Understanding Challenges and Opportunities for Implementing 'Route Allocation' in Lusaka's Bus Transport System

CUTS International

#1613

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Acronyms

BDAZ: Bus Drivers Association of Zambia

BOAZ: Bus Operators Association of Zambia

CAZ: Commuters Association of Zambia

CBD: Central Business District

CRAZ: Consumer Rights Association of Zambia

CREW: Competition Reforms in Key Markets for Enhancing Social and Economic Welfare

CUTS: Consumer Unity & Trust Society

LCC: Lusaka City Council

MLGH: Ministry of Local Government and Housing

RA: Route Allocation

RDA: Road Development Agency

RTSA: Road Traffic and Safety Agency

ZIPAR: Zambia Institute for Policy Analysis and Research

1. Introduction

Public transportation has become an important part of urban life in many African countries and especially for fast growing cities. As cities expand rapidly, concerns about the effectiveness of intra-city movements of people are becoming a source of worry and an important policy issue for many governments on the continent. This is because urban public transportation has important linkages with economic growth, productivity, social change and general well-being of the urban population.

For many African countries public transport experienced a transformation especially following liberalisation of most economies in the 1990s, moving from public run systems to include private sector participation. This transformation did not leave out Zambia. The period after 1991 was characterised by an influx of private passenger vehicles into the country leading to an exponential growth in the number of public transport operators. In general, this improved the availability of public transport within and across cities making it relatively easier for people to connect between places compared to before.

Nonetheless the changes in the transport sector seem to have come with unique problems over the years which seem to threaten the entire public transport system especially in big cities like Lusaka. A research by the Zambia Institute for Policy Analysis and Research (ZIPAR) has concluded that the Public Transport system for Lusaka fails to sufficiently meet the routine travel requirements of the majority (ZIPAR, 2013). That the service is of low quality and does not meet adequate level of service standards.

Additionally, due to declining bus level of service congestion has become an increasing problem bringing the City's road network to the verge of collapse as the public seek alternative means of transport including private vehicles, bicycles and those who merely walk. The Lusaka City Council has also observed that travel times are high as a result with passengers prone to accidents as bus operators adopt unsafe methods of driving in an effort to make more trips in a highly congested system (Luanga, 2008).

In view of the foregoing, this report provides an analysis of the current urban public transport system focusing on intra-city transport in Zambia, Lusaka in particular. The report uses some of the data from the Competition Reforms in Key Markets for Enhancing Social and Economic Welfare (CREW) project to describe the *status quo* of public transport system in the capital city highlighting various issues such as availability, safety and quality of public transport to mention a few. Using in-depth interviews conducted with relevant stakeholders involved in public transportation, the report further highlights

the need for working around some of the impediments in the public transport system brought out in the CREW study through the introduction of route rationalisation.

Route Allocation (RA), which is a systematic way of determining which routes specific bus operators should operate from can potentially decongest public transport routes and improve the quality of travelling from one point to another within the city of Lusaka. The main aim is to establish the reasons for failure to implement RA in Zambia and in the fast growing city of Lusaka. In analysing the current system the report also outlines the potential losers and winners from a change of the *status quo*, hence establishing probable reasons why some sections of the public transport system might or might not support a change of system, particularly the introduction of RA.

The report is an attempt to understand the political economy issues surrounding public transport which inform the interactions of the different players in the system.

2. Stakeholders in the Urban Bus Transport Sector

There are a number of stakeholders working in the urban transport sector in Zambia. This section outlines what some of these institutions are and the role they play in the urban transport system so that it becomes clear as to which of these institutions are responsible for RA:

Bus Drivers Association of Zambia

The Association represents the interests of bus drivers. It also operates as a labor union for drivers. Their role includes negotiating with bus owners on behalf of drivers for salaries and working conditions. This association is also able to make recommendations on which drivers should and should not be employed to drive a given bus and operate on a given route. They act as middle men or some sort of an employment agency for bus drivers.

Bus Operators Association

The Bus Operators Association is made up of individuals who own buses. These include both small and big operators. They represent the interests of bus owners and negotiate on their behalf on various issues including issues of bus licencing.

Consumer Rights Association

These represent the interests of general consumers including commuters. Their role is to ensure bus services meet value of money of consumers.

Commuters Association of Zambia

This is like a consumer interest group. It represents the interests of commuters and speaks on behalf of them on various issues.

Illegal Bus Operators

Because they are illegal they are not represented by anybody but cannot be left out of this list. These are an important interest group as they drive on the same road and routes as those who are licenced. They also affect passenger experiences in various ways.

The Road Traffic and Safety Agency (RTSA)

The Road Traffic and Safety Agency (RTSA), was legislated in 2003 to carry out the transport control and regulatory functions. RTSA is thus responsible for vehicle testing to ensure road worthiness, collection of road licensing fees, issuing of cross border-permits, collection of road user fees, and enforcement/fines (ZIPAR, 2013).

Ministry of Transport and Communication

The Ministry of Transport and Communication, through the Department of Transport (DoT) is mandated to provide timely, relevant and informed Transport Sector policy guidance (Ministry of Transport and Communication, 2014).

The overall objective of the DoT is to develop and ensure efficient coordination and implementation of the National Transport Policy thereby contributing to the Ministry's goal which is to provide policy guidance for all the sector modes of transport. Specifically, the DoT is responsible for the following functions: policy formulation, review, implementation and coordination; resource mobilisation; coordination of national transport corridor spatial development initiatives; research and development; providing technical advice to transport sector parastatals boards of directors; and other related policy level functions for all modes of transport in air, railways, roads and maritime inland waterways. The principle responsibilities for the DoT include some of the following:

- Initiate timely formulation, review and implementation of transport policies and programmes in the country;
- Promote implementation of public private partnership (PPP) programmes and projects being implemented in the transport sector;
- Provide guidelines on the preparation of national, provincial and district transport development plans;
- Oversee the operations and performance of statutory boards and institutions in the transport sector;
- Development, maintenance and management of local aerodromes; and
- Investigate and produce timely reports on incidents and events in the aviation sector

Road Development Agency

The Road Development Agency's functions has been defined by the Public Roads Act No. 12 of 2002 that provided for its establishment (Road Development Agency, 2012). The functions include the care, maintenance and construction of public roads in Zambia, the regulation of maximum weights permissible for transmission on roads and the provision for matters connected with and incidental to the foregoing. Within this functionality it is expected that the transport sector will contribute to economic development through;

- catalysing economic growth of the formal sector;
- alleviation of poverty by assisting communities to become self-sufficient;
- addressing basic needs of the poor; and
- fulfilling a strategic function in terms of integrating communities into a democratic society which acts as one nation, in order to ensure that the country can be defended from internal and external unrest and threat.

