Global Journal of human-social science: H Interdisciplinary
Volume 19 Issue 8 Version 1.0 Year 2019
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-460X & Print ISSN: 0975-587X

Road Transport Policy Reforms in Nigeria: A Case of Underdeveloped Infrastructure

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GJHSS-H Classification: FOR Code: 120506

Strictly as per the compliance and regulations of:

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The study revealed that road network development as a part of the reform implementation was partial (92.8%) while public-private partnership (80.3%) and road concessionaire model (76.5%) remained unexecuted.

The study concluded that the unfaithful implementation of road transport reform in Nigeria was responsible for road infrastructural underdevelopment.

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I. Introduction

The role played by transportation cannot be over-emphasized in the growth and development of any nation. This is because the primary function of transportation is to move passengers and goods from one place to another for higher value or utility. The modern transport system in Nigeria started during the colonial period in which the networks of rail, water, and road development were established for the exportation of cash crops such as cocoa, cotton, etc. as well as the importation of cheap, mass-produced consumer goods. The old transport systems were planned in the most economical way possible, as shown with the construction of sub-standard and sub-base rail and road alignments, which later proved inadequate to accommodate heavy vehicles. In the post-colonial era, the re-orientation of goals in the transport sector became imperative as transportation served as an instrument of unification of the country and a tool for social and economic development.

The positive impact on the nation's social and economic growth by the development of petroleum resources pushed up the demand for the transport system. The imbalance identified between the needs of Nigerians and the economy for adequate transport facilities and the ability of the transport sector to meet such demands informed the introduction of National Transport Policy. Friedrich (1975) defined public policy as the proposed course of action of the government or one of its divisions. While public policy was defined by Easton (1979) as the authoritative allocation of values to the whole society. But policy formulation is an instrument that is being used both by public and private organizations to address existing problems or imbalances and safeguard the re-occurrence of such in the nearest future through articulated goals and objectives as contained therein. Although the National Transport Policy draft document initiated in 1965, its adoption took effect in 1993, and was tagged "moving out of the crisis" as the first National Transport Policy concentrated majorly on modal development as a thrust. The realization of the fact that the aspiration contained in this document seemed inadequate to transform the dynamics and ever-changing transport sector environment nationally led to the 2003, 2008, and 2010 reforms which paid attention to integrated intermodal development, deregulation, privatization, and public-private partnership respectively.

The 2010 National Transport reform aimed at institutionalizing the transport system through the creation of central coordinating centers to administer its affairs. Despite the various policy document reforms, the transport sector and road transport mode witnessed deterioration in facilities. Nine years after, the achievement was minimal in the transport sector in general and road sub-sector in particular. The lofty general policy goals and objectives for the transport sector and in particular the road transportation seem unattainable. As many of the Federal highways and bridges in Nigeria, including Oyo-Ilorin, Lagos-Ibadan, Jebba-Mokwa, Ife-Ibadan, and Benin-Onitsha among other expressways, are characterized with large

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potholes and failed portions which slow down movements and expose users to frequent accidents with the attendant loss of lives and properties.

Nigeria major road transport infrastructure as at year 2010, consisted of 34,123 km of Federal roads including seven bridges across the Benue and Niger Rivers, the Lagos ring road, the Third Mainland Axial Bridge; 30,500 km of state; and 130,000 km of local roads (Buhari, 2000; FGN, 2010). But in December 2002, the Central Bank of Nigeria (CBN) conducted a nation-wide survey on the state of highways in the country which estimated the road network in the country to be 194,000 kilometers. It also revealed that most of the roads, especially those in the North-Western and South-Eastern parts of the country, were in bad condition. The trend is generally similar to the other part of the country. The majority of the roads constructed over three decades had not been rehabilitated even once, resulting in cracks, depressions, dilapidated bridges, and numerous potholes that make road transport slow and unsafe (CBN, 2002).

The Federal Republic of Nigeria's Constitution (1999) accordingly shared the responsibility of maintaining, planning, and developing the nation's transport infrastructure among the three tiers of Government. To this end, the Federal Government, through Federal Road Maintenance Agency (FERMA), Federal Ministry of Works and Federal Ministry of Transport, is responsible for the infrastructural development of national highways that make up only 17% of the existing road network in Nigeria; intra-state roads are the responsibility of State Governments; while the Local Governments are required to cater for intra-urban and rural feeder roads, which constituted over 60% of the existing road network. Other stakeholders in road network administration are the Federal Road Safety Commission (FRSC), Nigeria Police Force, and Vehicle Inspection Officer (VIO), while National Union of Road Transport Workers (NURTW) and Road Transport Employer Association of Nigeria (RTEAN) are the end-users.

The Nigeria road network as estimated at 108,000km as paved is the largest in West Africa and the second largest south of the Sahara in 1990. Nigeria today has a dense network of urban centers unequaled anywhere in Africa (Ramirez-Djumena, 2014) with fast-growing population of 140 million (National Population Commission, 2006) but World Population Reference Bureau (2012) put it at 170.1 million, which surpasses the existing road network. Despite the lopsided constitutional arrangement, the impact of the three tiers of government and, in particular, the Federal Government, remained minimal as the condition of Nigerian roads has become deplorable, notwithstanding the reform put in place.

Apart from faulty design, lack of drainages and very thin coatings that are easily washed away by heavy rainfall, the underdeveloped nature of waterways and moribund railways system which has served as alternative means of transportation has increased the pressure on the roads which eventually congest the road network with heavy trailers, oil tankers and heavy vehicles and consequently damages with resultant effect of frequent road accidents arising from potholes and road failures. These seem to be the result of bad planning and poor maintenance culture emanating from weak policy formulation and implementation of road transport reform.

