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Road Sector Reform: THEME
An Imperative for Sustainable Road Development

Paper presented by

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Presentation Outline

- Why Bother about Nigerian Roads?
- Some Statistics on Nigeria's Road Infrastructure
- Road Classification in Nigeria
- Nigerian Roads: Ownership & Economic Service
- The State of Nigerian Roads
- Root Causes for the Poor State of Nigerian Roads
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- Road Sector Reform – Key Objectives
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Why Bother about Nigerian Roads?

- By providing multiplicity of access, Nigerian roads are the backbone of social and economic activities in Nigeria;
- Hence, economic development is closely related to the extension and condition of the road network.
- Generally, roads are the nations' biggest public capital asset, representing between 15% and 30% of Gross Domestic Product (GDP) of a country.
- The approximate asset of our roads is N5.0 trillion.

[Source: <http://www.thisdaylive.com/articles/road-sector-reform-for-sustainable-devt/152478/>]

- Excellent roads will cause considerable reduction in the cost of production and save time of movement of goods and persons from place to place.
- The present state of Nigerian roads provides additions to the rate of poverty particularly, among the peasants who as farmers, artisan and other petty traders inhabit mostly the neglected rural areas of the country.



Some Statistics on Nigeria's Road Infrastructure

- With about 200,000km of road network, Nigeria has the largest road network in West Africa and the second largest, south of the Sahara;
- Only about 65,000km of this number is paved in bitumen;
- Today, 95% of both passenger and freight movements in Nigeria are by road;
- The Federal roads account for only about 54% of the total bituminous national road network;
- The Federal roads also accounts for more than 80% of the national vehicular and freight traffic.

[Source: <http://www.thisdaylive.com/articles/road-sector-reform-for-sustainable-devt/152478/>]



Some Statistics on Nigeria's Road Infrastructure

- The national network is currently estimated to be 194,200km of which:
 - 34,120km (17.6%) are federal roads,
 - 30,500km (15.7%) are state roads and
 - 129,580km (66.7%) local and rural roads.
- 68.3% of Nigerian roads are in terrible condition says 2013 NIIMP report;
- 40 percent of the bad roads belong to the federal government, 78 percent to states and 87 percent to local governments;
- Nigeria has a road density of 0.21km per square kilometre. Only 27% of the Nigerian road in good condition;
- Density of good roads is a dismal 0.06%. Simply put, there are only 6km of good roads per every 100sqkm of space!



