

Contemporary transportation systems in South Africa: a challenging consequence to min-ibus taxi industry

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Abstract

This paper investigates the implementation of Integrated Rapid Public Transportation Networks and Bus Rapid Transit system as a contemporary transport system with the intend to contribute to knowledge in public transportation in South Africa. The South African government developed Public Transport Strategy which aimed at accelerating the improvement in the public transport sector by establishing Integrated Rapid Public Transportation Networks (IRPTNs). The strategy intended to introduce priority rail corridors and a Bus Rapid Transit (BRT) system such as Rea Vaya and Gautrain. However, the introduction of such transportation strategies threatens the existence of the minibus taxi business as they aimed at providing an efficient, reliable and frequent public transport services at affordable fares. This paper is conceptual in nature and it uses relevant literature analysis to argue that the country should integrate the minibus taxi into same strategy as they are regarded as the country's most usual mode of public transportation. The paper concludes that whereas the IRPTN contributes immensely towards developing the public transport industry, on the other hand it is threatening the existing transportation of mini-bus taxi which has established itself as a critical component of the usual public transport system in South Africa.

Introduction

Globally transportation contributes to the socio-economic development and is also regarded as an indicator of economic growth. South Africa is considered among the developing nations in desperate need of feasible and suitable public transportation networks which can boast its economic growth. Thus, the country is on a mission to improve public transportation with the intention of transforming public transportation sector through the provision of high quality and affordable transport service in the country (Mwanyepedza, 2017). It is visualised that this will help in saving the travel time of the commuters all over the country. Therefore it can be argued that different strategies for providing affordable, safe and reliable public transportation systems become imperative. Since 1994, life in South Africa has change for the better and this has brought an unfolded change in the country. The debate over public transportation in South Africa has also brought an unfold change, and is still continuing, with many critics on policies and strategies the government is applying in ensuring effective, affordable and safe passenger transportation. Many debates on public transportation emphasises on different problems or challenges such as quality service of public transportation, poor transportation planning and different strategies that the government has introduced in providing an affordable, safe and reliable public transportation systems in the country. Despite all this major challenge the country is faced with the problem of providing an affordable, safe and accessible public transportation to its millions of citizens (Walters, 2013:34). Hence the country is determined to be moving towards an efficient commuter public transport infrastructure. However there are numerous problems associated with the implementation of the existing strategies such as lack of funding or subsidy to other modes of transport system such as mini-bus taxis.

Walters & Heyns (2012:35) pointed out that bus transport contracting is one of the problems associated with public transportation in South Africa. According to the findings of the study they conducted, it is revealed that there are major issues such as lack of funding and lack of capacity management to implement policy contribution to public transportation in the country. On the other hand Kane (2006) emphasised that poverty is another problem associated with transportation. That is transport cost measures the commuter's household expenditure on public transport. It is also argued that there are public transport strategies that still raise critical concerns in the country. For instance the introduction of Bus Rapid Transit (BRT) systems has been alleged as an approach that compromises the taxi industry. However it is generally accepted that the main political and economic challenges in South Africa is to integrate the existing offering especially the taxi industry into the BRT. Hence the critical argument in this paper is that despite all other problems associated with public transport, the transformation of public transport in the country particularly the Integrated Rapid Public Transportation Networks Systems (IRPTNs) is compromising the taxi industry in the sense that BRT is safe, reliable and affordable while taxis are doubted to absolutely possessing such characters. This paper provides an overview of public transport and transportation policy in South Africa, the transformation of Public Transportation Networks Systems in the country and its negative consequent on the taxi industry.