This situation aptly informed why attention focussed on policy reform implementation of the transport sector and road transportation in particular as it affects Federal highways in Nigeria. Therefore, this study aims at addressing the status of federal roads and the extent to which the policy reform implementation has impacted road infrastructural ability to cope with ever-increasing social, political, and economic development in Nigeria.

a) Statement of the Problem

Transport Systems provide mobility, timely accessibility, and facilitate the efficiency and productivity of the other sectors of the economy. Similarly, population growth, increased economic activity, and growing incomes combined to generate a higher demand for transportation service, which has some negative implications for development. The Federal Government of Nigeria (FGN) to introduce the National Transport Policy (NTP) in 1993, aimed at achieving sustainability in the transportation system. However, observing that the policy reform has little influence on transportation development, especially as the railways' system has partially collapsed with resultant increased pressure on roads. Different studies by scholars have been conducted on the level of transport development in Nigeria which include those from Buhari, (2000); Sumaila, (2013); Agbonkhese, Yisa, Agbonkhese, Akanbi; Aka & Mondigha, (2013); and Igwe, Oyelola, Ajiboshin & Raheem; (2013) among others whose studies focused on reviewing the national transport policy. Consequently, the road networks are overstretched congested with the roads characterized by deep potholes and failed portions, which impede movement and thus results in increased road traffic crashes. Despite putting in place of 1993 National Transport Policy and subsequent reforms, the road transport infrastructure seemed inadequate, and the yearly budgetary allocation seems not to impact favorably on the quality of the existing road network with adverse consequences on economic activities that have promoted poverty.

The above scenario informed the need to evaluate the National Transport Policy (NTP) to determine the extent to which the reform has achieved its stipulated objectives, and in particular, the

effectiveness of road transports reform implementation activities at the execution stage on infrastructural development in Nigeria. Also, there is need to investigate the cause of the persistent deplorable state of road transportation and the extent of road transport reform implementation for economic sustainability. Hence, this study.

b) Research Question

The study attempted to provide answers to this question

i. To what extent are the guidelines in the transportation system in Nigeria been implemented?

c) Objectives of the Study

The study aims broadly to assessing the implementation of road transport reform in Nigeria, while its specific goal is to

i. Investigate the extent of road transport reform implementation in Nigeria;

d) Scope of the Study

The study covered policy formulation and implementation in the road transport system of the Federal Government of Nigeria and the agencies with the responsibility of the transformation, expansion, and maintenance of the physical infrastructures in the road transportation sector between 1993 and 2016. Specifically, the study covered the Federal Road Maintenance Agency, Federal Ministry of Works, and Federal Ministry of Transport that was statutorily responsible for policy formulation, implementation, maintenance, design, and construction of federal highways. The study also focused on roads from three geo-political zones, namely South West, South-South, and North Central.

II. Conceptual Review

a) Roads and Concept of Road Transport

Roads came into being as soon as well-defined paths emerge for easy passage of people and goods between farmland and settlements. It was brought about by the advent of the wheeled vehicle, which invariably prompted road improvement, which informed the need to construct roads so that the use of the motor vehicle could extend into less accessible communities and areas in developing countries. Hoyle (1973) posited that in the least developed and most remote inhabited parts of the world, transportation constituted part of the daily rhythm of life. Also, as part of human activity includes the painless passage of services, goods, and people from one community to the other.

Broadly, transportation terrain involves complicated interrelationships that are in place between the physical environment, models of political and social activity, and economic development status. According to Nutley (1998), transportation aims at providing accessibility or the ability to undertake a trip for a particular reason. But the transport requirement is usually derived, and the economy remained the main transport motivation (White & Senior, 1983). Transportation is assumed to occupy a core position in the global, regional, and local, economies aimed at world transformation. It does not only interact with the environs but also with the spatial distribution and development with varying types of social and economic activities (Hoyle & Knowles, 1998).

Hawkins (1962), White & Senior (1983) posit that transport as an human activity not only involves easy passage in space but as well as in time dimension. Concerning space dimension, functional transport reforms ensure the movement of cheap goods from the manufacturing point to the consumer's area, thus creating and widening the markets and economic growth. However, within time frame stocks, work in progress, and finished goods can be quickly turned over to serve markets and big economies (Hawkins, 1962). With the advent of new faster transport modes which have changed space and time dimension of traveling by bridging the distance connections between states, nations, regions, and continental boundaries than those that exist within the towns in the same country in terms of physical distance (Simon, 1996). As a consequence, not only has the geographies of production, distribution, and consumption been affected, but the different world delineation in various degrees of integration with technologies that has changed dramatically.

Road transportation, unlike other modes, has improved the majority of the world's population mobility and accessibility tremendously (Hoyle & Smith, 1998). In the area of road transportation reform, three main parts have been identified to include operations, vehicles, and infrastructure, which is also applicable to other modes of transportation. The wheeled conveyance as a means of transportation move on the road connectivity while the operations deal with the management and control of the system to ensure safety. The main infrastructure features include roads, bridges, nodes, and proper linkages (Dickenson; Gould; Clarke; Mather; Prothero; Siddle; Smith; & Thomas-Thorpe, 1996).

Road infrastructure described as a set of roads arranged in the form of a network linking the inhabited parts utilized by man. As the population of an area increases, the intensity of human activities becomes significant, and the road network is more congested. A road is a dedicated passage of land which has been smoothed, paved, and prepared to free movement from one destination to the other. Roads are classified and arranged based on the importance, attributes, and the function it is expected to perform or on the ownership. Accordingly, it differs in width, construction and quality of paving material, maximum allowed slope, and minimum curvature radius. There are different

categorizations based on functions and available features into four different levels thus:

1. *Trunk A Road:* These are national highways or major roads of a country that connect state or regional capitals and cities. These roads are either dual carriageway or expressway.
2. *Trunk B road:* These are state highways that link markets and towns within the state to the state capital and also connected to national highways.
3. *Trunk C road:* These are roads built within the Municipal, local community or urban and rural roads that connect farmland and markets with towns within one province
4. *The International:* These are roads that are constructed linking two or more countries.

Trunk roads are usually a collective grouping of National, International, and primary highways while minor and tertiary roads grouped as local or community roads that remain unpaved but provide access to goods and services.

New roads are built to enhance road transport between two places to achieve economic benefit and social development that are associated with its building. New constructions are put in place not only to relieve the existing pressure of traffic congestion but to make new settlements accessible by connecting them to the road network and promoting commerce and other functions in the area. However, Simon (1996) posits that new road construction does not necessarily guarantee development in the area as he affirms that there is an indirect relationship in between and infrastructural upgrade.

