



REPUBLIC OF UGANDA

MINISTRY OF WORKS AND TRANSPORT

WORKS AND TRANSPORT SECTOR DEVELOPMENT PLAN 2015/16-2019/20



FINAL- 2017

“Development of Sustainable Multi-modal Transport Infrastructure and Services for Socio-Economic Transformation”.

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List of Acronyms and Abbreviations

AfDB	African Development Bank
ASPR	Annual Sector Performance Report (ASPR)
AU	African Union
ATM	Air Traffic Management
Bn	Billion
BRT	Bus Rapid Transit
CAA	Civil Aviation Authority
COMESA	Common Market for Eastern and Southern Africa
CNS	Communication, Navigation, Surveillance
COD	Cargo Oriented Development
DUCAR	District, Urban and Community Access Roads
DFID	Department for International Development
ERB	Engineers Registration Bureau
EAC	East African Community
EU	European Union
EIA	Entebbe International Airport
EACAA	East African Civil Aviation Academy
GDP	Gross Domestic Product
GoU	Government of Uganda
GAPR	Government Annual Performance Report (GAPR)
GKMA	Greater Kampala Metropolitan Area
IWT	Inland Water Transport
IMO	International Maritime Organization
ICAO	International Civil Aviation Organization
ISCOS	Inter-Government Standing Committee on Shipping
ICD	Inland Container Depot
JKIA	Jomo Kenyatta International Airport
JNIA	Julius Nyerere International Airport
JTSR	Joint Transport Sector Review
KIIDP	Kampala Institutional and Infrastructure Development Project
Km	Kilometer
Km/h	Kilometers per hour
KCCA	Kampala Capital City Authority
LBT	Labour-based technology
LRT	Light Rail Transit
MTEF	Medium Term Expenditure Framework
MoWT	Ministry of Works and Transport
MELTC	Mountain Elgon Labour-based Training Centre
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MDAs	Ministries, Departments and Agencies
M&E	Monitoring & Evaluation

MSA-KLA	Mombasa-Kampala
MIS	Management Information Systems
NCI	National Construction Industry
NEMA	National Environment Management Authority
NDP	National Development Plan
NRSC	National Road Safety Council
NSS	National Statistical System
PPDA	Public Procurement and Disposal of Public Assets Authority
PERD	Public Enterprises Reform and Divestiture Act
PMAESA	Port Management Association for East and Southern Africa
PPP	Public Private Partnership
RVR	Rift Valley Railways
RMI	Road Maintenance Initiative
SDP	Sector Development Plan
SGR	Standard Gauge Railway
SUA	Suppression of Unlawful Acts at Sea
SSATPP	Sub-Saharan Africa Transport Policy Programme
SSP	Sector Statistical Plans
SDGs	Sustainable Development Goals
TMEA	Trademark East Africa
TLB	Transport Licensing Board
TSDMS	Transport Sector Development Management System
TOD	Transit Oriented Development
USD	United States Dollar
UGX	Ugandan Shillings
UNRA	Uganda National Roads Authority
URC	Uganda Railways Corporation
URF	Uganda Road Fund
UCICO	Uganda Construction Industry Commission
UNCLOS	United Nations Convention for the Law of the Sea
URAC	Uganda Railway Asset holding company
WTSDP	Works and Transport Sector Development Plan

Foreword

The Works and Transport Sector Development Plan (WTSDP) 2015/16 – 2019/20 sets the medium term strategic direction of the Works and Transport Sector. The theme of the Plan is “Development of Sustainable Multi-modal Transport Infrastructure and Services for Economic Transformation” and in line with the NDP II.

The Plan is designed to ensure that the sector achieves an adequate, safe and well maintained Works and Transport Infrastructure and Services for social economic development of Uganda. The plan is in line with the aspirations of Uganda’s Vision 2040 of accelerating the transformation of Ugandan society from a peasant to modern and prosperous country.

The Plan identifies four key objectives to be attained during the five year period namely (i) development of an adequate, reliable and efficient multimodal transport network in the Country; (ii) Improvement of the human resource and institutional capacity of the Sector to efficiently execute the planned interventions; (iii) improving the National Construction Industry; and (iv) improving safety of transport infrastructure and services.

Over the Plan period, the Sector will focus on increasing the quantity of national paved road network from 3,795 kilometers to 6000 kilometers; improving the condition of national, city and DUCAR network; improvement of public transport in GKMA; development of Standard Gauge Railway System and rehabilitation of the meter gauge railway network; upgrading and expansion of Entebbe International Airport, revival of the National Carrier and development of Kabale International Airport in Hoima to enhance connectivity to the oil sector in Albertine Graben; and Development of Bukasa port, Port bell and Jinja pier to develop an alternative route to the sea through Lake Victoria so as to improve connectivity, reduce on over-dependence of the Northern Corridor and reduce the cost of transportation.

The Works and Transport Sector Development Plan 2015/16-2019/20 is aligned to the NDP II. The plan defines the long and medium term works and transport sector agenda and operationalize Uganda’s aspirations as outlined in the NDP II. The development of the Plan was informed by lessons learnt from the National Transport Master Plan, NDP1 & II, Vision 2040, Programme specific Strategic Plans, the Annual Joint Transport Sector Review, the NRM Manifesto 2016-21 and Presidential Pledges, and the Constitution of the Republic of Uganda. The process of developing this Plan was highly consultative, participatory and transparent.

I am therefore certain that the Works and Transport Sector Development Plan not only addresses the key challenges facing Uganda’s works and Transport Sector but also sets out priorities and key areas on which to focus investment in the medium term, for both public and private partners, in order to optimally contribute to the attainment of both the sector and national goals as outlined in the NDP II. I therefore appeal to the Government and Development Partners to extend the necessary financial support towards the implementation of this Plan.

I wish to express my appreciation to all of you who contributed to the development of this Plan. As the Minister responsible for Works and Transport, I am delighted to endorse and adopt this new pathway to transport infrastructure and services development. I encourage all stakeholders to embrace this renewed effort meant to chart and guide our endeavors in the works and Transport sector for the next five years. Let us continue working together to ensure successful implementation and execution of the Plan.

Monica Azuba Ntege

MINISTER OF WORKS AND TRANSPORT

ACKNOWLEDGEMENT

I am privileged to have presided over the process of preparing the Works and Transport Sector Development Plan for the period (2015/16 -2019/20). This Plan is a strategic document for resource mobilization, allocation and implementation to improve service delivery in the sector.

I appreciate and recognize the invaluable facilitation and guidance offered by the Department of Policy and Planning in the formulation process of this plan together with the staff from other Departments and sector Agencies. The Plan realistically presents the aspirations of the sector in improving service delivery to the people of Uganda.

I am grateful to the Top Management for their guidance and leadership. I appreciate the efforts of Sector Working Group (SWG) and Senior Management for their input in refining the Plan. I thank all those who participated actively in the development and review of the Sector Development Plan.

The resources required to implement this Sector Development Plan will come from the Government of Uganda and this shall be complimented by resources from Development Partners and the Private Sector.

I therefore acknowledge and endorse the Works and Transport Sector Development Plan for the period 2015/16-2019/20 as a working document to guide implementation of all interventions in the Sector over the Medium Term. I implore upon the technical staff and all stake holders in the Sector to use this Plan as the blue print for all interventions in the Sector for the period 2015/2016 – 2019/2020.

Bageya Waiswa
PERMANENT SECRETARY

Executive Summary

The Works and Transport Sector Development Plan (2015/16–2019/20) sets out a framework for the development of the Works and Transport sector in the medium term as enshrined in the Vision 2040, NDP II and Manifesto 2016-2021. It sets out the strategic direction of the sector for the period 2015/16-2019/20. The theme of the WTDP is “development of sustainable multi-modal transport infrastructure and services for socio-economic transformation”. The Plan has six chapters and the overall cost of the Plan is UGX 28,060.19 Billion.

Chapter one, presents the Introduction. This covers the sector Mandate, Vision, Mission, Strategic Objectives, and the Sector Composition. The Chapter also details out the approach undertaken in the execution of Sector Mandate; the Legal and Institutional Framework that guide the Sector in execution of its mandate, and the consultative process followed during formulation of the Plan. The Chapter concludes with a presentation of the Sector challenges experienced in the last five years key among which include inadequate funding, high cost of land acquisition for the right of way and unfavorable land law which affects project implementation and costs, axle load control, road and marine safety, poor performance of the railway concessionaire, land encroachment, weak inland water transport legislation and a generally the weak local construction industry.

Chapter two covers the situational analysis of the different modes of transport namely, roads, railway, inland water and air. It also covers elements of institutional capacity building that will strengthen and enable the sector improve performance in service delivery. Under roads sub-sector, 1,343km of national gravel roads have been paved in the last eight years, increasing the network of paved roads to 4,157km. This has increased the proportion of the road net work in good condition. However, funding for road maintenance is still low and only meets about 40% of the maintenance needs. Railway transport has performed poorly with a decline in market share to less than 5 percent. However, the recently introduced passenger train services have recorded great improvement with a current passenger ridership of 40,000 per month. The service has a great potential to decongest Kampala. With regards to air sub-sector, Entebbe International Airport recorded an exponential growth in air traffic in the last eight years. International passenger traffic grew from 781,428 in FY 2007/2008 to 1,363,484 in FY 2015/2016. On the other hand, the inland water transport is still underdeveloped though plans are underway to revamp this sub-sector.

In Chapter three, the sector priorities, interventions on crosscutting issues and the cost and financial plans for the investments and interventions to be undertaken in the five years, are presented. The chapter identifies the major interventions under the four strategic objectives of: development of an adequate, reliable and efficient multimodal transport network; improvement of the human resource and institutional capacities for efficient execution of the planned intervention; improvement of the national construction industry and; increasing the safety of transport services and infrastructure. Major projects to be implemented during the Plan period include: construction of strategic roads to support oil and gas sector, mining, tourism, agriculture and trade; construction of Expressways and flyovers in GKMA; development of SGR and rehabilitation of meter gauge; Expansion of Entebbe airport, development of Kabaale airport in Hoima and revival of

Uganda Airlines; development of New Kampala port of Bukasa, remodelling of Portbell and Jinja pier; and development of the local construction industry. The total cost of the Plan interventions for the period 2015/16-2019/20 is UGX 28,060.19 Billion.

Chapter Four focuses on the implementation framework of the Plan. It spells out the roles and responsibilities of the different actors who directly and indirectly contribute to the implementation of the Sector Development Plan. These include Ministry of Works and Transport, Uganda National Roads Authority, Uganda Road Fund, Civil Aviation Authority, Uganda Railways Corporation, Kampala Capital City Authority and the Local Governments. It also provides for the roles of other bodies responsible for regulations, such as Transport Licensing Board, National Road Safety Council, Engineers Registration Board, National Building Review Board and other key stakeholders in the sector. This Chapter also spells out the implementation risks of the Plan and a communication strategy aimed at creating an enabling environment to achieve the Plan objectives.

Chapter Five addresses the financing strategy of the Plan. The Chapter elaborates on the different sources of funding to implement the sector interventions. Priority programs in the SDP will be financed mainly by the Government of Uganda through the MTEF, Development Partners contributions, Non-concessional loans and PPPs. This Chapter also highlights the unmet funding needs and strategies to be undertaken by the sector to mobilize resources to close the financing gap of UGX 6,220.87BN which is projected from the sector MTEF namely advocating for an increase in the sector MTEF/budget and balancing investments among the various modes of transport, developing bankable projects to mobilize more resources from the Development Partners and Private sector; increasing own generated resources used at source by sector institutions; improving sector governance and accountability/ M&E; and implementing key sector reforms.

Chapter Six covers the overall Monitoring and Evaluation Framework for the Plan. It provides the programme specific inputs, outputs, and outcomes indicators. It therefore forms the basis for the sector Ministry and Agencies to extract the specific indicators for their respective Strategic Plans. Specifically, the implementation of the WTSDP will be monitored and evaluated by Top Management and SWG during their monthly meetings. The Sector shall also undertake annual and mid-term reviews of the Plan and the results will be reported during the Joint Transport Sector Review (JTSR), as part of the Sector Performance Report. The Midterm Review of the WTSDP will be undertaken during the 13th Joint Transport Sector Review in March 2018 while the final review and evaluation will be done during 16th Joint Transport Sector Review scheduled in September 2020. In addition, implementation of the Plan will also be monitored by other Institutions of Government responsible for monitoring Government Programmes namely Office of the Prime Minister, National Planning Authority, Office of the President and Parliament of Uganda.