Public Transport in South Africa

Public transport infrastructure and its related services is a catalyst for economic growth, direct and indirect job creation in South Africa (Sebola & Baloyi, 2012; Sebola, 2014). Therefore the provision of safe, accessible, affordable and reliable transportation of goods and people is critical to the development of the country. While other countries such as China, USA, UK and Finland have appreciated their rapid public transport as a means to reduce traffic congestion, South Africa is still struggling to provide its citizens with a safe and quality public transportation. Regardless of the question of safety and quality, the country does need public transportation that is safe and accessible at all the time of need. Ugo (2013:1; Mhlanga, 2017; Mwanyepedza, 2017) acknowledged that the society relies on transport infrastructure systems that are safe and the role it plays in improving the lives of the citizens, despite all the dangers associated with the minibus taxi in the country such as continuous accidents and violence. Moodley, Chetty, Reddy & Simmer (2011) considered the most key objectives of public transport as being; *Firstly*, to provide an adequately frequent service for passenger in terms of government policy. *Secondly* to ensure a more reliable service through the operation of monitored contract and *lastly* to eliminate the uncertainty inherent in non-contracted services and to reduce duplication and inefficiencies.

The country have different modes of transportation such as road, freight and ports which are regarded as being the most common mode in the country to transport both goods and the people. All these modes of transportation are essential for people and goods transportation. The taxi industry is among other modes a major and popular mode of transportation in the country (Govender & Allopi, 2006:100; STATS SA, 2015; Mhlanga, 2017; Mwanyepedza, 2017). Despite all violence or taxi wars, overloading, over speeding, un-roadworthy associated with taxis, they are still considered popular and they are dominant in the South African public transport sector (Fobosi, 2013). However the issue of safety and affordability of such transportation is still debated nationally, but Sebola (2014) argues that South African public considers it a convenient and faster transport mode than thinking about its costs.

The South African public transport system consists of rail and bus services which are subsidised by government and the minibus-taxi services which are unsubsidised. All this transportation systems are arguably being regarded as unsafe, expensive, ineffective, inefficient and inaccessible to the commuters and they transport people to and from work, schools and they connect people to different districts and cities. The minibus-taxi industry approximately commutes almost 65% of South African commuters daily (Ahmed 2004 & Sebola & Baloyi, 2012, Sebola 2014), thus

making it the most preferred mode of transport in the country. Below is a weekly usage of public transport commuters in the country.

Table 1: Weekly usage of public transportation in South Africa as of 2007

Mode used	% of people that used mode weekly			
	Train	Bus	Minibus-taxi	Car
Number of users	1083 000	2 566 000	10 080 000	7 088 000

Source: Pillay and Seedat (2007: 398)

As of 2007 almost half of the population of South Africa relied mostly on public transport with the minibus-taxis being the main dominant mode used weekly. With regard to the current 2016/2017, it is known that the number of minibus-taxis commuter in the country has largely increased and therefore the taxi industry are still regarded the most used mode of transport which commute people from and to different locations in the country (National. Chakwizira, Bikam, Dayomi & Adeyejo (2011:70) also add that minibus-taxis are regarded as the most dominant mode of public transport in the greater Johannesburg City for all public transport commuters. This is also evidenced by the National Household Travel Survey (NHTS) (2013), which indicates that nationally, 44.70% households are dissatisfied with the level of crowding in buses and as a result they prefer taxis than buses. Consequently one of the remaining effects over the country is that many minibus-taxis are regarded as being accessible all the time but most of them are un-roadworthy and they results in frequent daily accidents. However the government has initiated on Taxi Recapitalisation which was supposed to bring hope to the taxi commuters (Baloyi, 2013: 342), to date there are still many minibus-taxis which are un-roadworthy, hence Pillay (2001) acknowledged that most South African citizens are still bound by the conventional public transportation systems which put their lives at risk and emphasised that South Africa need transport professionals who can provide an efficient and effective public transport in accordance with policies.

