

INSTITUTIONAL DEVELOPMENT IN PUBLIC TRANSPORT: IMPLICATIONS OF SELECTIVE COMPLIANCE FOR NAIROBI'S PARATRANSIT SYSTEM

D McCORMICK

Institute for Development Studies, University of Nairobi

PO Box 30197-00100, Nairobi, KENYA

Telephone: +254-20-318262, ext 28177; Mobile: +254-733-889010

Email: dmccormick@uonbi.ac.ke

ABSTRACT

Nairobi's public transport system is known for being disorderly and even chaotic. Understanding the nature and implications of the current disorder should give planners and public transport actors the tools to devise and promote better institutional frameworks for public transport in Nairobi and elsewhere. This paper uses data from field research carried out in Nairobi in 2010-2011 as part of a larger three-city study. The research used key informant interviews and case studies of paratransit businesses to gain an in-depth understanding of paratransit operations, especially the compliance of individual paratransit firms with existing laws and regulations. A key finding was that, contrary to popular belief, paratransit vehicles did not flagrantly violate *all* regulations, but practiced what researchers called 'selective compliance'. They followed some regulations and violated others. This paper analyses this result in order first, to assess the implications of such behaviour for the development of different categories of institutions in Nairobi's public transport sector, and second, to hone existing theories of institutional change to make them more applicable to urban public transport systems in Africa.

1. INTRODUCTION¹

Nairobi's public transport system is disorderly and even chaotic. Observers have called it 'matatu madness'. 'Matatu' is the Kenyan name for the vans and mini-buses that provide most of Nairobi's public transport. They operate as profit-making businesses. They are firms, in the economic sense of being ongoing organisations that manage and coordinate the activities of employees, contractors, and others to produce goods or, in this case, services for sale (Putterman and Kroszner 1996). The accusation of 'madness' comes despite the existence of a rather complex system of laws, regulations, and government directives designed to create an orderly public transport system, as well as a range of public institutions charged with overseeing and enforcing compliance. Earlier research suggested that non-compliance is related to the strategies that matatu businesses adopt for their successful operation (McCormick et al. 2013a). Some firms comply because compliance is necessary for them to achieve their strategic objectives. Others, with different strategies, choose not to comply. This paper uses data from the same study to look, not at the causes, but the effects of non-compliance on the very institutions meant to bring about an orderly sector. It raises the question: How does widespread non-compliance affect the development of institutions and organisations in Nairobi's matatu sector?

The paper has six parts. Following this Introduction is a brief discussion of the theoretical relationship of non-compliance, disorder, and institutional development. Part 3 describes the study methodology, while part 4 presents Nairobi's paratransit institutions and organisations. Part 5 presents the study's findings on compliance with paratransit regulations. Conclusions are drawn in Part 6.

2. NON-COMPLIANCE, DISORDER, AND INSTITUTIONAL DEVELOPMENT

Disorder increases uncertainty and has the power to inflict losses on individuals, groups and ultimately on the entire society. Establishing and maintaining order is one of the key tasks of governments aiming at achieving higher levels of development.

The ideal state for development to take place is what North et al., (2000) call a system of order. North identifies four elements characterising such a system:

1. An institutional matrix that gives rise to a set of organisations and a set of rights and privileges.
2. A stable structure of exchange relationships in political and economic markets.
3. An underlying set of institutions that commit the state to a set of political rules and enforcement mechanisms that protect both the organisations and exchange relationships.
4. Conformity to the rules arising from some combination of norm internalisation and external enforcement.

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The 'rules' in North's analysis can be very broad, e.g. a country's constitution, or specific to a single economic, political, or social sector. North and others using the New Institutional perspective have come under some criticism for Western bias (see for example, Özen 2011). In particular, New Institutional studies usually assume first, that the state is able to establish and enforce a set of rules and regulations; second, that the state is external to its fields of operation and can credibly serve as a mediator when necessary; and third, that the state is the source of stability and change (Özen 2011). Such assumptions are at variance with the reality of many countries in the global South, forcing observers to tailor their analysis and proposed solutions to the particular situation under study.