Lusaka City Council

Through city councils, the Ministry of Local Government and Housing is responsible for Public Transport management. Their mandate is to run bus stations, to designate routes and to develop the associated Public Transport infrastructure along routes (ZIPAR, 2013).

Zambia Police (Road Traffic Department)

Zambia Police Traffic Officers are responsible for the enforcement of Road Traffic Laws (Act No 11 of 2002 of the Laws of Zambia) (Zambia Police, 2014). They enforce the law by ensuring that those who break it are brought to book. Law breakers are subjected to payment of Admission of Guilty money and an official receipt Accounts Form 72 is issued. Perpetual offenders are taken to subordinate courts. The officers mount snap check points within towns and on highways. All un-roadworthy vehicles are removed from the roads, unlicensed drivers are charged, drunken drivers are charged and taken to court and any other lawbreakers are dealt with according to the specification of the law. Officers on the highways conduct motorised patrols using motor bikes and motor vehicles. They also:

- prevent or minimise road traffic accidents on highways
- clear obstruction on any part of the highway
- ensure that Passenger Service Vehicle drivers abide by regulations
- educate motorists and other members of public on the highway
- warn and charge erring motorists violating the Road Traffic Act
- Set up speed traps and charge motorists exceeding speed limits on the highways
- deal with Road Traffic Accidents on highways and give prompt attention and care to victims of accidents
- remove un-roadworthy motor vehicles on highways

The Police Traffic Officers also conduct road safety awareness programmes. They sensitise members of the public and motorists on radio, television, print media, ceremonies, roads, brochures and public shows. They also go to schools to educate school children on road safety awareness.

3. *Status Quo* of Route Allocation in Zambia

Based on the literature review in the preceding section, public transport management in Zambia is a function of the Ministry of Local Government and Housing. This has also been observed and concluded through a study by the Zambia Institute for Policy Analysis and Research (ZIPAR, 2013). This means that local authorities, i.e. city councils carry the mandate to run bus stations, to designate routes and to develop the associated public transport infrastructure along the routes.

Like in many parts of Africa, a permit is required to operate a commercial bus in Zambia. Some of the pre-conditions for such a permit include a roadworthy vehicle and a qualified driver. International literature shows that the license to operate usually makes provision for the allocation of the vehicle to a specified route, but this does not happen in Zambia. What is practice in Zambia is that operating permits are valid throughout the city jurisdictions of the issuing authority.

Another important thing, which has also been observed in the ZIPAR study, is that operating permits are routinely issued on request, without consideration of the demand-supply balance in the locality or of their impact on other operators. As such some routes are oversubscribed while others are undersubscribed. With the emergence of new residential areas all around Lusaka, public transportation is becoming a nightmare for people who do not live along the well-known or traditional routes.

International literature in Africa has outlined a sufficient list of reasons why route management or rationalisation does not seem to always work. This section attempts to highlight some of these reasons and asks questions as to whether they also apply to the Zambian situation. Indeed these questions also form part of the hypothesis which this study is attempting to test. According to Kumar and Barret (2008) three reasons account for the lack of effective management of public transport systems in most African countries. These are weak institutions, institutional overlap and regulatory vacuum.

Institutional Weakness

A report by the World Bank finds that institutional weakness and confusion are the primary causes of the growing transport problems in African cities (World Bank, 2002). The report observes that at the municipal level, institutional structures for transport are weak and inadequately staffed. The report further observes that “cities that have failed to find acceptable institutional mechanisms have also frequently failed to address the problems of increasing road congestion, environmental deterioration, and the decline of public transport.”

It is not at this stage certain if this is the case in Zambia. However, the lack of an RA system in the presence of so many actors as outlined earlier leaves many questions as to whether the institutions that exist are strong enough to effectively guide the operations of bus operators.

Institutional Overlap

Kumar and Barret (2008) observe a host of issues related to institutional overlap and how these may affect the quality of the public transport system. They observe that first; jurisdiction over urban transportation issues extends over multiple tiers of government, creating the sort of jurisdictional impediments to integration with many functions being carried out at the national level.

In some cases responsibilities are devolved to local government, but lack of financial resources often make it difficult for them to implement programs effectively. The result is often duplication of efforts, poor accountability, lack of coordination, and diffusion of commitment at all levels toward the implementation of transport strategies that serve people's needs. Whether this is the case in Zambia is still unclear at this stage. However, the literature in the earlier sections seems to make it clear in terms of the roles and responsibilities that each institution plays. The mandates also seem to be quite clear in terms of who should do what.

A Regulatory Vacuum

Kumar and Barret further observe that the regulatory framework for urban transport in most African countries typically comprises several elements, one of them being controlling entry into the market by new operators, and allocating routes to market participants. However, most African countries have what Kumar and Barret refer to as 'very light-handed regulatory frameworks'. Syndicates of transport operators seem to enjoy a large degree of autonomy and a wide ambit for self-regulation even where regulations exist. This is mainly because application and enforcement of such regulations are seldom enforced.

Seemingly the public transport system is on auto-pilot with each bus operator doing what they feel is right and going to any destination where RA is concerned. However, it is not clear if there is a regulatory vacuum in the public sector in Zambia. According to the literature reviewed in the earlier section, each institution seem to play a certain role but it is uncertain in terms of the effectiveness of their regulations and especially enforcement.

4. Purpose of the Study

The overall purpose of the study was to deliver a timely and fact based analysis of the political economy around the failure to implement RA policy for intra city buses in Lusaka. The assessment highlights the constraints and or opportunities to the implementation of the RA of buses as well as the presence of any institution framework to this effect.

Objectives

The main objective of this study was to understand the challenges and opportunities for implementing RA in Lusaka city. More specifically the study was to:

a) Describe the Zambia transport sector with respect to RA in terms of policies, regulations and institutional or legal frameworks: This sort to check if there exist any policies and regulations in Lusaka that guide RA.
b) Describe the various institutions in the transport system and how they affect RA.
c) Identify the winners and losers as well as the potential cost and benefit of having in place a RA policy/framework.
d) Providing an analysis that gives a compelling case for development and implementation of a policy for RA.
e) Identifying opportunities for engagement and contribution to promote appreciation of RA at policy level.