1.0 INTRODUCTION

1.1 Background to Works and Transport Sector

Uganda's national transport system is comprised of road, rail, air and inland water transport modes. These modes operate on networks which collectively comprise the country's transport system. With over 90% of cargo freight and passengers moving by road, road transport is the core and dominant mode of transport. Air and rail transport modes are still growing with limited utilization while inland water transport is less developed. As a result, transport costs in Uganda have remained high in the region.

The transport sector has been rightfully identified, in the NDP II, as a complementary sector which supports the key growth sectors. However, in order to harness the above mentioned economic opportunities, Uganda needs to develop an adequate, reliable, efficient and sustainable multimodal transport network. This calls for increased investment and improvements in air, rail and inland water transport modes as well as balancing investment in road development and maintenance.

1.2 Theme of the Plan

The Works and Transport Sector Development Plan (WTSDP) 2015/16 – 2019/20 sets the medium term strategic direction, development priorities and implementation Strategies of the Works and Transport Sector. The theme of the WTSDP is "Development of Sustainable Inter-modal Transport Infrastructure and Services for Socio-Economic Transformation". This theme is in line with the NDP II theme of Strengthening Uganda's Competitiveness for Sustainable Wealth Creation, Employment and Inclusive Growth as well as the aspirations of Uganda's Vision 2040 of accelerating the transformation of Ugandan society from a peasant to modern and prosperous country.

Development of efficient and sustainable inter-modal transport infrastructure and services supports the development of key growth sectors, leads to reduced transport costs and improved competitiveness as transport accounts for over 30% of the production cost. It leads to better access to markets and attracts Foreign Direct Investment thus increasing the country's competitiveness to trade, and contributing to economic growth and prosperity. It also provides employment and other social opportunities and benefits all of which result in positive multipliers effects on the economy. Therefore, sustainable multi-modal transport infrastructure development and usage plays a key role in Uganda's pursuit for sustainable economic development.

1.3 Mandate, Vision, Mission and Core values of the Sector

1.3.1 Mandate

- i. Plan, develop and maintain an economic, efficient and effective transport infrastructure;

- ii. Plan, develop and maintain economic, efficient and effective transport services by road, rail, water, air and pipeline;
- iii. Manage Public works including government structures and;
- iv. Promote good standards in the construction industry

1.3.2 Vision

Provide reliable and safe works, transport infrastructure and services.

1.3.3 Mission

To promote adequate, safe and well maintained Works and Transport Infrastructure and Services for Social Economic Development of Uganda.

1.3.4 Core Values and Principles

The values and principles that guide and consign the staff and Political leadership of the Sector to the above Mandate, Vision and Mission in providing services are enlisted below:

Professionalism:

Adherence to the defined rules, standards and guidelines of the respective disciplines, exhibiting professionalism, competence and honesty.

Integrity:

Highest standards of integrity. The Sector shall not place its self under any financial or other obligations to individuals or organizations that might seek to compromise the professional behavior in performance of our duties.

Quality Assurance:

The sector shall put in place measures and mechanisms that will ensure our clients deliver/receive ultimate quality services and works within budget and time.

Selflessness:

The sector shall put public interest above personal interest without consideration of any financial or material benefit and gain.

Objectivity:

The sector shall make decisions based on merit, researched information, professional codes and other codes of good practice.

Customer/Client focus:

The sector shall put the interests of our customers/clients as our first priority. We shall always seek to meet our customers' needs and expectations.

Partnership:

The sector shall engage our partners in planning, designing, implementing, monitoring and evaluating our programmes and Projects.

Optimal use of resources:

The sector shall optimally use resources in the attainment of its objectives and targets.

Transparency and Accountability:

The sector shall be transparent and accountable for its decisions, actions and inactions.

Responsiveness:

The sector shall respond to our clients effectively and efficiently when called upon.

Impartiality:

The sector shall provide services to all clients without discrimination on the basis of gender, race, colour and religion or creed or ideological orientation or social status.

Teamwork:

The Sector staff are well aware of working together and are committed to a common purpose

1.4 Strategic Objectives of the Sector

The strategic objectives of the sector are:

- i. Develop adequate, reliable and efficient multimodal transport network in the Country
- ii. Improve the human resource and institutional capacity of the Sector to efficiently execute the planned interventions
- iii. Improve the National Construction Industry
- iv. Increase the safety of transport services and infrastructure

1.5 Composition of the Sector

The Works and Transport sector is one of the priority sectors of Government. It is led by the Ministry of Works and Transport. The Ministry is responsible for policy formulation, legislation, strategic planning, setting standards, regulation, and monitoring and evaluation of the Works and Transport Sector.

The Ministry supervises four (4) Agencies which are established by Acts of Parliament namely; the Uganda National Roads Authority (UNRA) for management of national roads; Uganda Road Fund (URF) for financing road maintenance; Civil Aviation Authority (CAA) for management and regulation of air transport sub-sector; and Uganda Railways Corporation (URC) for management of railway and water transport sub-sector. These Agencies are mandated to implement sector projects and programmes under the supervision of the Ministry. Other affiliated institutions include the East African Civil Aviation Academy (EACAA), Engineers Registration Board (ERB) and the National Building Review Board (NBRB).

In pursuit of its mandate, the sector works closely with KCCA and Local Governments, other MDAs, the private sector and civil society, and the Development Partners. Key Development Partners supporting the sector include EU, World Bank, AfDB, Exim Bank of China, Islamic Development Bank, JICA, KOICA, TradeMark East Africa, BADEA, and DANIDA.

1.6 Execution of the Sector Mandate

The Ministry of Works and Transport was restructured in 2009 and its mandate was changed to focus on provision on innovative and strategic leadership to the Sector through policy formulation, strategic planning, setting standards, regulation, monitoring and evaluation. The Ministry, as a Sector Leader is mandated to set the strategic direction standards and regulation for Statutory Agencies in the Sector.

Sector Agencies namely Uganda National Roads Authority (UNRA), the Civil Aviation Authority (CAA) and the Uganda Railways Corporation (URC) are responsible for direct implementation of works. In addition, Local Governments are responsible for maintenance of district, urban and community access roads network whereas Kampala Capital City Authority is responsible for the construction, rehabilitation and maintenance of roads in the City.

However, the Ministry is still involved in civil works on the DUCAR network where Local Governments lack the technical and financial capacity to undertake such works. Other civil works include those which are of strategic nature and are not on the national network and also emergencies.

1.7 The legal and institutional framework

1.7.1 Legal Context

The Sector institutions were established by Acts of Parliament; Uganda National Roads Authority (UNRA) was established through the UNRA Act of 2006 with the responsibility of developing, maintaining and operating the national roads network.

Uganda Road Fund (URF) was established by an Act of Parliament in 2008 to finance routine and periodic maintenance of public roads from mainly road user charges. It became operational in January 2010.

Uganda Railways Corporation (URC) is a Government parastatal established by the Uganda Railways Corporation Act, 1992 to manage the development, operation and maintenance of railway and marine transport services and infrastructure in Uganda. Effective November 1, 2006, Government through the provisions of the PERD Act (Cap 98) privatized the commercial operations of the Corporation by way of a 25-year concession to MS Rift Valley Railways (Uganda) Ltd (RVR).

Civil Aviation Authority (CAA) was established by an Act of Parliament (Cap 354) in 1991 with the main objective of promoting the safe, regular, secure and efficient use and development of civil aviation inside and outside Uganda. The Authority is also mandated to advise Government:

- i. On policy matters concerning civil aviation generally; and
- ii. With regard to international Conventions relating to civil aviation and the adoption of measures necessary to give effect to the standards and recommended practices under those Conventions.

Other Bodies under the Ministry include the following;

- i. National Road Safety Council (NRSC) - This was established under the Traffic and Road Safety Act, 1998 with a mandate to plan, promote and coordinate policies related to road safety;
- ii. Transport Licensing Board (TLB) –This is a statutory body established by an Act of Parliament, under the Traffic and Road Safety Act, 1998 with a mandate to license and regulate public transport vehicles and inland water transport vessels. The Board has a secretariat which is responsible for coordinating all matters concerning Board activities including Regional Offices in Mbale, Fort Portal and Mbarara;
- iii. Engineers’ Registration Board (ERB) - This regulates and controls Engineers and their activities within Uganda and provides advice to Government on matters relating to the engineering profession;
- iv. East African Civil Aviation Academy (EACAA-Soroti) – This was established by a treaty of cooperation of the first East African Community in 1971 to train Pilots and Aircraft Maintenance Engineers mainly for the then East African Airways, an airline once jointly owned by three partner states. It was inherited from the defunct East African Community (1997); and
- v. Mountain Elgon Labour-based Training Centre (MELTC)- This was established in 1995 in response to the need to build capacity in the districts and the private sector to carry out effective road rehabilitation and maintenance using labour-based methods.

1.7.2 Guiding Policy Framework

1.7.2.1 National Context

a) Vision 2040

Vision 2040 recognizes the fact that countries that have attained rapid socio-economic development have adopted and adapted transport modes and technologies, and accumulated sufficient quality stock of transport infrastructure. This has enabled them to lower the cost of doing

business and improve the investment climate. Therefore, there is an urgent need for Uganda to attain an integrated transport infrastructure network to spur its own economic growth. This will entail development of a highly interconnected transport network and services optimizing the use of rail, road, water and air transport modes.

Vision 2040 envisages that Uganda will have a developed road infrastructure leading to improved transport connectivity, effectiveness and efficiency at comparable levels of the developed countries. It further envisions that Entebbe International Airport will be developed into a regional hub and GKMA as one of the most attractive cities in the world, offering its citizens and visitors a safe and efficient transport system based on high quality public transport and a complementary non-motorised transport network. It highlights a number of main strategies for achieving its vision in the transport infrastructure and services which include:

- i. Development of highways connecting Uganda to the neighbouring countries and the major productive centers within the country;
- ii. Improvement of road infrastructure within the Greater Kampala Metropolitan Area and other urban areas
- iii. Investments in heavy rails, new light rail systems and bus rapid transit and trams in GKMA and other four proposed regional cities of Mbarara, Mbale, Arua and Gulu.
- iv. Transforming Entebbe International Airport to class A standards by improving its associated infrastructure.
- v. Increasing the volume of passenger and cargo traffic by marine transport and establishing navigable routes and putting in place adequate marine infrastructure.
- vi. For trans-boundary infrastructure government will promote partnership with the other countries to increase the economic viability of the infrastructure.*

Overall, the Vision 2040 identifies the accumulation of a critical mass of transport infrastructure, adoption and adaptation of transport modes and technologies as key to lowering the cost of doing business and improving the investment climate in Uganda and thus contributing greatly towards harnessing the abundant opportunities around the country.

b) National Development Plan II (NDPII)

Uganda's works and transport sector is highlighted as one of the complementary sectors, alongside water, energy, trade and financial services, that is expected to provide institutional and infrastructural support to primary growth and other sectors.

The five-year national plan takes cognizance of a number of key constraints attributed to the low performance of the works and transport sector in the past which includes weak legal, policy and institutional frameworks especially for the railway sub-sector; a weak local construction industry; limited connectivity to major tourism, mineral, oil and gas facilities as well as social services; poor maintenance of the roads; inadequate human resource capacities and limited funding.

The NDPII, as way of addressing the above constraints, emphasizes the need to develop adequate reliable and efficient multi-modal transport network, support the national construction industry, improve human resource capacities, and strengthen relevant policy legal and regulatory frameworks.

C) National Transport Master Plan including Master Plan for Greater Kampala Metropolitan Area (2008-2023)

The Sector is guided by the National Transport Master Plan including Master Plan for Greater Kampala Metropolitan Area (2008 2023) as the overarching planning framework for the development of the transport sector over a 15 year period. The NTMP/GKMA provides an analysis and a realistic 15-year sector investment plan, covering all transport modes including roads, railways, civil aviation, inland water transport, urban transport in GKMA and other modes of transport, including pipelines and non-motorised transport (NMT). Besides the investment plan, it also addresses the necessary management framework including institutional, legal, financial, land and environmental issues, and sets out a roadmap for stakeholder participation.

