

# **THE IMPACT OF VARIATIONS IN TRANSPORT POLICY- COMPLIANCE ON FLEET MANAGEMENT IN NIGERIAN INSTITUTIONS: A CASE OF THE UNIVERSITY OF PORT HARCOURT, NIGERIA**

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## ***Abstract***

*Misuse of public vehicles and fuel cards is becoming a worrisome menace. This study examined the level of compliance to the vehicle use policy of the University of Port Harcourt, Nigeria. The descriptive study used likert-scaled questionnaire and movement resgiter for data sourcing, and inferential statistics for analysis of generated data. Respondents were vehicle users of the Logistics & Transport Unit of the Office of the Vice-Chancellor, University of Port Harcourt. Findings revealed proportional improvement in policy-compliance and inversely proportional rise in maintenance/operational costs with enforcement of policy as well as expected decreases in the vehicle maintenance/operational costs. There was a strong and positive correlation between policy implementation strategies and the rate of compliance by the vehicle users. The strength of the relationship between the variables under study was 98.10%. Variation in the rate of compliance by the vehicle users was explained by changes in the policy*

*implementation strategies. The study recommended unrelaxed efforts at policy-compliance enforcement.*

**Keywords:** *Transport fleet management; Policy-compliance; Maintenance costs*

## **Introduction**

ICAC (2008) observed that the menace of misuse of public facilities is more rampant in the use of public vehicles and fuel cards. The spate of misuse of public vehicles allotted to some officers of the University of Port Harcourt is a key issue of concern to the University authorities (Wabali, 2015).

Ndikom (2008) emphasized that policy formulation is a reactive process, which may be characterized by some ad-hoc responses to specific problems as they acquire some critical dimension within the transport system. To regulate the use of public vehicles, checkmate unprofessional conducts, ensure accountability, instill safety consciousness, and forestall some sharp practices of drivers and vehicle allottees, the Transport Unit of the University formulated some extant rules, regulations and standard operating procedures.

As is always the case with laws, compliance to the policy poses another great measure of difficulties (Bethel-University, 2016). Non-compliance to rules and regulations guiding the use of public vehicles in the University of Port Harcourt manifests in such acts as the use of official vehicles without proper permission from the relevant authority, use of official vehicles by unauthorized persons - friends or minors of the allottees, low sense of safety and lack of adequate security measures on the part of university drivers, reckless use of vehicles by both allottees and their drivers, which in some cases have resulted in traffic crashes, thereby endangering the lives of drivers, passengers and other

road users and increasing the operating and maintenance costs of the vehicles.

Others are the inability or deliberate refusal of the drivers to complete and submit log books domiciled in each vehicle (Eneonwo, 2014), irregular completion of fuel coupons, movement registers and other forms of documentation, failure to disclose cases of minor crashes, diversion of vehicles to unauthorized places before and/or after assignments, speeding in excess of the maximum allowable limit of 50km/hr in built-up areas, 80km/hr on highway and 90km/hr on expressways for cars (Weiland, 2015; FRSC, 2012), drunk-driving, failure of drivers to carry out appropriate pre-driving and post driving checks (WOFT checks: water oil, fuel/fan belt tension and tyres) and inspection and detection of potential sources of danger, failure to carry out the post driving checks - checking for water leakages, oil droplets, tyre pressure and examination of the volume of lubricants, ensuring that vehicle is properly parked with glasses shut, doors locked, and prompt cleaning of the vehicle after each use (One-Motoring, 2013).

This work set out to examine the place of vehicle policy in the overall management of fleet in public institutions. It x-rays the impact of the current rate of compliance to the policy on the overall fleet management concerns of the University of Port Harcourt. It investigates the level of relationship between the current rate of policy compliance and the operational efficiency and operational cost of the fleet. The specific objectives were to:

1. identify the factors responsible for the operational failure of University vehicles.
2. determine the effectiveness of the policy in the overall fleet management practices of University.

3. ascertain how the level of compliance to the policy has aided the increased rate of vehicle failure and un-serviceability.
4. determine level of awareness of the provisions of the policy by the drivers and their principals.
5. highlight relevant lessons that can be learnt from the study.

The research questions were:

1. What are the factors that hamper the operational efficiency of the University fleet?
2. How effective is the University policy on use of public vehicles in the overall management of the University fleet?
3. Is the current rate of compliance to the policy on use of public vehicles responsible for the increased spate of vehicle failure and subsequent relapse to unserviceable state?
4. How knowledgeable are the drivers and their principals about the rules and regulations guiding their use of University vehicles, otherwise known as terms and conditions of allocation?
5. What are the lessons that can be learnt from this study to improve on fleet management in similar institutions?

Two null hypotheses formulated to guide the study were:

H<sub>01</sub>: There is no significant relationship between policy implementation strategies/steps and the rate of compliance by the official vehicle users in the University of Port Harcourt.

H<sub>02</sub>: There is no significant relationship between policy compliance rate and the proximity of official vehicle users' residence to designated parks of the University of Port Harcourt.

