers and goods by way of wheeled vehicles running on rail track known as a railway or railroad. The rails are anchored perpendicular to railroad, train consists of one or more connected vehicles that run on the rails. Force is commonly provided by a locomotive that hauls a series of unpowered cars that can carry passengers or freight. The locomotive can be powered by steam, diesel or by electricity supplied by trackside systems.

Regional and commuter trains feed cities from suburbs and surrounding areas, while intra-urban transport is performed by high capacity tramways and rapid transits, often making up the backbone of a city's public transport. Since the 1960s, container trains have become the dominant solution for general freight, while large quantities of bulk are transported by dedicated trains.

2.2.3 Water transport

Water transport is the movement by means of a watercraft such as boat, ship or sailboat over a body of water like sea, ocean or lake. The need for optimism is common to watercraft making the hull a dominant aspect of its construction, maintenance and appearance. In the 19th century, the first steam ships were developed using a steam engine to drive a paddle wheel or propeller to move the ship. Now most ships have an internal combustion engine using a slightly refined type of petroleum called bunker fuel. Some ships, such as submarines, use nuclear power to produce the steam. (Agaba Vivian 2014, March 21).

Recreational or educational craft still use wind power, while some smaller craft use internal combustion engines to drive one or more propellers, or in the case of jet boats, an inboard water jet.
Although it is slow compared to other transportation, modern sea transport is a highly efficient method of transporting large quantities of goods. Commercial vessels, nearly 35,000 in number, carried 7.4 billion tons of cargo in 2007. Transport by water is significantly less costly than air transport for transcontinental shipping, short sea shipping and ferries remain viable in coastal areas.

In the 1800s, the first steamboats were developed using a steam engine to drive a paddle wheel to move the ship. The steam is produced using wood or coal. Recreational or educational craft still use wind power, while some smaller craft use internal combustion engines to drive one or more propellers, or in the case of jet boats, an inboard water jet.

The advantages of road transport over other means of transport is that it is flexible, it does not have a fixed schedule, it does not also have the fixed charges to be paid, safe among others and this is why some times it is preferred compared to other means of transport.

2.2.4 Pipeline transport

Pipeline transport sends goods through a pipe, most commonly liquid and gases. For liquids or gases, any chemically stable liquid or gas can be sent through a pipeline. Short-distance systems exist for sewage, water and beer, while long-distance networks are used for petroleum and natural gas.

Cable transport is a broad mode where vehicles are pulled by cables instead of an internal power source. It is most commonly used at steep gradient, typical solutions include aerial tramway, elevators, escalator and sky lifts, some of these are also categorized as conveyor transport.

2.2.5 Air transport

Air transport is the fastest method of transport. Commercial jets reach speeds of up to 955 kilometers per hour and a considerably higher ground speed if there is a jet stream tailwind, while piston-powered general aviation aircraft may reach up to 555 kilometers per hour (345 mph) or more. This speed comes with higher cost and energy use, and aviation's impacts to the environment and particularly the global climate require consideration when comparing modes of transportation.(Agaba Vivian 2014, March 21). The global trend has been for
increasing numbers of people to travel by air and individually to do so with increasing frequency and over longer distances and this has the attention of climate scientists and other researchers.

Air transport is normally favored due to speed and more convenient and uses high speed without traffic congestion because of the scheduled programme.

2.3 Public transport
Public transport is also known as public transit or mass transit, this is a means of transport which is used by an average number of people moving at once and stopping at different places without fixed charges being paid. This is a shared passenger transport service which is available for the use by the general public, as a distinct from modes such as taxis, buses, ride sharing and trains among others. (Kiggundu Amin Tamale (2008). Public transport involves buses, taxis among others; these carry a reasonable number of people in order to do away with traffic congestion.

This can be used to control traffic congestion because people move at once and the fee being paid varies according to the stop overs and also encourages means of transport that can reduce traffic congestion like park and ride facilities, walking among others.

Rapid urbanization has resulted in to the increasing use of vehicles both for public and private use. Poku Boansi (2003) contends that public transport in Ghana is offered by private sector in form of buses, mini buses, and taxis due to ever-increased demand for transport service, however, public transport is inadequate as commuters loiter around looking for transport to and from work. According to Safari-Uganda, the main vehicles of the public transport in Uganda are mini buses that are called “taxis” with more than 80% users, which drive on fixed routes mainly through the city from their centers to the suburbs accounting for 21% of the motorized trips. In most cases, people are not comfortable to use taxis in the city while sitting with 14 people and in the middle of traffic jam. Therefore, they try to avoid the situation by using a special hire or/ and private cars that account for 37% of all motorized trips with less than 10% of people, thus leading to use of automobiles that contribute to traffic congestion on available infrastructure together with the available public transport.

2.4 African Urbanisation Statistics
Africa’s urban population is the fastest growing population globally. The quality of life for Africa’s city dwellers will and directly depend on the quality of urban governance. Urbanisation can spur development but under current conditions, it is more likely to compound Africa’s
structural challenge. In less than 20 years from now every second person in Africa is likely to live in a town or a city. This will total about 926 million people, the equivalent of adding the current combined populations of Nigeria, Ethiopia, Egypt and Tanzania. (Godfrey.o.Wandera 2014).

By 2050 nearly 60% of the continents population will live in cities, historically urbanisation is a sign of economic prosperity and the shift of a country’s economic growth from agriculture to manufacturing and industry, the composition of the population of the country from being predominantly rural to urban. This can be in form of urban sprawl where by people move from rural areas to urban and they settle near to urban areas thus offering an allowance for the population to use faster means of road transport like boda bodas which in turn leads to traffic congestion.

2.5 Boda bodas in Uganda

Boda boda transport services as one of the Ugandans innovations that have grown from a small beginning in 1960s in the border region of Kenya (Malmberg Calvo 1994). The term itself is an English word “border border”. Boda bodas mainly provide a passenger transport service, although they can sometimes be required to carry goods.

2.6 Traffic congestion

Traffic means pedestrians or vehicles on the road or the flux or passage. Traffic congestion is a condition on road networks that occurs as use increases, and is characterized by slower speeds, longer trip times, and increased number of vehicles stand in line. (Wanjiku, M. 2009). The most common example of the informal transport is boda boda transport. When traffic demand is great enough that the interaction between vehicles slows the speed of the traffic stream, congestion occurs. Traffic jam occurs when vehicles are fully stopped for a longer period of time and composed of boda bodas which do not use the cycling lane(Adedimila1977). This can sometimes lead to less productivity, increase in travel time and also pollution both air and noise which can eventually lead to lung diseases.

Traffic jam can be considered as one of the serious global problems for both developed and under developed countries (Naznin at. el. 2010). Traffic congested areas, especially in the urban areas traffic jams are an annoying and harmful problem to the residents and travelers. It is the
consequence of difference between transportation demand and supply (Habib, 2000). For the developing countries increases in urban population are creating pressure on the existing transportation system for which, traffic problem has already become a part of urban transportation system.

Traffic congestion of boda bodas primarily occurs due to the urban life styles where everyone wants to move at the same time and they carry few people at a time (Wanjiku, M. 2009). This is because of the efficient operation of both the economy and school systems required that people work, go to school and do their every day jobs about the same hours so that they can interact with each other. (Deming, W. E. 2000).