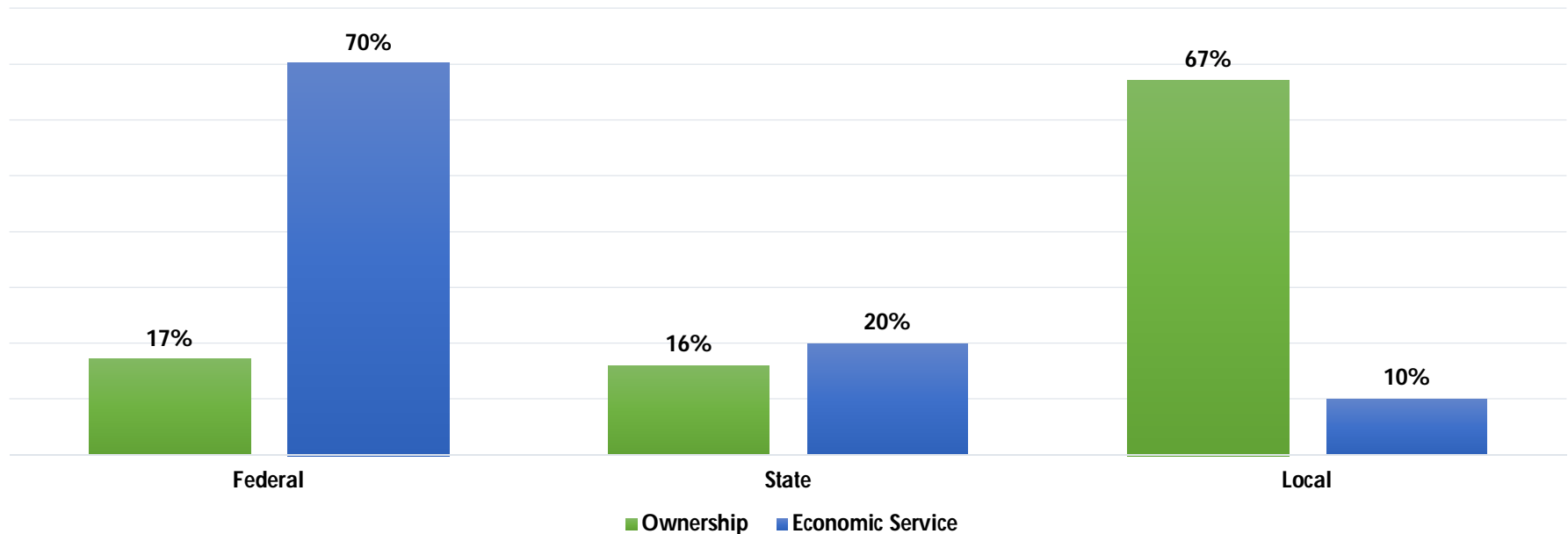


Road Classification in Nigeria

Road Class	Socio-economic Objective	Ownership and Financing
Trunk 'A' Roads	<ul style="list-style-type: none"> • These roads form the skeleton of the national road grid. • They cut across regional boundaries in the country and even extend to the international borders of neighbouring West African countries. 	<ul style="list-style-type: none"> • Roads are under Federal Government's ownership. • They are designed, constructed, maintained and financed by the Federal government through the Federal Ministry of Works. • The Federal Road Maintenance Agency (FERMA) is in charge of their maintenance.
Trunk 'B' Roads	<ul style="list-style-type: none"> • These roads are the second category of main roads in Nigeria. • They link the major cities within States with the State capitals. 	<ul style="list-style-type: none"> • These roads are designed, developed, financed and maintained by the State governments through their Ministries of Works, Transport or Infrastructure. • The primary objectives of Trunk B roads are to enhance the socio-economic development of the various States in the country.
Trunk 'C' Roads	<ul style="list-style-type: none"> • These roads are local feeder roads • The roads link villages and communities in the remote parts of each local government region. 	<ul style="list-style-type: none"> • Constructed and maintained by the Works Department of Local Government Authorities. • This class of roads are primarily not concrete asphalted and are affected by seasonal weather changes.



Nigerian Roads: Ownership & Economic Service



Even though Federal roads constitute only 17% of the total national stock, they carry more than 70% of the National vehicular traffic, thus underscoring their crucial importance to the economy of the country. The Federal roads have been subjected to severe pressure as a result of increased vehicular traffic as well as freight especially given the near absence of rail, marine and other forms of transport to convey heavy goods.



The President Speaks about Nigerian Roads



"The roads are dead. Those who drive between Lagos and Ibadan will have a lot of stories to tell you. Those who drive from Kaduna to Jebba may have more stories to tell. The same thing is applicable to the East West Road." – President Muhammadu Buhari. [*Wednesday, November 25, when he hosted senators at the new Banquet Hall of the presidential Villa, Abuja*]



Nigerian Roads in Pictures



Nkerefu to Amagunze
(Nkanu East, Enugu State)



Oshodi-Apapa Expressway October 2014. AFP/Pius Utomi Ekpei



Nigerian Roads in Pictures



Portharcourt Enugu Expressway



Motorists, motorcyclists and tuk-tuks navigate the Ikorodu-Shagamu road at Ogijo in Ogun State on October 23, 2014. Photo: AFP/Pius Utomi Ekpei



State of Nigerian Roads



“With no functional railway system, roads are the only means of movement of people and goods, meaning that the nation’s economy is grounded with such bad roads as Nigeria has. Some of the worst highways include the Lagos-Ibadan Expressway, Shagamu-Ore, Onitsha-Enugu–Port Harcourt road, Ikorodu-Shagamu road, Okene-Lokoja-Abuja and Rijau -Kontagora road in Niger State. With a few exceptions, indeed, virtually all the highways in the country are in terrible state. Not to mention the majority of Trunk B roads that have not received any attention.

Travelling through Nigerian roads, especially, during the rainy season is hellish. Vehicles break down; heavy-duty trucks overturn and get stuck in the mud. Motorists disembark at such horrible spots to push crippled vehicles. The result is traffic gridlock on both sides of what seems like a jungle and loss of many lives”.

(The Guardian Editorial of November 8, 2015 | Source: <http://www.ngrguardiannews.com/2015/11/state-of-nigerias-roads/>)



The State of Nigerian Roads

- The deplorable state of roads is a national shame;
- There is hardly any part of the country that can boast of motorable roads, be they Trunk A, B or C roads;
- There is no alternative either. The railway system is dysfunctional while the air transport sector is an arena of inefficiency;
- Unfortunately, no tier of government can be said to have acquitted itself creditably on matters of roads construction and maintenance;
- Nigerians die daily in avoidable accidents due to bad roads. Man-hours are lost in traffic. The national economy suffers losses.
- it is indeed a shame that 55 years after independence, despite huge oil revenue, we still lack good transportation system.