This study set out to examine the policy of the University guiding the use of her vehicles, with a view to reviewing the policy and

highlighting relevant issues for improved compliance, enforcement and monitoring. The study will enhance the appreciation of the impact of adequate policy framework on the management of fleets. It will improve the lives and properties saving measures resulting from matters that may have been addressed by the policy. It will reduce the increasing rate of relapse to conditions of un-serviceability and consequent premature boarding of otherwise public vehicles. The work will be useful for the reduction of the present phenomenal increase in the operating and maintenance cost of the University vehicles, and so provides funds for other pressing needs. It will guide the University management in taking more proactive informed decisions on the disposal of public vehicles, especially through the notorious public auction sales. The work will serve as a light and guide for further studies with the purpose of improving fleet management operations in other public institutions. It will also contribute to existing body of knowledge and literature on the relationship between the rate of compliances to rules and regulations governing the use of public goods and the sustenance of the use of public goods.

#### **Review of related literature**

According to their concerns, the regulations of the University can be classified into two. They are Operational conducts of the University drivers/standard operating procedures and operational conducts of vehicle allottees (terms and conditions of allocation). Pertaining to drivers, it is the policy of the University that drivers are:

- i. not to allow/condone the use/driving of vehicles under the influence of alcohol/drugs to engage in defensive driving and apply utmost discretion in the use of public vehicles;

- ii. to maintain drivers and passengers safety by the compulsory use of seatbelts as provided in the vehicles;
- iii. not to condone the diversion of University vehicles to unauthorized locations;
- iv. not to use University vehicles for towing operations;
- v. to sincerely complete the movement register before and after use of vehicle;
- vi. to ascertain and record the status of vehicles before taking them up for assignment;
- vii. to sign for collection and return of pool vehicles at the exit/entrance points of designated parking lot and to ensure the cleanliness of vehicles after each day's use;
- viii. to liaise with transport officers for servicing and maintenance of vehicles in their custody as and when due;
- ix. to do all pre-driving and post-driving checks.

Pertaining to vehicle allotees, the policy of the University that allotee(s) are:

- i. not to drive University vehicle(s) by himself/herself where a university driver has been designated, except in unavoidable circumstances;
- ii. not allow the use of university vehicle(s) for unofficial engagements, except where appropriate permission has been granted by the transport officer;
- iii. not to allow the driving of University vehicles by his/her spouse, child, friends, relatives, ward, etc.;
- iv. not to allow/condone the interchange of official vehicle number plates or any part thereof, with any other vehicle;

- v. to maintain a system of liaison with the Transport Office, for the purposes to taking complaints arising from use of vehicles and for maintenance/servicing of vehicles.

Ajienka (2015) provides some pieces of information on expenditures on repairs and maintenance of the University of Port Harcourt vehicles from January 2010 to May 2015. They are January-December 2010 (N113, 489,662), January-December 2011 (N100, 231,531), January-December 2012 (N81, 429,458), January-December 2013 (N15, 082,249), January-December 2014 (N33, 766,399), and January-May 2015 (N3, 824,022). The figures clearly show that the cost of repairs and maintenance was on annual progressive decline from January 2010 to December 2013, and then rose rapidly in 2014. From the figures for January-May 2015, there was comparative decline in average monthly maintenance/repair cost. This is premised on the fact that the average monthly cost for January-December 2014 was 2,813,866 (i.e.  $33,766,399 \div 12 = 2,813,866$ ), and for January-May 2015, it again declined to 764,804 (i.e.  $3,824,022 \div 5 = 764,804$ ).

## **Methodology**

The study engaged descriptive survey for data gathering and inferential statistics for data analysis. A questionnaire was structured in a flexible style that border on experiences in use of University vehicles, understanding of the provisions of University policy/rules and regulations governing the use of vehicle, policy compliance factors and opinions/ideas on ways to ensure more responsible and efficient use of public vehicles. It is such that easily allowed for scaling of responses, using the Likert Five Point Scale from “Strongly agree” (5 points) to “Neutral” (1 point).

Secondary data was used to test hypothesis one which measured the relationship between policy implementation strategies

and the rate of compliance by the vehicle users. The policy implementation strategies is operationalized by taking percentage of the number of queries, warning letters, surcharges and suspension letters received by the Allotees/Drivers within the period under study (2010-2015). Similarly, within the same period, policy compliance rate is operationalized using the regularity of return of logbooks as expected at the end of every month and completion of the daily movement register domiciled at each vehicles park.

Primary data was used to test hypothesis 2 which measured the relationship between policy compliance rate and proximity to vehicle users' residence. Both the dependent variable and independent variable were operationalized using relevant questions from the questionnaire. The response mode from the questionnaire were measured using the Likert Five Point Scale varying from: Strongly agree (representing 5 point), Agree (representing 4 point), Disagree (representing 3 point), Strongly disagree (representing 2 point), Neutral (representing 1 point).