As conceived by Tolly & Turton (1995), transport policy is not only viewed as the process of regulating and controlling the provisions of transportation but also to efficiently facilitate the economic, social, and political life of any country at the minimum social cost. As a framework for transport control and regulation, transport policy provides the government with a rule-setting function that ensures efficiency, safety, cost-effectiveness, and a conducive transport system. Conceptually, policy reform can be considered to be a form of aspiration, guidelines, ideas, goals, and visions for a better society. Equally, Hodgson (2012) argued that transport policy is specifically designed to proffer solutions and focus on the social issue of movement from the human angle as against viewing mobility as just a feature of the society.

However, transport policy deals with mobility as a central feature of the new world. Accordingly, to enhance globalization, the objective of transport policy is not aimed at changing mobility itself but rather its pattern. Hodgson (2012) concluded that the political goals complexities in transport policy inform why the issue of policy design became unique for policy researchers. Thus, Oyesiku (2004) concurred that transport policy not only serves as the bedrock for the strategy and direction of development of the transport system, but it enucleates the degree to which the planning and provision of transport offer suitable solutions. Oyesiku affirmed that the adopted strategies in transport provision together with the efficiency of the transport system are indirectly related to the nature and dynamism of the country transport policy. The consequence of societal values, transport policy, and reform process outlines and responds to the type of transport needs of the society in the way and manner it wants it developed. As a consequence, Sumaila (2008) posits that transport policy reform has many composite implications with its goals interdependent.

Within and across countries, Mercado, Paez, Scott, Newbold, & Kanaroglou (2007) have advanced an analytical framework to assess transport policies that direct on three indices which include consequence, context, and content. Arguing that the analysis and enumeration of policy objectives and values are useful in understanding why a particular transport approach embraced at the expense of others and which better explain the variations that occur across countries. Hence, from the perspective of a policy reform analyst, there is a need to consciously situate existing or proposed policies within the context of the country's policy problem.

According to Mercado et al. (2007), interpretation of transport policies based on the context in which it was formulated, bearing in mind the organizational arrangement and policy motivation derivable from the nation's political and socio-economic situations. The institutional analysis assesses the country's governmental structure and how the established relationship of sub-national will key into the policy formulation and implementation process. But the end-goals are the analytical product derivable from policy motivation of the country transport framework. Policy approaches, objectives, and solutions are used, to sum up, policy contents while consequence directly relates to the performance of policy solutions and policy outcomes. It emphasizes that policy intentions might become ineffective through the real implementation procedures of the adopted program approaches and solutions, which culminated in poor or unintended consequences.

b) Elements of Road Construction

Road construction involves the clearing of dedicated right-of-way aimed at overcoming the natural geographical obstacles with lower grades to permit foot or vehicular movement as stipulated by official guidelines or the standard set by law (O'Flaherty, 2002). The process is initiated by deforestation, digging, blasting, and removal of earth, and rock, which is followed by the construction of embankments, bridges and tunnels. A road pavement is the hard-wearing

material laid down on the dedicated route aimed at sustaining vehicular movement on a road or walkway. Road engineers use asphalt or concrete materials laid on a compacted coarse base, which are often provided with signs and symbols to guide traffic. For low-impact roadways and walkways, permeable technique is currently in use while a variety of road building equipment is employed in road construction.

After full considerations of the environment, designing, planning, approval, and legal obligation requirements; the surveyor would then set the road alignment. The gradient and radii are mapped out and designed in a way that fits the natural ground levels and reduces the quantity of cut and fills (Kincaid, 1986). Adequate efforts would have to be taken to preserve reference Benchmarks. The road is designed and constructed for the primary use of vehicle and pedestrian movement (Lay, 1992). Environmental considerations and storm drainage are concerns that informed why sediment and erosion controls are constructed to prevent any detrimental effects. On the drainage lines, the sealed joint laid in the road easement with runoff coefficients and features expected to be adequate for the zoning of the land and storm water system. Drainage systems must be able to withstand the ultimate design flow intensity from the upstream catchment for drainage discharge outfall into rivers, creek, and sea with approval of the appropriate agency.

According to Oduwole (2002), to meet the minimum California Bearing Ratio results, general fill material should be free of organics and have a low plasticity index. The Select fill should be composed of broken rock and gravel or sand-clay below a particular tiny piece and be free of clay. After each layer of fill is compacted, the roadbed must be "proof rolled" until the roller that passes over an area create no visible mark or deformation; the section is then deemed to have complied. The roadway construction is completed by paving with asphalt or being left with gravel surfaces, which depend on expected usage and economic factors. Road safety signs including road surface marking, raised pavement markers, traffic signs, crash barriers, and other forms of road surface marking put in place for safety improvement, which in due course might require maintenance.

c) Incremental Model

The concept of disjointed incrementalism as simplified and made easy to grasp. As argued by Lindblom (1979), in most decision situations, people do not have all the necessary understanding, the time, the cognitive capacity, or the resources to conceive of all the options to visualize all the consequences of each option, to establish a set of desired and weighed. Incrementalism is a policy choice adopted at a particular time aimed at a gradual increase of value adjustment from a previous policy choice. The model has witnessed criticisms from methodological, empirical, and theoretical scholars but survives because there is no alternative replacement.

The policy change is the idea embraced by policymakers to ensure step-wise correction since the late 1950s. The concept has been applied successfully in the study of public budgets. Drawing on Lindblom (1959), Wildavsky (1964), scholars have argued that the results of the annual budget seem to drift instead of shifting abruptly. The concept of "base" and "fair" share that was premised on each year's budget should be on the previous year allocation and that any marginal increase should relatively be shared equally and made to cut across categories and agencies which resultantly affect the budget. The incremental model as a policy choice is said to be descriptive and has been under profound criticism by scholars that it did not survive. Critics have pin-pointed challenges in the models used by Davis, Dempster, & Wildavsky (1974); (Gist 1982; Natchez & Bupp 1973), in the standards used (Wanat 1974), in the model clarity of terms (Berry 1990; Hayes 1992), and in the nature of the process of making choices (Padgett 1980, 1981). Others complain of identified challenges associated with the complexities in the simple theories of budgeting, in particular, the incremental model (Kiel & Elliott 1992; Rubin 1988; Schick 1998).