5. Methodology

The methodology for this study uses a number of approaches. Other than just collecting data through the traditional qualitative and quantitative approaches, the study also engaged 'process tracing'. Process tracing allows the investigator to create tailored explanations that are fully embedded in the historical and institutional context for a particular problem, in this case, lack of RA. Process tracing will be used to find the multiple stakeholder interactions that allow the existence of the *status quo*. Through this process, the study will explore the rules of the game, constraints and incentives for the lack of RA in Lusaka.

Using the approaches described above five major stakeholders were approached as summarised in Table 3. The process of selecting these stakeholders was guided by CUTs International Lusaka office. Many of these stakeholders have prior engagements with the center in terms of the operations of the public transport system in Lusaka. The same stakeholders were involved in completing the CREW project as key informants and strategic contacts. Thus, the sample of key informants was purposive and this was for the reason of not wanting to miss out all relevant information that these were envisaged to possess. Table 3 also shows that the questions asked to each of the informant interviews were tailored to their role in the public transport system.

Table 1: Key Informants for the RA Study

Institution/Organisation	Information Sought
Commuters Association	• View on current public transport system: what are the bottlenecks? • Whether change is desired and the kind of change • Perceived losses from change of *status quo* • Perceived benefits from change of *status quo*
Bus Drivers Association	• Views on current public transport system • Views on the behaviour of law enforcement agencies • Perceived losses from change of *status quo* • Perceived gains from RA
Bus Operators Association	• Views on current public transport system • Views on the role of regulatory authorities • Incentives from *status quo* • Potential losses from change of *status quo* • Bottlenecks of the current system
Road Traffic and Safety Agency	• Clarification of mandate • Challenges faced in implementing mandate • View of *status quo* • View of RA

Institution/Organisation	Information Sought
	• Perceived losses from change of *status quo* • Perceived gain from RA
Ministry of Transport and Communication	• Core mandate of the Ministry • What role the Ministry plays in RA
Road Development Agency	• Core mandate in *status quo* • Incentives for change of *status quo*
Lusaka City Council	• Bottlenecks in implementing current mandate on bus stations • Losses and benefits from current status • Perceived losses and benefits from RA • Role to play in the change process
Zambia Police (Traffic Department)	• Clarification of mandate in public transport • Challenges faced implementing mandate • Views on how to best counter plying • Perceived losses from change of *status quo* • Perceived gains from RA

Domain analysis was mainly employed to analyse all qualitative data obtained from interviews with key informants, complimented by data from the CREW study. The results of the quantitative analysis are presented first in the following section and provide an overview of the nature of public transport in Lusaka in terms of availability, accessibility, quality and safety.

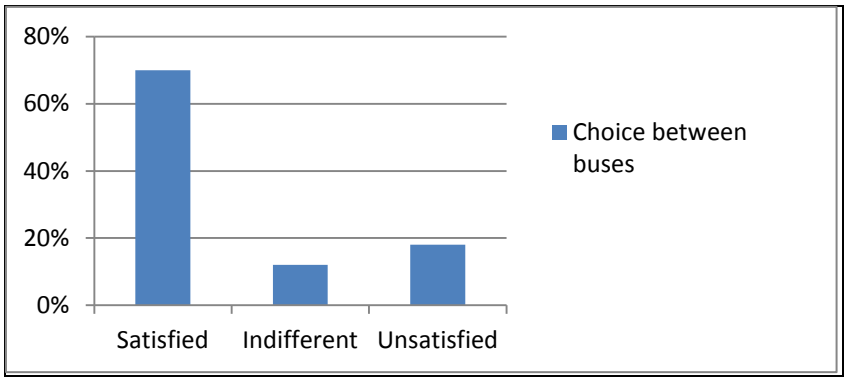
6. Nature of Public Transport System in Lusaka

The public transport system in Lusaka like in many other major cities in Africa has evolved over the years. With the opening up of the economy to the private sector, there are more buses today on the roads of Lusaka than ever before. The rate of increase of the buses also seems to correspond well with the population growth of the city which grew by about 127 percent between 1990 and 2010. While the growth in the number of private sector players is important and represents an improvement in how people move from one place of the city to another, it has raised a lot of concerns which are now attracting interest from policy makers. Data from a commuter survey conducted in 2010 reveal interesting issues about public transport system in Lusaka in terms of availability and accessibility, reliability, quality, and safety.

Availability and Accessibility

Availability and accessibility of public transport is concerned with whether a commuter can easily find a bus where they are or near where they are, when they need it and as conveniently as possible. It is also concerned with the commuter's ability to choose to board a bus of their choice out of many options. The ability to freely and easily choose between buses is an indicator of availability of public transport.

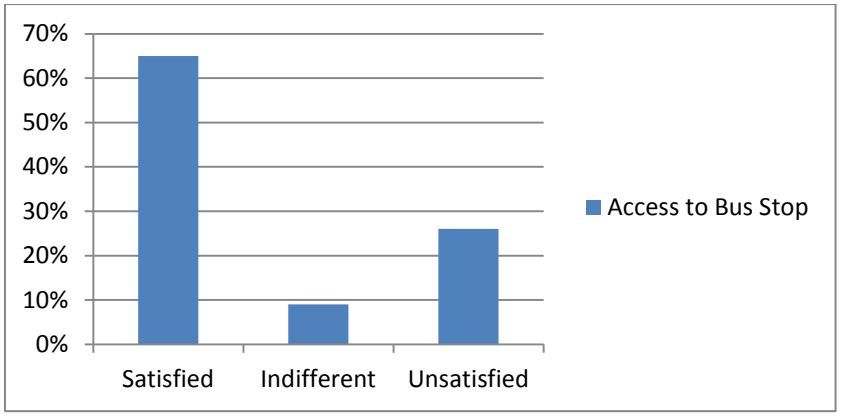
Figure 1: Proportion of Commuters Satisfied with Ability to Choose Between Buses



Source: Author's own construction using CREW data

Commuters were asked to indicate their satisfaction levels in terms of whether there are enough buses in the public transport system to allow them to make their choices. As can be seen from Figure 1, 70 percent indicated that they were satisfied with the number of bus choices. As the commuters were randomly selected from different parts of the city this is an indication that buses are actually available to the extent of letting commuters make choices.