Theoretical literature on regulation abounds. Much of it focuses either on the qualities of 'good regulation' or on issues of enforcement (Baldwin et al. 2012, Banks 2003). Good regulation, if complied with, is assumed to lead to an orderly system, benefits to the economy, and ultimately, to the general wellbeing of the population. Some link compliance to the quality of regulation (Tyler 2006, Murphy et al. 2009). In this view, compliance is related to the perceived fairness of the law or regulation in question. Unfair regulations are more likely to be violated than fair regulations. Another body of compliance literature focuses on theories of enforcement or, more broadly, motives for compliance (see OECD 2004 for a summary). Still another set of literature considers the characteristics of both the regulated and the regulator. The compliance literature often approaches compliance as a dichotomous variable. An actor either complies or does not comply with a set of regulations, yet even in theory, compliance admits of levels and grades.

There is a wide empirical literature on regulation and regulatory compliance. The largest body deals with environmental regulations, but studies have also focused on regulations governing workers' health and safety, food safety, fisheries, and product standards (Baldwin et al. 2011). This body of literature identifies factors that determine compliance as: potential illegal gain, severity and certainty of sanctions, individuals' moral development and their standards of personal morality, individuals' perceptions of how just and moral are rules being enforced, and social environmental influences (Sutinen and Kuperan, 1999). However, on one hand, compliance is not a simply dichotomous variable; firms are always negotiating with the factors that affect them including the market forces. On the other hand, much of the literature fails to recognise the dynamic character of government regulations, considering them to be static and not inclusive. The compliance literature in environment suggests that participatory approaches attract higher compliance.

Studies focusing on regulatory compliance by public transport providers proved almost impossible to find, though some general paratransit studies have implied that lack of compliance is a source of crashes and other problems plaguing paratransit operations (McCormick et al. 2013a). Such problems include major disregard for the government regulations, attempts to bribe officials, generating informal rules, and challenging enforcement decisions in court. A recent study conducted in some twenty African cities recognises the problem of non-compliance and recommends a fresh and inclusive approach to transport policy (SSATP 2013).

3. METHODOLOGY

This paper uses data from field research carried out in Nairobi in 2010-2011 as part of a larger three-city study. The overall objective of the study was to gain an in-depth understanding of paratransit operations, especially the firms' business strategies and their compliance with existing laws and regulations. Data collection, which was carried out from May to July 2011, consisted of key informant interviews of key industry stakeholders, followed by case studies of fifteen paratransit businesses. In the text and tables, references to cases are given as R1, R2, etc. indicating Respondent 1, Respondent 2 and so forth.

Secondary sources of information consisted of documents, especially the relevant laws, regulations, and directives issued by the transport authorities, and published and unpublished literature. Data analysis was qualitative and consisted of collation and thematic analysis of interview notes.

Compliance was tracked for sixteen sets of regulations. This paper uses responses on a subset of six of these to examine the firm-level variation in patterns of compliance and to compute overall compliance scores.

4. PARATRANSIT INSTITUTIONS AND ORGANISATIONS

Paratransit institutions are those policies, rules, regulations, and informal ways of doing things that govern the operation of paratransit in Nairobi. Paratransit organisations are the government and private sector organisations that create, administer, and enforce paratransit policies, rules, etc. The research identified five main organs of government with direct effects on Nairobi's paratransit operations (McCormick et al 2013a). These are:

1. Ministry of Transport (MOT)
2. Transport Licensing Board (TLB)
3. Traffic Police
4. Nairobi City Council (NCC)
5. Judiciary

The main government laws and regulations are contained in five documents:

1. Traffic Act (2009, amended 2012)
2. National Integrated Transport Policy 2012 (chapter on Paratransit)
3. Directive 161 of 2004 (Michuki Rules)
4. Directive issued by TLB 1 November 2010, requiring membership in SACCOs and Management Companies
5. National Transport and Safety Authority Act (No 33 of 2012)

The industry itself has institutions in the form of commonly held norms and practices that in some cases contradict government policies (McCormick et al, 2013a). Chief among these is the 'target system', by which paratransit owners require their crew to bring a specific amount of money at the end of each day.

COMPLIANCE WITH PARATRANSIT REGULATIONS

A key finding was that, contrary to popular belief, paratransit vehicles did not flagrantly violate *all* regulations, but practiced what researchers called 'selective compliance'. They followed some regulations and violated others. The fifteen case studies demonstrate the variety of paratransit operators' compliance with government regulations. They also provide insights into the reasoning behind this variety.

5.1 Varieties of compliance

The varieties of compliance can be analysed from at least two perspectives, by regulation and by firm (see Table 1).

