AN ASSESSMENT OF THE REGULATORY ARRANGEMENTS IN THE MINIBUS TAXI INDUSTRY IN SOUTH AFRICA: A PRIMER FOR SELF-REGULATION

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ABSTRACT

The World Health Organization (WHO) contends that road safety must be appreciated from the basis of it being a shared responsibility; and has to be based on cooperation and coordination by all the state agencies, general public and private sector, working together at every sphere to establish initiatives geared towards improved traffic safety outcomes. In South Africa's informal transport industry, the minibus taxi industry has critiqued that public administrators do not sufficiently prioritize economic, human behavior and lifestyle related issues in the regulation of the market until it is too late. Perceptively, driver behavior of minibus taxi operators and other road safety concerns continue to plague South Africa's road network and contribute negatively to the country's road safety record. Government had responded to these challenges by establishing an enabling policy, institutional and regulatory framework that aims to encourage authorities to maintain control of industry governance and eradicate violent conflicts between minibus associations emanating from a myriad of activities including corruption in route and license allocation, route infringement, operating unlicensed vehicle etc.

Contribution: In this paper, we explore the regulatory environment that governs the minibus taxi industry, and describe the current government approach towards regulation. Further, we build on the knowledge advanced by researchers regarding the need for targeted and coordinated public transport reform initiatives through the introduction of governance i.e. self-regulation. Based on the assessment of the interaction between regulation, and industry governance; it is argued that newer forms of management and control must be explored, embraced and appreciated as potential critical contributors to sustainable business practices.

Most importantly, self-regulation mechanisms are suggested as having significant potential to assist in addressing the need to a) re-orientate relationships between stakeholders that interface with the minibus taxi industry at various levels through streamlining, coordinating, monitoring and evaluation of industry initiatives, and b) help escalate human behavior facets when resolving road traffic problems through targeted improvement in user

knowledge, vehicle quality, operational efficiency, employment conditions, skills development and attitudes.

Key words: Minibus taxi, Regulation, Governance, Government, Self-regulation, Road-safety, Public Transport, Informal Transport, Policy, Training and Capacity Building, Sustainabilit

1 INTRODUCTION

1.1 Introduction and Problem Statement:

The 1996 White Paper on National Transport Policy acknowledged the need to fully recognize and focus on the human behavior elements as a critical pathway to reaching a solution to road traffic problems. The general principle of the policy aims to target improvement in user knowledge regarding road user behavior, safety, skills and attitudes through enhanced formal and non-informal educational setting or institutional platform. The government and the taxi industry in recognition of the need to improve unity, peace, control and most importantly, industry governance, undertook an extensive reform process into revitalizing, unifying and ultimately democratizing the informal public transport system. The establishment of the NTTT- a joint task force - in the 1990's resulted in the identification of economic, human behavior and lifestyle related industry challenges; and the subsequent development of potential solutions to facilitate the achievement of industry aspirations

Much of the significant challenges related to the need for improved a) regulation and control, b) skills development and training, c) road traffic safety, d) Economic sustainability, e) restructuring and formalization etc. However, the development and implementation of road economic and safety regulation solutions in terms of intervention and awareness programmes, has been universally fragmented. The general approach with regard to road public transport reform initiatives has been to a) incorporate the informal sector into corporatized public transport operators as envisaged in the Public Transport Strategy of 2007 and the supporting Action Plan and b) ensure rule compliance through law enforcement and normally supported by public and private sector interventions and initiatives aimed at raising general awareness regarding road user behavior and dangers of drug use. The National Department of Transport (NDOT) jointly with various stakeholders and state entities collaborate on various road safety campaigns and interventions i.e. Operation Hlokomela, Arrive Alive etc. The Road Traffic Management Corporation (RTMC), SANTACO, NDOT, metropolitan municipalities, other law enforcement and public transport stakeholders are generally involved in developing economic and safety interventions. Furthermore, the government through agencies such as the Road Traffic Infringement Agency (RTIA), Cross-Border Roads Agency Act (CBRTA), and Road Accident Fund (RAF) also undertakes road safety programmes as part of their annual performance targets