Figure 2: Proportion of Commuters Satisfied with Having Access to a Bus Stop



Source: Author's own construction using CREW data

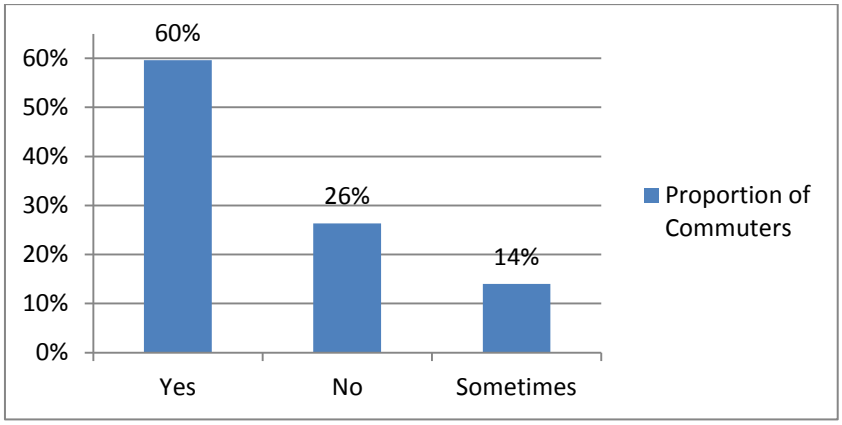
Commuters were also asked to indicate their satisfaction in terms of ease of access to a bus stop. Figure 2 show that 65 percent indicated they were satisfied with accessibility to a bus stop from which they could board a bus. Again this indicates that in general, buses could be easily accessed by majority of commuters which is a sign of availability.

Reliability

Reliability is concerned with whether there exists time table which bus operations follow and if there is adherence to such a timetable. It also involves issues to do with the waiting times at bus stops as well as the length of an average bus journey. It could also include assurance that when a commuter boards a bus they be taken to their desired destination without abruptly being dropped before reaching their destination.

The survey asked commuters to indicate whether or not they could rely on public transport in Lusaka to move them from one place to another to test of public transport is actually reliable. Figure 3 shows that 60 percent of the commuters actually indicated public transport was reliable compared to 26 percent who indicated it was not. This is interesting and is an indicator that the transformation in public transport system and especially the involvement of private players has actually improved reliability of the public transport system, at least from the view of commuters.

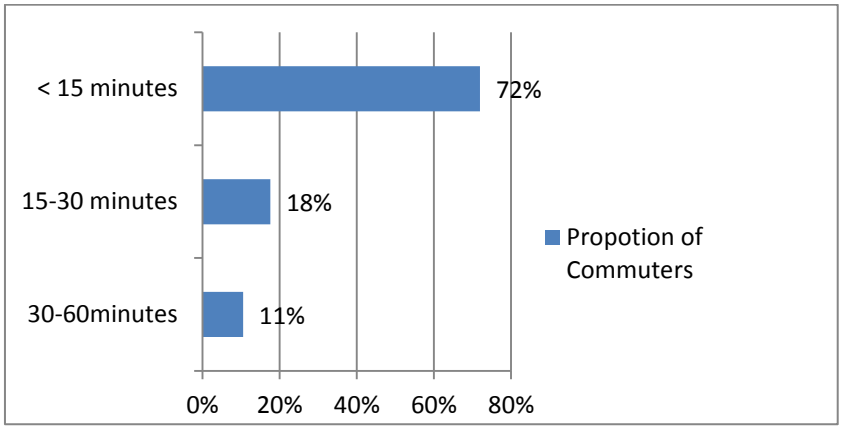
Figure 3: Proportion of Commuters Indicating they could rely on Public Transport



Source: Author's own construction using CREW data

The lengths of waiting time while at the bus stop as well as the length of a bus journey are two other important indicators of reliability. While the former was not captured in the survey, the majority of commuters did not spend a lot of time at the bus stops waiting for a bus.

Figure 4: Time Spent Waiting for a Bus

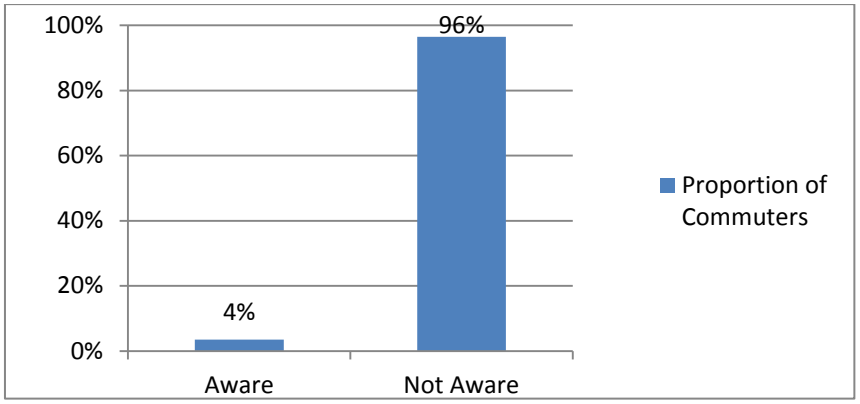


Source: Author's own construction using CREW data

Figure 4 shows that 72 percent of commuters spent less than 15 minutes waiting for a bus compared to 18 percent who spent between 15 and 30 minutes. This again indicates that there is some level of reliability on public transport.

However, there was no time table for bus operations in the city. A bus time table is a good indicator of reliability as it helps passengers plan their movements with ease. Approximately 96 percent of the commuters interviewed expressed ignorance of their being a bus time table. This means that even if one is sure to find a bus, there is no specific time for which a bus can be expected to arrive and later on to leave.

Figure 5: Proportion of Commuters not aware of a Bus Timetable

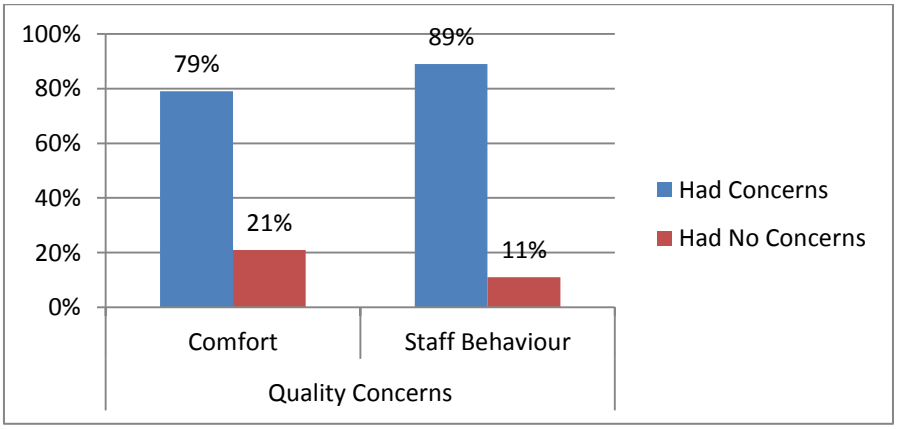


Source: Author's own construction using CREW data

Quality

Quality, which is an important aspect of public transportation, involves commuter's experience during the bus journey. Whether the seats of the bus are comfortable or not and whether the bus is not overloaded to allow for ventilation and breathing space during the journey are some of the indicators of quality of public transport. Quality of public transport may also involve how bus staff treats the passengers.