Accessibility improvement for boda bodas has received increasing attention in planning. There is also a lack of empirical analysis of how much pedestrian accessibility would vary depending on the characteristics of streets on routes to specific destinations. It is however regrettable that despite attempts to widen the road; boda boda congestion can be characterized by too many boda bodas moving in different directions. Since improvement of boda boda accessibility is increasingly expected in transport planning… (Nakamura 2016) to help improve the traffic flow and contribute to sustainable development through economic, social, and environmental co-benefits, this research attempts to provide friendly means of positive coexistence between boda bodas and other means of transport.

Traffic congestion is demand for road space outstripping the available road infrastructure to the extent that free movement of traffic is nearly impossible. The situation where travel demand exceeds the capacity of the transportation network. (Kampala Traffic Congestion Management Plan 2014-2019 RSI). According to Institute of Transporting Engineers, traffic congestion is a situation where there are more people trying to use a given transportation facility during a specific period of time than the facility can handle with what are considered to be acceptable levels of delay or inconvenience.

2.7 How boda boda transport contribute to traffic congestion.
Uganda has one big city (Kampala) where all these activities are conducted, Kampala one of the fastest growing African city with annual growth rates of 5.6%(Adam Smith, 2005), Due rapid
urban growth causes major socio-economic and environmental problems that lower the quality of life of the urban dwellers like accidents, traffic pollution, high travel time, and stress because of high travel costs. (Wanjiku, M. J. 2016). Public transport services in the city of Kampala are provided by private operators with free entry and exit and mainly with 14-seater mini-buses and motor cycles commonly known as “boda bodas”.

Traffic congestion is very common and is worse during peak periods whereby travel speeds reduce to about 15km per hour and below leading to slow flow of vehicles. Road safety in the Kampala area is also a serious challenge (Adam Smith, 2005), (Jan Holm Pedersen, 2014), and (Joel Ogwang 1999). Road Transport network are poorly developed and are not evenly distributed connected to all over the country, the city has no pavements, no traffic light which are properly working, no strict laws to regulate and govern the motorcyclists and private min bus owners.

No Transits oriented, no park and ride that can help to reduce traffic congestion, road networks are in sorry states, too narrow, full of potholes, no designated zebra crossing, no parking fee charged for parking in the city as it is with Stockholm, no fly overs to help in reducing congestion, no pedestrians way, bicycles are not provided for as it’s here in Europe (less motorization)and other developed countries, no cameras to monitor the attitudes and behaviors of bad drives and worst of all there’s no public transport to reduce of traffic flows and worst of all the enforcement is full of corruption.

2.8 Growth of the informal sector
Plying the streets of Lagos, sua Paulo and other cities of developing cities are a fleet of small, low performance of other public means of transport and versatility of the boda boda transport (Cervero 2000), he further notes that in some places, environmentally friendly. An increasing number of people in the city most especially with young men who can operate motor cycles congregate at major intersections, offering different road sections for example the bus lane and other transport means.

He further echoes these sentiments that these privately operated small scale services and are varyingly referred to as par transit, low cost transport and third world transport (cervero 2000)
used to reflect the context in which this sector operates informally, informal transport are also
notable for their roles being performed to help in the movement of people in the city (cervero
1998).

Reddy (1999) argues that urbanisation is an affiliated feature of economic development. On
average 45% of the human population in the world live in urban centers. With growing
population in urban centers, vehicles operate in cities and share the same road space resulting
into inefficient operations and hazards because of varying speeds and dimensions. He shows that
studies done in Delhi, Mumbai, Calcutta, Hyderabad, and Bangalore have indicated that the per
capita trips by vehicular modes have more than doubled in the last two decades and the number
of vehicles has progressively increased at a rapid rate in these cities.

In Uganda the number of people carried per route is very low which leads to congestion on the
road and boda bodas also carry maximumly 2 people per route which could also be a problem in
causing traffic congestion. In addition, boda boda transport is also flexible and versatile where by
they lack specific routes for transport. It shows the shortage of public transport to cope with the
demand especially at peak hours and that it has largely remained inefficient and unattractive thus
inevitable need for structural improvement and upgrading. In the absence of an efficient mass
transit public transport in Indian cities, a large number of private and Para-transit modes have
emerged in the market to meet the travel needs.

The gap in the supply of transport is filled by an array of Intermediate Public Transport (IPT)
modes like auto rickshaws, cycle rickshaws and tempos. IPT have increased due to the high cost
of private transport and less flexibility and overcrowding of public transport. He provides an
overview on urban transport from the Asian perspective, urban poverty and transport had been
one of the neglected issues especially in the eyes of multilateral lenders, he showed that there is
now a renewed interest to tackle this problem (Paul Barter 1999)

The report shows transport patterns and the needs of the urban poor. He showed that poor people
in Asian cities have problems of affording public transport and it is a big burden to them and that
small change in the public transport prices can make a large difference to the mobility of the
poor. There is therefore need to focus on the pro-poor transport strategy to make improvements
that benefits the modes widely used or potentially used by the poor. He shows that to make walking easier and safer, especially in and around low-income settlements and concentrations of low income employment, would benefit the poor, since most of their trips are on foot. Similarly, policies that succeed in making non motorized vehicles.

2.9 Challenges of informal transport sector

With standing these benefits the informal transport sector is blamed for a long list of problem that afflicts cities of the developing word. Aggressive and unruly driving among drivers whose very livelihoods depend on filling empty seats all too often causes serious accidents. (Cervero (2000). Excessive competition has produced too many idling and slow moving vehicles that jam critical intersections and it has also led to the severe accidents thus leading death and serious injuries.

Traffic tie ups along with poorly maintained vehicles and slow stroke engine designs have worsened air pollution. Often times, the sector is chaotic and disorganized. Cervero (2000) Transport decision makers at all levels need strategies and approaches that will better rationalize and when called for, coordinate and integrate informal transport services. An important challenge is to inco operate the informal sector into the mix of legitimate transport offerings and lager public interests. Illegal boda boda operators to hang around bus terminals and coax waiting customers to hope board a nearby van. Perhaps nowhere have the repercussions of cut throat competition been more serious than in South Africa. There intense rivalries over turf among private minibus operators have led to full- fledged gang warfare.

2.10 Laws governing boda boda

Strict implementation of regulations already in place i.e. regulation on permits, helmets, reflective wear. The regulations should be enforced. Designate boda bodas to specific areas/routes especially outside the city centre. Reduce the cars in the CBD so as to reduce traffic conflicts (Consider mass transit system), All riders need to be registered and certified before being allowed to operate.

There is need to implement the enforcement of helmet law and there is need to increase access to helmets by exploring cost cutting measures such as tax reductions. “We had initiated a process of
passing this ordinance but halted the process on grounds that the business has many factions which must be disbanded. However, we have decided to pass this ordinance so that it can reduce the controversy in the boda boda industry. The ordinance provides for having a common body, management, and term of office, gazette stages, data banks, Taxation, areas of operation, and other general policies for boda boda operators. (Makara Sabiti 2010).

