



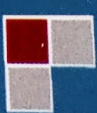
CONTEMPORARY ISSUES IN TRANSPORT DEVELOPMENT IN NIGERIA

Editors

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Contemporary Issues in Transport Development in Nigeria

Editors

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Foreword

Transport in nature is dynamic; hence constant changes are often experienced in its operations in terms of service delivery; regarding movement of goods and persons from one geographical location to the other, across the globe. Likewise, changes are experienced in infrastructure provision and supply. For instance, as a result of the technological advancement the methods and/or strategies of road construction, traffic management, port cargo handling and clearance among others, have always been in a flux. Consequent upon this, stakeholders in the sector such as educational institutions, academics, students, practitioners, security and law enforcement officials inter alia, need to be in tuned with the periodic changes often experienced in the transport sector in areas of service delivery and infrastructure provision.

Therefore, the titled of this book **Contemporary Issues in Transport Development in Nigeria** is ideal and capable of filling the knowledge gap(s) of an individual and /or organizations in any parts of the world that is determined to understand some of the latest development in the transport sector, with a view to improving the quality of service delivery as well as prolong the life span of the available transport infrastructure in all modes of transport, using contemporary planning and management approaches/strategies emphasized in this book. Importantly, going by the contents of this book, it is also capable of engendering sustainable research (es) and topical discourse in different areas of transportation, in a way that such academic exercises would thus expand the frontier of knowledge and assist the society in realizing the need for advancement of the sector in Nigeria, and other countries especially in most developing countries of the world. I hereby urge governments, private stakeholders and others in other sectors of the country, to read this book, embrace and implement the key recommendations therein, for the betterment of human race.

Senator Idris A. Umar
Honourable Minister of Transport

Preface

Transport Intelligence, being one of the statutory mandates of the Nigerian Institute of Transport Technology (NITT), by extension requires regular update of the public about technical changes and happenings in the transport sector globally, through lectures, workshop and other related academic exercises, for inform policy change, implementation and evaluation in the country. In view of the above, it is therefore believed that this objective can only be achieved through knowledge sharing via books, journals and periodic newsletter, hence the publication of this book. This sourcebook, therefore, is designed for an interdisciplinary audience of academic, students of tertiary institutions, planners, traffic and road engineers, legislature and so on.

The contents of this book are contributed by prominent academics in the field Transportation Planning and Engineering from Universities. The other category of contributors is some of the academic staff of the institute. The institute is hereby grateful to them all.

Dr. Aminu M. Yusuf
Executive Editor

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We equally thank the management and staff our parent Ministry-Federal Ministry of Transport (FMOT), under the distinguish leadership of the Honourable Minister, Senator Idris A. Umar and the Permanent Secretary- Engr. Nebolisa O. Emordi for being a strong source of power, inspiration and support for the Institute and its Management in day-to-day discharge of its statutory responsibility as hub of Transport Intelligence in the country. Finally, we give God all the Glory for everything.

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TRAFFIC RULE AND REGULATION COMPLIANCE IN NIGERIAN CITIES: THE CASE OF ABUJA CITY

By
Ojekunle J. A. and Koguna A.A.

Introduction

Every society needs one form of rules and regulations in order to guarantee peace, order and harmony. Indeed, no society can survive without developing a set of rules, laws and regulations that will guide the behavior of the members of such society. Yerokun (1976) observed that societal survival and viability depend on the obedience and compliance of its members to the rules and regulations guiding them. The above fact justifies the introduction of certain set of rules and regulations that guides the operation of transport system in different societies.

The need for rules and regulation of transport operation is also justified considering the enormous negative impact generated through its operation. Transport negative externalities are diverse, which include air pollution, noise, environmental degradation as well as traffic accidents. Curbing these externalities requires the need to develop set of rules and regulations to guide the operation of the transport system.