Notwithstanding other criticisms, the budget performance arising from models of decision making featuring ''considerations of limited rationality in the face of complexity and uncertainty'' was the parameter employed by incrementalists (Davis, Dempster, & Wildavsky, 1974). Within the structure, outputs govern by standard operating procedures, are incremental, in which participants are expected to use step-wise decision rules for three reasons. The first concerns the easiness of reversing mistakes following changes. The second involves the participant's desire to establish stable expectations in a complex and uncertain environment. The third deals with the nature of interacting, overlapping, and conflicting institutions in American politics, which push participants to compromise (Davis, Dempster & Wildavsky, 1974; Fenno, 1966; Lindblom, 1959; Wildavsky, 1964).

However, Lindblom (1968) argued that incrementalism was possible to achieve a radical shift as "one person's incremental decision could be another man's radical change." He conceded the argument for forwarding the planning and application of rational analysis using analytical techniques. Finally, it is worthy to note that the transport system has witnessed incremental processes both in the National Transport policy formulation starting from 1965 policy statement to 1993 national Transport Policy Document with subsequent reforms in 2003, 2008, and 2010. The implementation of provisions of road transport infrastructures also conforms to incremental ideals.

III. Methodology

a) Research Design

The study employed a descriptive design that involved a systematic collection, presentation, tabulation, interpretation, and analysis of data on road transport reform implementation, focusing road network infrastructure underdevelopment in Nigeria.

b) Study Population

The study population consisted of civil servants whose total population was 2683. The civil servants included the senior staff on grade level 7 and above in the selected ministries and agency. The breakdown of the population is as follows: Federal Ministry of Works had 1223; the Federal Ministry of Transport had 975, and Federal Road Maintenance Agency had 485.

c) Sampling Techniques and Sample Size

The administration of the questionnaire adopted a multi-stage sampling technique. The first stage involved the use of proportional sampling technique which ensure that adequate representation of the agency irrespective of their population; and application of 10% random sampling to personnel of the Ministry of Transport, Federal Ministry of Works and FERMA that are statutorily responsible for policy formulation, implementation maintenance, design and construction of federal highways. The study focused on roads from three geo-political zones, namely South West, South-South, and North Central, purposively selected from the six geo-political zones of Nigeria for data collection and which seemed to represent at least 50% of the six geo-political zones in Nigeria. Also, two-state capitals are purposively selected from each of the zones: Oyo State (Ibadan), Ondo State (Akure), Edo State (Benin), Delta State (Asaba), Kogi State (Lokoja) and Kwara State (Ilorin). The choices of these states were informed because all states capitals are within federal road network and also forming a network with those not selected. Also, for each Ministry and Agency, a simple random technique of balloting system was used in selecting respondents. These making it possible for each member of staff understudy to have an equal chance of being sampled. The sample size of 268 that constituted 10.1% considered a fair representation of the above population under study. The distribution of 268 copies of the questionnaire administered to the respondents was as shown in Table 1

Table 1: Administration of Questionnaire

Ministry and Agency	Population	size	Percentage
Federal Ministry of Transport	975	98	36.6
Federal Ministry of Works	1223	122	45.5
FERMA	485	48	17.9
Total	**2683**	**268**	**100.00**

Sources: Fieldwork July 2019

d) Sources of Data Collection

In the course of this study primary and secondary sources of data collection are use. Gathering of the primary data are done with the use of a set of open-ended and close-ended questionnaires, structured interviews, and personal observation. Two hundred and sixty-eight (268) copies, representing 10% administered to civil servant respondents drawn from the senior staff cadre of Federal Ministry of Works, Federal Ministry of Transport, and Federal Road Maintenance Agency. Structured interviews conducted on the Managerial Staff (Directors, Road Engineers, and Head of Departments), who volunteered and cooperated with the researcher. Personal observations were also used to assess physical infrastructure facilities, equipment, and others that were incidental to the study.

Secondary data collected from sources including Federal Ministry of Works, Federal Ministry of Transport, and Federal Road Maintenance Agency. Others included official documents of the selected ministries, journal articles, books, magazines, and internet resources.

IV. Data Presentation Analysis and Discussion

a) Demographic and Socio-economic Characteristic of the Respondents

This section discusses some demographic and socio-economic characteristics of the respondents, comprising civil servants from the ministries and agency under considerations. Demographic features considered include age, educational qualification, and grade level, on the one hand, and driving experience, type of driver's license, involvement in road accidents, among others, on the other.

The study revealed that close to two-thirds (62.9%) of the respondents were aged between 31 and 40 years, about one-third (32.6%) were aged between 41 and 50 years, and 4.5% were aged between 21 and 30 years (Table 2). Variations in required formal educational attainment for civil service employment and working as a transporter might be significant in explaining observed differences in the age distribution of respondents.

Distribution of respondents revealed that one-quarter (25.0%) of the respondents have a postgraduate qualification, close to four-fifths (73.5%), of the civil servant, had a first degree or its equivalent. While none of the civil servants had educational qualifications less than the first degree. Observed educational attainment is a requirement for career civil servants. The fact that higher education as requirement for innovation in the service could also be significant.

Table 2: Demographic and Socioeconomic Characteristics of Respondents

Civil Servants			
1	Age (in years)	Frequency	Per cent
	21-30yrs	12	4.5
	31-40yrs	166	62.9
	41 – 50yrs	86	32.6
	51yrs and above	-	-
	No response	-	-
	Total	264	100.0
2	Highest qualification		
	Postgraduate	66	25.0
	Bsc./BA/HND	194	73.5
	NCE/OND	-	-
	SSCE/GCE	-	-
	Primary Schl.	-	-
	No response	4	1.5
	Total	264	100.0
3	Transport Ministry	96	36.4
	Power, Works and Housing	120	45.4
	FERMA	48	18.2
	Total	264	100.0
4	Cadre		
	Directorate	2	0.8
	Management	20	7.6
	Senior Staff	242	91.6
	Total	264	100.0
5	Grade Level		
	8-10	230	87.1
	11-13	32	12.1
	14-17	2	0.8
	Total	264	100.0
6	Length of Service		
	1-5years	12	4.5
	6-10years	156	59.1
	11-15years	80	30.3
	Above 15 years	16	6.1
	Total	264	100
7	Status on ownership of a personal copy of NTP		
	Had	112	42.4
	Did not have	152	57.6
	Total	264	100.0

Source: Fieldwork July 2019.