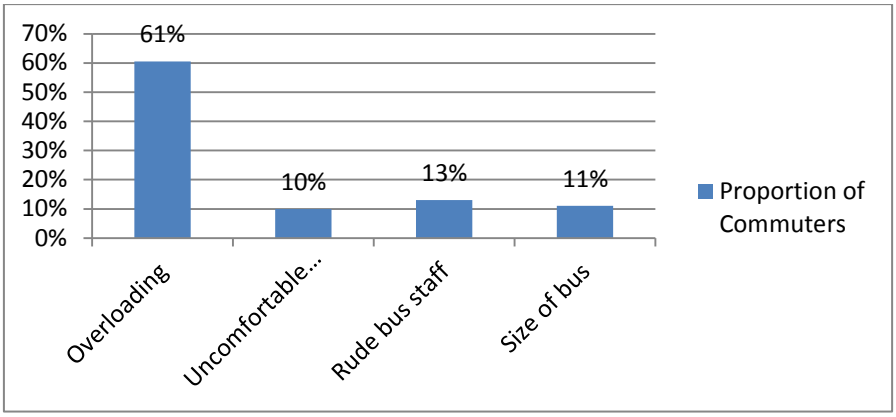
Figure 6: Proportion of Commuters Expressing Concerns with Quality



Source: Author's own construction using CREW data

Figure 6 show that 79 percent and 89 percent of the commuters expressed concerns with comfort of the bus journey and staff behavior respectively. The concerns with comfort are highlighted further in Figure 7. The high share of passengers expressing concerns with comfort on bus journeys and unprofessional conduct of bus staff is a serious indication of poor quality of the bus transport system.

Figure 7: Causes of Discomfort on Buses



Source: Author's own construction using CREW data

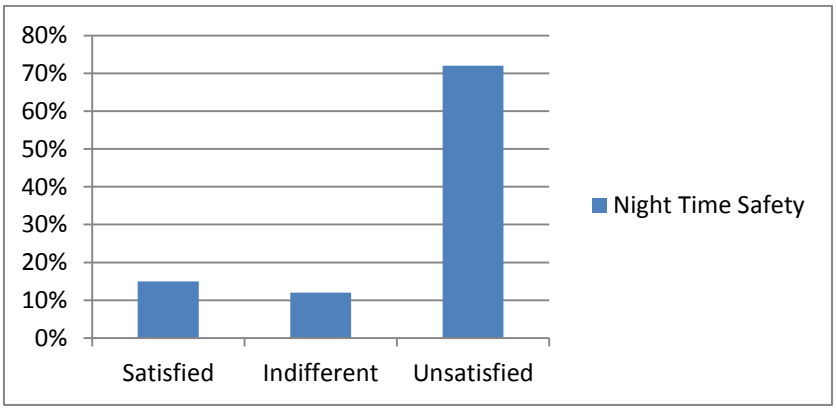
More than 60 percent of commuters indicated that overloading was the major source of discomfort in buses. Other sources were uncomfortable seats (10 percent), rude bus staff (13 percent) and size of bus (11 percent) with smaller buses being the most uncomfortable.

Safety

Safety is probably one of the most important of all passenger needs when using public transport. Passengers need to feel confident that their lives and property are not in danger whenever they board a bus. Safety means that drivers of buses observe traffic rules and regulations which reduce the chances of road traffic accidents. It also means that passengers would not be robbed while on a bus or along the route they chose to use.

Figures 8 and Figure 9 show the proportion of commuters who expressed dissatisfaction with the safety of public transport in Lusaka. It also appears that there are more concerns with night time safety compared to day time safety.

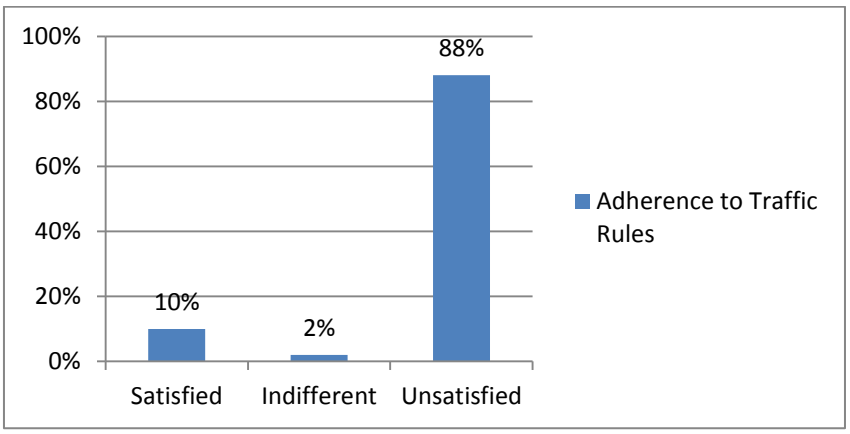
Figure 8: Proportion of Commuters Dissatisfied with Night time Safety on Public Transport



Source: Author's own construction using CREW data

Safety concerns include that most bus drivers tend not to observe traffic rules and regulations. They tend to over-speed and take short cuts that would endanger the lives of passengers. Close to 90 percent of commuters expressed concern with the failure of bus drivers to adhere to traffic rules as shown in Figure 9. This is a serious indication that passengers do not feel safe when they use public transport.

Figure 9: Proportion of Commuters Expressing Dissatisfaction with Bus Driver Behavior



Source: Author's own construction using CREW data

7. Current Public Transport System in Lusaka

The current public transport system in Lusaka has mixed features: it is dynamic, fast paced, unpredictable, chaotic and sometimes dangerous. Based on information from key informants included in the study, this section gives an overview of how the system operates, the different groups that are involved and how they are interconnected to one another. The section also demonstrates the power struggles and the fight over loyalty which the system visibly displays on a day to day basis. The section begins by describing the two types of bus operators found in Lusaka: the legal ones, dubbed *angels* in this study, and the illegal ones, dubbed *demons.* The section then goes on to describe the management of bus stations and stops and the different interest groups surrounding these. It ends with a description of the current RA system.