In informal transport literature, researchers have investigated a myriad of regulatory, institutional and transformation challenges in the minibus taxi and the broader public transport industry. Most prominently are the writings were (Gwilliam, 2002), (Cerverro 2001), (Oosthuizen and Mhlambi, 2002), (Fourie, 2003), (Wilkinson, 2010), (Ferro, Behrens & Golub 2012), (Schalekamp, 2013) and others. The predominant of these writings sought to a) highlight the common effect of poor regulation (supply and fare regime) and its contribution to destructive competition and poor service quality, b) suggest the various pitfalls that undermined the prospective progress and success of the industry, mainly hindered by prevalent instability in the industry, c) explore the incorporation of informal minibus taxi into the broader formal public transport realm and the subsequent management of hybrid (planned and informal) public transport systems in various cities and compared the regulatory approaches given the varying levels of recognition afforded by the respective cities to the informal system.

An assessment of potential approaches that aim to respond to the minibus taxi industry and policy challenges from a governance perspective has not been found in literature. However, in RSA road public transport reform literature, (Schalekamp et al., 2010) insightfully suggested that targeted initiatives focused on improving employment conditions, efficiency of operations, public financial support and the safety and quality of paratransit vehicles may be an essential component to any strategy aimed at road-based public transport reform and service level improvement. Furthermore, the evidence advanced by (Moyana and Chibira, 2016), that 80 per cent of road accidents in the country are attributable to human behavior, highlighted the need for improved prioritization of human behavior elements in the road passenger sector. Unsurprisingly, the *UN HABITAT* has advanced the importance for developing countries to invest resources into developing measures and efforts of ensuring that road safety concerns and minibus taxi regulation are prioritized in the pursuit of Sustainable Development Goals (SDG). Therefore, improving regulation and road safety particularly in the minibus taxis is purported to represent a critical pathway to reducing deaths and injuries arising from road accidents.

1.2 Aim of study

In this paper, we suggest that innovative forms of management and control that can be endorsed by authorities, industry, and society etc. and supported by scientific methods of investigation, have the potential to augment current regulatory levers and promote sustainable business practices. Importantly these mechanisms have demonstrated potential to adequately respond to industry concerns and enable the development, coordination, streamlining, monitoring and evaluation of road economic and safety initiatives; whilst actively promoting skills development and institutional learning within the industry.

Findings: Governance is advanced based on the understanding of its potential and importance towards facilitating sustainable development outcomes. Illustratively, a self-

regulation model in the road freight industry is demonstrated as an appropriate precursor for understanding innovative forms of managing collective business interest and activities. Essentially, such a management system approach must be explored, replicated and enhanced to also incorporate the minibus taxi industry and help contribute towards professionalization, transformation and modernization aspirations of the industry.

Research and Practical Implications: The prospects of endorsing a self-regulation model would encourage the development of instruments that can enable the use of scientific methods of inquiry into demonstrating and promoting best business practices in the operation and maintenance of minibus taxi services. Such an arrangement is expected to incentivize and enable stakeholders to commit towards a coordinated and active interest in managing minibus taxi industry business activities towards sustainable regulation.

2 REGULATORY ENVIRONMENT IN THE MINIBUS TAXI INDUSTRY

Regulations vary greatly between public sector regulation of market entry and service quality, to that of self-regulation by fragmented association organized either according to a route or a network (Behrens, 2014). The control and execution of regulatory controls in the minibus taxi industry is renowned as being lax in most instances, with corruption in the issuance of operating license and permits, illegal routes and operators identified as a major impediment to inducing high levels of compliance in the sector. In this section, we describe the regulatory framework governing the industry and highlight the economic and safety processes involved for an operator to become compliant.