Currently, the University operates a fleet of less than one hundred and twenty (120) vehicles because of the drop in fleet size after the public auction sales of un-serviceable vehicles in 2014. In some cases, there are no official drivers attached to the vehicle. This is more so with the pool vehicles. About one hundred vehicles have been allocated to various officers and offices of the University. The rest are in the central pool. It is expected that a total of one hundred and eighty (180) respondents may not be exceeded. This includes both drivers and vehicle allottees. Because the sample size in its entirety is relatively low, efforts were be made to cover the entire population.

The Analysis of Variance (ANOVA) served for statistical analysis of the rate of compliance to the policy on daily return of vehicles to the designated parks and completion of movements registers as measures of policy compliance rate. Hypothesis 1 addressed the relationship between the steps/strategies taken in the past five years, to implement the policy and the rate of policy compliance in the said years. Hypothesis 2 bordered on the relationship between the proximity of the residence of a vehicle user and his/her rate of

compliance to the regulation on daily return of vehicles to University parks. Each hypothesis was tested.

## Results and Discussion

Table 8.2.6.1: Response rate

S/N	Status of the respondents	Number distributed	Number returned	% Rate of response
1	Vehicle allottees	64	58	90.6
2	Drivers	107	99	92.5
	<b>Total</b>	<b>171</b>	<b>157</b>	<b>91.8</b>

From Table 8.2.6.1, 171 copies of questionnaire were successfully distributed to the 180 respondents that formed the sample population. Only 157 respondents (representing 91.8% of the sample population) returned well completed copies of the questionnaire.

Table 8.2.6.2: Rate of policy compliance, policy implementation actions taken and annual cost of repair/maintenance of vehicles from 2010 to 2015

S/No.	Policy compliance rate (%)	Policy implementation actions taken (%)	Annual cost of repair/maintenance of vehicles (₦)
Year 1 (2010)	15	8	113,489,662
Year 2 (2011)	19	13	100,231,531
Year 3 (2012)	28	22	81,429,458
Year 4 (2013)	43	35	15,082,249.00
Year 5 (2014)	36	31	33,766,399.00
Year 6 (Jan-May, 2015)	52	38	3,824,022.00

Source: Record of monthly return of completed logbooks, Permissions Register (for non-return of vehicles), vehicle movement register and the 7th Vice-Chancellor's Tenure Report/Account)

(NOTE: Policy implementation actions are the queries issued, administrative warning letters issued and surcharges against drivers for vehicle misuse within each year.)

Table 8.2.6.2 answers research questions 2 & 3. For research question 2 (How effective is the policy on use of vehicles in the management of the fleet?), it is clear that with increased steps/actions towards policy implementation, there is corresponding increase in policy compliance rate and expected decrease in vehicles repair/maintenance costs. In 2010, only 8 implementation actions were taken and the rate of compliance was only 15 percent. This also shows that the cost of vehicle repairs/maintenance was as high as ₦113,489,662 (One hundred and thirteen million, four hundred and eighty nine thousand, six hundred and sixty two naira). In the year 2011, the policy implementation actions increased to 13, compliance rate increased correspondingly, to 19 percent and the annual cost of repair/maintenance decreased to ₦100,231,531 (One hundred million, two hundred and thirty one thousand, five hundred and thirty one naira). In the following year (2012), a total of 22 steps were taken towards implementation of the policy, and this led to an increase in compliance rate to 28 percent and the corresponding decrease in vehicles repair/maintenance cost to ₦ 81,429,458 (eighty one million, four hundred and twenty nine thousand, four hundred and fifty eight naira). In 2013, 35 policy implementation steps were taken and 43 percent compliance rate was recorded. There was corresponding decrease in the vehicles repair/maintenance cost to a much lower ₦15,082,249.00 (fifteen million, eighty two thousand, two hundred and forty-nine naira).

For 2014, there were 31 policy implementation steps/strategies taken, 36 percent policy compliance rate and a corresponding decrease in vehicles repair/maintenance cost to ₦33,766,399.00 (thirty three million, seven hundred and sixty six thousand, three hundred and ninety nine naira). Lastly, in 2015, only 5 months record of repair/maintenance cost was available. The records show that between

January and December, 2015, 38 implementation steps were taken; rate of policy compliance was 52 percent and from January to May, the sum of ₦3, 824, 022.00 was spent on vehicles repairs/maintenance. From the forgoing, it is clear that with increased actions/steps towards the implementation of the policy on the use of vehicles, there is always improvement in the policy compliance rate and decrease in the amount of money spent by the University in running the fleet.

Research question 2 (How effective is the policy on use of vehicles in the management of the fleet?) can be answered thus: The University Policy on the use of official vehicles is very effective in the management of fleet. However, its effectiveness is a function of the consistency of its implementation steps/actions/strategies. For research question 3, “Is the current rate of compliance to the policy on use of public vehicles responsible for the increased spate of vehicle failure and subsequent condition of un-serviceability?”, Table 8.2.6.2 shows that vehicle failure (un-serviceability) in the University of Port Harcourt is primarily a function of the rate of compliance to the University policy on the use of official vehicles. This is so because efficiency of fleet improve alongside with improvement in policy compliance, as indicated by the attendant cost of vehicle repairs/maintenance.