The Challenges

- In 1983, only 150,000 vehicles were on Nigeria roads. Today the number has grown to over nine million;
- Nigeria is getting more vehicles on the road, making construction, rehabilitation and maintenance of the roads absolutely essential;
- Excessive axle loading on our roads - the movement of heavy articles on the road that would have been moved by rail;
- Huge investment in road infrastructure has not been met with a commensurate attention for maintenance and asset preservation;
- Many years of neglect resulted in the national road network characterised by pavement and structural failures.



Passenger Cars Per 1000 Persons

Date	Value	Change, %
2007	31.0	94.51 %
2004	16.0	2.35 %
2003	15.6	16.70 %
2002	13.4	17.19 %
2001	11.4	9.44 %
2000	10.4	

We expect that this number should have doubled by now for a combination of reasons: the global economic crises of 2008 and other unfavourable policies that have resulted in much higher unemployment rates and consequent shift to motor transport business.



Route Causes for the Poor State of Nigerian Roads

- Lack of adequate funding
and
- Institutional weaknesses



Main Institutional Problems Facing the Road Sector

- Growth in road network size in a context where road traffic was growing faster than the economy as a whole (measured in terms of GDP). This has led to an acute shortage of funds for maintenance and improvement of the road network.
- Outdated management structures buried within several layers of government bureaucracy that are not responsive to user needs and not commensurate with the value of the assets being managed.
- Lack of clearly defined responsibilities between Federal, State and local government departments for managing different parts of the road network
- Human resource constraints manifested in terms of shortage of qualified technical and managerial staff with low salaries and few incentives to improve performance and productivity.
- Weak management information system leading to poor planning, costing and financial control.
- Inadequate financing for maintenance, preservation and development
- Perception of road as a public good providing a social service paid for through general taxation irrespective of use.



Funding Issues

- Released sums for road development hovered between 8.3% in 1996 to 100% between 1979 and 1982. An average funding of 61.3%;
- Whereas, the sum of N321billion is required to maintain Nigeria's national road network on a yearly basis; FERMA hardly ever got N20billion per annum to maintain 34,120km of federal roads in its purview up until 2010, 7 years after its establishment;
- Between 2010 and 2012 FERMA got a minimum of N40billion every year. This improvement is only a 12% effective funding.



Funding Profile for Nigerian Federal Highways - Capital Projects: 2005 – 2013

Year	Amount Required	Budgeted Amount	Actual Released Funds	Funding Gap	Requirement (Expressed Amount In %)
A	B	C	D	E(B-C)	D*100/B
2005	143,650,000,000.00	67,854,363,765.00	61,390,288,947.28	97,705,636,235.00	42.74
2006	165,560,000,000.00	82,519,373,423.00	61,074,107,804.30	61,130,626,577.00	36.89
2007	202,000,000,000.00	134,665,481,921.51	108,641,539,716.48	67,334,518,078.49	53.78
2008	258,720,896,105.26	142,885,032,521.42	127,892,820,865.42	115,835,863,583.84	49.43
2009	197,522,317,617.54	182,622,818,424.00	168,850,759,251.01	14,899,499,193.54	85.48
2010	262,213,145,781.99	216,541,676,800.09	86,624,577,054.95	45,671,468,981.90	33.04
2011	164,600,000,000.00		84,965,912,485.00	34,586,050,220.00	51.62
2012	167,794,147,306.00	133,311,303,470.00	89,803,364,202.00	34,482,843,836.00	53.52
2013	171,294,667,671.00	134,427,651,813.00	58,350,534,632.00	36,867,015,858.00	34.06
Total	1,733,355,174,481.79	1,224,841,651,918.02	847,593,904,958.44	508,513,522,563.77	

In almost all years, the actual amount released is much less than what is allocated. For example in 2010, total amount released for Highway projects is about N87bn, which is less than half of the amount allocated in the year