The current legislative arrangement for operating road passenger transport services are primarily regulated by the *National Land Transport act 5 of 2009 and its supporting Regulations*. The legislation requires the establishment of transport regulatory authorities to manage the economic and safety elements of the public transport systems. The Provincial Authorities acting through the Transport Operating License Administrative Board's (TOLAB), are responsible for ensuring transparent processes in the determination and approval of formation or amalgamation of associations, routes, permits and operating licenses for passenger transport services in the country. TOLAB's in collaboration with the Provincial Regulatory Entity (PRE) are empowered by the Act, the authority to approve or reject a prospective operator from entering the minibus taxi after seeking concurrence with the affected municipality and stakeholders. Similarly, road cross border operations are regulated and enforced by the Cross-Border Road Transport Agency (CBRTA) – a national departmental government entity.

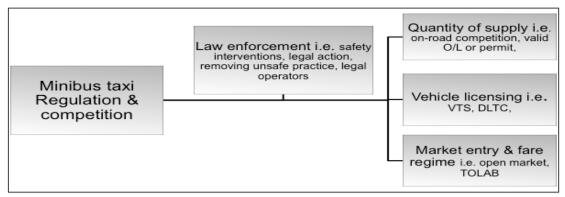


Figure 3: Regulatory environment in the minibus taxi industry
Source: Author

Authorities exercise economic regulation by also ensuring that processes of acquiring rights to operate a route and register with an association adhere to legal requirements and streamlined to public management objectives of transparency and adequate public participation processes. In this instance, economic regulation broadly relates to two areas of control namely a) the issuance of operating license and permits to prospective and incumbent operators to operate passenger transport services and, b) the awarding of contracts or concessions that are in alignment with strategic passenger transport plans, supported by effective communication and execution of law enforcement in terms of Section 49, 54 and 73 of the NLTA of 2009, supported by Section 2, 6 and 10 of the Regulations. These supporting regulatory instruments provide a basis for the awarding of licenses to minibus taxi operators to run a service as defined in the application documents. Once granted, a license in effect bestows local monopoly rights to the operator. In terms of contracting minibus taxis however, authorities encourage the industry to corporatize minibus taxis operators into larger, bus and vehicle operating companies; and through policy law, encourage the industry to compete for competitive contracts on that basis. Interestingly however, market entry into the minibus industry is highly influenced by minibus taxi associations currently registered with the Provincial Registration Administrative System (RAS) and National Traffic Registry (NTR) i.e. Transport Operating License Administration Board (TOLAB). Associations are able to achieve this effect because, they also regulate the operator's use of terminals and control supply of minibuses by exercising territorial protection of routes operated or registered to such associations; and charge fees for such activities.

The administration of fares levied by the industry is a form of economic regulation and its control has been largely entrusted to route associations. The general practice is that taxi fares are regulated and controlled by the respective regional minibus taxi structures representing both local and long distance operators. These associations typically set fares based on market penetrated, and the fare structure adopted typically does not distinguish and fragment customers according to needs and income level. According to some associations, long distance services operate more differently in that fare adjustments only occur once every two or three years. Fluctuations in the world fuel market usually triggers a) fare increases from the industry and b) debates about whether taxi operators should be

subsidized in light of improving healthy on-road competition between minibus taxi and the bus industry. The quality of supply in terms of ensuring regulation of driver fitness and the roadworthiness of vehicle roadworthy is a function administered by the Driver License Testing Centers (DLTC) and Vehicle Testing Stations (VTS) respectively; and overseen by the RTMC, a national government agency. Municipalities act as provincial agents in the administration of driver and vehicle licensing and sometimes also undertake vehicle testing as a function in certain municipalities. VTS's are mainly operated by independent service providers seeking to facilitate the efficient assessment of vehicle roadworthiness before it can be operated on the public road and these stations produces fitness certificates for each vehicle that has passed the assessment. The institutions undertaking various forms of regulatory functions are seldom co-located and streamlined thus making compliance to be costly for prospective and incumbent participants in terms of both time and cost. this is despite, both the VTS and the DLTCs being a provincial executive function implemented by agents of the provincial authorities based on a) municipal jurisdictions or boundaries for DLTC's and b) approval of a service provider by the provincial Member of Executive Council (MEC) to register a VTS.