Research Question 4 (How knowledgeable are the drivers and their principals about the rules and regulations guiding their use of university vehicles?) is addressed in Table 8.2.6.3.

*Table 8.2.6.3: Rate of awareness of vehicle users regarding the University vehicle policy*

Question	Responses			Percentage		Total
	Yes	No	Total	Yes %	No %	%
Are you aware of the provisions of the University policy on the use of University vehicles?	52	105	157	66.9	100	

From Table 8.2.6.3, the level of awareness of University vehicle users about the provisions of the policy on their use of vehicle is a paltry 33.1%. The percentage of unawareness is very high at 66.9%. This explains why compliance rate is low, as one is not expected to comply with a rule that he/she does not know about.

Research Question 5: Kindly suggest best measures for the improvement of the management of University fleet.

*Table 8.2.6.4: Suggested measures for improvement in University fleet management*

<b>Measures</b>	<b>Responses</b>	<b>Total Responses</b>	<b>%</b>
Controlled maintenance/servicing	46	157	29.3
Regular retraining of drivers	58	157	37
Compulsory completion & submission of movement register & logbooks	23	157	14.6
Stern disciplinary measures against Defaulters	26	157	16.6
Others (specify)	4	157	2.5

From Table 8.2.6.4, respondents suggested five measures for the improvement of the management of the University fleet. Most respondents suggested regular retraining of University drivers (58 respondents or 37 percent) of total responses. This is followed by the suggestion of control in maintenance/servicing of vehicles (46 respondents or 29.3 percent) of total responses. Stern disciplinary measures against defaulters had 26 respondents or 16.6 percent of the total respondents. Respondents gave 4 other different suggestions, as follows:

1. Create more awareness on the provisions of the policy.
2. Establishment of annual reward scheme for accident-free drivers.
3. More serious compliance monitoring & evaluation (no sacred cows).
4. Monetise the vehicle for users (allotees) who do up 4 years in office.

*Table 8.2.6.5: Proximity of user residence to designated parks*

S/N	Questionnaire on Policy Compliance Rate	RESPONSES				
		SA	A	D	SD	N
A	You reside within the University campus	46	44	26	22	19
B	You reside within the University host community	66	37	16	24	14
C	You reside outside the University host community	62	47	19	26	3
D	No specific/definite residence at the moment	5	21	67	40	24
	<b>Total</b>	<b>179</b>	<b>149</b>	<b>128</b>	<b>112</b>	<b>60</b>

Table 8.2.6.5 addressed research question 1 by frequency and percentage rate. Residing within the university campus had 46 respondents strongly agree, 44 agree, 26 disagree, 22 strongly disagree and 19 neutral, with a percentage representation of 29.30%, 28.03%, 10.20%, 16.56%, 14.01% and 12.10% respectively. Residing within university host community had 66 respondents strongly agree, 37 agree, 16 disagree, 24 strongly disagree and 14 neutral, with a percentage representation of 3.18%, 13.38%, 42.68%, 25.48% and 15.87% respectively.

Always liaising with the transport officer for the routine maintenance/servicing of the vehicle showed responses of strongly

agree 62, agree 47, disagree 19, strongly disagree 26 and neutral 3, with a percentage representation of 39.49%, 29.94%, 12.10%, 16.56% and 1.91% respectively. Stringent of the University policy on official vehicle users showed responses of strongly agree 66, agree 37, disagree 16, strongly disagree 24 and neutral 14, with a percentage representation of 42.04%, 23.57%, 10.19%, 15.29% and 8.92% respectively.

*Table 8.2.6.6: Policy compliance rate*

S/N	Questionnaire on Policy Compliance Rate	RESPONSES				
		S.A	A	D	S.D	N
11	You service/repair the official vehicle in the University accredited service centre without liaising with the Transport Unit	7	15	45	77	13
12	You service/repair the official vehicle using your trusted private auto-mechanics	62	50	18	24	3
7	Your official vehicle is usually parked at the car pool after work	12	18	50	69	8
10	Your personal convenience matters in the choice of park for your official vehicle	66	48	15	20	8
	<b>Total</b>	<b>147</b>	<b>131</b>	<b>128</b>	<b>190</b>	<b>32</b>

Research question 1 was further addressed by Table 6 showing frequency and percentage of policy compliance rate: Service/repair of the official vehicle in the University accredited service centres without

liaising with the Transport Unit showed responses of strongly agree 7, agree 15, disagree 45, strongly disagree 77 and neutral 13, with a percentage representation of 4.46%, 9.56%, 28.67%, 49% and 8.29% respectively. Service/repair the official vehicle using your trusted private auto-mechanics showed responses of strongly agree 62, agree 50, disagree 18, strongly disagree 24 and neutral 3, with a percentage representation of 39.49%, 31.84%, 11.46%, 15.28% and 1.91% respectively. Parking official vehicle at the car pool after work showed responses of strongly agree 12, agree 18, disagree 50, strongly disagree 69 and neutral 8, with a percentage representation of %, 7.64%, 11.46%, 31.84%, 43.94% and 5.09% respectively. Personal convenience matters in the choice of park for your official vehicle showed responses of strongly agree 66, agree 48, disagree 15, strongly disagree 20 and neutral 8, with a percentage representation of 42.04%, 30.57%, 9.55%, 12.73% and 5.09% respectively.