Using the original set of sixteen regulations, it was observed that different regulations have variations in compliance, with some having generally high compliance levels, others low compliance, and many with mixed levels of compliance. Analysis of compliance by each of the fifteen operators suggests *high compliance* with two regulations: the requirement for painting a yellow band on the vehicle and the relatively new regulation demanding membership in a SACCO or management company. In contrast, three regulations -- working hours, touting, and monthly payment of wages -- showed *low compliance*, while the remaining eleven regulations had *mixed compliance*.

In Table 1, firm-level data is reported for the smaller set of six regulations. The

Firm (R)	Compliance Score	Regulation					
		1 Road worthiness	2 Excess passengers	3 Route adherence	4 Crew qualifications	5 Working hours	6 Management
1	7	M	M	M	M	M	H
2	9	H	M	M	H	L	H
3	7	M	M	H	H	L	M
4	7	M	L	H	H	L	H
5	4	M	L	L	M	L	H
6	9	H	M	H	H	L	H
7	7	H	M	H	L	L	H
8	6	L	M	H	H	L	H
9	8	M	M	H	H	L	H
10	11	H	M	H	H	H	H
11	7	H	M	L	H	L	H
12	6	H	L	L	H	H	L
13	8	H	M	M	H	L	H
14	8	M	M	L	H	L	H
15	6	L	M	H	L	M	H

Source: Field data, 2011

Key: L = Low M = Moderate H = High

5.2 Reasons for compliance and non-compliance

Respondents who chose not to comply with particular regulations generally offered reasons for their non-compliance.

Roadworthiness: Roadworthiness is a two-pronged issue. On the one hand are those vehicles that are unroadworthy; these get fake inspection certificates because they could never pass a genuine inspection. One of our respondents (R15) acknowledged that this was his situation: 'The [vehicle] cannot pass vehicle inspection.' Others, however, have roadworthy vehicles, but take the fake certificates to avoid what they see as a tedious and corruption-laden inspection process.

Excess Passengers: Every matatu must display its passenger carrying capacity. The regulation prohibits the carrying of standing passengers so the capacity is the number of seats, less those for the driver and conductor. Although standing passengers were commonplace before the 2004 Michuki rules, they are much less so currently. This is probably due to fairly vigorous enforcement by police and City Council *askaris*². One owner (R12) said, 'If you carry excess passengers, you get problems. I don't like excess passengers.'

Route adherence: Matatus deviate from their routes in several ways. 1) Shorten the route. 2) Detour around a traffic jam. 3) Extend the route by entering the CBD when not permitted to do so. 4) Move to another route believed to have more passengers.

Shortening the route is common in rush hours, when matatus want to make as many trips as possible in order to maximise their fare intake. One respondent said, 'One wants to restrict routes, but during rush hour one must look for people' (R7). Traffic jams are a major problem for matatus using the target system of fare management. Diverting onto alternate routes that the crew believe will move faster is one way of dealing with a traffic jam.³ Respondents described in some detail the alternative routes they use when faced with a jam (R5, R12). They also acknowledge that they do this at their own risk because 'if caught [we] will be charged with contravening [traffic regulations]' (R7).

Matatus also extend their routes. Mainly this involves going beyond their terminus and into the Central Business District. In its effort to decongest the city, the TLB has limited matatu access to the Central Business District. For example, all matatus plying the Jogoo Road (a main artery into the city from the east) are required to terminate at Muthurwa. From there, passengers have to either walk or take another vehicle to town. Many matatu owners argue that this is not practical, especially for new vehicles that are still servicing their loans (R12). Such owners have regular payments to make to the bank and are not ready to risk the reduced income that is likely to result from compliance with this regulation. Others argue that the administration of the regulation is not fair. 'It is an unfair practice. There are those which are affected and those which are not.' (R13)

² *Askari* is a Kiswahili term for soldier, police officer, or armed guard, which is commonly applied to the enforcement arm of city or municipal governments.

³ The other is to raise fares. To some extent, peak fares take into account the slower movement of traffic as busy times of day, but in severe traffic jams, Nairobi matatus hike fares to double or even triple their usual amount.

Finally, matatus sometimes move to completely different routes from the ones assigned. They cite lack of passengers on the first route or traffic jams as reasons for this (R5, R11, R12). One respondent explained that his SACCO was able to negotiate with the TLB to include only his starting and destination points on his vehicle license so that he would be able to take alternative routes without incurring a penalty (R5).