The implementation of law enforcement is a function undertaken across the three spheres of government i.e. National, Provincial and Municipal government. Additionally, The RTMC, SANTACO, NDOT, other law enforcement and public transport stakeholders are generally involved in developing and implementing road safety interventions that are primarily aimed at eradicating unsafe practices in the industry associated with legal compliance i.e. roadworthiness of fleet, fitness of drivers in terms of valid driver's license and a PrDP (Passengers professional driving permit), alcohol and driving. Furthermore, the government through agencies such as the RTIA, CBRTA, and RAF also undertakes road safety programmes as part of their annual performance. Much of the interventions i.e. Arrive Alive, Driver awards, Operation Hlokomela are geared towards generating heightened awareness around the dangers of unsafe road user behavior; and are augmented by a "command and control" approach to regulation that results in offenders being reprimanded or worse, arrested. Relatedly, primary structures i.e. associations also undertake some sort of enforcement in respect of ensuring monopoly of affiliated vehicles and operators operate their respective territory. These activities generally involve active or registered members patrolling their respective routes for possible infringements by operators who bring vehicles into routes without consent from association executives; and often results in violent altercations ensuing and staging of coup for leadership by disgruntled members i.e. formation of operators or associations outside the established operating industry framework. Nonetheless, public transport stakeholders' concerns regarding the fragmentation in the implementation of economic and safety programmes or initiatives he highlighted the need for a refocus towards better alignment, coordination, monitoring and evaluation of improvements. Despite this, the economic regulatory environment can be argued to be robust in seeking to facilitate transparent and efficient processes in the management and control of the minibus taxi industry.

3 A PRIMER FOR SELF-REGULATION:

Self-regulation has been a growing area of interests amongst researchers in seeking to understand mechanisms adapted to a) changes created by economic globalization and other changes in both the distribution of power and the governance structure of international society and b) harmonize varied individual interests in the management of collective business interests and common pool resources. See Rosenau (1992), (Mayntz, 2003), (Hoff, 2003), (Lenssen et al., 2008), (King et al., 2012). Accordingly, the international political transformation of nation-state power and the emergence of non-governmental actors in the 1990's had revealed the need for authorities to reorganize the frameworks of governance and regulations by taking into account the changes caused by globalization and incorporating new structural elements.

The authority of self-regulatory initiatives stems from the allocation of resources and the exercise of control and co-ordination (Rhodes, 1996). Industry self-regulation is devoid of regulation by government and such a lack of government authority has been suggested by King et al (2012) as being the elements that make self-regulatory initiative problematic. Hoff (2003) conceives that self-regulation is characterized by a high degree of autonomy from the state, with the state not occupying a sovereign position but can still influence the networks indirectly or imperfectly. Conceived in this sense, governance essentially can also be used to describe different modes of coordinating individual actions or basic forms of social order Mayntz (2003).

The term "governance" refers to the self-organizing networks of action that complement markets and hierarchies that make up structures of government. In transportation, governance essentially involves the processes and systems used to manage collective transportation affairs and activities between state and non-state actors and stakeholders (Chakwiriza and Mashiri, 2009). Insightfully, the sustainable urban transport writings (C. Kennedy et al., 2005), advanced the four pillars to sustainable transportation that are conceived as necessary to facilitate the pursuit of sustainable socioeconomic development outcomes. These pillars consisted of 1) Governance, 2) Financing, 3) Infrastructure and 4) Neighborhoods. According to (Chakwiriza and Mashiri, 2009), forms of governance are generally conceived as ancillary pillars that have an impact in the provision of adequate quantity and quality of transportation services. Characteristically, governance is a more cooperative mode where actors (both state and non-state industry stakeholders) participate in mixed public / private networks of engagement and is closely associated with self-regulation.