Table 2 revealed that 45.4% of the sampled civil servants were from the Ministry of Power, Works, and Housing; 36.4% were from the Ministry of Transport, and 18.2 % were from FERMA. Since the proportional sample taken from each Ministry/Agency, employed personnel in these agencies could be seen to be in the proportion of the total sample taken for the study. Of the 264 civil servants sampled, 0.8% was in the Directorate cadre, 7.6% were in the management cadre, and 91.6% were senior staff, implying that adequate, relevant information obtained from the sampled population. Grade Level of the sampled population followed a similar pattern with their designation: 0.8% was on levels 14 to 17; 12.1% were on levels 11 to 13, and 87.1% were on 8 to 10. Years of service of respondents also followed a similar pattern of being bottom-heavy: only 6.1 % have spent more than 15 years; 89.4 % have spent between 6 and 15 years, and only 4.5% have spent between one and five years. The study sought to know if the staff had a personal copy of the draft National Transport document, as this presented likelihood of having to make reference to it and get used

to the provisions and thereby provide a basis for its successful road transport reform implementation. It revealed that 42.4% of the respondents have their copy, while 57.6% did not have. Personal interaction with the staffers that claimed not to have a copy of the policy revealed that they all claimed to be very familiar with the contents, which they claim is on the internet. Directors interviewed by the researcher argued that: 'if there was no National Transport Policy, then there will be no Federal Ministry of Transport.

b) Investigating the Extent of Road Transport Reform Implementation in Nigeria

The extent of the road transport reform implementation indicator included the following: network interconnectivity, road network development, alternative sources of funding attraction of private investors, and concessionaire of roads.

The National Transport Policy Reform of 2003 recognized the need for interconnectivity of road linkages to rail, airport, waterways, and the port. The interconnectivity is expected to facilitate and promote both accesses to local and international markets' export and import oriented goods and services. Of the 264 respondents sampled for the study, 230(87.1%) strongly agreed that the expected connectivity had been 'fully implemented,' and 13(4.9%) believed that the connectivity was only partially implemented (Table 3). Investigating on the anticipated road development expected to be achieved by the implementation of the policy revealed that 301(91.3%) affirmed that the road network development was at least 'partially implemented'; and only 4(1.5%) of the respondents were of the opinion that the road network development was 'not implemented' at all. Investigations on the implementation of provisions for sourcing alternative sources of funds for road management revealed that 179(67.8%) were of the opinion that this provision was 'poorly implemented'; 64(24.2%) affirmed the non implementation of the provision; and only 2(0.8%) of the respondents felt its contrary. Rating for attracting private investors received a similar pattern: 33(12.5%) of the respondents believed in its either poor implementation or 'Not implemented' at all (212(80.3%)). Implementation of roads concessionaire judged in a similar vein: 244(92.4%) of the respondents either affirmed that the policy was 'poorly implemented' (57(17.6%)) or 'Not implemented' at all (247(76.2%)).

Table 3: Extent of Road Transport Reform Implementation in Nigeria

1	Interconnectivity of road/ rail/port	Frequency	Percentage
	Fully implemented	230	87.1
	Partially implemented	13	4.9
	Poorly implemented	9	3.4
	Not implemented	8	3.0
	No response	4	1.5
	Total	**264**	**100.0**
2	**Road Network Development**		
	Fully implemented	4	1.5
	Partially implemented	241	91.3
	Poorly implemented	13	4.9
	Not implemented	2	0.8
	No response	4	1.5
	Total	**264**	**100.0**
3	**Alternative sources of funding**		
	Fully implemented	2	0.8
	Partially implemented	9	3.4
	Poorly implemented	179	67.8
	Not implemented	64	24.2
	No response	10	3.8
	Total	**264**	**100.0**
4	**The attraction of Private Investors**		
	Fully implemented	2	0.8
	Partially implemented	7	2.6
	Poorly implemented	33	12.5
	Not implemented	212	80.3
	No response	10	3.8
	Total	**264**	**100.0**

5	Concessionaire of roads		
	Fully implemented	-	-
	Partially implemented	10	3.8
	Poorly implemented	42	15.9
	Not implemented	202	76.5
	No response	10	3.8
	Total	264	100.0

Source: Fieldwork July 2019.

Investigation on the implementation of the provisions on government disengagement from transport service provision in Table 4 revealed that 235(89.0%) of the respondents thought that it had been either fully implemented (117(44.3%)) or 'partially implemented' (118(44.7%)). In the case of road maintenance, 174(65.9%) of the respondents judged this provision as being 'poorly implemented'; 68(25.8%) judged it 'partially implemented' while only 4(1.5%) were positive about its full implementation. Investigation on the implementation of the provision of transit parks revealed that 244(92.4%) of the respondents either affirm that its 'poorly implemented' (47(17.8%)) or 'Not implemented' (197(74.6%)). Investigations on the implementation of provision for enforcement of traffic regulations received better rating: 238(91.9%) of the respondents either rated it 'fully implemented' (99(37.5%) or 'partially implemented' (139(52.7%)).

Table 4: Extent of Road Transport Reform Implementation in Nigeria

6	Government disengagement from transport services provision	Frequency	Percentage
	Fully implemented	117	44.3
	Partially implemented	118	44.7
	Poorly implemented	14	5.3
	Not implemented	5	1.9
	Sub total	254	
	No response	10	3.8
	Total	264	100.0
7	Road Maintenance		
	Fully implemented	4	1.5
	Partially implemented	68	25.8
	Poorly implemented	174	65.9
	Not implemented	4	1.5
	Sub total	254	
	No response	14	5.3
	Total	264	100.0
8	Provision of transit parks		
	Fully implemented	4	1.5
	Partially implemented	6	2.3
	Poorly implemented	47	17.8
	Not implemented	197	74.6
	Sub total	254	
	No response	10	3.8
	Total	264	100.0
9	Enforcement of traffic regulations		
	Fully implemented	99	37.5
	Partially implemented	139	55.7
	Poorly implemented	14	5.3
	Not implemented	2	0.7
	Sub total	254	
	No response	10	3.8
	Total	264	100.0

Source: Fieldwork January 2019.

c) Interview Analysis

The conducted interview aimed at eliciting information relating to policy issues that could not be adequately covered by the questionnaire. When asked about the extent of road transport reform implementation, the interviewed directors said that 'all you have seen about road transport system are the achievement of the extent of road reform

implementation.' They agreed that the road might have issues, but that was not enough to deny our presence. The road maintenance, rehabilitation, and construction suffered a major setback because of the non existence of parastatals, which incapacitated FERMA and deprived it of funds that could have been paid directly to the National Road Commission, who was to manage and re-distribute the said money. The extent of road transport development is in exhaustive. As new areas developed, new roads are constructed.