Other Plans / Policies addressing specific areas include:

- i. The National Construction Industry (NCI) Policy, 2010,
- ii. Non Motorised Transport Policy 2012;
- iii. Road Safety Policy, 2014
- iv. The Traffic and Road Safety Act, 1998
- v. Inland Water Transport Control Act 1939
 - a) The Vessel (Registration) Act, 1904;
 - b) The Ferries Act, 1905 and The Rivers Act, 1907;
 - c) The Foreign Seamen Deserters' Act, 1908;
 - d) The Inland Water Transport (Licensing) Rules, 1938;
 - e) The Uganda Railways Corporation Act, 1992;
 - f) Lake Victoria Transport Act 2007

1.7.3 Regional and international commitments

As a member of regional blocs including the EAC, COMESA and AU, Uganda ratified several principal treaties in the area of regional transport cooperation which include the following:

- i) The "Treaty for the Establishment of the East African Community (EAC)".

Among other provisions, this treaty proposes a customs union in which internal tariffs are abolished and non-tariff barriers are eliminated. In the transport sector it provides for the elimination of non-physical barriers to road transport and the non-discrimination between carriers of member states. The EAC agreed also on tariff setting, schedules and safety issues for the water cargo transport on Lake Victoria.

ii) The "Treaty for the Establishment of the Common Market for Eastern and Southern Africa (COMESA)". Under this treaty, member states are required to develop coordinated transport and communications policies. In addition it provides for the measures to ensure common procedures for the harmonization of road transit charges, similar treatment to the carriers of all member states and the promotion of cost-effectiveness through competition. Uganda is an active member of COMESA and has supported all the initiatives aimed at strengthening integration in the region.

iii) The "Northern Corridor Transit Agreement" between Burundi, the Democratic Republic of Congo, Kenya, Rwanda, and Uganda.

The provisions of this agreement are mainly concerned with facilitating the transit of goods traffic and the similar treatment of carriers of all member states.

Other Regional Coordination Initiatives are:

A. Roads

The Tripartite Agreement on Road Transport between Uganda, Kenya and Tanzania (1998) is aimed at the coordination of efforts to provide and sustain suitable regional road infrastructure. In particular, it set out provisions in four specific areas:

- a) Coordination of efforts to provide and sustain suitable regional road infrastructure and related facilities.
- b) Promotion and facilitation of traffic flow through designated international transit routes.
- c) Harmonization of policies on transport regulation including standards and procedures on axle load control.
- d) Establishment of a Standing Committee of Member States to report on the improvement of regional roads.

Progress in implementing this tripartite agreement has been slow, however, because of funding limitations and conflict between regional and national priorities.

B. Railways.

Uganda, Kenya, Rwanda, South-Sudan and china signed an agreement to develop Standard Gauge Railway network for passengers' and cargo transport, with the first phase expected to be opened already in 2017. Passengers' rail service is expected to reach a speed of 120 km/h between stations.

C. Water Transport

In 2002, The Government of Uganda, Tanzania and Kenya signed a tripartite agreement on Inland Waterway Transport. The purpose of the agreement is to promote and facilitate safe and efficient water transport for the inter-state transport of goods.

E. Air transport

The Government of the Republic of Uganda signed Bilateral Air Services Agreements (BASA) with several other states. The agreements make it possible for airlines to offer the traveling and shipping public a variety of service options at the lowest prices that are not discriminatory and do not represent abuse of a dominant position, and wishing to encourage individual airlines to develop and implement innovative and competitive prices.

Below is a list of more instruments, conventions, protocols and agreements to guide Sector institutions while executing their mandates:

- i. The Yamoussoukro Decision spearheaded by the African Union (AU),
- ii. International Convention on the International Civil Aviation Organization (ICAO) 1944
- iii. Regulations for the implementation of Liberalization of Air Transport Services – Legal Notice No. 2 of 1999”.
- iv. The Communication, Navigation, Surveillance/Air Traffic Management (CNS/ATM) Master Plan.
- v. The United Nations Decade of Action on Road Safety
- vi. The Lake Victoria Transport Act 2007
- vii. The United Nations Convention for the Law of the Sea (UNCLOS)
- viii. The Convention for suppression of Unlawful Acts at Sea (SUA 88’)
- ix. The African Maritime Transport Charter
- x. Applicable Conventions of the International Maritime Organization (IMO)
- xi. Port Management Association for East and Southern Africa Protocol’s (PMAESA)
- xii. Central Corridor Transit Transport Coordination Protocol
- xiii. ICAO Standards and Recommended Practices (SARPs)
- xiv. East African Community Treaty and Protocols
- xv. Agreement on the Intergovernmental Standing Committee on Shipping (ISCOS)

1.8. Implementation challenges experienced over the last five years

- i. Inadequate funding for infrastructure development projects. Although the sector has been receiving a fair share of the national budget, the budget is still inadequate to finance sector development projects. This includes donor funded projects which require counterpart funding from government, and projects in the NRM Manifesto and Presidential directives/ Pledges
- ii. High costs of acquisition of land for the right of way for the development of infrastructure projects; coupled with unfavorable land law affects budget performance especially for externally financed projects in terms of project costs and completion period
- iii. Inadequate funding for road maintenance has exacerbated the maintenance backlog as current funding only meets about 40% of the national roads maintenance needs. The delay

to fully operationalize the Road Fund as a second generation Road Fund has resulted into inadequate funding for road maintenance and accumulation of road maintenance backlog (about UGX 1,083.60 BN)

- iv. Weak local construction industry in terms of technical and financial capacity; most local contractors are not commercially well organized and lack the necessary capacity in terms of equipment and skilled manpower to undertake infrastructure projects. As a result, civil works contractors are undertaken by foreign companies with very little input from local contractors.
- v. Poor performance of the railway concession and legal status of Uganda Railways Corporation: With the advent of conceding of operations to RVR, URC mandate was re-defined to focus on monitoring and evaluating the performance of RVR. After the concession, follow up activities were not completed such as setting up of a Railway regulator (URAC – Uganda Railway Asset Holding company), and amendment of the URC Act. Absence of a revised law has hindered performance of the railway sub sector as less investment can be attracted to this sub sector in the short term.
- vi. Limited land for the proposed airport expansion especially for Entebbe International Airport. The acquired piece of land on Plot M121 (66 Ha of former MAAIF land) is still inadequate for airport expansion, and there is need to acquire the whole of plot M121 and the Kigungu Peninsula for this purpose. Also, funding for upgrading of Arua, Gulu and Kasese regional airports is still a challenge.
- vii. Inadequate staffing particularly in UNRA remains a big constraint. The overall budget has doubled but the wage bill is still constrained. As a result, there are no enough technical staffs to effectively prepare and supervise the projects.
- viii. Weak inland water transport legislation and disjointed and old laws, regulations, standards and design manuals in the sector.
- ix. Axle load control is still a major problem. The current law is weak and not deterrent. Transporters can afford to pay the fine and still make good profit from overloading.
- x. Growing trend of road carnage and increased levels of traffic congestion within Greater Kampala Metropolitan Area due to poor traffic management practices.
- xi. Land encroachment especially for road and railway reserves.

1.9 Plan Development Process

The Sector commenced on the process for preparation of the Sector Development Plan in FY 2015/16 but finalization of the Plan delayed until early 2017. Preparation of the WTSDP was participatory involving consultations with the Ministry departments, Sector Agencies and key stakeholders in the sector including development partners, private sector and civil society organisations to ensure full coverage and understanding of the key issues affecting the sector.

The process was spearheaded by the Policy and Planning department working closely with a Multi Sectoral Team (comprised of Staff from the Ministry and Sector Agencies).

The development process for the WTSDP involved 2-stages. Stage 1 involved a comprehensive review of literature at global, regional, national and sector levels and consultative engagement of sector MDAs and key stakeholders. Stage 2 entailed the development of Sector Strategic Plan, informed by the findings, conclusions and recommendations arising from the review and the medium term priorities provided by the national development-planning framework. Consultations and guidance was provided by the National Planning Authority at this stage

The Plan went through a series of reviews for input, Sector wide consultation and approvals. It was first presented to Senior Management whose comments were considered to produce the second Draft. The second draft was presented to the Sector Working Group whose comments were considered to produce the third Draft of WTSDP, which was presented to the Top Management for discussion and final approval. Following approval by the Top Leadership, the revised WTSDP was submitted to the National Planning Authority for a certificate of compliance. Upon receipt of the compliance certificate, the ASSIP will be published and disseminated to the various stakeholders for information and implementation.

1.10 Structure of the Plan

The WTSDP is a vehicle for implementation of the NDPII in the sector. The Plan is comprised of Six Chapters and is in line with the Sector Development Plan Guidelines (SPDG) issued by the National Planning Authority (NPA).

Chapter One covers the Introduction, Chapter Two deals with the Sector Situation Analysis, Chapter Three covers the strategic direction of the Sector for the 5-year period, Chapter Four presents the institutional arrangements for implementing the Plan, Chapter Five addresses the costing and financing strategy of the SDP and lastly Chapter Six which spells out the monitoring and evaluation arrangements for the Plan.

CHAPTER TWO: SUMMARY OF THE SITUATIONAL ANALYSIS OF THE WTSDP

2.0 Introduction

To inform the Sector Development Plan, a review and analysis of the sector's achievements to date and the environment in which the sector operates was undertaken. The chapter therefore presents a situational analysis of the Sector clearly focusing on the most recent achievements, previous and current performance, challenges and plans for all the four sub-sectors namely roads, railways and aviation and inland water sub-sectors. It further, specifies the various elements of institutional capacity that will strengthen and enable the sector improve performance in service delivery. The environmental analysis looked at both the internal and external factors affecting the sector using the POCC approach (Potentials, Opportunities, Constraints and Challenges).

2.1 Road Sub-sector

Road transport is the dominant mode of transport accounting for over 90% of cargo freight and passengers movement. It is classified into national roads and District, Urban and Community Access Roads. The national / trunk roads provide the main communication network which is made up of international routes linking to neighbouring counties, together with the major domestic routes serving the important population or administration centers. Development and maintenance of national roads is a function of the National Roads Authority whereas the Local Governments are responsible for the DUCAR network i.e. urban roads by the Urban Councils and community access roads are the responsibility of the sub-counties and wards in urban areas.

National roads are strategic roads of national importance linking border posts, airports and ports to each other and the Capital City. They serve long distance transport and are the primary artery of the road network. District roads link district headquarters to the national road network and Sub-County administrative Centres. Urban roads are roads within the boundaries of urban areas, while community access roads are roads within villages that link communities and also provide access to administrative, social and economic services.

The road network totals to 144,785km and comprises 20,544km of national roads, 35,566km of district roads, 10,108km of urban roads and 78,567km of community access roads. Only about 5,100km (4%) of the road network is paved, while the rest of the road network is of gravel or earth surface. Of the national road network, 4387km is paved representing 21.4 percent of the national road network. Of the District roads, only 145km is paved representing 0.4% of the district roads. For Urban roads, only 570.8km is paved (5.6%) while all community access roads are not paved.

A comparative analysis of the status of roads network in East African Community is summarized in the Table 1 below, and accordingly, Uganda has the lowest percentage of paved road network.

Table 1-1: Comparison of paved road network in EAC

Country	Total roads network (km)	Paved roads (km)	%ge of paved roads
Kenya	160,886	11,189	6.95
Tanzania	86,472	7,092	8.20
Uganda	144,785	5,100	3.52
Rwanda	14,008	2,662	19.00
Burundi	12,322	1,286	10.44

2.1.1 National Roads Development

Investments in the transport sector have concentrated on road transport particularly upgrading of national road network to paved bituminous standard. The government budgetary allocation to the transport sector has grown from UGX 564bn in FY 2007/8 to UGX 3,489bn in FY 2016/17, the bulk of which is spent on the roads sub-sector (over 80%).

Specifically for the roads sub-sector, the approved budget for national roads development has increased from UGX 615bn in FY 2010/11 to UGX 1,728.90BN in FY 2014/15 (by 180%) and further to UGX 3,489bn in FY 2017/18. The approved budget for road maintenance (both national and DUCAR) increased from UGX 283.88BN to UGX 428.10BN (by 50%) over the NDP1 period

On the other hand, the approved budget for road maintenance (both national and DUCAR) only increased from UGX 283.88BN to UGX 428.10BN (by 50%) over the NDP1 period. This budget is inadequate as it only meets about 40% of the funding requirements and this has led to accumulation of road maintenance backlog of about UGX 1,083.60 BN as of June 2016.

Regarding physical performance, a total of 1,717km of old paved roads were rehabilitated between July 2010 and October 2016 and additional 429 Km are currently being rehabilitated. This will bring the total number of kilometers rehabilitated to 2146Km. The details of the roads which have been reconstructed are provided in Annex-1.