Typically, the adoption of self-regulatory initiatives requires a new set of management practices and the creation of opportunities in unanticipated places i.e. improvement in operations, labour practices, quality and efficiency. These schemes regularly involve the adoption of instruments and methods that promote fair sharing of information and collective responsibility amongst participants and industry role players regarding the implementation of best practice in producing a product or services. Examples of these

instruments can be found in *ISO*, quality and performance measurement. Nonetheless, self-regulation pursues to harness the social capital (connections and networks) of the industry and expedite potential for a simultaneous improvement in human and financial capital (minimum skills requirement in the market and capital (accumulation).

In literature, there are generally 3 governance models that have been adopted by various industries in seeking to manage collective resources and business interests. The Marketbased model involves the organization of various institutions to develop and implement industry best practices. Voluntary schemes are models predominantly premised on the philosophy of relying on the coordinating power of a network of companies and industry players. Lastly, the *Network model* is similar to voluntary schemes but varies in that; the network is not necessarily hierarchical in its structure. Governance models may also manifest in the form of various mixed methods depending on the industry goal pursued. In order for self-regulation initiatives to become effective and influential, there are characteristically three general principles that such initiatives must address. Firstly, the industry must be able to demonstrate identifiable and measurable gains from selfregulation for both industry and society i.e. public relations. Secondly, the development of new rules to the game must be accompanied by credible enforcement of such rules. Typically, this means the development of mechanisms amenable to visible verification of rule compliance by the industry as efforts to improve credibility. Thirdly, there must exist a supportive institutional environment that can enable appropriate coordination and complementing arrangement to the functioning of self-regulatory initiatives

In the text box, a case study of RTMS is used to illustrate an innovative form of management and control. It is further shown that the scheme is able to achieve success and legitimacy within road freight stakeholders by demonstrating adherence and commitment to promoting sustainable transport business practices in the provision of road freight transport services. According to (Nordengen, 2014), the RTMS as a self-regulatory process, essentially involves the assessment of and the demonstration by an operator or a company, that transport activities are managed with sufficient due consideration of the law, road safety, compliance and operational risks; thus, enables operators and the industry to display excellence in the management of the road freight operations. RTMS makes use of operator certification programme as an accreditation tool to demonstrate compliance with legal requirements and companies that have embraced the scheme have demonstrated significantly improved compliance and safety performance.

RTMS Case Study: Filling regulatory gaps in the road freight industry.

The Road Traffic Management System (RTMS) is an industry led initiative responsible for facilitating sustainable truck payloads within the confines of legally prescribed load factors. RTMS is based on a set of industry-determined standards and manuals to encourage responsible operations and compliance with law. The voluntary scheme was conceived after growing recognition of the socioeconomic cost and dangers of unsafe practices in the road freight industry. Generally, the scheme is mainly about the promotion of good business practices and more crucially, advocates for transport operators and other road transport stakeholders to take active responsibility of their respective business behavior and practices.

Figure: Four Pillars of the RTMS

Load control	Safety & Compliance	Driver wellness	Training & Development
Prevent Optimize payload Safe practices Compliance with dimensional limits	Systemic maintenance Minimize breakdowns Prevent & minimize violations Manage risks Monitor safety indicator	Medical fitness certificate Management of chronic conditions Fatigue & rest day allocation Monitor working hours Resource provision	Structured Training plan & programme Driver recruitment Competency evaluation Driver assessment Communication on compliance / safety

Source: www.RTMS-sa.org

The voluntary scheme is based on an established set of operational performance measurement tools that can quantitatively monitor and manage the risks associated with the provision of road freight services. Figure below illustrates the broad pillars under which the scheme's objectives are premised. Voluntary schemes such as RTMS typically makes use of an internationally recognized certification regime i.e. ISO 39001, as means of gaining legitimacy and certification compliance. As a result, the RTMS enjoys a healthy share of institutional support from authorities and industry players 1; consequently, the scheme has demonstrable contribution towards the National Department of Transport's (NDoT) National Freight Logistics Strategy objectives,

To date, the following RTMS successes that can be leveraged into the minibus taxi industry were found to be as follows according to Nordengen (2014):