Kampala Capital City Authority Act, the KCCA shall have power to make ordinances not inconsistent with the Constitution or any other law made by Parliament. “…I would, therefore, wish to impress it upon the central government that streamlining the boda boda industry would call for maximum restraint on the part of top security personnel against undue interference in the boda boda management (KCCA Act Section 8a).

Branas and Knudson (2000) in their study investigated motorcycle rider death rates between states with full motorcycle helmet laws and those without. They (ibid.) revealed that from 1994 to 1996, states with helmet 102 B. Bagenda, A. Ahimbisibwe, W. Tusiime and Musa Moya ORSEA Journal laws experienced a median death rate of 6.20 riders per 10,000 registered motorcycles and states without helmet laws experienced a median death rate of 5.07 riders per 10,000 registered motorcycles.

Their (ibid.) study weakened the claim that rider death rates are significantly lower in states without full motorcycle helmet laws. Fernando and colleagues (1998) in their study offered the first evaluation of a helmet law using combined forensic and police data in a large south European urban area where there is widespread use of motorcycles. They (ibid.) concluded that there was effectiveness of the helmet law, as measured by reduction in number of deaths and mortality ratios after the law implementation.

Similar findings were by Servadei and colleagues (2002) in which they stated that the revised Italian mandatory helmet law, with police enforcement, is an effective measure for traumatic brain injuries’ prevention at all ages. Studies by Chiu (2000) and Kraus (1995a) revealed that following implementation of a helmet law, a reduction in motor-cycle-related head injuries occurs while the repeal of a law results in increased death and injury. Ecological-type studies also suggest that motorcycle helmet laws result in a reduction in motorcycle head injury-related deaths (Sosin, 1990) and that helmet laws result in a reduction in motorcycle related death rates.
2.11 Summary

According to the literature, some of the countries perceive boda boda transport as motor cycles for example India in Mumbai, boda bodas commonly carry between 3-5 people per route which is not the case on the Uganda’s boda bodas because they carry a limited number of people which leads to congestion. Some of reasons as to why boda bodas contribute to traffic congestion include, no transits oriented, no park and ride facilities that can help to reduce traffic congestion, no parking fee charged among others but it does not point out the major factor as to why boda bodas contribute to traffic congestion. Some of the laws being pointed out include regulation on permits, helmets, awareness of traffic rules to specific areas but the literature does not revile the organisations that amended the laws and how they will be implemented. It also lacks practical solutions on how the congestion of boda boda transport can be improved and their effects which can effectively improve on the flow of transport, the literature also does not reveal on how frequently boda bodas are used in the city. The literature also points out the laws that govern boda boda transport like the helmet law but does not point out how it should be specifically implemented.
CHAPTER THREE

METHODOLOGY

3.0 INTRODUCTION
This chapter presents the research methodology that was used in the study which aims at studying the contribution of boda boda to traffic congestion in the CBD. These details presents how analysis that was collected from different views will provide alternatives to a lasting solution for boda boda contribution in the CBD. It entails the research design, population of the study and validity of the instrument. A case study design was adopted combining both qualitative and quantitative methods carried out in Kampala Central Business District (CBD), data was collected from Boda boda operators, management officials and the users, using in-depth interviews, questionnaires and focus group discussions.

3.1 RESEARCH DESIGN
The study used a descriptive survey which uses observation and surveys. The purpose of employing this method was to describe the nature of the situation as it exists at the time of study and explore the causes of the phenomena.
Both qualitative and quantitative research approaches were employed. The quantitative approach was used to precisely obtain and quantify the impact between variables while qualitative approach was used to yield detailed explanations in order to gain a wider understanding of the problem.

3.2 STUDY AREA AND TARGET POPULATION
The study is focused on the boda boda contribution to traffic congestion in the CBD along streets in the CBD. In terms of population the study targeted majorly the Boda Boda riders, street parking, loading and offloading of passengers and goods along the street, KCCA officials basically from the traffic department and physical planning directorate and local leaders among others.
3.3 SAMPLE FRAME AND DESIGN

A sample is a representative portion of a given population under the study. When collecting data, it is important to ensure that the sample is free from peoples’ bias and its actual representation of the population under the study.

The study targeted a sample population size of eighty two (82) respondents who are classified in the table below. The technique of sampling to be used will be random and purposive. For the case of purposive technique persons to be interviewed will be picked from KCCA directorate of physical planning and traffic department.

Table 3.3.1 shows the targeted population to be interviewed in order to acquire the necessary findings which are relevant as far as the topic of study is concerned for example the physical planner at the Central Division, boda boda riders and users, public means of transport among others.

Table 3.3.1: Sample size and sampling technique design

<table>
<thead>
<tr>
<th>Population</th>
<th>Sample size</th>
<th>Sampling techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boda boda riders</td>
<td>42</td>
<td>Random</td>
</tr>
<tr>
<td>Boda boda Users</td>
<td>10</td>
<td>Random</td>
</tr>
<tr>
<td>Public transport (taxis)</td>
<td>10</td>
<td>Random</td>
</tr>
<tr>
<td>Private cars</td>
<td>10</td>
<td>Random</td>
</tr>
<tr>
<td>Chairperson (Motorcycle stages)</td>
<td>8</td>
<td>Purposive</td>
</tr>
<tr>
<td>KCCA officials (traffic department and a physical planner)</td>
<td>2</td>
<td>Purposive</td>
</tr>
</tbody>
</table>

3.4 DATA COLLECTION METHODS

3.5.1 Primary data collection techniques

- Traffic counting. Here the researcher was required to know the number of people each boda boda can carry to and from town compared to other transport means at a particular time. Traffic counting can also be done by using a sample of people working in the CBD to know the means of transport used to and from the CBD.
- Interview method. The researcher approached different groups of people in the study area and had a one on one discussion with the Motorcycle riders, KCCA officials (traffic department and a physical planner). This is intended to correct wider information on the subject matter.

- Questionnaire technique. The questionnaires were used to gather comprehensive data from the respondents through answering questions related to the research topic. This was done through the typed questions for the respondents for example the physical planner at that Central Division in Kampala, boda boda riders, chairman boda boda stages among others.

- Photography. The researcher had several photographs using a camera to give a clear visual impression of the road with and without boda bodas. The photographs are taken at different intervals for example during morning and evening hours which are mostly used by the people to and from work unlike during the mid day hours where the traffic is low.

- Measurement. This involved pacing to know the coverage of boda boda stages verses the width of the road, this method helps in identifying the width of the road whether it can accommodate the traffic flow according to the activities being performed in the specific area.

3.4.2 Secondary data collection technique

- Literature review. Under this method the researcher was acquired to review documents of the previous research, Journals and articles that are in line with the research topic which helped in the analysis of the data.