### Analysis of hypotheses

**Hypothesis One:** There is no significant relationship between policy implementation strategies and the rate of compliance by the vehicle users in University of Port Harcourt.

*Table 8.2.6.7: Table of values for hypothesis 1 - Percentage rate of policy compliance & policy implementation actions taken from 2010 to 2015*

S/No.	Policy compliance rate (%)	Policy implementation actions taken (%)
Year 1 (2010)	15	8
Year 2 (2011)	19	13
Year 3 (2012)	28	22
Year 4 (2013)	43	35
Year 5 (2014)	36	31
Year 6 (2015)	52	38

*Source:* Record of monthly return of completed logbooks, Record of daily permissions for non-return of vehicles, vehicle movement register.

Table 8.2.6.8: Extract from SPSS table of simple regression for Policy Implementation Strategies and Rate of Compliance by Vehicle Users.

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of Estimate	Durbin-Watson
1	.981 <sup>a</sup>	.962	.953	3.09280	1.949

a. Predictors: (Constant), Policy Implementation Actions

b. Dependent Variable: Policy Compliance Rate

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	972.572	1	972.572	101.676	.001 <sup>b</sup>
	Residual	38.262	4	9.565		
	Total	1010.833	5			

a. Dependent Variable: Policy Compliance Rate

b. Predictors: (Constant), Policy Implementation Actions

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	4.183	3.049		1.372	.242
1 Policy Implementation Actions	1.142	.113	.981	10.083	.001

a. Dependent Variable: Policy Compliance Rate

From the regression tables, the model summary showed a strong and positive correlation between policy implementation strategies and the rate of compliance by the vehicle users in University of Port Harcourt. The value of the co-efficient of the correlation (R) was 0.981, showing that the strength of the relationship between the variables under study is 98.10%. The co-efficient of determination (R<sup>2</sup>) showed a value of 0.962 which indicated that about 96.20% of the variation in the rate of compliance by the vehicle users was explained by changes in the policy implementation strategies. The remaining 3.80% is accounted for by other factors not covered in this study.

The computed t-statistics for the study showed t-computed as 10.083. Using the conventional 5% level of significance, the critical value of t-statistic at 4 df is 2.32. Since the t-calculated is greater than

t-critical value (10.083>2.32), null hypothesis was rejected and alternative hypothesis was accepted. Thus, there was a significant relationship between policy implementation strategies and rate of compliance by vehicle users in University of Port Harcourt.

F-computed was 101.676, while the critical value at 5% level of significance was 10.13. Since F-computed is greater than F-critical ( $F_{1,3} = p < 0.05$ ), the model was significant and so the predictor variable (policy compliance strategies) constituted a fairly good model and significantly predicted the rate of compliance by the vehicle users.

The linear regression model formula can be stated as follows:

$$PCR = 4.183 + 1.142PIA + \mu.$$

This means that the expected increase in policy compliance rate is 1.142 units for each element of policy implementation actions taken.

**Hypothesis Two:** There is no significant relationship between policy compliance rate and the proximity of vehicle user's residence to University of Port Harcourt parks.

The extracts from SPSS version 20 software print out for regression result of policy compliance rate and the proximity to vehicle users residence is shown in the table below:

Table 8.2.6.9: Extract SPSS table of simple regression for Policy Compliance Rate (RPCR) and Proximity of Vehicle Users Residence to University parks.

## **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
	.636 <sup>a</sup>	.404	.206	39.59106

a. Predictors: (Constant), PVUR: Proximity of Vehicle Users' Residence to University Parks.

b. Dependent Variable: Policy Compliance Rate (RPCR) by Vehicle Users.

#### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F
1	Regression	3190.844	1	3190.844	2.036
	Residual	4702.356	3	1567.452	
	Total	7893.200	4		

a. **Dependent Variable:** RPCR: Response on Policy Compliance by Vehicle

b. **Predictors (Constant):** PVUR: Proximity to Vehicle Users' Residence

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardize	T	Sig.
		B	Std. Error	d Coefficients Beta		
1	(Constant)	64.313	46.461		1.384	.260
	PVUR	.488	.342	.636	1.427	.249

a. **Dependent Variable:** RPCR: Response on Policy Compliance Rate by Vehicle Users

b. **Constant:** PVUR: Proximity of Vehicle Users' Residence to designated University Parks.