On the quality of the job done, the directors said that the foreign contractors have adequate field equipment and technology. The interviewees affirmed that there was an underline corruption when projects awarded to foreigners failed to conform to the specified standard. On the issue of corruption, they agreed that political corruption is the most destructive one, which is incomparable with bureaucratic corruption.

The fieldwork involved having to travel around the three geo-political zones (South-South, South West, and North Central) and in particular, the purposively selected six State capitals (Ibadan, Akure, Lokoja, Ilorin, Benin, and Asaba). The road networks were generally characterized with potholes and failed portions to the extent that in some cases pools of water made it impossible for small cars to pass through. The roads had become worst than as described by Buhari (2000), Sumaila (2013), and other scholars.

d) Analysis of Secondary Data

Since coming on board of the fourth republic in 1999 in Nigeria, the road network has not been given priority as before. The investment profile declined gradually from 1990, which stood at 70.14% for that year allocation to 31.03% for the year 2002 total allocation to the transport sector. It concise with the period when 50% of Federal roads, 20% of the State roads, and only 5% of the Local government roads were in reasonably good condition as claimed by Buhari (2002). But an insider confirmed that since the year 2012 to date, no meaningful allocation came to the transport sub-sector, which informed why road pavements become impassable.

Table 5: Estimated Size of the Road Network in Nigeria.Road Length in Km.

OWNERSHIP	PAVED(Km)	UNPAVED(Km)	TOTAL(Km)
FEDERAL GOVERNMENT	26,500	5,600	32,100
STATE GOVERNMENT	10,400	20,100	30,500
LOCAL GOVERNMENT	2,600	128,000	130,600
TOTAL	**39,500**	**153,700**	**193,200**

Source: Federal Ministry of Works, 2012

Equally related to the funding was the performance on the road activities. Funding dictated the extent of work done, as shown in the estimated size of the road networks in Nigeria in Table 5. The Federal Government-owned 34,100km (17.0%) in which 26,600 km paved when 8,600km remained unpaved, which was the primary concern of this study. As illustrated by the bar chart in figure 1, which compared the activities of the Federal, State, and Local Governments on the national road networks. The estimated size of the roads under the State Government stood at 30,500km (16%) when the Local Government roads constituted over 130,600km (67%). What a lopsided road length arrangement?

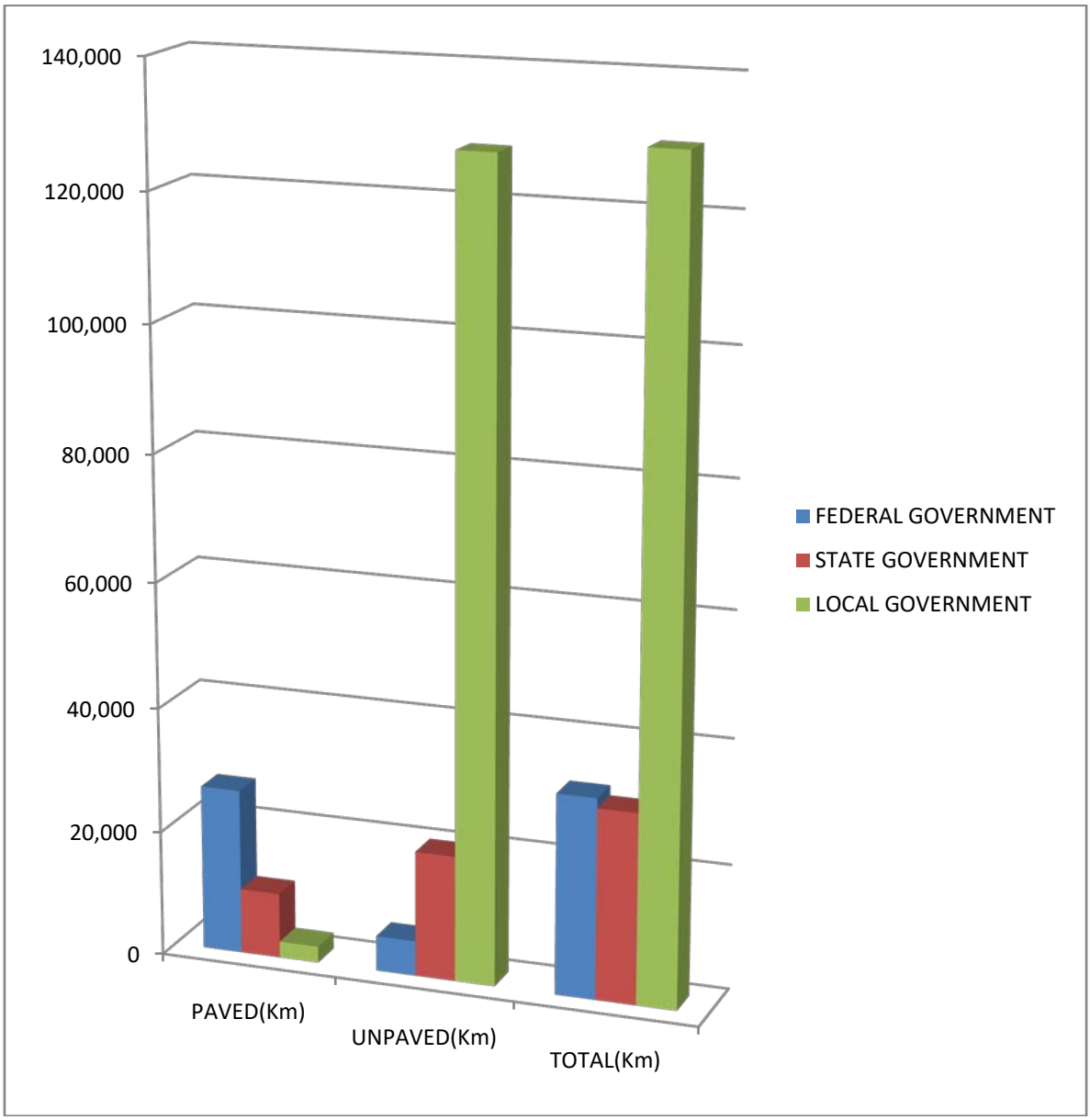
e) Discussion of Findings

In the course of this study, many scholars' works reviewed in the area of policy formulation and implementation, as well as the role played by the stakeholders concerning the road transport infrastructural development in Nigeria and the developed countries of the world. This study intends to juxtapose the obtained results with the reviewed literature to draw out the area of convergence or that of divergence.