In the past 8 years, 1,573km of gravel national roads have been upgraded to paved bitumen standard bringing the national paved roads network to 4,387km.

Table 1-2: Stock of National Roads since 2008

Financial Year	Paved roads	
	Annual Increase (km)	Stock (km)
2008/09	159.00	3,034.60
2009/10	165.40	3,200.00
2010/11	64.10	3,264.10
2011/12	53.00	3,317.10
2012/13	172.50	3,489.60
2013/14	305.40	3,795.00
2014/15	185.88	3,981.00
2015/16	238.00	4,157.00
2016/17	230.00	4,387.00

2.1.2 Road Maintenance

The unprecedented increase in financing of the development of the national road network in the last eight years has resulted in an increased need for maintenance. Over the last 7 years, significant interventions have been made through Uganda Road Fund to finance this maintenance and resulting trend in KMs and consequent condition of the national paved roads can be seen in tables 1-3 and 1-4 below.

Table 1-3: Summary of road maintenance interventions July 2010 to June 2015

Category / FY	Intervention	2010/11	2011/12	2012/13	2013/14	2014/15
Routine Maintenance	Paved Roads (km) Mechanized Maintenance	1,810	1,890	1,500	1,720	2664
	Unpaved Roads (km) Mechanized Maintenance	10,669	7,500	10,362	10,500	12005
Periodic maintenance	Paved roads (km)	127	6	0	0	20
	Unpaved roads (km) re-gravelling	1,612	197	502	600	1510

Table 1-4: Summary of paved road condition

Year	Paved Roads Condition (km)				Paved Roads Condition (%)		
	Good	Fair	Poor	Total	Good	Fair	Poor
2009/10	1,230	1,180	709	3119	39%	38%	23%
2010/11	1,742	680	843	3264	53%	21%	26%
2011/12	1717	856	744	3317	52%	26%	22%
2012/13	1,794	893.4	802.6	3489.6	51%	26%	23%
2013/14	2505	531	759	3795	66%	14%	20%
2014/15	2,707	478	796	3,981	68%	12%	20%
2015/16	2,040	913	1204	4,157	61%	27%	12%

Overall rating of the paved road network condition has generally improved over the past 10 years. However, the above rates still lag behind many developing countries as network conditions reflect low maintenance expenditures. This inadequate level of road maintenance results in lower travel speeds and higher operating costs. Hence, there is need to increase funding for road maintenance in order to preserve the huge investments being made by government in road development.

2.1.3 Bridges Programme

The inventory of bridges and major culverts (over 6 m span) on the national roads is estimated at about 550 structures and of which about 60% are in good condition³. However, the complete inventory and condition assessment is not available yet. A total of 23 new Bridges have been constructed on the national roads network during the past 5 years and another 6no rehabilitated. This has helped to remove bottlenecks on the national network and improve all weather accessibility. The list of completed bridge projects is provided in Annex 2.

Currently, construction works are on-going on the following 12no major bridges;

- i. New Nile Bridge at Jinja
- ii. Apak Bridge along Lira – Abimu road
- iii. Pakwala, Nyacyara, Goli and Nyagak-3 Bridges in Nebbi
- iv. Enyau-3 and Alla Bridges in Arua
- v. Goli and Nyagak in Nebbi
- vi. Nyalit and Seretiyo in Kapchorwa
- vii. Cido Bridge on Nebbi
- viii. Kabale Bridge linking Kyankwanzi to Ngoma
- ix. Ruboni Access bridge in Kasese
- x. Nyamugasane bridge in Kasese district
- xi. Maliba – Nkenda – Bugoye – Nyakalingo
- xii. Kasozi Bridge linking Ngoma to Buruli

In addition, design of 66no bridges will commence in FY 2017/18 and a total of 130 bridges is targeted to be constructed during the WTSD period.

2.1.4 Ferry Services

The sector provides ferry services for effective and safe continuation of national road network and provision of transport services to islands and other hard to reach areas. During the past 5 years, a total of 10No. Ferries were procured for various routes and are all operational. These ferries include the following:

Table 1-5: List of Ferries and their Operational routes/ schedule

	Ferry Crossing / Establishment	Operation Schedule
1	Bukakata (Masaka District) to Luuku (Kalangala District).	Route operated by KIS, using two ferries each making a minimum 4 trips per day
2	Laropi (Moyo District) to Umi (Adjumani District)	Makes a minimum of 12 trips per day.
3	Kiyindi (Buikwe District) to Buvuma (Buvuma District)	Makes maximum 3 trips per day.
4	Masindi Fort (Kiryandongo District) to Kungu (Apac District)	Makes a minimum 11 trips per day.
5	Nakiwogo (Entebbe Municipality) to Kyanvubu (Wakiso District)	Makes a minimum of 9 trips per day.
6	Wanseko (R) (Buliisa District) to Panyimur (Nebbi District)	Makes a maximum 2 trips per day.
7	Obongi (Moyo District) to Sinyanya (Adjumani District)	Makes 10 trips per day
8	MV Kyoga1 (Namasale-Amolatar District) to (Zengebe-Nakasongora District)	Makes 4 trips per day.
9	Mbulamuti Ferry: Kasana (Kayunga District)- Bugobero (Kamuli District)	Makes a minimum 15 trips per day.
10	Lake Bisina Ferry for Kumi -Katakwi crossing	Ferry under trial run

In addition, procurement of a second ferry on Lake Kyoga for Namasale-Zengebe crossing and a new ferry for Wanseko-Panyimur crossing has been completed while procurement of new ferries for Sigulu Islands and Bukungu-Kagwara-Kaberamaido crossing on Lake Kyoga will commence in FY 2017/18.

2.1.5 District, Urban and Community Access Roads (DUCAR)

DUCAR roads facilitate trade and commerce in the urban centers and they service industrial and social infrastructure. District councils are responsible for district roads, while town councils are responsible for urban roads. Local councils (LC3) are responsible for Community Access Roads.

The size and spatial extent of the urban centers is rapidly changing due to economic growth, population growth and creation of new districts. However, there has been a mismatch in resources to maintain and expand this network resulting in obvious consequences of dust nuisance, erosion and flooding.

In June 2012, The Government of Uganda (GoU) made a policy shift from contracting the road maintenance works in Local Governments (LGs) to Force Account. This was subsequently followed with the acquisition of a fleet of 1,405 pieces of new equipment from The Peoples' Republic of China which was distributed to local governments.

However, Local Governments were not able to successfully carryout road maintenance activities by the force account. Several complaints were received from users about the unsatisfactory performance of the equipment which was attributed to incomplete road units and compounded by absence of trained operators.

Nevertheless, there was a remarkable improvement in the condition of district road network during the period. In 2014, about 65% of the district roads were reportedly in fair to good condition compared to 54% for urban roads and 30% for community access roads.

In order to address the above challenges, Government in 2014 committed to procure and equip districts with robust equipment from Japan capable of undertaking rehabilitation and maintenance of roads. The expected equipment totals to 1153 pieces and the first consignment of equipment of 102 units arrived in the country in April 2017 and delivery will continue on a monthly basis until March 2018.

However, this fleet of equipment represents a heavy investment whose operations and maintenance require proper planning and adequate funding. There is therefore need to upgrade the standard of the maintenance facilities at the regional mechanical workshops including provision of adequate budget for maintenance and repair of the equipment. The annual maintenance costs of this equipment is estimated at UGX 21.38BN

On the other hand, community access roads provide nearest access to the rural communities. They play a dual role in the economy, both as a direct provider of services implementation and as a catalyst for economic integration, redistribution and development. Most of the community access roads have been in poor state in the recent past. However, there have been a number of interventions like CAIIP 1 & 2, PRDP, RTI, etc which have greatly improved the condition of this network although more still needs to be done in this area.

2.1.6 Inventory and Condition of Kampala City Roads

Kampala has an estimated network of **2,110km** of roads of which **578 km** (27%) are paved and **1,532km** km are unpaved i.e. earth or gravel (73%) as of June 2016. These figures were derived from a study commissioned by KCCA in 2013 to undertake a roads inventory and conditions assessment which established an accurate database/inventory of all road infrastructure within KCCA area of jurisdiction and its condition. Only 51% of the paved roads and 70% of unpaved roads were in fair to good condition.

Kampala's road network was constructed for less than 100,000 vehicles in the 1960s and yet today, over 60% of vehicles in Uganda (about 900,000 vehicles) use Kampala roads even though its road network is less than 1% of the total road length in Uganda. Hence, most of the roads have outlived their usefulness and need either total reconstruction or upgrading to paved and for the major road corridors widening.

Table 1-6: Summary Inventory of KCCA's Road Network

Road Type	Length (Km)		Road condition –fair to good (Percentage, %)	
	2011	2016	2011	2016
Paved	417	578	11	51
Unpaved	801	1532	48	70
Total	1,218	2110		

Although most trips are for pedestrians who account for 48% of the mode share in the city, there is a lack of pedestrian facilities on most roads. In many cases pedestrians are forced to share carriageways with vehicles exposing themselves to accidents. Provision of walkways and cycle paths is hampered by lack of right of way and limited funding for upgrading and maintenance city roads and street. This combined effect of having an inadequate and poor road network, a city drainage system that needs massive investment and the absence of a well-organized public transport system has led to traffic congestion in Kampala. A recent study commissioned by KCCA and UNHABITAT revealed that 24,000 man hours are lost each day by commuters due to traffic jam.

Government through Kampala Capital City Authority (KCCA) has put in place measures to improve city infrastructure through emergency repairs, reconstruction and rehabilitation of key roads. A total of 152 Km of roads has been reconstructed/ upgraded by KCCA since 2011 across the five divisions and a further 54km has been prioritized for reconstruction/ upgrading by FY 2018/19. Other planned interventions include but not limited to:

- i. Redesigning the current road network to enhance mobility through provision of alternative connector roads that reduce traffic on the main trunk roads
- ii. Junction improvement(using signal control) and expansion of street lighting network

- iii. Introduction of mass public transport systems integrated with NMT (city bus services and pilot NMT)
- iv. Streamline traffic management and operations in the city (boda-bodas, taxi cabs, commute buses, heavy trucks, etc).
- v. KCCA is working with other Government entities notably Security organs, MoWT, Ministry for Kampala to streamline the operations within the Taxi industry. KCCA needs support from all the stakeholders to ensure that Taxi industry gets leadership and work with elected members to transform public transport in Kampala.
- vi. The Authority has developed a programme for the second phase of the Kampala Institutional and Infrastructure Development Programme (KIIDP II) in line with the new 5-Year Development Plan (2013/14 -2017/18). KIIDP2 Batch 2 will include design and construction of several kilometers of roads and installation of 22 traffic signal controlled junctions. This shall also include construction of a Traffic Control Centre building and fully equipping it so that it is fully functional. These interventions are ongoing.
- vii. KCCA plans to reconstruct and restructure the Old Taxi Park and USafi Park with funding from donor agencies.
- viii. The Authority with support from Chinese government is currently finalizing a contract agreement to construct a multi-storey car park and a City bus station at the new taxi park starting this year.
- ix. KCCA is working together with MoWT to ensure that the BRT Pilot project is implemented. BRT System is the most important project that Kampala city needs now. If implemented, the congestion along the designed corridors will greatly be eliminated.
- x. In preparation for the medium term measures, KCCA engaged a consultant using World Bank funding to develop a city wide multi-modal transport master plan for greater Kampala that shall be coordinated with the land use plan for the metropolitan area. This detailed master plan will provide the basis for providing transport infrastructure for the growing urban population in the metropolitan area.

2.1.7 Road Safety

Road safety in Uganda is a growing concern, due to the human, social and economic misery that results from the daily carnage on our roads. Statistics from Uganda Police indicate that road traffic crash fatalities grew from just over 600 in 1991 to 3,224 in 2015. On average, about 13,000 people have been hospitalized annually due to road crashes. These rates are high especially given the low traffic volume on our roads and are attributed mainly to poor driver behavior, vehicles in poor mechanical condition, extensive vehicle overloading, poor enforcement and limited road safety education. Allied to this, are a weak institutional and structural arrangements and severe underfunding for spearheading a coordinated response to the carnage on Uganda roads. According to the Global Status Report on Road Safety, 2015 published by the World Health Organisation, Low and Middle Income Countries lose 2-3% of their GDP to road crashes which translates to about U\$ 0.8 Billion for the case of Uganda.