Table 2: Public Transportation usage in South Africa as of 2015

Mode used	Train	Bus	Minibus-taxi
Number of users	2 000 000	9 000 000	15 000 000

Source: National Land Transport Strategic Framework (2015)

Table 2 above shows an increasing demand of public transportation in the South Africa. It is clearly demonstrated in both table 1 and table 2 that the demand for minibus taxis increased from 10 080 000 in 2007 to 15 000 000 in 2015. This give evidence to the fact that the minibus taxis are still the most dominant mode of public transportation in the country. Despite the fact that most commuters are concerned about the costs of the taxis, reckless driving, killings and violence in the industry as some of their most important transport related problems (NHTS, 2013), the increasing demand and usage of minibus taxis changes frequently. It can be argued that most commuters prefer to travel by minibus taxi because they are accessible and they don't have specific timeframes to and from different destinations as compared to buses. The industry has been commonly identified and associated with reckless driving, killings, violence and illegal operations (Mhlanga, 2017). Despite poor performance in the industry, the minibus taxis have been consistently high in demand throughout and shows no sign of slowing business. The government need to carefully consider minibus taxi industry problems in the country and regulate the industry to eliminate their reckless driving, killings, violence and illegal operations. It should be noted that the industry does not only transport millions of commuters daily, but also have an important role in the broader South African economy. To date the government is still facing the challenges of subsidising the industry to fit the formal public transportation mode in South Africa. That is despite the acknowledgement of a major contribution to public transportation they make to the country.

Transportation policy in South Africa

Currently in South Africa the right to movement is a fundamental right and the choice of movement is also a fundamental right. Therefore the right of citizens to reliable and safe public transport cannot be ignored and compromised. In essence the commuter should be regarded as the most important person and mutual respect is of paramount importance. It is the government's mandate to ensure safe, efficient and affordable public transport. Hence the following transport policies in South Africa were established to promote public transport fundamental rights. The White Paper on National Transport Policy of 1996, Moving South Africa, National Land Transport Transition Act and the Public Transport Strategy, 2007-2020.

a) White Paper on National Transport Policy of 1996

The White Paper on National Transport Policy clearly sets out transport policy in South Africa and its main objective is to ensure that the legislation governing transport in the country is implemented. Its broad and main goal is to ensure a smooth and efficient interaction that allows the society and the economy to assume their preferred form (Luke & Heyns; 2013). In essence transport infrastructure in South should not be a major problem since this policy emphasis on the interaction of both the society and the economy to run smoothly. All South Africa's different modes of transport in the country should be governed by this policy as it emphasis on the efficient use of the public resource provision of public passenger transport.

b) Moving South Africa, 1998

Moving South Africa (MSA) was also introduced by the National Department of Transport in 1998 as a project that aimed at developing a long term transport strategy for South Africa. This strategy aimed at providing an effective and sustainable urban transport system. However it is argued that the strategy does not clearly sets out objectives of the provision of effective and sustainable transport in rural areas. Therefore, it can be argued that this strategy is being biased on the development or transformation of public transport in rural areas at it focuses more on urban areas.

c) Public Transport Strategy, 2007-2020

This strategy aims at accelerating the improvement in public transport by establishing integrated rapid public transport networks (IRPTNs), which will introduce priority rail corridors and bus rapid transit (BRT) systems in districts and cities. The essential feature of this strategy is the phased extension of mode-based vehicles recapitalisation into IRPTNs. These networks include the integrated package of rapid rail, BRT, taxi and metered taxi priority networks particularly in major cities. This strategy should improve public transport services to almost half of South African population. But to date the South African public transport is still faced with major challenges such as continuous accidents and violence.

d) National Land Transition Transportation Act of 2009

Another public transportation policy in South Africa is the National Land Transportation Act (NLTTA). The policy gives transition of National Land Transport Act of 2002 and its main objective is to promote public transport over private transport. This simplify that, the public sector is tasked with provision of safe, affordable, reliable, and accessible public transportation with the backing from the private sector.

e) Taxi Recapitalisation Programme

The White Paper on National Transport Policy (1996) and Moving South Africa strategy (1998) refer to the Taxi Recapitalisation Programme as an intervention by government to bring about safe, effective, reliable, affordable and accessible taxi operation by introducing new taxi vehicles which are specifically designed to undertake public transport services in the taxi industry. Since the establishment of this policy old and unsafe taxis were to be scrapped and be out of the national roads by the end of 2010. To date such objective has not been achieved (Sebola, 2014). This programme is not considered as a quick solution to end taxi problem but as a means to introduce new and comfortable taxi vehicles that are safe in the transport industry.