Reform is a change expected to bring to bear on the course of action. The extent of road transport reform has been within the policy framework, available technology, and financial resources. The 1993 National Transport Policy document at inception recognized and promoted modal development. This document has been reformed in 2003, 2008, and 2010 to address the existing or foreseeable identified gaps. These reformed efforts have manifested in the present number of kilometers of road lengths and its quality (91.6%), which was not contradictory to the position held by Buhari (2000) and CBN (2002). The extent of the road network development was judged (92.8%) as being partially implemented which agrees with that obtained from the secondary data in fig. 1 which are in consonance with position held by McCawley, 2010 & Kingombe, 2011, that infrastructural investment and maintenance can be costly, and the demand for infrastructure surpasses amount invested. The interconnectivity of road with rail, port, air, and waterway was fully implemented although its suitability may be in doubt. Alternative sources of funding were poorly implemented (67.8%) as it has not impacted on the infrastructural provision or maintenance. The above result confirmed Oroleye's

(2019) position on the National Assemblies' failure to establish road institutions that will generate funds. As a result of the inability of the government to bear the full cost of road construction and maintenance, the Public-Private-Partnership reform process was adopted. This program aimed at attracting private organizations to partner with the government to jointly finance road construction. But contrary to expectations, the program has not been implemented (80.3%) probably to justify the position held by Igwe et al. (2013) that the policies of the Nigerian Government constituted a barrier to large scale entrepreneurial success as the government plagued by corruption and greed. As a result it inform why road concessionaire unimplemented, as evident from the study (76.5%). While Nigeria has not benefited from this PPP model, the program has impacted significantly on road network development in South Africa (World Bank Development Indicators, 2010; CIA World Factbook, 2010 & Daramola, 2003). The consequence of state of funding and failure to implement alternative sources, affected the implementation and provision of road maintenance (65.9%), thus creating an infrastructural gap that Olomola (2003) described as initializing incidence of poverty across various Nigerian communities.

Finally, there was conformity in the data generated through the questionnaire administration and those gathered through interview sessions in respect of the extent of road transport reform implementation in Nigeria.



Source: Federal Ministry of Works.

Fig. 1: An Estimated Size of the Road Network in Nigeria. Road length in Km

V. Conclusion

The study concluded that the country's unimpressive performance on road transport reform implementation attributed to the Federal Government and National Assemblies inability to establish the various agencies and institutions which include National Road Transport Commission, Toll Gate Agency, etc. that will not only execute the reform implementation with the Act of Parliament but generate necessary fund for road infrastructural development through taxes. This gap was responsible for the road infrastructural under development. Hence the extent of activities of road transport reform has fallen short to cope with economic activities and the increasing population of Nigeria.

VI. Recommendations

1. The Federal Government and the National Assembly should expedite action to pass the necessary Act of parliament to establish the agencies (National Transport Commission, Road Transport Commission, Federal Highway Agency, and Road Toll Agency, etc.) that will fast track the activities of road transport reform implementation in the sector.
2. Critical to the infrastructural investment is the establishment of above-named institutions, which will facilitate the implementation of transport policies as well as provide the legal and regulatory framework for private sector (PPP) participation in the sector as alternate sources of generation and funding of roads.
3. As recommended in the National Transport Policy Reform document on roads allocation to the 3-tiers of government, in the ratio 50:30:20, to Federal, State and Local Government according to the resources available at the disposal to each tier, the Federal Government should adopt it now without any further delay as against what is presently obtainable.
4. FERMA should be assisted by the Federal Government to acquire state of the art technology such as GIS that can monitor road damage throughout the road networks nationwide and field equipment with professionals to be able to perform its statutory functions effectively on road maintenance through direct labor instead of contract awarding method.

References Références Referencias

1. Agbonkhese, O; Yisa, G. L; Agbonkhese, E. G; Akanbi, D. O; Aka, E. O; Mondigha, E. B. (2013). Road Traffic Accidents in Nigeria: Causes and Preventive Measures. *Journal of Civil and Environmental Research* Vol.3, No.13. pp20-30.
2. Berry, W. D. (1990). The Confusing Case of Budgetary Incrementalism: Too Many Meanings for a Single Concept. *Journal of Politics* Vol. 52 pp 167–96.
3. Buhari, M. (2000). "*The Role of Infrastructural Development and Rehabilitation in Sustainable Economic Growth in Nigeria*", A Paper Presented at The All Peoples Party Economic Summit, Held at The Ladi Kwali Conference Centre, Sheraton Hotel and Towers, Abuja, from 9th to 10th November, 2000.
4. Central Bank of Nigeria (2002). *Annual Reports and Statement of Accounts, for the Year Ended 31st of December,* 2002. Abuja: CBN Press "CIA (2009) THe World Factbook — United States". Retrieved June 14th, 2015 from http://www.cia.gov/library/publications/the-world-factbook/geos/us.html.
5. Daramola, A. Y. (2003): "Innovative Options for Financing Transport Infrastructure in Nigeria, *The Magazine of the Nigerian Institute of Social and Economic Research*, Nos. 4 & 5, Ibadan.
6. Davis, O. A., Dempster, M. A. H., & Wildavsky, A. (1966). A Theory of the Budget Process. *American Political Science Review* .Vol. 60, pp529–47.
7. Davis, O. A., Dempster, M. A. H., & Wildavsky, A. (1974). Towards a Predictive Theory of Government Expenditure: US Domestic Appropriations. *British Journal of Political Science* Vol. 4, pp419–52.
8. Dickenson, J., Gould, B., Clarke, C., Mather, S., Prothero, M., Siddle, D., Smith, C., & Thomas-Thorpe, E. (1996). *A Geography of the Third World*. 2nd ed. pp344. New York, USA: Routledge.
9. Federal Government of Nigeria (2010). *Draft National Transport Policy*. Abuja: Government Press.
10. Federal Ministry of Transport (1993). National Transport Policy. Lagos: Government Press.
11. Federal Republic of Nigeria (1999). *Constitution of the Federal Republic of Nigeria.* Abuja: Government Printers.
12. Fenno, R. F. Jr. (1966). *The Power of the Purse: Appropriations Politics in Congress.* Boston: Little, Brown.
13. Friedrich, C. (1975). "Political Decision Making, Public Policy and Planning" in J. Uveges Jr; (ed); *The Dimensions of Public Administration*. Boston: Holbrook Press Inc. pp111.
14. Gist, J. R. (1982). ''Stability'' and ''Competition'' in Budgetary Theory. *American Political Science Review. Vol.* 76, pp 859–72.
15. Hawkins, E. K. (1962). Roads and Road Transport in an Undeveloped Country: A Case Study of Uganda. *Colonial Research Studies*, 32. 263 pp. London: Colonial Office, Her Majesty's Stationery Office.
16. Hayes, M. T. (1992). *Incrementalism and Public Policy*. New York: Longman.
17. Hoyle, B. S. (ed.) (1973). *Transport and Development*. *Geographical Readings*. pp230 London: The Macmillan Press Ltd.
18. Hoyle, B., & Knowles, R. (1998). Transport Geography: An Introduction. In: B. Hoyle & R