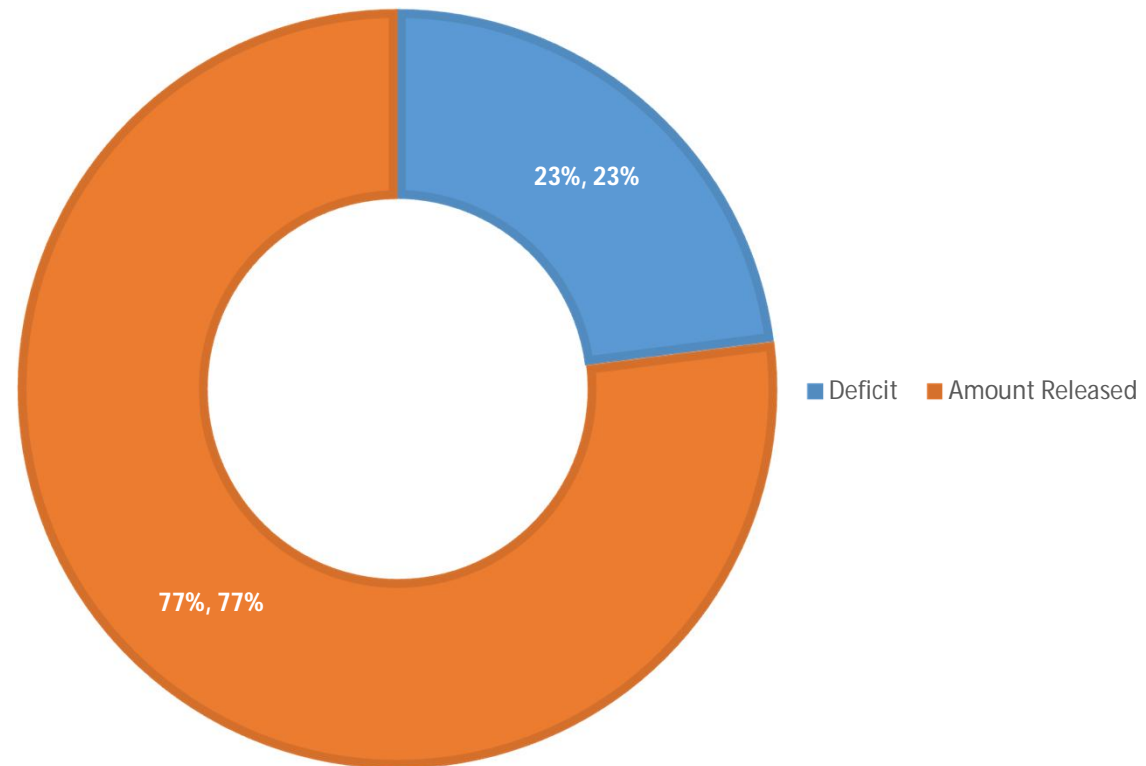
Funding for Maintenance of Federal Road Network (2003-2013)

Year	Amount of Required Budget	Budgeted Amount	Actual Released Funds	Funding Gap	Released (Expressed Required Amount Versus Funds in %)
A	B	C	D	E(B-C)	D*100/B
2003	75,000,000,000.00	7,720,333,333.32	1,472,470,000.00	73,527,530,000.00	1.96
2004	112,000,000,000.00	14,999,999,999.99	18,783,831,888.15	93,216,168,111.85	16.77
2005	112,000,000,000.00	19,552,306,597.60	17,937,985,785.95	94,062,014,214.05	16.02
2006	112,000,000,000.00	12,957,049,225.00	11,785,071,906.28	100,214,928,093.72	10.52
2007	112,000,000,000.00	22,903,370,253.00	22,903,370,253.00	89,096,629,747.00	20.45
2008	120,000,000,000.00	28,731,806,346.00	28,244,651,990.00	91,755,348,010.00	23.54
2009	120,000,000,000.00	43,969,000,000.00	43,969,000,000.00	76,031,000,000.00	36.64
2010	120,000,000,000.00	62,616,000,000.00	51,611,000,000.00	68,389,000,000.00	43.01
2011	120,000,000,000.00	29,655,000,000.00	27,275,000,000.00	92,725,000,000.00	22.73
2012	120,000,000,000.00	43,838,000,000.00	43,838,000,000.00	76,162,000,000.00	36.53
2013	120,000,000,000.00	39,139,000,000.00	27,699,000,000.00	92,301,000,000.00	23.08
Total	1,056,000,000,000.00	326,081,865,754.91	295,519,381,823.38	780,736,920,064.77	

FERMA has always insisted that N120bn is required to revamp Federal Roads in Nigeria every year for 8yrs. It is estimated that amount would recover 3500km of Federal Road every year



Road Sector Budget



Source: Federal Ministry of Works (2012)