To curb traffic accidents in particular informs the decision of various governments globally to develop some set of traffic rules and regulations. The traffic rules and regulations are put in place primarily to ensure compliance; adequate compliance however cannot be guaranteed without proper enforcement. Adequate compliance is no doubt a panacea to reducing the menace of traffic accidents in Nigerian cities. This paper therefore examines the general compliance of motorists to traffic rules and regulations in Nigerian cities with particular reference to the Federal Capital Territory (FCT) Abuja. The policy implications of lack or low level of compliance are equally highlighted to provide some useful information for policy makers and agencies in charge of traffic rules enforcement.

Traffic Externalities In Nigerian Cities

Nigerian cities are increasingly becoming more inaccessible and impassable due to numerous traffic flow problems. The main traffic flow problems characterized Nigerian cities can be categorized into, traffic congestion, parking, accidents and environmental pollution.

Traffic congestion is a condition on the road network that occurs as the use of road increases. Congestion often relates to an excess of vehicles on a portion of road way at a particular time resulting in lowering speed and sometimes congestion is referred to as "stop and go" or in Nigerian context is called "go slow" or hold-up". It is one of the resultant effects of increased motorization witnessed in many Nigerian cities in last one and half decade.

Congestion is a common characteristic of road transport network in major Nigerian cities. The resultant effects of congestion is manifested in delays, prolonged journey or trip times, loss of man hours, high cost of transportation, environmental pollution and accessibility problems. Stopping these problems requires a holistic approach, first by identifying the underlying factors of congestion and secondly proffering effective solution. The issue of congestion is a major traffic problem in cities like Lagos, Abuja, Ibadan, Port Harcourt, Kano, Kaduna etc. The problem is also creeping to medium cities like Zaria, Onitsha, Aba, Warri, etc.

Solving congestion problem and other related traffic flow problem requires proper enforcement of traffic rules and regulations and attitudinal changes among Nigerian driving populace. As much as enforcement is needed, so also is public awareness and education on traffic signs, highway codes, road marking and traffic rules and regulations. Apart from fundamental factors of congestion such as land use, poor condition of road network, other main factor of traffic flow problem is human. At present, one major policy action of addressing this problem is the enforcement of traffic rules and regulations. What then are the traffic rules and regulations?

Traffic Rules Enforcement And Regulation

Like in all human endeavors, traffic laws and regulations are made to ensure public safety, reduce adverse environmental effects on the society and allow free flow of traffic at an acceptable speed. The major sources of traffic rules and regulations that govern the traffic system in Nigeria include; the Road Traffic Law Cap 118, the Federal Road Safety Decree 45 as amended by the Act 35 of 1992 otherwise referred to as CAP 141 laws of the Federation.

Aminu (1999) equally identified other sources of traffic rules and regulations, which include National Road Traffic Regulations Decree 1997 and various edicts enacted by state governments. These rules and regulations are designed to guide road users in order to eliminate or minimize road accidents. Asalor (1998) submitted that the current perceived ineffectiveness of the traffic rules and regulations Nigeria is due to lack of proper enforcement. Studies have also shown that proper enforcement of traffic rules and regulation brings orders and improves general safety on city road. (Koguna 2008). Traffic rules vary from place to place.

The structure, classification and type of road determine the types of rules that are enforced. For instance, while some rules are applicable to users of the highways, when it comes to rural roads some of these rules are relaxed when applied to the users. According to CAP 141, Law of the Federation "a ticket system" is introduced which is issued to any apprehended traffic offender. This ticket is called "notice of offence". Table 1, shows a check list of various offences, their codes as well as fines attached.