Knowles (eds.) *Modern Transport Geography*. 2nd edition. pp373. New York: John Wiley & Sons.
19. Hoyle, B., & Smith, J. (1998). Transport and Development: Conceptual Frameworks. In: B.
20. Hoyle & R. Knowles (eds.). *Modern Transport Geography*. 2nd edition. pp 373 New York: John Wiley & Sons.
21. Hudgson, F. (2012). "Sustainable Transport Policy". Research Group. Institute of Transport Studies. Clearinghouse.
22. Igwe, C. N., Oyelola, O. T., Ajiboshin I. O. & Raheem, S. (2013). A Review: Nigeria's Transportation System and the Place of Entrepreneurs. *Journal of Sustainable Development Studies* Vol. 3, No. 2, pp168-180.
23. Kiel, D., & Elliott, E. (1992). Budgets as Dynamic Systems: Change, Variation, Time, and Budgetary Heuristics. *Journal of Public Administration Research and Theory* 2:139–56.
24. Kincaid, P. (1986). *The Rule of the Road: An International Guide to History and Practice*. Santa Barbara: Greenwood Press.
25. Kingombe, C. K. M. (2011). *Mapping the New Infrastructure Financing Landscape*. London: Overseas Development Institute.
26. Lay, M. G. (1992). *Ways of the World: A History of the World's Roads and of the Vehicles that Used Them*. Sydney: Primavera Press.
27. Lindblom, C. E. (1979). Still Muddling, Not Yet Through. *Public Administration Review*, 39(6): 517-25.
28. Lindblom, C. E. (1968). The Policy Making Process. N. J.: Prentice-Hall.
29. Lindblom, C. (1959). The ''Science'' of muddling through. *Public Administration Review* Vol. 19, pp 79–88.
30. McCawley, P. (2010), 'Infrastructure Policy in Developing Country, *Asian-Pacific Economic Literature*, Vol. 24, No.1, May.
31. Mercado, R., Paez, A., Scott, D., Newbold, K. & Kanaroglou, P. (2007). "Transport Policy in Aging Societies: An International Comparison and Implications for Canada". *The Open Transportation Journal*, No, 1, pp1-13.
32. Natchez, P. B., & Bupp, I. C. (1973). Policy and Priority in the Budgetary Process. *American Political Science Review* Vol. 67, pp951–63.
33. Nutley, S. (1998). Rural Areas: The Accessibility Problem. In: B. Hoyle & R Knowles (eds.) (1998). *Modern Transport Geography*. 2nd edition. pp373. New York: John Wiley & Oduwole, O. S. V. (2002). Bills for Engineering Measurement & Evaluation. Ibadan: Vintage Books.
34. O'Flaherty, C. A. (2002). *Highways: The Location, Design, Construction & Maintenance of Road Pavements.* London: Elsevier.
35. Oroleye, A. K. (2019). "Appraisal of Road Transport Policy Reform in Nigeria: A Case of Infrastructural Deficit" *Journal of Governance and Public Policy Vol. 6 no 3. October*
36. Oyesiku, K. (2004). "*Policy Directions in Urban Transportation" in Perspectives on Urban Transportation in Nigeria*. Zaria: NITT Publications; pp171-202.
37. Padgett, J. F. (1980). Bounded Rationality in Budgetary Research. *American Political Science Review. Vol.* 74, pp354–72.
38. Padgett, J. F. (1981). Hierarchy and Ecological Control in Federal Budgetary Decision Making. *American Journal of Sociology* Vol. 87, pp75–128.
39. Rubin, I. (1988). New Directions in Budgetary Theory. Albany: State University of New York Press.
40. Schick, A. (1995). The Federal Budget: Politics, Policy, Process. Washington, DC: Brookings.
41. Simon, D. (1996).*Transport and Development in the Third Word*. London: Rutledge, pp194.
42. Sumaila, A.G. (2008): *"Transport Policy and Regulations in Nigeria: A critical Appraisal"*,
43. Paper presented at the 2008 LAMATA Annual National Conference on Public Transportation, Sheraton Hotels and Towers, Lagos, May.
44. Sumaila A.F. (2013) (2013), Building Sustainable Policy Framework for Transport Development: A Review of National Transport Policy Initiatives in Nigeria", *International Journal of Development and Sustainability,* Vol. 2 No. 2, pp 505-520.
45. Tolley, R. S; & Turton, B. J. (1995). "*Transport Systems, Policy and Planning*; *A Geographical Approach.* Essex: Longman Scientific and Technical.
46. Wanat, J. (1974). Bases of Budgetary Incrementalism. *American Political Science Review* Vol. 68, pp1221–28.
47. White, H. P. & Senior, M. L. (1983). *Transport Geography*. pp224. New York: Longman.
48. Wildavsky, A. (1964). *The Politics of the Budgetary Process*. Boston: Little, Brown.