3.5 Data processing and analysis

The data collected was revised and edited. The quantitative data was compressed in form of statistical graphs to weigh the contribution of boda boda transport to traffic congestion. This was to enable the researcher to produce reliable and prolific research, for qualitative data the questions were arranged and made in a manner that they can easily be interpreted by the respondents.
After collecting the data, it was edited to familiarize with the data, check for completeness and accuracy. It was organized in terms of research instruments. Questionnaires, documentary analysis, interviews and observation research was arranged in terms of various research questions to facilitate analysis. Qualitative and quantitative data analysis technique was used. Cross tabulation analysis was done to determine relationships within the objectives guiding the study and to explore their implication for cause and effect. Descriptive statistics such as percentages were used and information was presented inform of tables.

3.5.1 Data processing

The data generated was processed to make information ready for use. The data was edit and tabulate, make it easy for analysis since the processing was to be done concurrently with analysis. Tables and graphs are used.

3.6 LIMITATIONS OF THE STUDY

Given the procedural nature to come up with a well thought research paper, the researcher dealt with the following challenges. Hostility by some respondents, this was exhibited by most of the street vendors and the boda boda riders who felt insecure every time I would approach them thinking that I was a KCCA official who wanted to confiscate their products and the boda boda riders also thought that am sending them away from their stages because some are not registered however the researcher tried to co operate with the willing respondents.

Time factors. The period of time allocated for data collection and analysis for effective acquisition of data from the respondents basing on the questionnaires formulated.

Ignorance of the boda boda riders. The riders did not want to know about the research which I was taking on. Some of the riders had a negative attitude towards the questions asked and this gave the researcher a resolution of finding the interested riders to respond on the questions being asked.
3.7 Summary
Various methods were used in collecting data and these include, traffic counting, interview method, questionnaire technique, photography, measurement and literature review to collect data effectively and the processing of data was done in form of tables and graphs. Traffic counting method was used to know how frequently are boda bodas used in the CBD verses other means of transport used by the people to and from the CBD and it was realized that most of the people use boda bodas to and from the city. The interview method was formulated in form of questions which were random and purposive according to the questions for example the physical planner at the central division of Kampala had a purposive questionnaire because he was supposed to respond on how the Authority has tried to reduce on the congestion of boda bodas in the city. Secondly the riders also had random questions as to why boda bodas contribute to traffic congestion.

CHAPTER FOUR
FINDINGS AND DISCUSSIONS
4.0 INTRODUCTION
This chapter organizes and reports the study’s main findings, including presentation of relevant quantitative and qualitative data. The chapter also synthesizes and discusses the results in line with the study’s research questions, literature review.

4.1 Boda boda usage in the CBD.

Central Business District is part of the Central division in Kampala district, according to the planner of the central division, most of the roads in the CBD measure between 10- 15 meters wide especially in the downtown, single carriage way designed by the Ministry of Works and Transport.

According to the planner of the Central division, the roads were constructed by UNRA and KCCA who are responsible for construction and maintenance. All the roads are tarmaced though with potholes do exist in some roads of the downtown for example Nakivubo place road, the roads do not have drainage channels with a number of potholes and worn out tarmac. The narrowness of the road without pedestrian facilities in some sections of the roads that leads to difficulties in the pedestrian movement.

Some of the roads are rehabilitated to ease the flow of traffic for example Kampala road, Entebbe road, Queens’ way among others. As earlier pointed out, most of the roads are planned to be measuring 15 meters due to the heavy traffic within the city and the movement of pedestrians and to control the mixed traffic with the business center.

Traffic counting was carried out along Kyagwe road, Namirembe road, Ben Kiwanuka street during the rushing hours both morning and evening, it is realized that traffic congestion is composed of boda bodas to and from CBD compared to other means of transport for example buses, taxes, private cars among others because of various reasons such as flexibility, boda bodas also require a limited space to use rather than other means of transport like buses, taxis that occupy a bigger space on the road.

Table 4.1 shows the flow of traffic during the rushing hours both morning and evening when people are going to the CBD and when living the CBD, traffic counting was carried out along
kyagwe road. The road is used by various means of transport like boda bodas, taxis, buses and pedestrians and the conditions of the road does not support the heavy traffic flow in the area.

**Table 4.1: An illustration on the flow of traffic during the rushing hours.**

<table>
<thead>
<tr>
<th>ROAD NAME</th>
<th>MEANS OF TRANSPORT</th>
<th>TIME</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Morning (7am-9am) %</td>
<td></td>
</tr>
<tr>
<td>Kyagwe Road</td>
<td>Boda bodas</td>
<td>174</td>
<td>285</td>
</tr>
<tr>
<td></td>
<td>Taxis</td>
<td>120</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Private cars</td>
<td>84</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Buses</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Bicycles</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>400</strong></td>
<td><strong>420</strong></td>
</tr>
<tr>
<td></td>
<td>Evening (8pm-9pm) %</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boda bodas</td>
<td>43</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Taxis</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Private cars</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Buses</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Bicycles</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>205</strong></td>
<td><strong>126</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>285</strong></td>
<td><strong>205</strong></td>
</tr>
</tbody>
</table>

The table 4.1 data collected from the field by the use of traffic counting to find out the use of boda boda transport to traffic congestion versus other means of transport like buses, taxis, private cars among others and was carried out in the morning and in the evening. From the table 4.1, the boda bodas contribute 43% in the morning and 64% in the evening and this shows that the traffic congestion in Kampala is contributed by boda bodas compared to other means of transport like buses that have 1% in the morning and 2% in the evening. This shows that people use boda bodas to and from the CBD compared to other means of transport.

The boda bodas are used by people in order to increase on the travel time to the work since the CBD is mainly composed of business centers and civic areas thus increasing in the productivity. The boda bodas are also used due to reduced delay in traffic jam, accessibility and flexibility whereby they are able to move to remote areas as far as remote areas are concerned and also delivering door to door services.
Graph 4.1: percentage of flow of traffic during morning hours on kyagwe road.

Graph 4.1 corresponds to the table 4.1 of traffic counting in percentages for both day morning and evening of the traffic moving along Kyagwe road mainly during the rushing hours and this shows that traffic congestion is mainly in the evening with 64% of the boda bodas accessing the road thus leading to traffic congestion of boda bodas.

From the graphs 4.1, the traffic flow shows the percentage of the boda bodas that people use compared to other means of transport that people use. This is because the boda bodas can do door to door service delivery as fulfilled by the demands of the customers and also its flexibility to move as far as remote areas are concerned and this also contributes to traffic congestion in the CBD. The number of people that are using boda boda verses other means of transport like buses, taxis among others depends on the ease of acquisition compared to other means of transport, flexibility and also the percentage to fulfill the customers’ demands.

From the table 4.2, 50 people from Nakasero market that use the boda bodas compared to other means of transport like buses and taxis. 32% of the people use boda boda transport because of its flexibility and they deliver door to door services according to the demands of the customers, they are also easy to get since they park anywhere and they are found anywhere which is not the case with other public means of transport which sometimes leads to congestion sometimes lead to accidents and traffic congestion.
Table 4.2: use of boda boda transport verses other modes of transport from home to places of work.

<table>
<thead>
<tr>
<th>Sample specific place</th>
<th>MEANS OF TRANSPORT</th>
<th>Number of users</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nakasero market</td>
<td>Taxis</td>
<td>21</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>Boda boda</td>
<td>16</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Private cars</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Buses</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Bicycles</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td><strong>50</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Author field findings

Graph 4.2: A graph showing the percentage of boda bodas users in a sample size of Nakasero market.