TABLE 1: Types of Road Traffic Offences and Fines in Nigeria

S/N	OFFENCES	CODES	POINTS	FINES IN NAIRA
1.	Driving License Violation	DLV	3	3,000
2.	Vehicle License Violation	VLV	3	3,000
3.	Light/Caution/Signal Violation	LCV	2	5,000
4.	Road Obstruction Violation	ROV	2	3,000
5.	Speed Limit Violation	SLV	2	3,000
6.	Overtaking Violation	OVT	3	3,000
7.	Traffic Light Violation	TLV	3	5,000
8.	Assaulting Marshals on Duty	AMD	4	10,000
9.	Obstructing Marshal on Duty	OMD	2	2,000
10.	Attempt to Corrupt Marshal	ATC	1	10,000
11.	Traffic Sign/Marking Violation	TSV	2	3,000
12.	Warning Sign Violation	WSD	3	3,000
13.	Dangerous Driving	DGD	3	3,000
14.	Alcohol/Drug Violation	ALD	3	3,000
15.	Wind Screen Violation	WSV	3	2,000
16.	Forged Papers and License	FPL	3	20,000
17.	Road Hazard Violation	RHV	3	2,000
18.	Do not Move Violation	DNM	2	3,000
19.	Construction Area Violation	CAV	3	3,000
20.	Slow Vehicle Failure to Move Over	SVF	2	5,000
21.	Flying Particles Violation	FPF	2	10,000
22.	Overloading Violation	OLV	2	3,000
23.	Inadequate Construction Warning	ICW	2	50,000

24.	Number Plate Violation	NPV	2	3,000
25.	Fire Extinguisher Violation	FEV	3	3,000
26.	Projection Load Violation	PLV	3	3,000
27.	Riding Motorcycle with Helmet	RMH	2	2,000
28.	Road Obstruction Violation	ROV	3	3,000
29.	Seat Belt Violation	SBV	2	3,000
30.	Under Aged Driving/Riding Violation	UDRV	2	2,000
31.	Use of Phone while Driving	UPWD	4	4,000
32.	Driving with Worn-out Tyre	WTV	3	3,000

Source: Source: FRSC, FCT Sector Command, 2010

In all, 32 traffic offences have been identified and are punishable with options of fines under the current Federal Road Safety Act CAP 141 laws of the Federation. In addition, knowledge of road traffic signs, signals, codes and pavement markings is very important to all road users if adequate compliance must be achieved. Ignorance of these signs and signals is not an excuse.

Unfortunately, majority of road users in Nigeria are not well educated on road traffic signs and signals even the elites. The situation in Nigerian cities is that of "educated illiterate" as far as traffic education is concerned. The general low level of traffic education is one of the reasons for prevalence of traffic rule violations in Nigeria cities. For instance, in Abuja alone an average of 13,000 traffic offenders are apprehended yearly. Table 2 shows the number of traffic offenders apprehended between 2003 and 2007 in Abuja.

TABLE 2: The Number of Traffic Offenders Apprehended in FCT Between 2003- 2007.

YEAR	NO. OF OFFENDERS
2003	19,946
2004	13,125
2005	15,870
2006	8,890
2007	7,170
Total	65,001

Source: FRSC, FCT Sector Command, 2010

As shown in Table 2, there is a general decline in the yearly apprehended traffic offenders, this may indicate steady improvement in compliance level of road users in FCT and may also indicate that the enforcement has been relaxed, so fewer people are apprehended yearly. To ascertain this, an observatory traffic survey was conducted in FCT Abuja along its major traffic corridors. The result of this survey shows that some traffic offences are more frequently committed than the others. Table 3 shows the traffic offences commonly violated by road motorists in the city.

Table 3: The Type of Traffic Offences Violated in FCT:

Number of vehicles surveyed	Use of Phone While Driving	Seat Belt Violation	Traffic Light Violation	Plate No. Violation	Over Speeding	Total Number of non-Compliance	Total Number of Compliance
19,281	253	4,627	361	183	1132	6,556	12725
	1.3%	24%	1.9%	0.9%	5.9%	34%	66%

Field Survey 2010

Table 3 shows a total of 19,281 vehicular traffic flows observed in a single day in five major traffic corridors in Abuja, out of these 6,556 violated one traffic rule or the others representing about 34% of the motorists in the city. The figures show that the most commonly violated offence is the use of seat belt about 24% of motorists in Abuja violated this rule during the survey. Comparing these figures with FRSC figures, it is clearly evident that the general compliance level of motorists/road users to traffic rules and regulations is still very low as against the picture given by the records from FRSC in table 2 Frequency of Traffic Offences in Abuja