From the regression tables, the model summary indicated that there was a strong and positive correlation between rate of policy compliance by vehicle users in University of Port Harcourt and the proximity to vehicle users' residence. The value of the co-efficient of the correlation (R) was 0.636, showing that the strength of the relationship between the variables under study was 63.60%. The co-efficient of determination ( $R^2$ ) showed a value of 0.404, showing that about 40.40% of the variation in rate of compliance by the vehicle users in University of Port Harcourt was explained by factors of proximity to vehicle user residence to designated University parks. Other factors not covered in the study accounted for the remaining 59.60%.

The computed t-statistics was 1.427. Using the conventional 5% level of significance, the critical value of t-statistic at 4 df is 2.32. Since the t-critical value is greater than t-calculated value ( $2.32 > 1.427$ ), null hypothesis was accepted and the alternative hypothesis was rejected. That is, policy compliance rate by vehicle users in University of Port Harcourt to the policy on daily return of vehicles was significantly related to the proximity of vehicle user residence to University parks.

From ANOVA table, F-computed was 15.815, while the critical value at 5% level of significance was 10.13. Since F-computed is greater than F-critical ( $F_{1,3} = 15.815, p < 0.05$ ), the model was significant and so, the predictor variable (rate of compliance by vehicle users) constituted a fairly good model and significantly predicted proximity of vehicle user residence to University parks. The overall implication is that the model was good for policy making. The linear regression model formula can be stated as:

$$RPCVU = 64.313 + 0.488PVUR + \mu$$

This means that the expected increase in policy compliance rate was 0.488 units for each element of proximity to vehicle user residence.

### **Summary of findings**

From hypothesis 1, increase in actions/steps taken to enforce/implement the policy increased policy compliance rate and decreased vehicle maintenance/operational costs. Also, there was a strong and positive correlation between policy implementation strategies and the rate of compliance by the vehicle users in University of Port Harcourt. The value of the co-efficient of the correlation indicated that the strength of the relationship between the variables under study was 98.10%. The co-efficient of determination ( $R^2$ ) showed a value of 0.962 which indicated that about 96.20% of the variation in the rate of compliance by the vehicle users was explained by changes in the policy implementation strategies. The computed t-statistics for the study showed t-computed as 10.083. At 5% level of significance, the critical value of t-statistic at 4 df is 2.32. The t-calculated is greater than t-critical value ( $10.083 > 2.32$ ). Again, F-computed was 101.676, while the critical value at 5% level of significance was 10.13. This indicated that the model was significant and so the predictor variable (policy implementation strategies) constituted a fairly good model and significantly predicted the rate of compliance by the vehicle users.

From the foregoing, the following deductions were discernible:

### ***Poor quality of drivers undermines operational efficiency***

Many of the drivers were illiterate, lacking the basic competence necessary for proper documentation. Such abilities of a professional driver to register movements properly, fill the log book, read the condition of vehicle through its intelligent transport system (signals and metering system) were lacking. These were the manifestations of poor quality and improper recruitment considerations. Many drivers also lacked the basic understanding of the concept of defensive driving

and would rather engage in quarrels and fights (road rage) over what they assumed to be their rights.

***Truancy and lack of integrity hampers effective service evaluation***

Insincerity on the part of drivers has been noted as a serious issue that negatively impacts fleet management in the University of Port Harcourt. Many drivers hardly told the truth, especially when involved in major crashes that did not require the towing of the vehicles they drove. They were also in the bad habit of diverting major part of the monies meant for fuelling to their private uses, and diverting vehicles from official assignments to personal engagements.

***Many drivers are careless about the use of university vehicles***

Carelessness/negligence was another habit that hampered the operational efficiency of the university vehicles. This category of drivers hardly engages in pre-driving and post-driving checks. This led to avoidable vehicle breakdowns and consequent increased down-times and high operating costs.

***Repair of vehicles by quacks increases overall depreciation rate and maintenance cost***

Many allottees of University vehicles use road-side technicians with doubtful professionalism to fix university vehicles. This was more so in the case where they did not want to report accidents or faults arising from their carelessness or abuse of such vehicles. So, they would not comply to the rule that clearly states that allottees/drivers should liaise with transport officer for repair/maintenance of university vehicles. The use of quacks led to higher degree of damage over time, as they only fixed immediate causes, whereas the remote causes of damages were always ignored. There are also cases of outright damage to vital

parts by unprofessional auto-technicians in the process of repairs. Exchange of superior parts of vehicles with inferior ones constituted some of the issues.

***Reckless use of University vehicles by unauthorized persons***

High rate of depreciation of University vehicles has been observed. This has led to exorbitant and highly increased cost of maintenance of vehicles. (See “On Annual Cost of Vehicle Repairs and Maintenance”). Users of the vehicles were reckless. Where stiff penalties and other policy enforcement steps were frequently taken, recklessness was seriously curtailed.

***Policy implementation strategies impact on compliance rate***

From the analysis of hypothesis 1, increase in number of warning letters, suspension from duties, surcharges, quarries, etc, issued to drivers for breach of rules produced proportionate increase in policy compliance rate and relative decline in negative behaviour on the part of drivers. To save cost of running the University fleet needed stiffer penalties for defaulters.