Network of Bus Routes

The very first thing to highlight is the way the bus route system is fashioned in Lusaka. The main routes run from the compounds to the Central Business District (CBD) and vice versa. This means that all buses leaving compounds or residential areas go straight in to town without branching to any other areas. A number of key informants observed that this is faulty. It would be better to have routes that pass through important destinations and not just going straight into town.

For instance, there should be a route from Chelston through Kabulonga to Chilenje to avoid everyone having to go through the CBD to get to where they are going. As it is, the current system disadvantages and inconveniences commuters who always have to pass through central town moving from one part of town to another and in the process having to get on two or more buses incurring high costs and lengthening travel times.

Parallel Operators: Angels and Demons

There are two sets of bus operators in the public transport system of Lusaka. There are the legal ones, who can be classified here as 'angels'. There are also illegal ones, who can be classified as 'demons'. The angels are those who have a valid bus operator license referred to as the Public Service License from RTSA, and are registered and attached to a particular bus station. These load and offload their buses from well-defined stations. As such they pay a loading fee to the council or any other authority found in the station as will be discussed later. The angels are easy to monitor and police as they are registered with a specific bus station.

Additionally, these fulfill the mandatory requirement of being registered for tax with ZRA, as it is a prerequisite for getting the RTSA license. According to RTSA records, at the recent public sitting for public service licenses, a total of 1,220 operators had

licenses approved while a further 30 had approvals after appeals, bringing the total number of legal operators in public transport to 1,250.

The demons on the other hand are the illegal or unregistered operators who comprise mostly those operators who do not renew their licenses, either because they do not satisfy all requirements or simply because they want to make a saving on the license fees. There is also the element of operators who get short term licenses of three months durations who upon expiring may choose to maximise on gains by not paying for renewal. Since they operate without licenses, often they avoid formal bus stations and load and offload their buses anywhere. Because the demons operate seemingly outside the normal system, they escape council fees, especially those paid within the station.

As the demons are also not registered with any station, they are usually difficult to police as they cannot be traced. And since there is no formal RA mechanism the demons can move from one side of town to another contributing to the chaos that characterises the transport system in the city. The view of key informants is that such operators have connections with the political system within the transport sector. These are likely cadres who are highly connected and can manipulate authorities, or have formed cartels with some authorities such that when caught they are let off easily with some under the table exchange of rents.

As regards the number of illegal operators, it is difficult to trace them because they are illegal and as such no official data base exists.[1] While unregistered fleet numbers could go up to 5000, only a few of these may actually be in business and on the road. Others may not be operating for various reasons including that their buses have broken down or simply gone out of businesses for lack of profit. This is common especially for individual bus operators who may have only one or two buses.

Parallel Authorities in Public Transport: The City Council and Political Groups

The management of bus stations and stops is a display of different powers at work. There are currently two sets of authorities that exist and seem to control the Lusaka public transport system. These are the Lusaka city council and political cadres.

i. Lusaka City Council: The Lusaka city council is by law charged with identifying, establishing and managing bus stops and stations. Based on the information provided by the area Councilor who spoke on behalf of Lusaka City Council, the process of establishing a bus station starts with the Ward Development

[1] An attempt has been made through this study to estimate how many illegal bus operators there are by subtracting the number of licensed (legal) operators (1250) from the total fleet numbers approximated at 7000 or more with an assumption that the difference constitutes the illegal operators. However, this is misleading as fleet numbers displayed on buses does not necessary mean all the buses are actually operating.

Committee identifying a place or point it feels need a bus stop or station. Then the committee writes to the council who submits the request to the town clerk. The town clerk sends the request to the committee stage of the Council which assesses the identified need before submitting the request to the full Council. Once the full council makes a final decision, the request becomes law through the Ministry of Transport and Communication and a bus stop or station is established. Thereafter the job of the council is to manage the bus stations. The Council charges a fee of ZMW1000 (US$0.1) for every trip for buses operating in Council bus stations. On a monthly basis the Council makes approximately ZMW 120,000,000 (US$10,909).

ii. Political Cadres: The key informants of this study (Lusaka City Council, Bus Operators Association, Bus Operators Associations and Individual Operators) all identified a parallel authority or system that exist in the public transport system they referred to as *Political Cadres.* According to the key informants this parallel system is organised in such a way that it is present at every bus stop and bus station. In terms of composition, this group appears to belong to or be affiliated with a political party, usually the ruling party in many instances as can be told by their flashing of political party symbols and regalia.

At bus stations and bus stops the representatives of this group also collects fees from bus operators the same way the Council collects fees. The only difference is that whereas money collected by the Council is considered part of government revenue, it is unknown as to where the money collected by these political groups goes. Additionally, whereas the Council issues receipts for every payment a bus operator makes, this authority issues no receipts, a sure recipe for corruption. It is also unclear who is in charge of this system and from whom the power to establish an illegal system such as this one come from.

The truth is that even police are aware, but they have not been able to get rid of it. If an operator refuses to comply with this parallel authority they risk being banned from a given bus station or a route for good. This authority is quite powerful and can stop any bus operator from using a particular route even if such a driver is licensed. Unfortunately, the scope of this study could not establish the channels of authority for this group and what makes it impossible for police to stop the scourge.

8. Current Route Allocation System

While no specific RA system exists in the Lusaka public transport system, there are still avenues through which RA happens as revealed by key informants interviewed in this study. This section classifies the ways of allocating routes into Operator's choice RA and default RA.

Operator Choice RA

According to the Road Traffic Act No. 11 of 2002 every bus operator is required to obtain a road service license as pre-requisite to operate on Lusaka roads. Key informants revealed that at the time of application, operators are asked to give particulars of the road or area they propose to serve during their course of operations. This means that rather than the authorities allocating operators to particular routes in the city, operators are actually given the privilege to choose where they want to operate from.

Given that operators want to go everywhere they can to maximise their routes and make more money, they all tend to indicate that they would operate '*Throughout Lusaka*'. This has become a default inscription found on nearly every bus operating in the city. Thus, it now remains the operators' choice to choose their route of convenience which they can change any time since they are not restricted in any way. This perhaps explains the haphazard nature and random trips of bus services around the city.