- Reduction and minimization of overloading:
- Preventing road damage & preserve infrastructure
- Enhancing safety of vehicles on roads
- Driver wellness initiatives
- Reduction in traffic violation
- Active promotion of skills development within the transport sector.
- Industry or company measuring respective performance
- Reduction in crash / incident rates
- Improved compliance i.t.o traffic violations, driving hour violations, fewer speed exceptions

4. CONCLUSION

The regulatory frameworks that administrate the minibus taxi industry in terms of legitimate industry governance structures, operating licensing and route determination process is robust and highly regulated. However, constant or persistent deviation from the set rules and laws as a result of a myriad of issues including corruption and lack of appropriately coordinated road safety and economic initiatives understandably creates problems. Further, persistent fragmentation in the execution of safety regulatory functions and the lack of streamlined, coordinated institutional and industry learning mechanisms arguably obviates the alignment between the regulatory processes and the self-interest prevalent in

road transport industry. Evidently, the institutional learning environment to facilitate the sharing of knowledge regarding industry best practice on a variety of road economic and safety issues including vehicle operation, targeted road safety, compliance, economic, modernization and transformation framework etc. has been non-existent. Concerns associated with training, capacity building, driver wellness and road human behavior elements of the minibus transport represents an area not currently prioritized as illustrated in the current regulatory levers, but remain issues acknowledged globally as well as in National Policy.

Debatably, there exist a complementary mechanism that can potentially assist in escalating targeted improvements in road economic and safety. In this paper, it was shown that matters that relating to training of drivers, unsafe business practice, road safety and customer care including the need to monitor and evaluate targeted professionalization, quality of life as well as sustainability initiatives, are inadequately championed by authorities. This is despite the industry persistently stating its dissatisfaction regarding the manner in which authorities have conducted such initiatives in the past.

A governance mechanism is advanced as one of the essential pillars to promote sustainable transportation and more crucially, manage collective business affairs in a transparent and appropriate decision-making environment. The development of a self-regulatory scheme is suggested as a potential approach that can aid better coordination and cooperation of human behavior and other road safety and economic challenges. Significantly, these forms of mechanisms must be supported by scientific evidence and a set of new management practices that can demonstrate, prioritize and facilitate best practice, institutional learning and streamline prospective industry regulation intervention programmes. This paper has demonstrated through literature as well as the RTMS case study, that self-regulation initiatives can involve the adoption of instruments and methods that promote fair sharing of information and collective responsibility amongst participants and industry role players regarding the implementation of best practice in producing transport products or services.

In closing, it is generally conceived that such an arrangement can assist in adequately escalating driver wellness, customer service as well as lifestyle related concerns in the management of minibus taxi industry. The potential of such a scheme is premised on the appreciation that self-regulatory mechanisms generally embody strong social capital links; and have demonstrated potential to adequately support regulatory and institutional arrangements and facilitate the pursuit of improved sustainable development outcomes. Therefore, these methods of governing for improved regulation and road safety outcomes must be explored with a strategic objective of ensuring the industry is empowered to take effective and active responsibility for their transportation activities; whilst promoting value creation for broader stakeholders and enhancing public welfare.

5. REFERENCE

BEHRENS, R., MCCORMICK, D. and MFINANGA, D., 2015. Paratransit in African cities: Operations, regulation and reform. Routledge.

CERVERO, R., 2001. Informal transit: learning from the developing world. *ACCESS Magazine*, **1**(18).

CERVERO, R. and GOLUB, A., 2007. Informal transport: A global perspective. *Transport Policy*, **14**(6), pp. 445-457.

CHAKWIZIRA, J. and MASHIRI, M., 2009. Contribution of transport governance to socio-economic development in South Africa, 2009, Southern African Transport Conference.

FOBOSI, S., 2013. The minibus taxi industry in South Africa: A servant for the urban poor? CONSULTANCY AFRICA INTELLIGENCE, Accessed 11/9/2016

FOURIE, L.J., 2005. Rethinking the formalization of the minibus-taxi industry in South Africa.