***Place of residence of vehicle users partly influence their compliance rate to the policy on daily return of vehicles***

From the analysis of hypothesis 2, there was a relationship between the allottee place of residence and ability to comply with the policy that stipulated that the official vehicles should be returned to the central parks after each day’s use. Many users were willing to comply with the directive, but would not because they would be inconvenienced by it, as they do not live on campus.

***Road crashes involving University vehicles mainly caused by over-speeding***

Because some drivers divert the official vehicles to other locations when sent on errands by their principals, they spend substantial part of the time/period for the official assignment on their personal engagements. After this, they would wish to make up for the time spent outside the official assignment by over-speeding. This led to avoidable crashes.

### **Recommendations**

It is imperative to make the following recommendations for drastic improvement of the efficiency of the University fleet to reduce operating costs, down-times and save lives:

#### **Enhanced drivers' recruitment considerations**

There should be well tailored and suitable recruitment qualifications. The emphasis on National Drivers' Licence and Trade Test Certificates alone does not guarantee good products of recruitment. It has become necessary to establish stringent but apposite recruitment screening exercise for prospective drivers. Emphasis should now be placed more on competence than paper qualification. Such exercises should test the literacy level (ability to read and write), integrity/sincerity, and limit of patience and the understanding of the Federal Highway Code. Illiteracy on the part of drivers manifests in their inability to engage in proper documentation, such as filling of fuel coupon, filling of logbooks, filling of movement registers, incident report writing, effective reply to queries and inability to read information from the intelligent transport system. It has been observed that drivers' recruitment in the past has been majorly influenced by influential members of staff. This recourse to god-fatherism gives the benefitting drivers the assurance that their benefactors would always intervene when punishment for insubordination is meted out to them. This therefore, calls for a stiff

penalty against undue patronage by senior members of staff. It is instructive to note that illiteracy on the part of the drivers hampers the likelihood of proper usage assessment, as they do not keep useful records.

#### **All Vehicles to be serviced by Accredited Agents**

The use of incompetent road-side mechanics and other quacks technicians to repair/maintain University vehicles should stop. All requests for repair/ servicing should be channeled to the transport unit. This will regulate operations and guarantee the use of quality spare parts and recommended oil for servicing. Penalties should be meted out to allottees who, for the reasons of hiding their recklessness, engage unaccredited auto technicians for repair/maintenance of University vehicles. Where an allottee is found to have caused substantial damage to university vehicle through his/her recklessness or misuse of official vehicle, the concerned allottee should be surcharged for the repair. This should also apply to all drivers and should be enforced strictly.

#### **Review and Publicity of Policy/ Terms & Conditions of Allocation**

It has been observed that many allottees do not have adequate knowledge of the university rules and regulations/policy governing their allocation and use of University vehicles. It is therefore, recommended that every allocation letter should come with a copy of the University policy on the use of official/utility vehicles. Allottees should sign for collection of the documents. On the other part, drivers should also be given regular briefing on the provisions of the policy.

#### **Use of Speed Limiting Devices**

Speed limits should be enforced on all University vehicles to reduce crashes resulting from over speeding. This can be done by installation of speed limiting devices on the vehicles. The speed should not exceed 100km/ph for cars, mini-buses and sports utility vehicles; while that of trucks, tractors, long buses (coaster) and other heavy-duty vehicles should not exceed 80km/ph. This can be achieved if management of the University approves and mandates the transport unit to enforce it.

#### **Compulsory return of Vehicles during weekends and Public Holidays**

It is one of the findings of this research work that much of the misuse of University vehicles takes place during the weekends and public holidays. It is therefore necessary to enforce the compulsory return of allocated vehicles to the parks at the close of work every Friday, and on the evenings preceding public holidays, except where express permission has been granted by the transport unit on very cogent grounds. Users of University vehicles have ample time to travel out of the state during the weekends for unofficial purposes, but prefer to use the official vehicles instead of their private ones.

#### **Preference should be given to Allotees of University vehicles and Transport Officers in Staff Housing Allocation**

This research work has revealed that the failure of vehicleusers to comply with the policy on daily return of vehicles to the designated University parks is mainly due to the distance between their residences and the parks. It is quite inconveniencing for the principals (allotees) and their drivers to park in the University and then take taxis to their various homes. It is equally inconveniencing for drivers to drop off their principals in far-flung locations only to return to the University to park the vehicles and then find their own ways home; considering the

heavy traffic usually experienced at the peak hours of traffic (4pm) during which these workers go home. To this end, it is recommended that special preferences be given to users of official vehicles when housing allocation is being made for available accommodations. The boys-quarters attached to the main staff quarters should be recovered for the drivers attached to such officers. It is also imperative to accommodate at least a Transport Officer or Transport Supervisor in the residential quarters, so as to be on ground to monitor daily use of University vehicles, especially the signing for, and prompt return of vehicles at around 6pm daily. This has become necessary because cases of manipulation of past day's records have been noted.