Crew Qualifications: The regulations require that crewmembers hold a Public Service Vehicle (PSV) licence. In order to get the PSV licence, they must be of a certain age (24 for drivers and 18 for conductors), hold a valid driving licence for the type of vehicle they will be driving, hold a certificate of good conduct issued by the police (Traffic Act 2009), submit to regular eye checkups, training, and retesting. Some bus companies and SACCOs go beyond these minimums to require training in driving and customer care.

The main violations involve the use of drivers with fake PSV and/or driving licences. Some of these are so-called 'squad' drivers – a pool of drivers who wait at termini hoping to fill in for absent drivers or drivers needing a break – but some are the regular drivers. There is considerable variation among owners on the recruitment and training of drivers and conductors. Some carefully scrutinise the persons they hire, and retain drivers for considerable periods. One owner said that he had one current driver for seven years, another for three years, and a third for one year (R9). Another said that he studies the pool of drivers seeking jobs and then 'tries to get the best. There is no time to train; we just try to get the best' (R7).

Working Hours: Article 66A (1) of the Traffic Act stipulates that no person shall drive a public service vehicle or a commercial vehicle for more than a total of eight hours in any period of twenty-four hours. Compliance is very varied. Some firms comply by running one or two eight-hour shifts per day (R1, R12). Others run two shifts, but with only one of them conforming to the eight-hour limit (R10). Another works full days (12-14 hours), but gives drivers two days off after five days of work (R13). Still others work full days with minimal off days. Some complain about the shift system. One, who has gone back to only one set of drivers, says:

'I know it is against regulation, but they work for more than eight hours in a day. I have applied the shift thing once. The wear and tear gets high. The employees in the shifts want to make their money and make your target. When I had two shifts ... the income was slightly more, but the wear and tear was higher at the end of the day' (R14).

Management: The Ministry of Transport and the Transport Licensing Board issued a directive in late 2010 requiring all public transport operators to form or join transport Savings and Credit Cooperatives (SACCOs) or transport companies as a condition for obtaining or renewing PSV licences from 1 January 2011 onward. The directive's aim was to instil discipline in the public transport sector and to enable the government to regulate the sector more effectively. Compliance with this regulation appears to be high (see Table 1), but this may be masking different levels of actual compliance. Members of existing management companies and SACCOs found compliance with the new directive easy. 'The new law found us in existence....If you have a problem, you can ask the SACCO for assistance' (R4). In other cases, the directive made matatu owners come together to form new SACCOs or management companies. Some of these reported positive results, saying that they now know each other and are better able to confront problems on the route (R9). Others were less positive about the requirement and have effectively evaded it. 'We join SACCOs so as to get the TLB licence. No saving is done by the SACCO. It is not operated by owners. We have never been serious' (R12).

Monthly salary: Traffic Act 2009, no. 65A(6) Every conductor or driver of a public service vehicle shall ... be paid a permanent monthly salary by the owner of the public service vehicle.

This regulation hits at the heart of the 'target system' and has proved very difficult to enforce. Some of the larger bus companies and SACCOs use the monthly payment system, but most matatu owners oppose the monthly salary requirement. One problem they cite is the tendency of the crew to dip into the daily fares: 'If you pay them at the end of the month, it will be a conflict. They will always get some money on a daily basis' (R9). Owners also expressed concern about how a monthly payment can work when the vehicle is off the road and there is no income (R6).

The case studies suggest that each matatu owner assesses his situation and decides to comply with certain regulations and not to comply with others. The choices made vary from one firm to another, with some complying to a greater extent than others. The various reasons given for their non-compliance can be roughly categorised as follows:

1. Excessive bureaucracy or corruption
2. Lack of money and/or poor condition of the vehicle(s)
3. The regulation conflicts with a strong industry institution, such as the target system
4. Applying the regulation will, directly or indirectly reduce the business's income.
5. The regulation seems unfair

5.3 Implications of Selective Compliance

The findings have implications for government as well as for industry norms, practices and organisations. Selective compliance is a problem for government institutions. Although non-compliance is not total, it is sufficiently prevalent to create an atmosphere of constant and flagrant violation of regulations. Selective compliance has two possible effects on the government institutions charged with regulating public transport in Nairobi. The first and most important purpose is providing an orderly supply of transport services to city residents. As long as matatu operators can decide for themselves which regulations they will obey and which they will ignore, Nairobi's public transport will remain unpredictable and chaotic. All will suffer because the persistence of disorder increases uncertainty and inflicts losses on the majority of players (North 2005).