Accordingly, future developments in the sector have to include comprehensive Road Safety measures with the ultimate objective of reducing road crashes and/or fatalities through instituting proper road safety management measures and a well-coordinated accident response mechanism. In view of this, the sector plans to strengthen the institutional management of road safety through increasing human and financial resources available to the National Road Safety Council (NRSC) and the department responsible for Transport Regulation. In the long-term, the Ministry will transform the NRSC into an Agency responsible for road safety.

2.1.8 Axle load control

Uganda, like many other developing countries, is faced with the problem of axle load control. The non-vibrant railway sub-sector in Uganda and the entire East African region has resulted into heavy good flows being diverted to road transport with overloaded trucks plying the trunk route network.

The external trade of Uganda is highly skewed, with imports exceeding exports by a factor of 10 to 1. This causes a problem of lack of return load to the seaports, and truck operators tend to overload their vehicles while carrying imports from the seaports in order to maximize profits. As a result, the economy suffers either by absorbing the high transport and logistics costs or through premature failure of the road network and, hence, high maintenance and rehabilitation costs. Any delay in maintenance leads to earlier failure of the road network and subsequently, to higher costs of rehabilitation. It is estimated that overloading of trucks increases road maintenance costs by US \$21 million annually.

During the NDP1 period, a total of 940,348 vehicles were weighed across the country between FY 2010/11 – 2014/15 and the percentage of overloaded vehicles weighed averaged at 54%. To minimize this vice, the sector has introduced drastic changes in the management and operations of weighbridges. Also, works for installation of modern weighbridges near Malaba, Busia, Mutukula and Elegu border posts are underway, and there are plans to computerize weighbridge operations so as to minimize human interface.

Overloading also poses a safety hazard. Many accidents are caused by overloaded vehicles failing to brake, climbing steep gradients or accelerating, thus reducing the requisite distances between flowing traffic. Such a scenario may lead to severe accidents and congestion, thereby affecting service delivery. Furthermore, overloaded vehicles have higher emissions and, hence, higher pollution effect.

In view of the above challenges, the EAC has developed harmonized axle load limits, gross vehicle weights and vehicle dimensions to be adopted by member states. Government also plans to acquire modern weighing in motion weighbridges and will ensure decriminalization of overload offences in favor of penalty fees pegged to the calculated pavement damage attributable to the overloaded vehicle or equivalent to the amount of freight revenue earned from the excess cargo in order to avert this vice.

2.1.9 Road Traffic Demand

Road transport is the dominant mode of transport accounting for over 90% of cargo freight and passengers movement. The total volume of freight to and from Uganda (imports and exports) at the major border crossings of Malaba, Busia and Port Bell was about 6.74million tons in FY

2010/11. This has increased to about 8.32million tons in FY 2015/2016 and of which about 7.82million tons (94%) was transported by road.

Another indication of increasing road traffic is given by the sustained rapid increase in the vehicle population, as shown in Table1-7 below. The estimated national vehicle fleet including motor cycles has more than doubled over the NDP1 period from 635,657 vehicles in 2010 to 1,383,878 vehicles in 2015, and is projected to grow to over 2.0million by end of NDP2 period. However, majority of this growth was registered in the motorcycle category.

Table 1-7: Estimated National Vehicle Fleet in Uganda, 2005-2020 (Thousands)

No. (0)	Vehicle Category (1)	2005 (2)	2010 (3)	2015 (4)
1.	Cars and taxis	65.5	99.1	124.3
2.	Light goods/4WD	53.2	58.5	63.2
3.	Minibuses	27.6	76.9	233.4
4.	Buses	0.9	1.6	2.5
5.	Trucks, Agricultural tractors and Others	23.3	45.5	80.1
	Sub-total	165.8	273.8	494.8
6.	Motor-cycles	108.2	354.0	880.3
	Total	278.6	635.6	1384.3

Source: MoWT

2.2 Railway Sub-sector

Uganda's Vision 2040 clearly underpins the railway subsector as one of the key priority areas in modernizing the economy. The subsector is managed by Uganda Railways Corporation (URC) a corporate body established under an act of parliament. It is mandated to construct, operate and maintain railway, marine and road services both inside and outside Uganda for the carriage of passengers and goods. However, in November 2006, under the Structural Adjustment Program and Public Enterprises (PERD Act 2004) the operations of URC were concessioned to M/S Rift Valley Railways (Uganda) Ltd (RVR) for 25 years in order to increase efficiency and service delivery.

2.2.1 Uganda Railway Network

The lines in Uganda can be described as haul lines, transporting specific freight commodities between major hubs with port connectivity to Mombasa (Kenya). The Meter Gauge Railway (MGR) from Mombasa in Kenya to Kampala, Kasese and Pakwach in Uganda was built with the aim of transporting inland freight and linking Uganda to the coast. The current railway system mainly offers freight services and with a very limited passenger service in Kampala.

The Uganda MGR network is 1,266km of which about 315Kms is currently operational. The rest of the rail network is closed largely because of dilapidation. In October 2013, the northern line from Tororo to Gulu was reopened to freight traffic after 20 years of closure, providing a rail connection from Mombasa toward South Sudan. However, there has been no revenue railway traffic on this line since it was reopened. Summary of Uganda railway network and current operational network is provided in Tables 1-6 and 1-7 below.

Table 1-8: Uganda Railway Network

No	Section	Km	Rail Weight (lb/yd)	Status
1	Malaba – Jinja	159	75 & 80	Main line
2	Jinja Kampala	92	80	Main line
3	Jinja - Jinja Pier	4	50	Branch line
4	Kampala - Port Bell	9	80	Branch line
5	Kampala – Nalukolongo	5	80	Branch line
Sub-total Core Network		269		
6	Tororo – Soroti	161	50 & 60	Branch line
7	Soroti – Pakwach	346	40 & 45	Branch line
8	Nalukolongo – Kasese	330	50	Branch line
9	Branch to Kilembe mines	4	50	Branch line
10	Branch to Hima Cement	11		Branch line
11	Busoga loop	145		Branch line
Sub-total other lines		997		
Total Network		1,266		

Table 1-9: Rail Infrastructure operational lines

No	Section	Km	Rail Weight (lb/yd)	Status
1	Malaba – Jinja	159	75 & 80	Main line
2	Jinja Kampala	92	80	Main line
3	Jinja - Jinja Pier	4	50	Branch line
4	Tororo – Mbale	55	50 & 60	Branch line
5	Kampala – Nalukolongo	5	80	Branch line
Total Operational Network		315		

2.2.2 Uganda Rail Track Classification

The Rail track classification is dependent on Safety Tolerances, where the maximum deviations from the design track geometry that can be permitted for each "Speed Class" of track. There are five rail speed classes i.e. 1-5 representing maximum permissible speed of 15-90Km/hr. Uganda's track lies in class 2 with maximum speed of 35Km/hr.

The Industry is governed by regional agreements which among others guide on the wagon interchange period and charges within Kenya, Uganda and Tanzania. At the national level, the sub-sector derives its mandate from URC Act, 1992 and PERD Act.

2.2.3 Performance of the Railway Sub-Sector

The performance of the Freight Concession over the nine years has been unsatisfactory and the rail mode market share has declined to about 5% and this is evidenced by insignificant changes in freight volumes and increasing backlog in asset maintenance leading to poor asset availability and productivity.

In 2013, only about 7% of the freight handled at the seaport of Mombasa destined for Uganda was carried by rail, leaving the balance of about 93% to be transported by road trucks as reported by Ministry of Works and Transport- SGR Development Project Report, (2014). This has resulted in high costs of transportation and accelerated road deterioration as shippers continue to rely on the more expensive but more reliable road transport.

The net tonnage per kilometre (NTKM), which is a key parameter that tracks the overall RVRU's performance in relation to the set targets stipulated in the Uganda Concession Agreement (UCA), represents the total tonnage railed for the period and the distance moved. The overall performance from inception for 12 months period has never surpassed the year 2003 used as baseline target of 217.3 million NTKMs.

During FY 2014/15, only 180.1 million NTKMs were hauled representing 83% of the 2003 baseline performance. This therefore implies that for FY2014/15, the rail cargo tonnes moved were lower than NTKMs moved prior to the commencement of the concession, about eleven (11) years ago and this is because of delayed investment in the key infrastructure components of the permanent way, locomotives and wagons.

Currently the Kampala-Malaba line handles circa 560,000 net tonnes of freight per annum which represents only 7% of the freight transport market on the Northern Corridor of about 14.5 million tonnes per annum. Rail transport costs for bulk materials are quite low, typically less than USD 0.03 per ton-kilometer. On the Mombasa-Kampala route, the cost of rail transportation is estimated at USD 0.09 per ton-kilometer which is three times the international average, rendering the route highly uncompetitive. Given the state of the main line, there are numerous temporary speed restrictions and frequent derailments. This leads to poor transit times given the very low average speeds of less than 30 kph. The average transit time on the route Mombasa – Kampala is 6 – 20 days (which is about 30 days round-trip) on an average speed of 15 – 25 km/h which does not promote business competitiveness. Hence, most of the freight is carried by road at a very high average cost of USD 0.16 per ton-km.

Table 1-10: Locomotive status

No.	Type	Operational	Non-operational	Total
1	36 class	2	4	6
2	62 class	4	2	6
3	71 class	-	2	2
4	73 class	10	14	24
5	82 class	-	5	5
Total		16	27	43

Out of the total 43 locomotives conceded, only 16 are operational but out of this number, 13 locos are overdue for over haul and maintenance as per URC report on performance of RVRU, (2015). However, RVRU acquired four class 96 locomotives in 2014.

In June 2012, a joint verification was conducted between RVRU and URC, 1,321 wagons were identified as per the breakdown in Table 1-8. Since inception of the concession, only 365 were rehabilitated via KfW funded project and this exercise ended in October 2014. In 2015/16, RVRU acquired 240 new flat wagons out of the planned 480 as per their investment plan.

Table 1-11: Status of Railway Wagon

No.	Type of wagon	No of Units
1	High open	21
2	Covered	473
3	Fuel tank	200
4	Flatbed container	513
5	Low open	34
6	Ballast hopper	51
7	Others (Passenger, departmental et al)	29
	Total	1,321

Source: RVR report, June 2012.

The Government of Uganda, through the sector, plans to develop the rail network in the country to a modern, standard gauge network providing connection to Kenya (and ultimately the port of Mombasa), Rwanda and South Sudan. The proposed SGR project plans to increase the speeds to 120km per hour for passenger and 80 km/h for freight services, implying over a six fold saving in travel time.

Construction works have already started on the Mombasa-Nairobi section. For Uganda, bankable feasibility studies and engineering designs have been completed and land acquisition for the Kampala-Malaba route and other preparatory activities are on-going with actual construction planned to commence during FY 2017/18.

Also, Government has plans to rehabilitate the meter gauge railway line running from Tororo-Gulu-Pakwach (500km) and also Kampala-PortBell to revamp the southern route-central corridor through Lake Victoria. The sector also has plans to develop a logistics hub at Gulu railway station so as facilitate trade between Uganda, South Sudan and DRC.

In a bid to improve traffic flow in Kampala CDB, the sector with support from MoFPED and KCCA launched a pilot passenger train service scheme in December 2015 from Kampala to Namanve. The service is performing relatively well and is being subsidized by Government. Monthly ridership is in the range of 26,000-30,000 passengers as indicated in Table 1-9 below, and the scheme has growing potential to decongest Kampala if extended to other areas.