From the graph 4.2 the boda bodas are competing with the taxis in transporting people to the market but according to the number of people carried by a taxis, they are less than people carried by the boda bodas because the boda bodas carry 2 people each and this influences traffic congestion in the CBD compared to other public means of transport that carry people at once.

Graph 4.2 corresponds to the table 4.2 showing the percentage for the use of boda bodas compared to others which influences traffic congestion in the CBD because most of the people use boda bodas. The population studied was 50 people and different responses were acquired on how people come and live the CBD and this can be used to conclude on the means of transport that is mostly used in the CBD.
The boda boda also carry 1-2 people at a time which increases the number of boda bodas in the CBD compared to other means of transport that carry people to and from the city thus leading to boda boda congestion.

The findings show that people use boda bodas compared to other means of transport because they donot want to spend more time in traffic jam, the ease access of boda bodas because they do park any where and also the flexibility of boda bodas to operate as far as remote areas are concerned.

4.2 Factors that lead to the contribution of boda boda transport to traffic congestion.

Kampala city is composed of the CBD which is the core of the city; however traffic congestion is a serious problem during peak periods whereby travel speeds reduce to about 15km per hour and below leading to slow flow of vehicles. Traffic congestion is caused by a number numerous factors such as; the versatility of boda bodas where they are able to move from one place to another, lack of specific routes, low levels of sensitization, low levels of law implementation among others.

Table 4.3: Reasons for boda boda contribution to traffic congestion.

<table>
<thead>
<tr>
<th>Reasons for contribution</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Versatility of boda bodas</td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td>Poor road maintenance</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>Cost of acquisition and maintenance</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Low levels of sensitization</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Inadequate and unplanned parking facilities</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Reckless driving and bad drivers</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Unplanned stoppages</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Low levels of implementation</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Improper traffic controls and management</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Lack of specific lanes</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>------------------------</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Lack of specific routes</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>105</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author field findings

The total number of the respondents 105 from table 4.3 is not corresponding with the number of boda boda riders in the field which was 42 because many of the riders were pointing out more than 1 reason for boda boda contribution to traffic congestion. This is because the boda bodas contributed to traffic congestion because of many reasons. From the table 4.3, the most influencing factor of boda boda congestion is the versatility of boda boda with 20% compared to other factors that lead to traffic congestion like un planned stoppages along the streets.

Versatility of boda bodas. Table 4.3, 21 boda bodas riders pointed out that versatility is the common factor which leads to traffic congestion in the CBD because they can be provided ‘for hire’ area wide transport services operating out stages which are fairly and evenly geographically distributed in the CBD and the environmental operators indicate that the majority of these service trips are to carry passengers to or from work activity destinations. It has lacks restrictions and fixed departure times and rates charged, time of convenient for operations, areas where they can operate from and the basis upon which services are provided. 20% of the riders that they provide services which are highly flexible hence versatile because the operators can serve their customers any time when needed and they are even willing to wake up early and sleep late just to serve and generate income.

Poor road maintenance. The roads in the CBD especially in the down town are poorly maintained without pedestrian walkways, worn out tarmac and some of the walkways that exist are encroached on by the street vendors thus pushing pedestrians into the carriage ways which leads to mixed traffic of boda bodas, other means of transport and pedestrians. 17 boda boda riders pointed out that these roads cannot hold the heavy traffic flow thus ending up causing congestion in the down town and have a poor maintenance for example Nakivubo place road that has pot holes and this slows down the movement of boda bodas.
Figure 4.1: Poor road maintenance at Nakivubo place road.

Source: Author field findings

Figure 4.1 shows a road which is poorly maintained with pot holes and worn out tarmac and also lacks pedestrian walkways thus forcing the pedestrians to use the carriage way thus leading to mixed traffic of the boda bodas, vehicles and pedestrians thus leading to traffic congestion in return.

Inadequate and unplanned Parking facilities. Besides, traffic congestion is an outcome of limited/ inadequate of parking spaces. According to the riders in the downtown area in the CBD, 10 riders pointed out that the unplanned parking facilities whereby the riders park within the road which is supposed to be used for traffic flow thus minimizing on the space which is to be used by the traffic thus leading to traffic congestion. The unplanned facilities also in conveniences the businesses areas where they park from and this also increases traffic congestion in the area.

Figure 4.2: Un planned parking facilities.

Source: Author field findings

Figure 4.2, showing the un planned parking facilities where by the boda bodas park within the road and this slows down the movement of the traffic in the road. Further still the parking
facilities inconveniences the people because they normally park in front of the business centers thus leading to traffic congestion in the CBD.

Reckless driving and bad drivers. This involves over speeding, driving carelessly, turning in the middle of the road which slows down the movement of vehicles and boda bodas, 4 riders commented that the reckless driving of boda bodas because of the informal transport business is mainly carried due to unemployment and inadequate employment opportunities for the riders hence its only means of survival in the informal transport sector. The riders also acknowledged that the age of driving boda bodas should be restricted because the young appear to be irresponsible not like the old thus contributing to boda boda traffic congestion in the CBD.

**Figure 4.3: Reckless driving of boda boda rider.**

![Image of reckless driving of boda boda rider]

Source: Author field findings

Figure 4.3 shows the reckless driving of the boda bodas where by the boda bodas turn recklessly in the middle of the road and also the pedestrian using the driving lane because the pedestrian walkway is being used by the pedestrians thus leading mixed traffic and traffic congestion.

Unplanned Stoppage/Parking, the city does not have any planned parking facilities. That is why vehicle operators stop their vehicles in any place, where they need and it causes traffic jam. Variations in Speed Vehicle Slow and fast moving vehicles are running through the same road. As a result, slow moving vehicles are making the fast moving vehicles slow. This is also one of the important reasons of traffic jam.
Improper traffic controls and management also result into traffic congestion. Congestion is as a result of seven root causes and they can be grouped into three broad categories for example traffic demand, traffic influencing events and physical high-way features. From table 4.2, 15 riders pointed out that one of the other factors that leads to traffic is that the boda boda riders do not obey and respond to the traffic commands for example the traffic lights, traffic officers thus influencing traffic events includes traffic incidents, vehicular crashes, and road breakdowns. For the sake of traffic control, boda bodas 14% donot obey traffic rules and this is as a result of low sensitization and implementation of the traffic rules and regulations thus influencing traffic congestion in the end in the CBD.

Lack of Law implementation. Riders are often not trained sufficiently to follow lane discipline and traffic commands. The effects of poor lane discipline especially at traffic junctions deteriorate the already overcrowded junction situation. From the table 4.2, only 8 riders responded to low levels of implementation as one of the causes of traffic congestion in the CBD and to all these problems are compounded by the fact that traffic law enforcement leading to increased road accidents, over speeding among others.

Lack of specific routes to be followed by boda bodas. Boda bodas donot have specific routes to be followed where by a boda boda taking Jinja road at the same time can take Namirembe road which contributes to the traffic congestion in the CBD. For the sake of public transport, taxis take specific routes which leads to their organization in the CBD un like the boda boda transport. According to table 4.2, 7% of the riders pointed out that one of the major causes of boda boda congestion are the lack of specific routes to be used by the riders because if the riders had specific routes to follow they can be dispersed to various areas thus keeping some of the areas free from traffic congestion.