Table 4 Observed Traffic Offences in FCT Abuja

Types Offences Observed	Use of Phone While Driving	Seat Belt Violation	Traffic Light Violation	Plate No. Violation	Over Speeding	Total Number of Offenders
Number of Offenders	253	4,627	361	183	1132	6,556
Percentage	3.9%	70.6%	5.5%	2.8%	17.2%	100%

Source: Field Survey 2010

From Table 4, seat belt violation is the most common offence. It represents 70.6% of all traffic offences in the city. Next to this is over speeding of motorists this represents 17.2%. The least offence as revealed from table 4 is the use of phone while driving. On a whole, 66% of motorists in Abuja comply with traffic rules and regulations while only 34% of them are considered as traffic violators. No doubt, more efforts need to be put in by the relevant authorities to ensure greater compliance.

Challenges of Enforcing Traffic Rules Compliance and Enforcement in Abuja

In spite of the establishment of relevant laws that stipulate rules and regulations guiding the use and operation of road transport in Nigeria, the compliance to these rules and regulations still remain a challenging one. A number of factors or reasons have been responsible for this; they include the following:

(i) Low Level of Traffic Education:

Majority of Nigerian populace are not well informed/educated in traffic signs and rules. The Nigerian city roads are filled with drivers and other road users who are traffic illiterate because they could not read and interpret traffic signs and codes. It becomes practically difficult for them to obey rules and regulations. The low level of traffic education is due to the fact that understanding and interpretation of traffic signs, codes and marking are never made a part of condition for issuance of National Drivers' License.

(ii) Porosity in the Process of Drivers' License Issuance

Related to the first problem is the porous procedure of issuance of National Drivers' License. The current procedure of issuances of Drivers License left much to be desired. Drivers' License is issued indiscriminately without ensuring that each applicant undergo necessary driving training and acquire necessary knowledge in highway codes and traffic education. There are many Nigerians who possess National Drivers' License but do not know how to drive. On the long run, we have road users who have no regard for traffic rules and regulations. The enforcement becomes very difficult because wrong people are licensed.

(iii) Inadequate or Absence of Road Signs and Marking:

Road Safety can only be guaranteed where there is adequate communication between the motorist/road users and the roads. The mode of effective communication is the highway codes, signs and markings, which are put along city highways. When these are not there, they create confusion for road users and ultimately lead to traffic flow problem. The absence of required road furniture will hinder compliance and also make enforcement unrealistic.

(iv) Poor Enforcement:

Traffic rules compliance becomes a mirage in an environment where there is no adequate enforcement. When traffic offenders are not punished, it gives them impetus to make further violation. The enforcement practice among traffic law enforcement agencies in Nigeria is very selective in many occasions. They free offenders who can bribe them or those they consider are highly placed persons in the society.

Apart from problem of inadequate equipment and facilities for effective policing of the city traffic environment, the general attitude of law enforcement agencies is also a problem to effective enforcement of traffic rules.

(v) Motorists Attitudinal Problems:

Attitudinal problem is a major challenge to effective traffic rules and regulations compliance. As a result of low traffic education, social-cultural barriers, ignorance and psychological problems of some road users particularly drivers, the task of enforcement is a challenging one. A lot of commercial drivers in Nigeria are not well educated, or brought up in an indecent environment this affect their behavior and attitude especially when it comes to compliance to basic rules and regulations guiding their operations.

Road transport sub-sector is the mostly unregulated and unorganised. Numerous trade unions exist which set different and conflicting rules for its members. There is no any identifiable National body coordinating their activities which makes enforcement also difficult.