Table 1-12: Ridership of passenger Train Services

Month	Ridership	Revenue Collections (Mn)	%Growth Ridership	Remark
December 2015	1,802	2.03	-	Commencement
Jan-March 2016	26,456	24.50	1368.1%	Campaign period
April-June 2016	80,253	81.70	203.3%	Improved marketing - Introduced school tickets
July-Sept 2016	104,251	106.73	29.9%	Low business
Oct-Dec 2016	98,309	108.01	-5.7%	Low business due to school holidays and X-mas break
Jan-March 2017	79,779	83.17	-18.8%	Low business
Total	390,850	406.14		

2.2.4 Inland Container Depot and Goods sheds

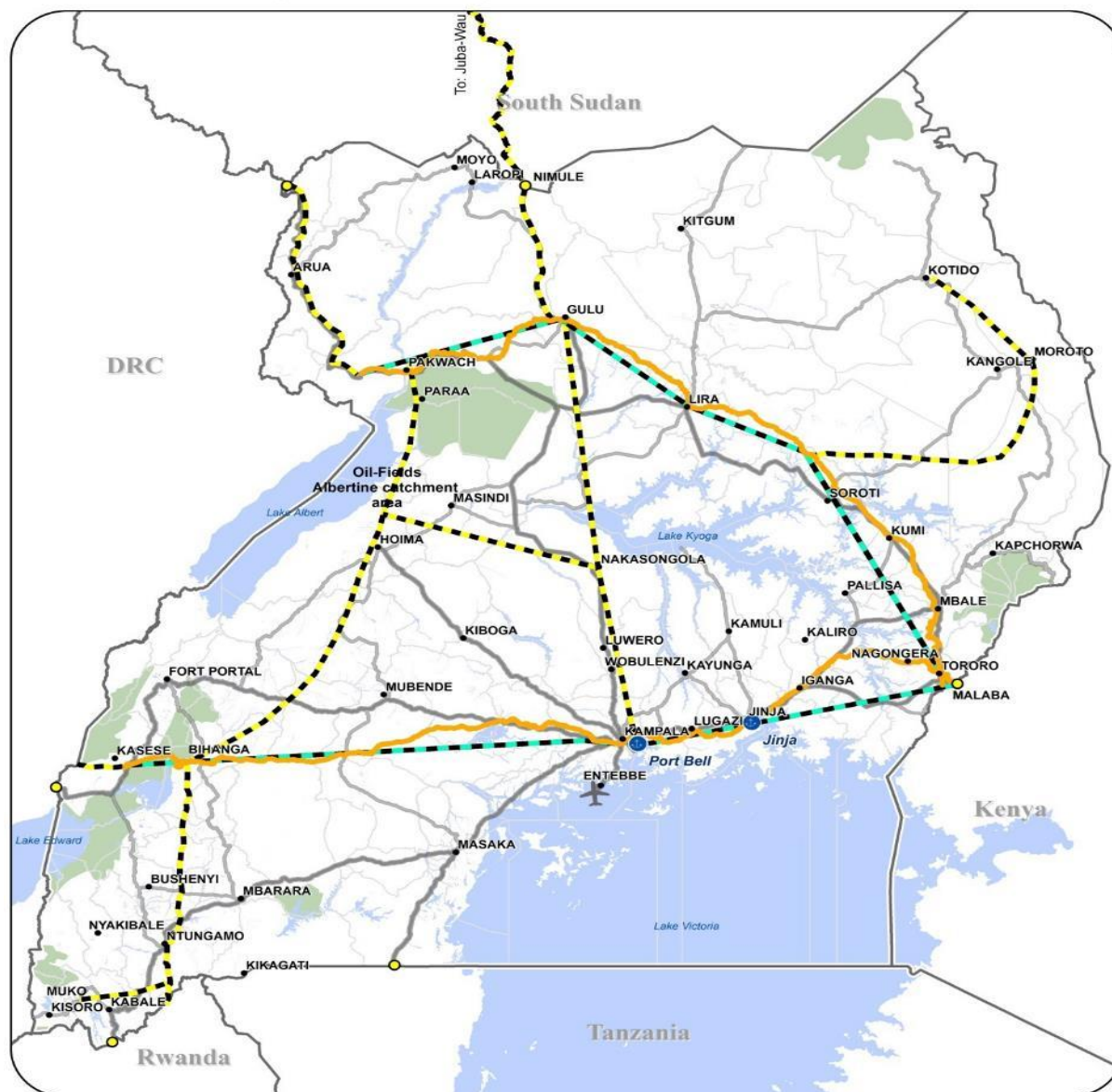
The sector has completed the construction of a railway ICD at Kyetume in Mukono district a few km along Mukono-Katosi road. The facility sits on a 13.5-acre piece of land and with expansion capacity of another 13 acres, and is deemed the biggest so far in the country. The facility has capacity to handle at least 36,500 containers (TEUs) per annum, which is about a third of all Uganda's import and export containers. The facility became operational in July 2015 and is being operated by RVR. URC has Good sheds in the following major locations: Kampala, Jinja, Tororo, Gulu and at every train stations.

Key challenges faced by the rail sub-sector include poor performance of the concessionaire, poor and aging infrastructure, inadequate funding, land encroachment, and current legal and policy framework which is not conducive for sub-sector growth.



Preparation of a Detailed Strategic Implementation Plan for the National Transport Master Plan,
including the Greater Kampala Metropolitan Area (NTMP/GKMA)

Uganda: Proposed Future Rail Network



LEGEND:

- Border posts
- Entebbe airport (primary airport)
- Port Bell/Jinja (major lake ports)
- Class A roads
- Class B roads
- Lakes
- National parks
- District boundaries
- Rehabilitated MG railway
- Future conceptual SG development plans
- Committed SG railway developments

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Table 1-13: Performance of Railway operations 2006/07 - 2013/14

No	Indicator	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14*
1	Net ton-km ('000)	77,535	127,981	139,672	124,558	157,203	153,634	124,394	109,337
2	Net tones	391,531	615,220	591,721	542,343	677,331	686,640	549,025	501,147
3	Net tonnes by rail ferries through Port Bell	58,451	109,149	36,831	32,206	8,703	12,398	39,985	7,197
4	Wagon Productivity (tkm/wagon '000)	7.5	8.2	9.0	7.9	9.9	9.7	7.8	8.0
5	Traffic Density ('000 tkm/km)	302	434	452	440	493	483	392	379
6	Locomotive Availability (%)	71%	77%	76%	78%	78%	75%	59%	49%
7	Locomotive productivity (km/loco/day)	2,539	2,864	2,144	167	208	168	155	187
8	Wagon availability	95%	87%	69%	63%	81%	62%	56%	50%
9	Wagon Transit Time MSA-KLA (days)	10	10	11	11	12	11	10	9
10	Wagon turn- round time MSA-KLA-MSA (days)	33	35	49	41	32	32	34	34
11	Average (route)km	194	207	236	230	232	224	226	218
12	Km of rail maintained	257	257	257	257	257	257	257	641
13	Km of rail improved /upgraded	-	-	-	-	-	-	384	-
14	%ge of total active track length under Temporary Speed Restriction	-	-	-	-	39%	32%	20%	28%
15	Number of reported accidents	86	84	137	128	164	171	206	113
16	Number of fatalities	1	10	6	4	5	8	5	6
17	Wagons	1,295	1,295	1,295	1,322	1,322	1,322	1,322	1,362

2013/14 data is up to April 2014.

2.3 Air Sub-sector

Air Transport is considered to be of strategic importance to Uganda because it guarantees direct access to international destinations given the land locked nature of Uganda. The management of the air sub-sector in Uganda is entrusted to the Civil Aviation Authority (CAA), an autonomous body established by an Act of Parliament (Cap 354) in 1991, reporting to MoWT. CAA is responsible for providing advisory role to Government in relation to Civil Aviation Policy matters and international conventions, Regulation of safety, security and doing business in air transport, management and development of major airports and provision of air traffic and navigation services. More specifically, it is responsible for licensing of aircraft and pilots, owns and operates Entebbe International Airport and thirteen (13) other national airports in Arua, Gulu, Jinja, Kasese, Kidepo, Kisoro, Lira, Masindi, Mbarara, Moroto, Pakuba, Soroti and Tororo. Other airports are either privately owned or under the local authorities.

Map showing national airports operated by CAA



Uganda practices a liberalized policy on traffic rights in keeping with the spirit of the all-African Yamoussoukro Declaration. However, Government of Uganda (GOU) has further signed Bilateral Air Services Agreements (BASAs) with different states which make it possible for airlines to offer the traveling and importing/exporting public a variety of service options at competitive prices that are not discriminatory and do not represent abuse of a dominant position.

Entebbe International Airport (EIA) is the main entry and exit point for Uganda's air traffic. While Arua, Kasese, Gulu, Pakuba and Kidepo Aerodromes have also been gazetted as entry and exit points for international traffic to promote tourism and business in the country. Since the demise of Uganda Airlines, Uganda has not had a national carrier. However, viable investment options and appropriate legislation and management for the revival of the National Carrier are being studied by Government.

In the last 8 years EIA registered exponential growth for air traffic measured in terms of numbers of passengers, cargo and aircraft movements which has put pressure on the airport infrastructure especially at peak periods.

Table 1-14: Air Traffic performance for Entebbe International Airport 2011/12-2015/16

	2011/12	2012/13	2013/14	2014/15	2015/16
Over flights	13,648	13,687	14,155	15,168	14,397
Domestic passengers	10,168	19,159	27,122	17,476	14,186
Transit passengers	77,341	91,633	95,175	106,986	140,678
International passengers	1,178,728	1,292,152	1,351,058	1,337,261	1,334,777
Commercial movements	27,732	29,882	30,258	25,583	28,073
Imports	21,408	21,854	21,764	20,747	21,490
Exports	31,842	35,512	32,355	31,866	34,693

Source: Civil Aviation Authority (CAA)

International air passenger traffic grew from 1,178,728 in 2011/12 to 1,334,777 passengers in 2015/16 at an average annual rate of 3.16%. However, Domestic passengers at Entebbe International Airport (EIA) increased at an average annual rate of 8.68% from 10,168 in 2011/12 to 14,186 passengers in 2015/16. The increase is explained by the commencement of domestic air operations by Aerolink. Transit passengers grew from 77,341 in 2011/12 to 140,678 passengers in 2015/16 at an average annual rate of 16.13%. Exports by grew from 31,842 in 2011/12 to 34,693 in 2015/16 at an average annual rate of 2.17%.

Other achievements registered by the sub-sector include development of a 20-Year National Civil Aviation Master Plan (2014-2033), construction of a new long-term car park, vehicle parking control system (Phase 1) and modern check-in and baggage handling system have been completed and installed respectively, Acquisition of extra land for the expansion of Entebbe, Arua, Gulu, Tororo and Kasese Airports, development of Master Plan and the detailed Engineering Designs for Arua, Gulu and Kasese Airports, construction of a new Terminal Building and

associated infrastructure at Arua airport as well as upgrading of air navigation and radar surveillance equipment and air traffic message handling system at EIA to enhance airspace safety.

There was significant improvement in performance of CAA upcountry aerodromes (13Nos) during the NDP1 period. Aircraft movements grew from 3,713 in 2010 to 39,297 in 2015. Of these movements, Arua and Soroti Aerodromes each contributed 30% followed by Pakuba -6.2%; Gulu-5%; and Kasese, Kisoro and Kidepo each contributing 4.7%. Also, Passenger traffic grew exponentially from 12,837 in 2010 to 115,708 in 2015 at an annual average rate of 15%. Overall, Arua contributed 50% of the total passenger traffic followed by Soroti-14%; Jinja-7.5%; Tororo-6.2%; and Kidepo, Gulu and Pakuba each contributing about 5%.

Government of Uganda has embarked on implementing a number of strategic interventions, which are currently at different levels of completion, to improve the current state of air transport infrastructure. The bulk of these interventions are focused on EIA so as to increase its capacity and enhance the safety and security as per International Civil Aviation Organization (ICAO) standards. The other interventions are focused on the development and upgrade of Arua, Gulu and Kasese Aerodromes and routine maintenance of the other aerodromes. In addition to the above, specific attention is also being placed on establishing a new airport at Kabaale, Hoima to serve the Albertine region for oil-related businesses and strategies.

Among the interventions at EIA, a new long-term car park, vehicle parking control system (Phase 1) and modern check-in and baggage handling system have been completed and installed respectively. In regards to enhancement of airspace safety, air navigation and radar surveillance equipment and air traffic message handling system have been upgraded.

CAA is funding the majority of the safety and security interventions, in addition to its other core functions (regulation, air navigation services, airports development and management), from its internally generated revenues. To supplement CAA's efforts, GOU secured external financing to finance the capital intensive airport infrastructure projects at EIA and establishment of a new airport at Kabaale.

Key challenges faced by air sub-sector include limited land for the proposed airport expansion at EIA, lack of a strong home based airline, unfavourable taxation attempts that contravene international conventions, agreements and policies, high price of aviation fuel in the country, security threats by regional and international terrorist groups and heavy burden of maintaining non-commercial services at upcountry airports.