The reason for the increase operation of boda boda in the CBD leading to traffic congestion in the end is due to the cost of acquisition and maintenance of boda bodas compared to other means of transport for example taxis and buses. From the table 4.2, only 5 riders pointed out that the state the ownership of the boda bodas, the cost of acquiring them, the daily income from the boda boda and the monthly operational costs. These are important factors to consider in the study as they are critical in the business and it was founded out that the cost of acquisition and
maintenance is cheaper than other means of transport thus increasing the number of boda bodas in the CBD thus leading to traffic congestion.

Low levels of sensitization. From the table 4.2, 6 boda boda riders responded that the driving permits are issued to the riders without sensitizing them about the good driving methods and this leads to bad driving and reckless mistakes for example over speeding, turning in the middle of the road which sometimes leads to accidents thus slowing down the speed of other road users and this in turn leads to traffic congestion and for some of the riders, the boda bodas can be got from a friend or a relative in order to earn a living without the concern of the driving permit.

4.3 What are the laws that govern the Boda boda transport?
Some of the laws are being amended by KCCA authority but others are according to the organizations that the boda bodas are organized in for example safe bodas, century bodas and boda bodas 2010. These laws are amended to help in the organization of the boda bodas during their operations and also help in the smooth operation of the boda boda businesses, some of these laws include; for example awareness of the traffic rules and regulations, registration of boda bodas among others

Table 4.4: laws governing boda boda transport

<table>
<thead>
<tr>
<th>Laws governing boda boda transport</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness of traffic rules and regulation governing boda boda transport.</td>
<td>24</td>
</tr>
<tr>
<td>Registration of boda bodas</td>
<td>20</td>
</tr>
<tr>
<td>Wearing of helmets</td>
<td>12</td>
</tr>
<tr>
<td>Carrying of one passenger</td>
<td>10</td>
</tr>
<tr>
<td>Compliance with road safety rules and regulations.</td>
<td>10</td>
</tr>
<tr>
<td>Acquisition of boda boda riding skills</td>
<td>7</td>
</tr>
<tr>
<td>Some laws still in process</td>
<td>1</td>
</tr>
</tbody>
</table>

Awareness of traffic rules and regulation governing boda boda transport. When asked to mention specific traffic rules and regulations governing public informal transport, 24 riders pointed out that they are made aware of the traffic rules and regulations and this is made especially in their organizations. The traffic awareness rules include the speed limits, not overloading, keeping left always while riding, no drinking and riding, having a riding license and always keeping distance
from one road user to another. The remaining operators gave sketchy responses to this law whereby the riders do not obey these rules.

The registration of the boda bodas in Kampala is still in process whereby every boda boda in the city is to be registered to reduce of theft, high crime rates which are mostly committed by boda boda riders like murdering of people. Out of 42 riders, 20 pointed out that they are required to require their inorder to determine the number number of boda bodas operating in the CBD. The registration of boda bodas in Kampala is still in process where KCCA has proposed a law for all boda bodas operating in Kampala to be registered but however the boda bodas are registered according to the organisations they are organized in like safe bodas, century boda bodas and boda bodas 2010 among others.

Wearing of helmets. These are head protective materials worn by boda boda riders and passengers in order to protect them from road accident damage and the weather conditions like sunshine and rain. From the table 4.3, 12 riders pointed out the concern of wearing helmets in the boda boda organizations like the safe bodas are encouraged to wear helmets mainly for safety and to reduce on the percentage of accidents which sometimes leads to accidents thus leading to traffic congestion in the CBD.

Carrying only one passenger. The boda boda riders in their organizations are encouraged to carry only one passenger. From the table 4.3, 10 riders pointed out that they are encouraged to carry one passenger which eases driving because it is comfortable to drive one passenger than two passengers on the boda boda. From the research, several accidents are caused due to uncomfortable and reckless driving thus leading to congestion and accidents.

Compliance with road safety rules and regulations. The level of compliance by the boda boda public transport operators with road safety regulations in the CBD. 10% of the riders pointed out the following are the regulations that operators are required to comply with and these include possession of valid riding license, trained in motorcycle riding in accredited institution, tested by traffic police, Wearing of protective gear by both the rider and passenger, Carrying one passenger per trip, having an insurance cover, riding with headlights on during daytime.
Acquisition of boda boda riding skills by public boda boda operators. With regards to where they had acquired their riding skills from, 7% of the riders indicated that they had acquired their skills from fellow boda bodas operators and this leads to bad driving which can sometimes lead to accidents, over speeding thus leading to traffic congestion. This indicates that most operators did not have the required driving skills to operate motorcycles since 7% of the operators acquired them from their friends and this leads to traffic congestion since they lack driving skills.

Operators with valid government riding licenses. The study sought to find out whether the respondents had valid driving licenses which they use during the operations while carrying out their business.

Table 4.3.1 shows the possession of riding licenses by the boda boda riders and limits the occurrence of accidents which sometimes leads to traffic congestion in the area because for a rider to acquire a driving permit he must have under gone training skills in order to acquire skills for proper riding and also following the traffic rules and regulations which improves the flow of traffic in the CBD.

<table>
<thead>
<tr>
<th>Possession of Riding License</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>30</td>
<td>72</td>
</tr>
<tr>
<td>No</td>
<td>12</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>42</td>
<td>100</td>
</tr>
</tbody>
</table>

According to the findings, 28% did not have valid driving licenses while only 72% had them. In the analyzed data remarks on how operators who did not have valid or no license managed to conduct their business, there varied responses which included; always hiding from traffic police, bribing police when caught without a driving permit, using of short cut routes where the traffic officers donot normally operate from, dodging police among others. Failure by the traffic police

These findings show that boda boda riders have laws that govern them against traffic congestion and bad driving, however some of these laws are amended within there organisations and also some of the laws formed by the government are still in process.
4.4 Summary

The most pressing factor that lead to boda boda congestion is the versatility of the boda bodas to take specific routes, low levels of sensitization among other. The chapter also brings out that people use boda bodas compared to other means of transport because they do not want to waste time in traffic jam during the rushing hours most especially in the morning which reduces on the travel time and the level of productivity of the country. The chapter also summarises the laws governing boda bodas in order to enhance their operations and improve on the flow of traffic, the laws are mainly formulate according to the organization of the riders for example safe bodas, century boda bodas among others. The common law pointed out by the riders is the awareness of traffic rules and regulation where the riders are sensitized on how to obey to the traffic rules which can reduce on the accidents and congestion.
CHAPTER FIVE

RECOMMENDATIONS AND CONCLUSIONS

5.0 INTRODUCTION
This chapter presents conclusions and recommendations to the research paper on the contribution of Traffic congestion by the boda boda transport. The recommendations can further be used to solve the problem of boda boda congestion in the CBD and an action plan to the most pressing problem which is the versatility of the boda bodas to move from one place to another.