The transformation of Public Transportation Networks Systems in the country

Globally public transformation has been commonly discussed widely by scholars and policy makers and still raises critical concerns such as safety, reliability and affordability. Public transportation contributes amusingly on the socio-economic aspect of the country. Although it is not the same as with respect to the change it made under improving both social and economic environment. Mtantato (2012: 202) add that the demand for transport in South Africa is driven by the need for people to reach locations where activities such as the workplace, schools, clinics and the market takes place. South Africa's notion of public transportation transformation is based on the belief that an effective, efficient, safe and affordable and reliable transport is of vital important to improve the quality of public transportation in the country. Hence the country has introduced transport networks such as BRT and IRPTNs. The introduction of the two is highly aimed at providing an efficient, reliable and frequent public transport services at an affordable fares. However the transformation of the country's public transport should not exclude the taxi industry as they are also commuters of the South African citizens on daily basis. Van Zyl & Labuschagne (2008) also noted that the minibus taxi industry cannot be ignored in the IRPTNs as they commute 65% of all public transport passengers in the country.

Consequently the minibus-taxi has established itself as a critical component of public transport system in South Africa. The study conducted by Ahmed (2004) established that as the number of minibuses grew the competition for passenger and operators also increases. Thus far the transformation of public transportation in the country does pose a threat to the taxi industry. Commuters in this regard will choose to go for a safer bus than an un-roadworthy minibus-taxi which threatens their lives. Hence the notion of transforming public transport system in the country is based on the belief that a fundamental shift in approach is required in order to deliver quality public transport services within the country and this can only be archived through a full engagement with current public transport service providers (Ribbonaar & Van den Berg, 2008: 491). Therefore the critical question which remains is that "*should South Africa continue to introduce different transport approaches or should it focus on the existing transport systems?*" There are different perceptions which can be argued on this transformation, one can view this as being beneficial to the economy through subsidy on the other hand one can argue on the negative threats and risks such as costs and maintenance of this approach. For instance the study conducted by Ribbonaar & Van den Berg (2008:494), revealed that there are cost associated with public transformation and emphasised on the objective of the transformation process as being natural and as a way to improve skill development of the key role players in the industry.

On the other hand, it is considered that public transport transformation has some missing dimensions which could be very costly to the government. Chakwizira, Bikam, Dayomi & Adeyejo (2011:56) emphasised that BRT terminals are located distances far away from the marginal communities. They argue that those communities still need to exchange a minimum of two transport modes in order to access the Gautrain & Rea Vaya BRT routes. Initially people who reside in urban areas are the beneficiaries of this transformation of the two networks than those who reside in rural areas. Hence most people living in rural areas are still facing challenges travelling to schools, hospitals and nearby shopping centre (Mwanyepedza, 2017). This implies that for a rural citizen to have access to this luxurious and safe transportation they must first access a minibus-taxi so that they can have access to the two networks in order to reach their choice of destination. This by implication means that the government focus mainly on transforming public transport in the cities or in urban areas and undermine the development of rural public transportation. The Rea Vaya BRT has been proven to be successful and they are also regarded as being affordable, reliable, safe and accessible in the cities with 16 000 passengers per day in Johannesburg since 2009 to date (Adewumi & Allopi, 2013:1). However according to Siyongwana & Binza (2012:191) this system is still limited in the country, because South Africa is still among other emerging economies and on the other hand

Sibande (2013) argues that not all the South African cities can adopt BRT as it is expensive. This transport strategy is not favourable to everyone. Gautrain has also been reported to be reliable, safe and accessible in the cities, but it is believed that it benefits only the few and the rich people and it is argued that the South African government is spending its scarce resources towards the systems that benefits only the few South African National Taxi Association Council (2013). It should be understood that BRT operates in the cities and therefore it will benefits few commuters in the cities unlike taxis that are affordable by all classes.