2.4 Inland Water Transport Sub-sector

Uganda is generally well endowed with freshwater lakes, rivers and swamps, most of which are navigable. There are on record 165 lakes of varying dimensions in the country. These water bodies together occupy approximately 18 percent (44,228 km²) of Uganda's total area of 241,551km² (UBOS, 2006). The principal lakes and river system in Uganda include; Lake Victoria (shared with Tanzania and Kenya), Lake Edward, and Lake Albert (shared with the Democratic Republic of

Congo and Lake Kyoga, the Victoria and Albert Nile. There are also several other smaller and navigable lakes outside the main system.

Lake Victoria, with a surface area of about 68,800 km² and a shoreline of 3,450 km² is Africa's largest Lake. It is a trans-boundary resource shared by Kenya, Tanzania and Uganda. Today, a significant number of vessels operate commercially on the Lake for transportation of passengers and cargo. The main ports include Kisumu in Kenya, Mwanza, Bukoba and Musoma in Tanzania as well as Jinja and Port Bell in Uganda. There is also growing fleet for the government to connect islands and rural towns to main land (road bridges operated by Uganda National Road Authority)

In Uganda, the legal instruments for Inland Water Transport are: The Ferries Act Cap 350, The Vessels (Registration) Act Cap 349 and The Inland Water Transport (Control Act Cap 348). The Ferries Act provides for the rules for the use of a special flag, forfeiture of license, fees, and auctioning of rights to run a ferry. The Inland Water Transport Act sets the regulations for licensing of ships while the Vessels (Registration) Act establishes the obligation to register all classes of vessels. However, these laws have been described as disjointed and under the responsibility of numerous institutions and do not consider for international registry of Vessels flying the Uganda Flag on the high seas.

Inland Water Transport in Uganda has been under developed over the years leading to deterioration of ferry systems, docking and landing sites and passenger transportation. This has reduced economic opportunities because of dependence on road transportation and logistics. The subsector was characterized by disjointed and old laws, regulations and standards which require immediate review and harmonization.

Formerly, Uganda had an extensive inland water transport system but this fell into serious decline in the 1960s. Prolonged heavy rainfall in the early 1960s, led to catastrophic flooding with piers being submerged and vessels washed ashore. Navigable lakes include Lake Victoria, Kyoga and Albert; there are also minor transport operations on Lakes Edward, George, Bunyonyi and Bisina. The principal navigable river is the Nile. Uganda Railways Corporation owns a few ferries/ships which ply Lake Victoria but are operating under Roft Valley Railways Uganda and are way below capacity to satisfy the demand. The Ministry operates MV Kalangala that connects Nakiwogo, Entebbe and Lutoboka on Bugala Island, Kalangala District.

There is a lot of demand for water transport on Lake Victoria to link Uganda to Kenya and Tanzania. Further demand is for transport linking the over eighty (80) islands that are located in Lake Victoria. There is a lot of potential for private sector investment in water transport on Lake Victoria.

In 2014, the Ministry was engaged in the review, harmonization and modernization of the old legislation so that Inland Water Transport can be revamped to play a role in transformation of the economy of Uganda. Review of the obsolete laws will enable Government to promote and develop inland water transport.

2.4.1 Ports and Inland Waterways Classification and Inventory

Ports and inland waterways in Uganda can be categorised into two classes, namely engineered commercial Ugandan ports, and landing sites.

On Lake Victoria, there are two main ports namely Port Bell and Jinja Pier. Both ports were purpose designed and built to handle railway wagon ferries for trade between Tanzania, Kenya and Uganda. Plans are underway to revamp and upgrade these ports and also develop a new port at Bukasa.

On Lake Albert, Lake Kyoga and Lake George there are various non-engineered *landing sites*. No infrastructure is present at these landing sites. Landing sites serve as a location for the traditional built vessels to dock, as well as berths for non- SOLAS conventional vessels to dock and discharge cargo and passengers from different locations on the inland water bodies.

The landing sites of Wanseko and Ntoroko on Lake Albert are highlighted as it these are currently used to export goods such as cars, rice, beer, cement and other general goods to the DRC, even though no proper port facilities exist. Wanseko is also to some extent being used for cargo transfers for the oil industry.

This sub-sector is responsible for providing cheap and environmentally friendly mode of transport for bulk cargo. However, the sub-sector is still under developed and is characterized by disjointed and old laws, regulations and standards which require immediate review and harmonization. In 2014, the sector undertook a review and harmonization the old legislation so that inland water transport can be revamped to play its role in transformation of the Uganda`s economy. Review of the obsolete laws will enable Government to promote and develop inland water transport.

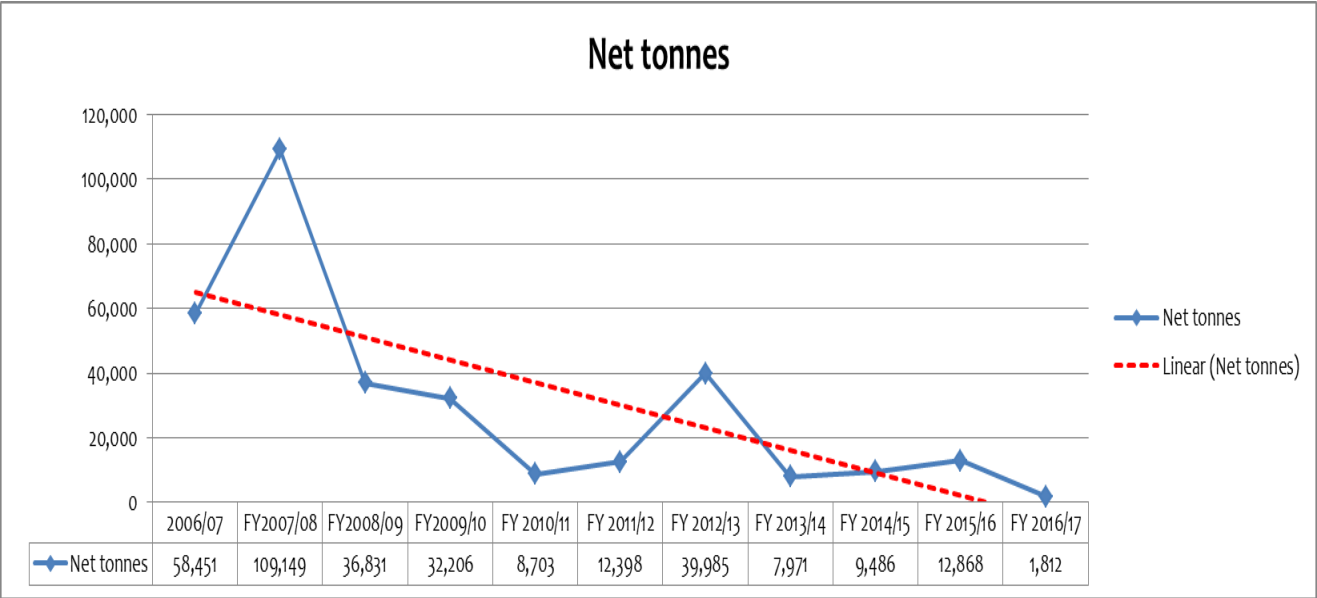
Currently, due to fragmentation of activities under the sub-sector, it's difficult to have synchronized information to explain the trends and performance levels of Uganda`s inland water transport sector. Formal information is only available for Port Bell and Jinja operations and RVR. The concession of the railways in Uganda to RVR and the restructuring of the Tanzania Railways Corporation into different stakeholders also contributed to low volumes of cargo because of the different interests of the new stakeholder companies as compared to the previous corporations.

Therefore, the sub sector needs to address the following issues:

- i. Develop a maritime policy for inland waterways
- ii. Establish a Maritime training institute
- iii. Undertake Vessel inspections, registration, surveying and licensing
- iv. Promote safety and security of lives on Inland Water bodies;
- v. Environmental issues – Maritime Pollution;
- vi. Vessel crews qualifications and training

- vii. Regulations governing small ships/yachts under 12 passengers.
- viii. Differentiation of Port areas for National and International use.

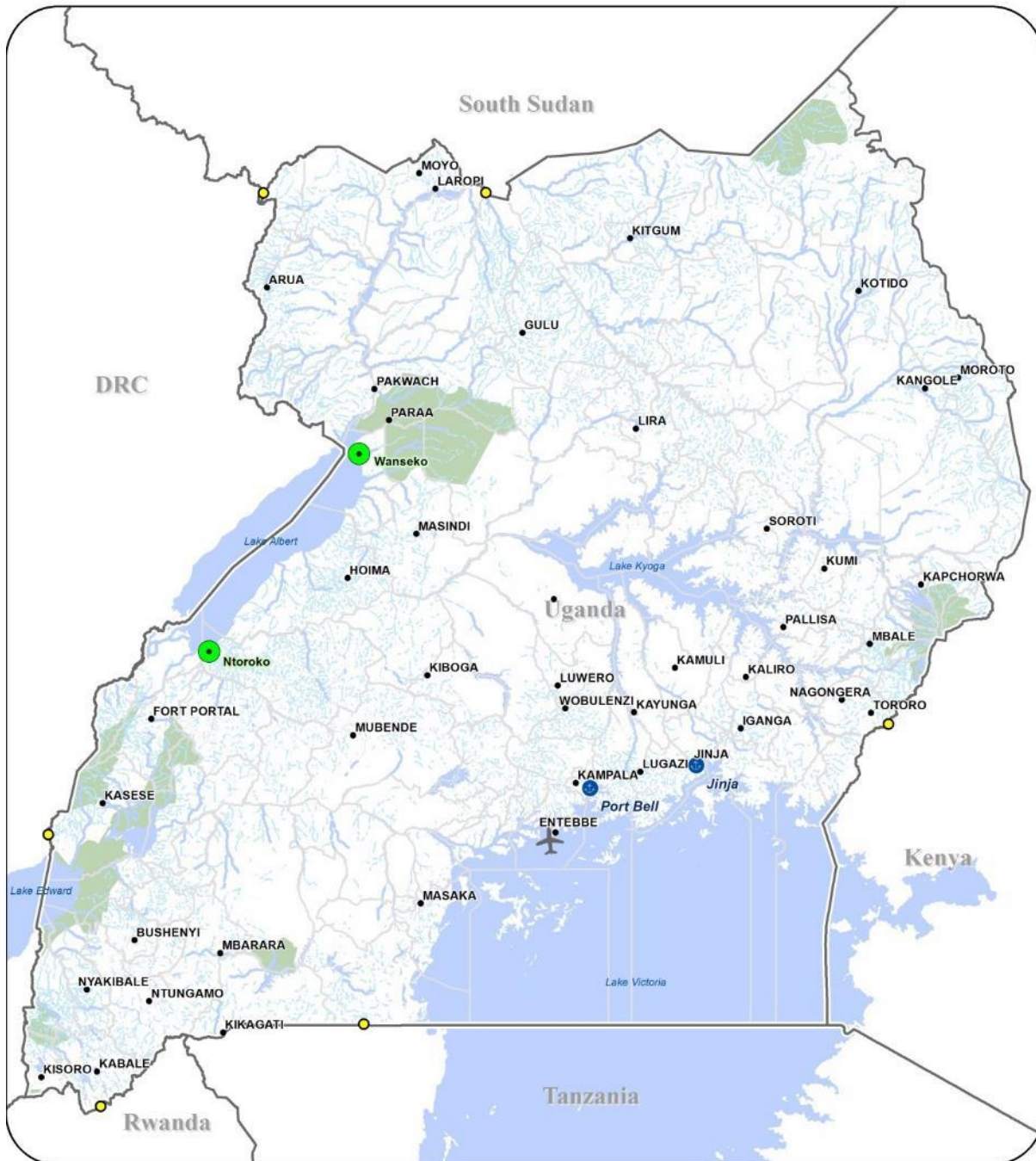
Freight Volumes Using Wagon Ferries on the Southern Route (2006/7 – 20016/17)





Preparation of a Detailed Strategic Implementation Plan for the National Transport Master Plan,
including the Greater Kampala Metropolitan Area (NTMP/GKMA)

Uganda: Port Network



LEGEND:

- Border posts
- Entebbe airport (primary airport)
- Port Bell/Jinja (major lake ports)
- Landing sites
- Minor Rivers
- Major Rivers
- Lakes
- National Parks
- District Boundaries

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2.5 Public Transport

The collapse of the Uganda Transport Corporation, which offered bus service to and from Kampala in the 1990's, gave birth to an individualized approach to public transport, resulting into the current challenge presented by taxis and boda-bodas (motorcycle taxis) in the country supported by long distance Buses plying from Kampala to Upcountry areas and regional cities like Nairobi, Kigali, Tanzania, and Mombasa.