5.1 CONCLUSION
Getting rid of boda boda congestion in the CBD requires everyone’s efforts and creativity; It is a way of life that people should know where they have to operate as a way of survival and a commitment to social justice among fellow human beings whose interests are to walk comfortably in the city and taxi drivers whose job is to deliver the passengers to their destination in a quickest time possible.

Traffic congestion should not be entirely blamed on the increase in the population size and vehicle numbers as most researchers suggest but also on the improper use of the street spaces and thorough research ought to be made about streets and their uses more to do with proper lane management. The increase in the boda boda congestion requires a long term view and seeks comprehensive assessments of social, economic and environmental costs of our actions for the government policies, programs and projects.

From the analysis above it can be concluded that the informal transport sector is contributing to traffic congestion at a faster rate. The study results indicated that the main factors for boda boda contribution to traffic congestion are; the versatility of the operations, ease of operation and the ease of acquiring and maintaining boda bodas, poor parking facilities, improper law enforcement, lack of specific routes to be followed among others. The boda boda industry has made a significant contribution to traffic congestion and this has led to pollution, decrease in the productivity levels and also accidents.
Despite the growth of boda boda industry and its benefits, there are also a variety of negative impacts that are brought due to boda boda transport for example numerous accidents, theft and smuggling of goods. The accidents are attributed to inadequate road safety training, low levels of law implementation. In addition the boda bodas also operate in such a way that they do door to door service delivery that can satisfy the customers’ demands. The services are also easy to use given that prices are negotiable, flexible whereby they can reach as far as, lack specific schedules and it can also cater for both rich and poor.

5.2 RECOMMENDATIONS
This section provides remedies to the gaps identified by the research findings and how the problem of traffic congestion of boda bodas can be improved along the streets of the CBD and these include;

Marking of the boda boda stages should be a priority so as to reduce on the confusion that results into congestion. Many boda boda stages appear but no one knows where they start and where they end which makes unauthorized riders to assume positions they don’t pay for, these stages can help in reducing on the number of illegal motorcycle riders and help curb the traffic congestion problems.

There is a need to restrict street side vehicle parking, given that on street parking along Kampala road consumes space of approximately 30 meters wide, restricting road side parking through raising the parking charge fees along the street or gazette the road to be used only for driving through can create more space for the vehicles that drive through hence improving the traffic flow.

Encouraging other means of transport like walking for short distances like to offices, shopping areas in the city which discourages congestion of boda bodas. Walking involves the physical movement of a personal and this reduces traffic congestion in the CBD since most of the places are near each other like business centers, civic and some institutions. People in the CBD use boda bodas for shorter distance travel within the CBD its self and they should be encouraged to walk using the pedestrian walkways in order to reduce the congestion of the boda bodas and also improves on active transport and socialization within the CBD.
Improving on the parking facilities and design management especially when constructing roads to demarcate the parking spaces for boda bodas away from the driving lane to avoid accidents and narrowing of the road leading to traffic congestion. Specific parking places due be demarcated especially on the wider roads like head on and angled parking of boda bodas so that they are away from the road to ease the movement of other road user.

Renovation of roads for example Nakivubo place road which has pot holes with worn out tarmac and this slows down the flow of traffic along the road since the road is within commercial centers. Pedestrian walkways can be included to be used by the pedestrians to avoid them being pushed into the carriage ways, drainage channels can also be improved to cater on the surface run offs of the water in order to control floating water on the road and also getting rid of too many junctions that can create a lot of traffic congestion in the junctions.

Introduction boda boda free zones. This is the introduction of an area where boda bodas are restricted accessing some of the areas in the CBD where a lot of business activities take place and active transport should be encourage in these areas like walking in the areas to reduce on the intensity of the traffic congestion. The boda bodas from Bombo road towards the CBD can use the watoto area to passengers, from Jinja road they can stop at Entebbe road and from Rubaga they can stop at Old Kampala in order to ease the flow of traffic in the CBD.

Sensitization of the riders. This can be carried out through seminars, conferences and banners to teach the riders about the road signs and their uses, wearing of helmets, the dangers of bad driving like over speeding thus eliminating traffic congestion. Intensive training should be carried out to get rid of bad driving activities in the city which sometimes lead to traffic congestion. The sensitization of the riders should be carried out by KCCA, traffic wardens, traffic officers perhaps the chair man for the boda bodas to direct their riders on how to keep safe on the road thus improving the flow of traffic on the streets in the CBD. The sensitization can be done through billboards, posters and social media to help the riders understand the riding rules and regulations.
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APPENDICES
APPENDIX 1
QUESTIONNAIRE FOR THE BODA BODA RIDERS.

MAKERERE UNIVERSITY

DEPARTMENT OF ARCHITECTURE AND PHYSICAL PLANNING
BACHELOR OF URBAN AND REGIONAL PLANNING

Questionnaire number………………………. Date………………………………

My name is Namuyiga Winnie. I am a student of Bachelors of Urban and Regional Planning Makerere University. Currently, I am performing a study to learn more about the contribution of Boda Boda transport to traffic congestion in the CBD. The purpose of this questionnaire is to learn more about the individual Boda Boda riders including: their backgrounds, the challenges they face, the perceived benefits gained from the job and how they can overcome a problem of traffic congestion.

1. Name…………………………… (optional)

2. Sex

   a) Male
   b) Female

3. Age

   a) 18-24
   b) 25-34
   c) 35-44
   d) 45 and above
4. Educational Level of the business operators
   
a) Primary level
b) Secondary level
c) Tertiary institution
d) Graduate

5. Do you live in Kampala (Yes or No)…………………………………………
   
a) If no for the question above, where do you live outside of Kampala and how long is the
distance (optional)……………………………………

6. How many years have you worked as a Boda Boda rider……………………………………
   
a) What was your former job before becoming a Boda Boda rider………………
b) Why did you leave your former job………………………………………………
c) Are you the owner of your motorcycle…………………………………………
d) If yes, did you use a loan or other form of credit………………………………
e) Who gave the loan or credit (Association, bank, individual, etc)……………………………..

7) Around how many hours do you work in a day………………………………………………
   
a) Around how many people do you transport in a day…………………………
b) Around how much do you earn in a day………………………………………………
c) Do you wear a helmet when you riding………………………………………………
d) Do you ever carry more than one passenger………………………………………………

8) Which stage are you attached to……………………………………………………………
   
a) What are the reasons for choosing this location?
   i) Availability of customers
ii) Limited Options
iii) Proximity
iv) Cost Effectiveness
v) Need to replace/assist family member
vi) Peace of mind

b) How many people are there per stage………………………………………………………………………..

c) How much Fee is Paid for Location………………………………………………………………………………

d) What are some of the challenges you face as a Boda Boda rider………………………………………
………………………………………………………………………………………………………………………………………………
………………………………………………………………………………………………………………………………………………

9) Do you obey the traffic rules e.g. traffic lights……………………………………………………………..

a) Have you found any problems with the road users (pedestrians and taxi operators) if yes what are they……………………………………………………………………………………………………
………………………………………………………………………………………………………………………………………………

10) Do you belong to a Boda Boda Association or similar organization………………………………………

a) If you are not in an association, why…………………………………………………………………………………..