Integrated Rapid Public Transportation Networks Systems (IRPTNs), Bus Rapid Transit (BRT) and Taxi Industry

According to *Public Transport Strategy* (2007) Integrated Rapid Public Transportation Networks Systems are the mobility wave of the future and are the only viable option that can ensure sustainable, equitable and uncongested mobility in liveable cities and districts. This rapid public transportation has been used in many developing countries and among others South Africa has become the first country in Africa to have introduced rapid public transport system which connects townships and cities. The Integrated Rapid Public Transport Networks (IRPTNs) developed during the 2010 World Cup are accelerating improvements in public transport in South Africa (Mwanyepedza, 2017). Thus far some of the buses that were developed special for the 2010 World Cup currently are regarded as ghost infrastructures. The government puts multi-billion rand transport infrastructure plan, which was set to entirely reshape public transport system in South Africa. However, it has been used to reshape what is commonly labelled as ghost infrastructure. This proves that the government continues to introduce strategies that are more costly to the government. Despite some multi-billion spent by government on the development of public transport infrastructure during the World Cup, the Integrated Rapid Public Transport Network that includes rail, taxi and bus services was introduced. The strategy aims to accelerate the improvement in public transport by establishing IRPTNs, which will introduce priority rail corridors and Bus Rapid Transit (BRT) systems in cities.

This strategy was supposed to bring about change in the country, but it is argued in this paper that the introduction of this approach brought about threats and violence to the taxi industry. Thus far IRPTN has had limited success in the country. They operate particularly in few major cities such as Cape Town, City of Johannesburg, Tshwane, Rustenburg, Port Elizabeth and Nelson Mandela Metro. These networks are still in its first phase approach and it is still not known as to whether it will be a success or not. Onatu (2011: 89) acknowledged that since the commencement of this approach the operators have witnessed confrontation and violence the taxi operators. Historically the taxi industry are being labelled as being un-roadworthy, violent and are also regarded as the causes of frequent accidents on the roads which claims the life of the citizens daily (Sebola & Baloyi, 2012). As far as ITRPNs is concerned the minibus-taxis and metered taxis are also included in the package of this network transformation. Many studies that were recently conducted emphasises more on the implementation of BRT and the challenges thereof. There are only few studies that argue about ITRPNs and its effect on the taxi industry. It should be noted that the minibus-taxis are unsubsidised in the country and if the government introduces an approach or a strategy, that strategy must produce benefits to the taxi industry. For instance the implementation of Taxi Recapitalisation Programme (TRP) is believed to be possible from the government perspective while on the other hand the taxi operators argues that it is a mission impossible for the government and an intended by the government to remove them off the industry business.

It can also be argued that the recapitalisation programme was long introduced in the country, but it has never become a mission possible. To date the country is still emphasising on recapitalisation of minibus-taxis, however, it has been difficult to implement it relatively well. It was firstly introduced immediately in the post-apartheid South Africa in 1996 and was integrated into the White Paper on Transport Policy of 1996, later to Moving South Africa of 1998 and recently into

the IRPTN. This means that there are ever strategies in place to improve public transport which relatively improve its functions. For this matter it is argued that the government should look deeper into the impact of this strategy as it seems to compromise the taxi industry. Thus far the South African National Taxi Association Council (SANTACO) also took an initiative to upgrade the minibus-taxis because the completion of the IRPTNs and BRT is threatening their business. The successful and the major attractive part of BRT is that it assists in traffic congestion in the cities. These network systems have some dedicated bus lanes which operates separately from all other traffic modes. This allows the buses to operate at a very high level of reliability since only professional drivers are allowed on the bus way. Hence it has brought about violence to the taxi industry. Taxi drivers are of the opinion that BRT is an improved system and it will cater for all commuters at a reasonable cost and they believe that it will threaten their business.