GOLUB, A., BEHRENS, R. and FERRO, P.S., 2012. Planned and paratransit service integration through trunk and feeder arrangements: an international review. *SATC 2012.*

GWILLIAM, K., 2003. Urban transport in developing countries. *Transport Reviews*, **23**(2), pp. 197-216.

HABITAT, U., 2011. Cities and climate change: Global report on human settlements 2011. London: Earthscan.

HOFF, J., HORROCKS, I. and TOPS, P., 2003. Democratic governance and new technology. Routledge.

JOHN T. BOWEN JR. AND THOMAS R. LEINBACH, Competitive Advantage in Global Production Networks: Air Freight Services and the Electronics Industry in Southeast Asia.

KENNEDY, C., MILLER, E., SHALABY, A., MACLEAN, H. and COLEMAN, J., 2005. The four pillars of sustainable urban transportation. *Transport Reviews*, **25**(4), pp. 393-414.

KING, A., PRADO, A.M. and RIVERA, J., 2012. Industry self-regulation and environmental protection.

LENSSEN, G., ARENAS, D., LACY, P., PICKARD, S. and ALBAREDA, L., 2008. Corporate responsibility, governance and accountability: from self-regulation to coregulation. *Corporate Governance: The international journal of business in society,* **8**(4), pp. 430-439.

MAYNTZ, R., 2003. From government to governance: Political steering in modern societies. *Summer Academy on IPP*, pp. 7-11.

MAYNTZ, R., 2003. New challenges to governance theory. *Governance as social and political communication*, pp. 27-40.

MFINANGA, D.A., MCCORMICK, D. and BEHRENS, R., 2015. Paratransit in African Cities: Operations, Regulation and Reform.

MOOLMAN, D., 1998. Taxi violence in South Africa-The causative factors. *Acta Criminologica: Southern African Journal of Criminology*, **11**(1), pp. 33-42.

MOYANA, H. and CHIBIRA, E., 2016. Improving safety in the road transport sector through road user behaviour changing interventions: a look at challenges and prospects, 2016, Southern African Transport Conference.

NDoT, 2009. National Land Transport Act.

NDoT, 2007. Public Transport Strategy. Pretoria

NDoT, 2007. Public Transport Action Plan – Phase 1 2007-2010: Catalytic Integrated Rapid Public Transport Network Projects. Pretoria

NORDENGEN, P. and NAIDOO, O., 2014. Evaluation of the Road Transport Management System, a self-regulation initiative in heavy vehicle transport in South Africa.

OOSTHUIZEN, S. and MHLAMBI, M., 2002. The road to empowerment of the minibus-taxi industry is full of pitfalls: our experience and observations over many years. *SATC 2002.*

PARNELL, S. and OLDFIELD, S., 2014. The Routledge handbook on cities of the global south. Routledge.

SCHALEKAMP, H. and BEHRENS, R., 2013. Engaging the paratransit sector in Cape Town on public transport reform: Progress, process and risks. *Research in Transportation Economics*, **39**(1), pp. 185-190.

SCHALEKAMP, H., BEHRENS, R. and WILKINSON, P., 2010, August. Regulating minibus-taxis: a critical review of progress and a possible way forward. In *Proceedings of the 29th Southern African Transport Conference (SATC 2010)* (Vol. 16, p. 19).

ROSENAU, J.N. and CZEMPIEL, E.O. eds., 1992. Governance without government: order and change in world politics (Vol. 20). Cambridge: Cambridge University Press

The White Paper on National Transport Policy. 1996. National Department of Transport

WILKINSON, P., 2010. Incorporating informal operations in public transport system transformation: the case of Cape Town, South Africa. Brazilian J. Urban Manag, 2(1), pp.85-95.

WORLD HEALTH ORGANIZATION. VIOLENCE, INJURY PREVENTION and WORLD HEALTH ORGANIZATION, 2013. Global status report on road safety 2013: supporting a decade of action. World Health Organization.

Www.nationaltaxialliance.com. Accessed 11th January 2017.

Www.santaco.co.za. Accessed 11th January 2017.

Www.RTMS-sa.org. Accessed 8th December 2016