Default RA

Key informants also identified a second way of current RA which can be termed as 'default' and is determined by bus size and driver social networks:

a. Bus Size Determined RA: this form of default RA depends on the size of the bus the operator has. By default, big and small buses find themselves attracted to certain routes while systematically rejected on others. Small buses (14-seater) tend to operate on short, high demand and high frequency routes with low income commuters such as Kanyama, Matero and Chawama to Town and back. Big buses (26-seater) tend to operate on long, low demand and low frequency routes such as Chelstone, Bauleni, Chilanga that have commuters with better incomes and as such are selective on size and quality of buses they use. This means that even if the system deliberately allocated an operator a specific route to operate on, the size of their bus is ultimately going to determine on which route they would end up operating.

The logic behind this is that small buses fill up quickly and hence more convenient for fast and shorter routes. At the same time, the reality is that the low demand roots are from low density residential areas with commuters who have reservations using smaller buses while the high demand roots often are from residential areas with people having low incomes and thus don't mind the size of the bus. Operators generate their revenue here based on turnover, or by making many short trips in a day. This is also because the shorter routes charge lower fares and the more frequent the trips the more profitable. On the other hand big buses take long to fill up hence more convenient for longer routes. They also charge higher fares which mean that even if they make fewer trips per day, the returns from each trip are high enough to compensate for the time lost in filling one bus and in moving a long distance.

b. Social Networks Based RA: the second default RA system is based on the social networks of the bus driver. When an operator obtains a license to operate a bus service, they have to employ a driver. Where the bus will be operating depends on where the driver is coming from. Usually drivers tend to operate on routes where they are known by fellow drivers and the parallel 'authorities' mentioned earlier. A driver who chooses to operate on a random route may face difficulties even when it comes to loading passengers on certain bus stops. He or she is likely to face resistance not only from fellow drivers but from call boys who are found at bus stops waiting to get commission from any bus that loads. This limitation of where a driver can or cannot go by the social networks created by illegal parallel authorities contributes to the inefficiency of the sector as commuters are denied choice by the limitations. At the same time, the quality of service on some roots suffers as drivers with good condition buses don't get to service them.

9. Losers and Winners of the *Status Quo*

The current routing system has either a loose or win scenario for the three major stakeholders in the sector namely regulatory authorities, operators and commuters.

Regulatory Authorities

The various regulatory authorities in the sector can be said to be both loosing and gaining at the same time.

i. Lusaka City Council: The City Council for starters can be said to be losing on the levies they could have been collecting from the operators taking advantage of the existing disorder and shun bus station. However, the council is still getting some benefit in that they get their revenue from stations as long as operators do use them. It is estimated that the council can make up to ZMW120,000,000 per month through station levy.

ii. RTSA and Police: These are by and large losing out in the current chaos as it is not only difficult to regulate but a good number operate without regulation un noticed. The current system also promotes a lot of demon operators and the lack of order tends to promote under hand dealings where operators may even strike deals with officials in these institutions to run away from legal provisions, even denying the institutions of an income that could be due if legal procedure is followed such as in cases of fines that may be forgone due to officers getting bribes from operators.

Bus Operators

In terms of winning or losing in the current *status quo*, these need be divided into two groups of small and large operators.

i. Small Operators; It can be said that small operators would be happier in the current status as they then just mix in the confusion and the limitations of their operation scales are not seen. In the current confusion, there is no difference between large and small operators as buses operate like individual operators and each has it time, in the case of bus stations where there is the first come first load case. In this situation, the small operators can simply blend in and make their share. These operators are also happy with the current status in that it allows them to dominate certain roots using the social network that prohibits unknown drivers from venturing in their territories while at the same time allowing them freedom to switch from root to root either through drivers creating networks or by switching drivers.

On the other hand, they are equally losing in the sense their buses are abused just as much in the rush and hustling to get ahead. Drivers have to do maneuvers that are destructive to buses at times, and even forgo servicing in the interest of getting ahead of others.

ii. Large Operators; It can be said that under the current status, large operators are losers as they have to work in the existing chaos which does not allow them take advantage of the scale of operation and can hardly take advantage of the chaos as the size of the buses does not allow for swift maneuvers to avoid authorities like small buses. Since each bus operates like an individual operator, large operators with more buses suffer huge time losses and a number of their buses spend time waiting for a chance to load like everyone else. The large operators also lose out in the same way small operators lose on the maintenance costs that are pushed high by careless operation and negligence due to hustling to get ahead.

Commuters

This can be said to be the category of stakeholders that are most disadvantaged under the *status quo*. They are losing in terms of the time they have to wait at stations for buses to be full as well as walking to designated bus stations that are often far from their places or destinations, which delays their movement and thus their programmes get dictated by the buses and thus commuters suffer on reliability of the transport system.

At the same time, they lose on quality service as they are denied the opportunity to choose which bus to use since they can only jump on which ever they find loading at that particular time. In addition, safety is highly compromised in the chaos that is the system and commuters are sometimes subjected to unsafe seating as well as driving.

On the other hand the commuters are losing out financially due to the connections they have to make moving from one point to another. Given most buses are operating roots from town to some destination out of town, radially such as town-Chelston, town-Matero, town-Chilenje etc, it gets very costly for commuters who for instance are moving from Kabulonga to Chelston as they have to get on a bus from Kabulonga to town and pay a ZMW6.50, and then from town to Chelston and pay another ZMW6 making a total of ZMW12.50 when one fair could have been enough for a direct route from Kabulonga to Chelston. Additionally, commuters face distorted fares along the way especially when they have to get off a bus at a destination that is not the bus' final station.

Other Key Players

Political Cadres who seem to be controlling the stations in the city cannot be overlooked. While the amount of revenue cadres collect from bus operators is unknown, they are a beneficiary of the current system. These benefit by collecting money from bus stops through their representatives all around the city. Historically this parallel system is said to only have come into existence after the privatisation of the public transport system. Key informants pointed out that the political and economic change that followed democratisation of the country brought about interesting dynamics such as the way bus stations and markets were to be run for the many years to come. As bus stations and markets were meeting centers for people from all walks of life within and outside the city, they became strategic points of information dissemination and attracted a lot of political interest. Political groups began to form in these places and due to the worsening of economic conditions that resulted in high unemployment, these groups seemed to offer a livelihood for those who identified with them through various ways.