Second, selective compliance erodes trust between vehicle owners and government. This in turn, can create adversarial relationships, which will make mutually beneficial solutions to the sector's pressing problems very difficult to achieve.

Selective compliance also has implications for the development of industry norms, practices, and organisations. Two outcomes are possible. In the worst scenario, the atmosphere of anarchy created by widespread non-compliance with government regulations could spill over and weaken the industry's own institutions. Matatu owners, in a dog-eat-dog atmosphere may fail to join associations, become active in their SACCOS, or collaborate with others in informal ways. In such a scenario, selective compliance could erode compliance even among those normally inclined to obey the law, creating a downward trajectory that if it continues unabated, could result in a public transport system that responds to neither government nor its own institutions.

Alternatively, selective compliance could result in a hardening of the present stand-off between government and the matatu firms, in which regulations perceived as unfair, unreasonable, or simply too costly can be ignored, while others that are more 'convenient' are followed. All players in this scenario become stuck in a bad situation.

5.4 Responses to Selective Compliance

What can government do to avoid both of these negative outcomes? The findings suggest several broad strategies for government policy and implementation of transport regulations. The first is to eliminate corruption and conflicts of interest among enforcement authorities. This will put government in control of the sector, rather than allowing corrupt actors to undermine the implementation of policies and regulations. The second step is to concentrate enforcement on the regulations most important for supplying orderly public transport services to the travelling public. This will give a much needed focus to government's enforcement efforts, and should provide some immediate positive changes in the sector. The third direction, which should be followed alongside the first two, is to consider ways of building social support for compliance, while at the same time reducing the emphasis on fines and other forms of deterrence. Finally, it will be important to make regulatory processes simple and easy to comply with. This strategy complements the first. It can reduce the opportunities for corruption by making it possible for operators to get licences, have their vehicles inspected, and do the other things expected of an orderly public transport system.

What can the matatu industry do for itself? The matatu industry, through its institutions and organisations such as SACCOs, management companies, and associations, has two main roles: to lobby government and to provide services to members. 'Lobbying' in the sense of influencing legislators on issues of transport is important, but perhaps at this moment in the history of Nairobi paratransit, an even more urgent need is to work with government to develop better regulations and to build members' support for full, rather than selective compliance. This can and should be the focus of matatu industry efforts.

Government, the industry, consultants, and academic researchers can also contribute to the improvement of regulatory compliance. The identification of selective-compliance among PSV operators has implications for both the content and the approaches to further paratransit research. What is needed is 'good' regulation' than can comfortably be obeyed by most operators. Good regulation must, among other characteristics, be better than its alternatives (Banks 2003). Establishing the superiority of a particular regulation to its alternatives involves research and constructive interaction with a wide range of stakeholders. Research has begun, but it needs to continue. For example, in late 2012, the Transport Licensing Board commissioned a survey of PSV demand, termini capacities, and compliance with regulations (Envag 2012). The result is a useful study, but one that was limited to Nairobi and driven by a particular set of urgent issues. Such a study should not be a one-off exercise, but should be carried out regularly and, if possible, extended both geographically and in terms of issues covered. Likewise, stakeholder interaction needs to be constant and to involve a wide range of actors in various types of forums.

6. CONCLUSIONS

Matatus are currently the backbone of Nairobi's public transport system. Strengthening the institutions will not only strengthen public transport but should also contribute to the city's economy and the livelihoods of its citizens. Nairobi, however, has serious problems of non-compliance with public transport regulations, and as a result the city's transport system is chaotic and risks becoming ungovernable. Some positive steps, such as the introduction of SACCOs and management companies, have already been taken, but further steps are needed. With the collaboration of all stakeholders and the strengthening of matatu institutions, it should be possible for Nairobi to have a useful and orderly transport system.

This paper began with reference to the effect of disorder on a particular set of institutions. The analysis has shown the value of the New Institutional theory for understanding the problem and developing possible solutions. It has also shown that some of the characteristics of a system of order posited by scholars in the field are weak or missing from the Nairobi transport system. Building or re-building such institutions will require the attention of all stakeholders, both within and outside of government.

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