The consequent impact of IRPTNs and BRT on Taxi Industry

The BRT system and IRPTNs currently has been proven to be a success within the introduced cities and has also attracted the media, the taxi industry and has brought much attention in South Africa. Some debates on these two network systems focuses more on the success part than the consequences thereafter. The implementation of these networks is said to bring about an entirely new public transport network and also unlock new opportunities for development in the country (Van Dijk, 2011). However there are some consequences that are associated with the development of these two systems. *Firstly* this system operates in the cities and they will transport only few commuters, because most people who reside in the cities they have their own cars and they can only use BRT as a substitute to save their cars for regular maintenance. *Secondly* the system is affordable and for safety reason all commuters would like to travel in a safe and reliable public transport and this will threaten the taxi industry business. Consequently there are challenges that only affect the poor in most rural areas and benefit the few in urban areas. The following are among others some short, medium and long term general accepted common benefits that are behind the success of these networks:

- An efficient, reliable and frequent public transport which is a short term benefits of IRTPN & BRT.
- An accessible safe and secure public transport for people with disabilities and mothers with children.
- A decrease in traffic congestion, energy consumption and vehicle emissions.
- Containing urban spread of settlements and promoting destination.
- Better economic development at and around the nodes as well as the mobility spines.
- Improved journey time for all public transport users and a world class public transport system which the city can be proud of.

The above are regarded as the most generally accepted common benefits associated with the implementation of the two networks in the country. They are considered to be promoting public transport as far as *Public Transport Strategy 2007-2020* is concerned. It is however argued if the government will continue to ensure the effectiveness of this benefits or it will introduce other strategies that will compromise the two existing world class public transport systems in the future. Despite all these benefits it is acknowledged that some of the benefits since are of short and medium terms they might contribute to the failure of these systems. With all this benefits then it can be concluded that South Africa still have some the underneath outlined critical challenges that have been debated upon and still hold critical concerns. This includes among others risks that may hinder the success of IRPTN & BRT:

- Lack of support from the public transport industry where some of the public transport operators does not want to support this system into ne operations.

- Developing a robust business and financial model by obtaining buy-in from existing operators.
- Violence associated with the taxi operators and Taxi Associations on the implementation and operation of the system.
- Another concern challenge highlights the need for high urban densities along the BRT corridors in order to ensure that the system is feasible to run the service it has been designed for, particularly when it is still competing with other modes such as minibus-taxis in the country.
- Training of owners and operators in skills are required to maintain and to ensure a success of the system is also required.

One major challenge facing BRT and IRPTNs is failure to consider a fair approach that cannot compromise the existing transportation mode such as taxi industry in the country Siyongwana & Binza (2012:200). On the other hand Adewumi & Allopi, (2013:3) also identified the maintenance of this system and its financial impact to the government. Since the introduction of these systems brought competition, the taxi industry has also embarked into world class transportation by upgrading the standard of their minibus-taxis through the South African National Taxi Association Council (SANTACO) TR3 2020 strategy. It is not known as whether the strategy as launched in the year 2010 has indeed brought about change and reduced unsafe and unroadworthy on public roads? It is argued that while mini-bus taxis have those problems known, but they still need to be retained as a transport system. Despite its safety weaknesses the mini-bus taxi industry in South Africa is the most unique and popular and liked mode of public transport by commuters and it contribute immensely to economic growth.

Conclusion

This paper has argued that despite the development and transformation of the Integrated Rapid Public Transport Networks (IRPTNs) and Bus Rapid Transit (BRT) systems in the country; violence, unsafe and unroadworthy vehicles still form part of the existing public transport mode. The government response through the IRPTN system and ignoring to subsidise the industry is a potential for conflict between the government and taxi operators. The IRTPN system continues to provide leap service to mini-bus taxi industry.

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