Strategies for Improving Traffic Rules and Regulation Compliance

Improving the level of traffic rules and regulations compliance requires not only enforcement but the adoption of holistic approach. The approach requires the following strategies:

- (i) Overhauling of Procedure for Issuance of National Drivers License (NDL). The present porous procedure of issuance of NDL is not good for road safety reason as many holders of the NDL do not know how to drive vehicles. Many others who drive vehicles did not go through any driving test or school before they were issued the NDL. There is therefore need to make mandatory the formal driving training and testing of driving skills of every prospective applicant before he or she is issued NDL.
- (ii) Introduction of Driving and Traffic Education in the Curriculum of Primary and Post Primary Education in Nigeria. This is necessary to ensure that the citizens are well educated in basic traffic and high codes which are essential for safe traffic environment. The education will promote road safety culture and traffic rule compliance among road users.
- (iii) Establishment of Formal Driving Schools across the Country. This is

- (iv) necessary for training and retraining of drivers. The formal schools should be accredited by NITT in collaboration with FRSC in order to guarantee standard and quality in the training offered.
- (v) Road Safety Public Campaigns. This should be undertaken by relevant agency particularly the FRSC periodically at public motor parks, schools, market places e.tc. to create public awareness on traffic rules and high codes as they relate to the use of road and vehicles.
- (vi) Intensified Efforts on Enforcement. The current efforts of FRSC on traffic rules and regulations enforcement is not adequate, there is need to embark on aggressive traffic rules enforcement through a collaborative approach with other security agencies such as Nigerian Police Force (NPF). The enforcement should not be selective but cover all categories of road users with stiff penalties for offenders.
- (vii) Adequate Provision of road signage and Marking. The government agencies responsible for road construction and maintenance should ensure that road signage is provided along cities' roads to educate the motorists on proper use of road ways. The road signage should be positioned at strategic locations and be well maintained to ensure compliance on the part of the motorists.
- (viii) The law enforcement agents particularly traffic division of NPF, Vehicle Inspection Office (V.I.O) and FRSC are to ensure adequate policing of Cities roads and the highways to enforce compliance. The need to get rid of corrupt officers in these agencies is an urgent one if the enforcement of traffic rules will be effective.
- (ix) Establishment of Special Mobile Court. This is equally necessary to ensure that traffic offenders are tried and brought into book if they are found guilty. Such court will also help dispensing administration of justice by removing undue delays that usually characterized the conventional court proceedings.
- (x) Adoption of Artificial Intelligence System in Road Policing. There is the need for the government to invest in the development of artificial intelligence technology to police Nigerian roads. The technology is very versatile; they are used in diverse areas, such as traffic management, traffic policing, monitoring and tracking of traffic offenders instead of relying on the manual method which is currently in use. Many advanced countries presently use artificial intelligence system, such as video cameras, information technology and other forms of Electronic devices to

police and enforce traffic rules and regulation. The surveillance can be mounted 24 hours along the highway and all offenders can be tracked down without physically in contact with the offenders.

- x) Promotion of Research and Development. Research in traffic violations, drivers' behavior, cultural and attitudinal factors that impact on the driving behavior should be promoted. In addition, research is also required in the area of artificial intelligence technologies. One major challenges of enforcement is lack of reliable data on various aspects of road and traffic systems in Nigeria. This makes planning and operation of the agencies concerned in the enforcement of traffic rules difficult.

REFERENCES

- Aminu Iro (1999) *Guide to Road Safety* Printed by Gaskiya Corporation Zaria
- Asalor A. (1998) *Road Traffic Accidents in Developing Countries* Joja Educational Research and Publishers, Lagos p 15
- Federal Road Safety Corps (FRSC) 2010 Annual Report p57
- Ojekunle J.A. "The Need for Highway Education and Formal Driving Training for Nigerian Drivers" *The Trainer* October – December issue 1997
- Koguna. A.A (2008) *Level of Compliance to Road Traffic Rules and Regulations in Abuja Municipality 2003-2007* PGD Dissertation submitted to Nigerian Institute of Transport Technology, (NITT) Zaria.
- Yerokun A.L (1997) "Traffic Rules in Nigeria" quoted in *Productivity and Road Traffic Administration in Nigeria* Pub. Sam Graphic Prints Ibadan (2003)