#### **Recovery and use of University Auto-workshop and Filling Station**

The University has an automobile workshop at Delta Park but it has gone comatose due to inadequate patronage and poor management. The cost of repairs/maintenance of University fleet by contractors is high. This can be drastically reduced if the University's automobile workshop is recovered and revived, qualified technicians hired and placed on University's payroll under the Transport Unit, and a spare parts warehouse established and manned by an inventory officer. Replacement parts are cheap when procured in such large quantity as the University always use in a short period. All collection of parts must be authorized by the Transport Unit and proper records kept by the Vehicle Inventory Officer, who would also recover the bad/replaced ones for proper accounting. This move will also guarantee the quality of spare parts used on university vehicles.

#### **Conclusion**

University policy on use of public vehicles has not been effective in the overall management of University fleet because the rate of compliance to the policy is low and only a little is being done to enforce strict compliance. Therefore, the goals/objectives of the University policy on the use of vehicles have not been substantially met. The current rate of compliance to the policy is responsible for constant vehicle failures and consequent relapse to unserviceable state. Drivers and allottees of University of public vehicles in the University lack adequate knowledge of the provisions of the policy, otherwise called rules and regulations. This has seriously impacted compliance rate, as no one is expected to observe a rule he/she is unaware of.

The factors that hamper operational efficiency of the university fleet range from: drivers' illiteracy, truancy/insincerity, non-compliance to policy by allottees and drivers, inadequate knowledge of the rules by operators of the vehicles, distances between residences of users and University parks, poor health condition of vehicle users, allottees attitude to the vehicles ("*Na gofment property*" mentality), use of quack, cheap technicians, etc. The University policy on use of official vehicles needs to be reviewed to provide for issues observed over the years. Transport Unit lacks the powers to revoke allocation or even sanction allottees.

## **References**

- Ajienka, J. (2015). *Landmarks & Legacies*, July 12, 2010 – July 11, 2015. *Tenure Report*: University of Port Harcourt Press.
- Akpoghomeh, O. (2012). *The Terror of Transport and the Transportation of Terror*. Inaugural Lecture Series No 94. University of Port Harcourt. University of Port Harcourt Press; Port Harcourt.

- Bethel-University (2016): Fleet Management Policy. Retrieved on Oct. 13, 2016, from [www.bethel.edu/transportation/fleet-](http://www.bethel.edu/transportation/fleet-)
- Eneonwo, C. (2014): *Irregular filling of the vehicles log books*. Unpublished official memo from Assistant Transport Officer, Protocol & Logistics Unit, Office of the Vice-Chancellor, University of Port Harcourt. June 13, 2014.
- FRSC (2012): FRSC harps on hazards of speed limits violation. Federal Road Safety Commission, Nigeria. [frsc.gov.ng](http://frsc.gov.ng)
- Ibe, C. (2011). *Transport Operations: Issues & Challenges*. Owerri. MeyPrints Publishers, Owerri.
- ICAC (2008): *Use And Misuse of Public Sector Resources*. Independent Commission Against Corruption (2008). Retrieved from [www.icac.nsw.gov.au](http://www.icac.nsw.gov.au) on March 2, 2016.
- Olagunju K. (2013). *Driving in Nigeria: Requirements, Laws, Traffic Agencies & Safety Tips*. Inquirer Publishers Ltd. Lagos.
- Mac'Odo, D. (1999). *Statistics for Decision Making*. Linnet Paul Publications, Port Harcourt.
- Ndikom, O. (2008). *Elements of Transport Management*. Lagos. Bunmico Publishers, Lagos, Nigeria.
- Oyadiran, P. & Aregbesola A. (2008). *Road Transport Policy & Traffic Management in Nigeria*. Journal of Research in National Development. Vol.6. No. 1:1596-8308.
- Tittenbrun, J. (2008). *Private & Public Ownership: A critical evaluation of the property rights theory*. Retrieved on November 12, 2015 from [www.researchgate.net](http://www.researchgate.net) in [www.researchgate.net/publication/25](http://www.researchgate.net/publication/25).
- Udeorah, S. (2014). *Schedule of Drivers/Vehicles for May, 2014*. (Unpublished memo from Head, Protocol & Logistics, Office, of the Vice-Chancellor, University of Port Harcourt). May 17, 2014.

Udeorah, S. (2014). *A Need for Change of Attitude*. (Unpublished memo from Head, Protocol & Logistics, Office of the Vice-Chancellor, University of Port Harcourt). November 4, 2014.

Uniport Weekly (Sept. 21-28, 2015). *Management Goes Tough on Use of Official Vehicles*. Vol.25. Edition 247. p. 7. University of Port Harcourt, Rivers State, Nigeria.

Wabali, R. (2015). *Use of Official Vehicles*. (Memo from Director of Council Affairs, University of Port Harcourt to University Community). September 15, 2015.