11) What do you think can be done to improve the traffic congestion in the CBD?

…………………………………………………………………………………………………………………………………………………………
…………………………………………………………………………………………………………………………………………………………
I am Namuyiga Winnie a student of Makerere University, as part of my educational requirements; am doing a research study about the contribution of boda boda transport to traffic congestion in the CBD. The data required is exclusively for academic purposes and will be treated with high degree of judgment.

1. Does the Authority allow use of pedestrian walk ways for boda boda riders

2. How has the authority tried to enforce the traffic laws to boda boda riders

3. Do you think influences boda boda congestion in CBD

4. What challenges do you face while dealing with boda boda riders especially on the streets in the CBD

5. What are the laws that govern boda boda transport

7. What effects does the boda boda congestion cause to other road users and businesses. 

8. What can be done to improve the traffic flow along the streets in the CBD.
APPENDIX III

QUESTIONNAIRE FOR BODA BODA USERS IN THE CBD.

I am Namuyiga Winnie a student of Makerere University, as part of my educational requirements; am doing a research study on the contribution of boda boda transport to traffic congestion. The data required is exclusively for academic purposes and will be treated with high degree of judgment.

Questionnaire number………………………. Date………………………………

1. Name of the respondent (optional)
   …………………………………………………………………………………………………

2. Age.
   a) Less than 19 yrs
   b) 20-30 yrs
   c) 40-50 yrs
   d) 50 yrs and above

3. Why do you prefer boda boda services over any other means of transport?
   a) No fixed charges
   b) No fixed schedules
   c) High speed
   d) All the above

4. How often do you use the streets?
5. How convenient is using the boda boda along the streets?
   a) Comfortable
   b) Not comfortable
   c) Stress full
Any other describe
   ........................................................................................................................................
   ........................................................................................................................................

6. What are the major problems you have faced while using boda bodas along the streets in the CBD?
   ........................................................................................................................................
   ........................................................................................................................................
   ........................................................................................................................................

7. What do you think can be done to improve the traffic congestion of boda bodas in the CBD?
   ........................................................................................................................................
   ........................................................................................................................................
APPENDIX IV

QUESTIONNAIRE FOR TAXI OPERATORS WHO USE THE STREETS IN THE CBD.

MAKERERE UNIVERSITY

DEPARTMENT OF ARCHITECTURE AND PHYSICAL PLANNING

Questionnaire number………………………. Date………………………………

I am Namuyiga Winnie a student of Makerere University, as part of my educational requirements; am doing a research study on the contribution of boda boda transport to traffic congestion. The data required is exclusively for academic purposes and will be treated with high degree of judgment.

1. Name of the respondent (optional)

2. How often do you use the street?
   a) Daily
   c) Weekly
   d) Monthly

3. How convenient is driving along these streets?
   a) Comfortable
   b) Not comfortable
   c) Stress full
   d) Congestion prone
   e) Any other description
4. What are the major problems you have faced while driving along the Streets in the CBD?
..........................................................................................................................
..........................................................................................................................

5. Have you found any problems with boda boda transport? If yes what are they?
..........................................................................................................................
..........................................................................................................................

6. What do you think can be done to improve the traffic congestion along the Streets in the CBD?
..........................................................................................................................
..........................................................................................................................
APPENDIX V

QUESTIONNAIRE FOR PRIVATE CARS WHO USE THE STREETS IN THE CBD.

MAKERERE UNIVERSITY
DEPARTMENT OF ARCHITECTURE AND PHYSICAL PLANNING

Questionnaire number…………………….. Date…………………………

I am Namuyiga Winnie a student of Makerere University, as part of my educational requirements; am doing a research study on the contribution of boda boda transport to traffic congestion. The data required is exclusively for academic purposes and will be treated with high degree of judgment.

1. Name of the respondent (optional)

2. How often do you use the street?
   a) Daily
   b) Weekly
   c) Monthly

3. How convenient is driving along these streets?
   a) Comfortable
   b) Not comfortable
   c) Stress full
   d) Congestion prone
   e) Any other description
4. What are the major problems you have faced while driving along the Streets in the CBD?

5. Have you found any problems with boda boda transport? If yes what are they?

6. What do you think can be done to improve the traffic congestion along the Streets in the CBD?
APPENDIX VI

QUESTIONNAIRE FOR STREET SIDE RETAIL BUSINESS OPERATORS ALONG STREETS IN THE CBD.

MAKERERE UNIVERSITY
DEPARTMENT OF ARCHITECTURE AND PHYSICAL PLANNING

I am Namuyiga Winnie a student of Makerere University, as part of my educational requirements; am doing a research study on the contribution of boda boda transport to traffic congestion. The data required is exclusively for academic purposes and will be treated with high degree of judgment.

Questionnaire number………………………. Date………………………………

2. Name of the respondent (optional)

3. Sex
e) Male
f) Female

4. Age.
e) 18-24
f) 25-34
g) 35-44
h) 45 and above

5. Educational Level of the business operators
e) Primary level
f) Secondary level
g) Tertiary institution
h) Graduate

6. Types of business

7. Location of business
a) Pedestrian walkways
b) Shop
c) In front of shops
d) In carriage way
8. What are the reasons for choosing this location?
   a) Availability of customers
   b) Limited Options
   c) Proximity
   d) Cost Effectiveness
   e) Need to replace/assist family member
   f) Peace of mind

9. Fees Paid for Location
   ……………………………………………………………………………………………………………………………………………………………………………………

10. Who provides the space you operate from
   a) Authority
   b) Land load
   Others specify……………………………………………………………………………………………………………………………………………………………

11. How big is the space you operate from?
    ……………………………………………………………………………………………………………………………………………………………………………………

12. How many days do you work in a week?
    ……………………………………………………………………………………………………………………………………………………………………………………

13. What time do you normally operate?
    a) Full day
    b) Morning
    c) Noon
    d) Evening

14. Who is responsible for collecting revenues?
    ……………………………………………………………………………………………………………………………………………………………………………………
    ……………………………………………………………………………………………………………………………………………………………………………………
    ……………………………………………………………………………………………………………………………………………………………………………………

15. When do you pay the revenues?
    a) Daily
    b) Weekly
    c) Monthly
    d) Annually

16. Are the revenues favorable or not?
    ……………………………………………………………………………………………………………………………………………………………………………………
    ……………………………………………………………………………………………………………………………………………………………………………………
    ……………………………………………………………………………………………………………………………………………………………………………………

17. Relationship with the enforcement agencies
    a) Good
    b) Fair
c) Bad
Why........................................................................................................
........................................................................................................

18. What are the major problems faced with selling alongside the roads?
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........................................................................................................
........................................................................................................
........................................................................................................

19. Do you have any intentions of renting a room or going to a built market? Why?
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........................................................................................................
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........................................................................................................

20. Have you found any problems with the road users (pedestrians motorists and taxi operators) if yes what are they?
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........................................................................................................
........................................................................................................
........................................................................................................

21. What do you think can be done to improve the traffic conditions of Ben Kiwanuka Street?
........................................................................................................
........................................................................................................

Thank you