Some Critical Road Projects awaiting funding

- East-West Coastal Road (Lagos – Calabar)
- Dualization of Ilorin - Jebba - Mokwa – Kaduna Road
- Dualization of Keffi – Akwanga – Lafia - Makurdi Road
- Lagos – Badagry - Seme Border Dual Carriageway
- Bodo - Bonny Road in Rivers State
- River Niger Bridge at Nupeko
- River Benue Bridge at Burukku
- Abuja – Kaduna Dual Carriageway
- Onitsha – Owerri Dual Carriageway
- Kaduna – Kano Dual Carriageway
- Port Harcourt – Enugu Dual Carriageway



Some Road Projects waiting for funding

- Dualization of Owerri – Aba Road
- Dualization of Lokoja – Ajaokuta – Ogbulafo - Enugu(9th Mile) Road
- Dualization of Akwanga-Jos Road
- Dualization of Enugu(9th Mile) – Otukpo – Makurdi Road
- Dualization of Owerri – Aba Road
- Lagos – Iseyin _ Kaiama – Konkwaso – Kaoje Kwambe – Argungu - Sokoto
- Phase I : 2nd Lagos outer ring Road: Tin Can Island – Igando – Lagos/Otta road interchange- Lagos/Ibadan expressway
- Enugu – Onitsha Dual Carriageway
- Phase II : 2nd Lagos outer ring Road
 - i. Lekki - Epe Expressway linking existing Lekki - Epe Expressway with connection to the Proposed Lekki Deep Sea Port
 - ii. 5th Mainland Bridge
- Golden Triangle(Economic) Highways



Alternative Sources of Funding

- Conventional PPP finance for road infrastructure;
- Viability gap funding;
- Adoption of annuity contracts for key arterial routes;
- Borrowing from multilateral agencies and pension funds for key highways infrastructure;
- Floating of Road Bonds for Highway projects;
- Implementation of 5% fuel surcharge



Road Sector Reform

Key Objectives -

- The reform agenda in the road sector seeks “to deliver better and safer roads to Nigerians, as well as to link the six geo-political zones in the country with dual carriageways”;
- Stimulation of private sector financing of road infrastructure in Nigeria;
- Sustainability in the delivery of good road infrastructure in the country;
- Establishment of institutional structures that bring all roads under regular maintenance;



Sustainability Targets

- To attain a sustainable economy commensurate with vision 2020, Nigeria needs to increase its total road network from the current 193,000 to over 300,000km by 2020;
- The paved network will need to increase from the current 65,000km to over 200,000 by 2020;
- This requires the construction or paving of an average 14,000km of road every year requiring an estimated N600 billion per year;
- For every USD1 spent on road maintenance, there is a corresponding increase in the nation's GDP.



Best Practices in Road Sector Reform

- The emergence of an independent road manager who acts in the interest of road users;
- The establishment of sustainable steady funding for programmed and sustainable maintenance of existing facilities within the road network through such alternative funding scheme as User Charge(s);
- Maximum Private Sector Involvement in the implementation of all construction and maintenance works, through competitive and transparent bidding; and
- Development of contemporary procurement methods within the road sector that enhances the completion of project cycles, qualitative products and value-for-money.



The Proposed Road Sector Reform Bills

S/No.	The Proposed Bill**	Description of Proposed Bill
1.	The National Road Fund Bill 2014	Bill is to guarantee sustainable funding and management for the road sector besides the annual budget.
2.	The Federal Road Authority Bill 2014	Bill creates semi-autonomous road agency that will be responsible for the efficient construction, maintenance and rehabilitation of Federal roads as well as providing the overall framework and advice for the coordination and technical specification of national roads including state and local government roads.

**Both bills await passage by the National Assembly



Benefits of Road Reform Bills

When the Road Reform Bills are passed into law, the pathways whereby huge private funds can be attracted to invest in the road sector to fill the funding gap within a framework of suitable contractual arrangements will be created. This will cover different forms of long-term contracts drawn-up between legal entities and public authorities, aimed at financing, designing, constructing, operating and maintaining the roads for sustainable road network development. This will usher in a **new day** with new opportunities in Nigeria for engineering professionals and job creation in the industry, as well as allied industries.





Additional References

1. 2013 National Integrated Infrastructure Master Plan Report
2. Road Infrastructure & Related Development, Federal Ministry of Works
3. UN/ECE Forum on Public–Private Partnerships for Infrastructure: The Next Steps(PPPs)
4. Road Sector Reform for Sustainable Development by Mike Onolememen