10. Perceived Benefits and Costs of Route Allocation in Zambia

The various stakeholders (Table 2) in the public transport system in Lusaka view the introduction of RA as something beneficial that can improve the quality of the transport system in Lusaka. The following are some of the perceived benefits that can come along with a RA system:

i. *Effective Policing*: the first important thing RA would do is to put operators on specific routes. This will enable the police and traffic officers to easily control the situation and as operators will no longer be able to escape punishment. Doing so will mean stopping operating completely. This will in the end restore order in the system.
ii. *Reduced Travel Times*: commuters would benefit from shorter travel times as bus operators would go to specific destinations without diverting.
iii. *Reduced Burden on Drivers*: currently bus drivers are required to cash a certain amount of money per specified time to the bus owner. This is regardless of the number of trips or the market situation. With RA, each route will have an estimated income that an operator can expect without putting too much demand on the driver.
iv. *Improved Reliability*: stakeholders also felt RA will improve the reliability of bus transport in Lusaka. Since this may mean servicing routes that have been abandoned before, the reliability of transport system would greatly improve.

11. Losers and Winners from Route Allocation

Establishing the winners and losers from RA is one of the most important issues under this study. This is because it will give an indication of which stakeholders to work with if RA is to be implemented. The information is also helpful in managing the risks that may come with implementing RA. The following are the perceived losers from RA. The section also highlights what exactly these groups of people will lose:

i. Political Cadres: the current system is a source of revenue and jobs for many political cadres. Given high unemployment rates in Zambia people have to look for means of survival either through formal jobs or informal ones. This aspect of the public transport system is providing an economic activity to those who under normal circumstances cannot find jobs. This means that to political cadres the current system pays off, especially where they can even set up in none designated stations and start collecting money from operators. Clearly this group would therefore do anything to keep things as they are as rationalising may mean more orderly operations in the sector and no chances of none designated stations where they make their money. In this vein, it is the researcher's opinion that since the political cadres has a backing from the ruling party, though not expressly, they would do anything to frustrate changing the *status quo*.

ii. Parallel Bus Operators (demons): the illegal bus operators also make a livelihood from their illegal activities. This means that they would rather keep the system as it is. Since RA would force them to become legal, they may lose revenue in terms of the money they make by operating a parallel system that does not pay fees to anyone including the council. This means that a change of system may spark a response whose magnitude and influence cannot be determined right now given the demons wield considerable powers owing to their links to ruling politicians who see them as a source of political support and an easy way to appease supporters.

iii. Bus Operators (angels): bus operators also seem to like the current system as it is. They would lose from RA in the sense that they would be stopped from going anywhere they want. Unlike the current system the new system would require that bus drivers stay in one place and operate one route for as long as they remain in business. As this may constrain the number of trips and hence the revenue, they may oppose the new system depending on the magnitude of the loss of privileges and revenue. Nonetheless, they would benefit from the change of system if the change is complete such that parallel structures, demons and the

chaos are eliminated as this would bring sanity and allow for quality service provision in a more efficient manner.

iv. The Police: while no clear evidence exist it could be true that the police benefit from the *status quo*. The parallel bus operators and the illegal political party structure that exists do not exist without the knowledge of the police. Otherwise illegal structures would not be tolerated. There is therefore a high likelihood that police or certain officials are part of the system and are benefiting from the *status quo* in one way or another. Ending the *status quo* may likely be opposed by the police themselves.

The following are the perceived winners from RA mechanism:

i. The City Council: the city council stands to benefit massively to a change in the *status quo*. If RA is to be introduced, it means eliminating all illegal parallel operations and bringing every operator under the responsibility of the council. This will increase the revenue base for the council which can result in increased revenues. The council is therefore likely to support this kind of change as it holds the prospect of bringing in more revenue.
ii. The Police: with a new RA system police is likely to spend less time chasing law breakers. Since the routes per operator will be pre-defined and permanent it would be difficult for bus drivers to run away from the law. Police will be able to punish offenders and raise more revenue from fines.
iii. Commuters: The benefits to commuters from RA have been highlighted earlier. They include shorter travel times, reliability of transport, predictable transportation and the like.
iv. Bus Drivers: the people who drive buses do not usually own them. These people are required to take cash money to bus owners at every specified period of time. Sometimes bus owners tend to have unrealistic expectations in terms of how much to charge. Introducing RA will mean that it will be possible to know the average number of trips per day and the expected revenue per trip. This will make it easier for divers to work.

12. How Can Route Allocation be Implemented?

In conclusion there is a general agreement among stakeholders that RA is a good thing for many of the benefits outlined earlier. In this section the process of how to undertake RA is recommended. Since the political risks have been identified this section highlights some of the issues to consider taking care of the risks that potentially exist in trying to disrupt the *status quo:*

i. Coordination: There seems to be a serious lack of coordination among institutions involved in the public transport system in Lusaka thus creating problems rather than solutions. The regulators, (RTSA and Zambia Police) and the mandated designator of stops and stations (Lusaka City Council) and the builders of roads, (Roads Development Agency and National Road Fund) do not seem to talk to each other going by the number of viable places in the city requiring connection but are not connected to the main road system. In the absence of these roads, RA would be difficult because operators will only service areas with roads, even regulators will only allocate routes that exists, which may not be rational.

   Furthermore there is need to coordinate with the other stakeholders. The regulators should be ready to engage with different associations and interest groups in the public transport system to ensure RA is well planned and understood before thinking of implementation.

   There is also need to establish that there is sufficient buy in from stakeholders in to the new idea before it can be implemented.

ii. Use of Existing Structures: it is clear from the earlier analysis that though there is no official RA in Zambia, there is a system which is allocating operators to specific routes. In an effort to implement RA therefore, it is important to study the current system and consider using it or part of it. In this way it would be easy to implement as some of the players will already be familiar with the system. It will also be important to consider what becomes of the other interest groups.

   What can be done to ensure the political cadres are given incentives to support the system? What can be done to ensure unlicensed and illegal operators are incorporated in the system so they still make their incomes? These two very pertinent questions beg for serious and sincere engagement by all stakeholders prior to rolling off the RA. It will be important for stakeholders to engage in an open book discussion of where each of these interest groups, who may not be

legal stakeholder but are stakeholders all the same, stand. The answers to such pertinent issues can only be provided by an honest stakeholder engagement without preset stance or positions.

iii. Political Will/Authority: implementing a RA is very political given the political nature surrounding the operations of markets and bus stations in Zambia. Clearly, markets and bus stations are hubs for political power and ideas. These are channels that very powerful people use to exert their influence on community and the moving masses. Therefore, RA needs strong political buy in from the top most of government. Support should be sought from the highest authorities of government to ensure efforts are not frustrated by selfish political interests. At the same time, there is need to use public buy in to sway the politicians into supporting the implementation.

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