Both taxis and buses are licensed as PSV's (Public Services Vehicles) by the TLB (Transport Licensing Board) to operate as public transport vehicles in the Country. The Buses operate on defined public routes to and from Kampala City. However, most taxis and Boda-bodas continue to operate without PSV licenses and fixed routes. According to the TLB statistics, only 10,529 PSVs, 7,862 motor cycles, and 42 inland water vessels were inspected and licensed between 2016 and 2017.

The level of service of public transport specifically urban public transport is still wanting, with no timetables, no fixed fares or fare structure, no formal stops, no terminals, and no fixed routes. This results in long travel times, and a high level of noise and pollution. Lack of integration among operators or among routes means that passengers have to pay separately for each boarding of a taxi or a Boda-boda, making public transport unaffordable to many; especially the urban poor. The current lassie-fare operation of taxis in GKMA is also the primary source for congestion. Many stops are created (illegally) along roads, near major intersections or interchanges which significantly reduces road capacity, and thereby create long queues during peak hours.

In 2012, an attempt was made to re-introduce urban bus transport in the GKMA by the Pioneer Easy Bus Company operating conventional single decker buses with a capacity of 30 seating/30 standing. However, the Bus Company got into issues with URA and local authorities and the intervention did not yield the intended results. Currently, Government is re-working out this strategy this time on a larger scale with franchised routes as a short term measure to improve public transport in GKMA.

For the medium term, Government will move towards the implementation of Bus Rapid Transit (BRT) and LRT as a means of improving public transport. A pre-feasibility study in 2010 identified a BRT network and indicated the feasibility of the system for Kampala. In 2012 a full feasibility study and detailed design commission was done and this study has identified pilot route(s) of 25km radius from the Central Business District (CBD) in three directions. The implementation of BRT offers the opportunity to re-organise public transport in the city, a move towards franchised bus routes operated by formal companies with an integrated fare system.

Drafting principles for the establishment of a Metropolitan Transport Authority (MATA) a dedicated transport agency responsible to organize, coordinate and manage Public Transport Operations within the GKMA, with proposed integrated mass rapid transport systems that include BRT, LRT, NMT, and Express Buses. MATA is proposed to effect a hierarchical integration of Public transport of taxis, buses, mass rapid transport systems and non-motorized services of walking, and cycling.

The current mode share in the city is estimated at: 48% walking, 33% taxi, 10% boda-bodas and 9% others including private car. This makes walking the most predominate mode.

Also, the sector introduced a new automated licensing system in December 2016 and also implementing the mandatory private motor vehicle inspection scheme. These interventions will go along away to improve the level of service of public transport in Uganda by only licensing PSVs which are fit to purpose.

2.6 Rural Transport

The National Agriculture Policy highlights poor transport infrastructure as a major constraint to agricultural development.

The strong link between rural transport and agricultural productivity in Uganda is confirmed by various studies. For example, it has been found that the benefit/cost ratio of investment in feeder roads in terms of returns to agricultural production is 7. The same study calculated that each additional kilometre of feeder road lifts 20 rural people out of poverty.

The predominant mode of transport in rural areas of Uganda is walking. This includes the carrying of water and firewood for domestic purposes as well as goods for agricultural and other economic activities. The next dominant mode is bicycles that are used both for personal transport and for carrying agriculture products. More recently, the number of motorcycles has increased considerably. These frequently operate as a paid Boda-boda service for passengers and goods in areas where there are no conventional bus and truck services.

This movement of people and goods takes place not only on rural roads but also on the extensive network of rural footpaths and village tracks. Therefore, a comprehensive rural transport policy and strategy has to take account of this by, for example, considering the improvement of footpaths, footbridges and village tracks as well as rural roads and other transport infrastructure.

The low availability of transport services is a major problem in many rural areas of Uganda. It has been found that the rural populations in sub-Saharan Africa “suffer from very high transport costs when compared with both national transport costs and rural transport costs in other countries. They also suffer from low service frequency and unreliable services particularly in the wet season”.

According to the most recent Uganda National Household Survey, access to health facilities remains the major problem perceived by rural communities. Access to safe water is second and roads are in 3rd position. However, Government through line sectors is implementing a number of interventions in this area namely, Community Infrastructure Improvement Programme (1 & 2), Rural Transport Infrastructure-RTI, etc and these will greatly improve rural accessibility although more still needs to be done in this area.

2.7 Non-Motorized Transport

The vast majority of road users in Uganda are travelling using non-motorized transport; mainly walking and cycling, but also some animal-based transport. However, the current transport infrastructure does not provide the minimum level of service to pedestrians and cyclists, both in

urban and in rural areas. As a result, the share of NMT users in road fatalities is the highest in Uganda, and the absolute number is increasing every year.

Bicycles are used not only for personal travel, but also to carry goods, especially in rural areas. A special accessibility problem exists today for people with mobility impacting disabilities. The various transport facilities do not meet their special mobility needs.

The Transport sector has planned to promote both walking and cycling the most sustainable modes of transport to compliment motorized modes.

The approved Non-Motorized Transport Policy 2012 mandates sector Agencies, Districts, Municipalities, and departments to promote walking and cycling as top priority modes. The Government will ensure that the needs of pedestrians and cyclists will be adequately addressed in the planning, implementation, regulation and enforcement of roads and other rural and urban infrastructure.

2.8 Cross cutting Issues

The Sector recognizes the impact of its activities on the environment and social issues. During the period 2010-2016, the sector achieved the following:

- i. Revised engineering road design manuals and specifications. These were launched in May, 2011 and were revised to incorporate changes in technology and requirements of road users including Environment and Social Development Intervention. The set of manuals include road maintenance specifications, geometric design, pavement and drainage design and road improvement guidelines.
- ii. Preparation of policy statements, guidelines and communication strategy for mainstreaming cross-cutting issues in the roads sub-sector;
- iii. Preparation and publication of District Road Manuals. These manuals are the major planning guides for rehabilitation and maintenance of district and community access roads. Volumes 5A-D of these manuals specifically looks at equity in recruitments, entitlements as well as human rights during road works;
- iv. Inclusion of social development issues in the General Specifications for Roads and Bridges Works. Sections 1700-1800 instruct contractors to develop environment, waste, HIV/AIDs, OHS and Gender management plans. The plans recommend detailed measures to be adopted by contractors in addressing the concerns of PWDs and Older Persons during implementation of roads works.
- v. Reviewed road designs, tender and contract documents to include aspects of vulnerable people namely PWDs, Older Persons, Children and Women. Implementation of the above strategy has addressed issues of discrimination in recruitment and accessibility to public infrastructure.

However, the sector still faces some challenges in this area notable ones being:

- i. Most of the infrastructure projects lack effective monitoring systems that are able to provide timely, relevant and good quality information on the progress and success of mainstreaming environmental and social safeguards.
- ii. Insufficient funding to run mainstreaming activities, especially at the beginning of project;
- iii. Inadequate attention on crosscutting issues during project design results into limited provision of accessibility furniture on public infrastructure. This occurrence is common on public structures developed by the private sector.
- iv. Negative attitudes of stakeholders towards employment of PWDs and elderly, it is assumed that construction activities are labour intensive and therefore the PWDs and Older Persons may not manage.
- v. Inadequate coordination between stakeholders especially during planning and monitoring of infrastructure development projects.

2.9 Institutional capacity of the Sector

2.9.1 Sector Financial Resource Capacity

Government has continued to prioritize the Sector in the allocation of the national budget in order to develop the necessary infrastructure required to support production, and enhance market access and access to socio services.

Table 1-15: Proportion of the National Budget Allocated to Sector MDAs FY 2015/16

Budget Allocation in UGX BN									
Financial Year	National Budget	MoWT Budget	%ge to National Budget	UNRA Budget	%ge to National Budget	URF Budget	%ge to National Budget	Total Sector Budget	%ge to National Budget
2015/16	18,311.37	928.02	5.07	1,812.22	9.89	417.93	2.28	3,158.17	17.25
2016/17	20,430.61	403.32	1.97	2,634.12	12.89	417.84	2.05	3,455.28	16.91
2017/18	21,318.82	475.54	2.23	3,618.71	16.97	417.41	1.96	4,511.66	21.16
2018/19	21,762.33	758.78	3.48	3,698.79	16.99	500.76	2.30	4,958.33	22.78
2019/20	22,100.73	967.49	4.38	3,811.92	17.25	551.03	2.49	5,330.44	24.12

During FY 2015/16, the sector was allocated a budget of UGX 3,158.17bn, which translates into 17.2% of the national budget. This allocation includes both GOU and Donor contribution. In FY 2017/18, the sector allocation has been increased to UGX 4,631.12bn which represents 21.7% of the national budget. This year's increment in allocation will enable the sector to implement key infrastructure projects namely construction of oil roads in the Albertine and Kabaale airport in Hoima to facilitate oil production, standard gauge railway, Bukasa port, and upgrading Entebbe

International Airport. For FY 2019/20, the budget allocation to the Sector is expected to increase to UGX 5,330.44bn representing about 24.1% of the national budget.

On the other hand, CAA and URC annual budgets are mainly financed using internally generated funds. However, a number of infrastructure projects have been planned under external financing and PPP arrangement over the Plan period. The annual indicative budgets for CAA and URC covering the Plan period are as below;

Table 1-16: Annual Indicative budget for CAA and URC

Annual Indicative Budget (Shs BN)						
MDA	2015/16	2016/17	2017/18	2018/19	2019/10	Total
CAA	142.85	148.54	157.60	166.68	171.45	787.12
URC	12.68	37.70	201.52	366.44	240.28	858.62
Total	155.53	186.24	359.12	533.12	411.73	1,645.74

The total budget for CAA and URC over the plan period is UGX 787.12Bn and 858.62Bn respectively. The highest increment in the annual budgets for both CAA and URC is expected in FY 2017/18 with URC registering the highest increment of over 100%.

2.9.2 Sector Human Resource Capacity

Table 1-17: Staff Establishment

MDA	Approved Posts	Filled Posts	Vacant Posts	%ge Vacant Posts	Remarks
MOWT	656	478	178	27%	Most vacant positions (85%) are for technical staff. The process for filling the vacancies is on-going but affected by inadequate wage bill
UNRA	1,471	1273	198	14%	Statistics are as at the end of May 2017. Recruitment is on-going
URF	36	29	7	19.4%	Recruitment to fill the vacant posts is on-going
CAA	992	982	10	1%	-
URC	140	128	12	8.5%	Of the 128 staff, 76 are support staff the majority being security guards and estate assistants. Structure to be revised in view of post concession.
East Africa Civil Aviation Academy	116	70	46	40%	Recruitment to fill the vacant posts is on-going. However, there are challenges of attraction and retention of staff as salaries are not commensurate with the private sector

2.8.3 Availability of Sector relevant technical and specialized competences

The sector has most technical competencies. For instance, in MoWT alone, 253 staff out the 499 filled positions are technical staff namely engineers, architects and surveyors. However, there are gaps in specialized areas of aviation, railway and maritime namely pilots, ground instructors, railway engineers and marine experts. These and other specialized competencies are hard to attract and retain in the sector due to market demand and better pay offered by the private / business sector.

2.8.4 Functionality of the Sector Monitoring and Evaluation Framework

The Sector has a Monitoring and evaluation Framework and Policy. The framework has a set of 18 golden Indicators that provide an assessment of high-level performance of the individual Sub-sectors, and the Sector as a whole. The indicators measure a mixture of inputs, outputs, outcomes and impacts.

Table 1-18: Golden Indicators

No	Core Indicator	Unit
1	Road network Condition (Proportion in fair to good)	%
2	Paved road network	Km
3	Road safety (Fatalities per 10,000 vehicles)	No
4	Road service level – travel time	Min/km
5	Road construction/ maintenance cost	USD/km
6	Rural accessibility	% and Km
7	Road maintenance needs met	%
8	Compliance with axle load regulation	%, tones , No.
9	Rail freight volume	Tone-km
10	Rail modal share at Malaba and Port Bell border points	Million tones,%
11	Rail modal share on Lake Victoria ferries	%
12	Locomotive productivity	Km/ loco/ day
13	Wagon utilization	Days
14	International aircraft movements	No.
15	Passenger traffic	No.
16	Freight on Lake Victoria International Freight cargo on Lakes Victoria and Albert	Million tones
17	Passenger traffic Domestic passenger traffic by GoU Vessels	No. ('000)
18	International passenger traffic on Lake Victoria & Albert	No. ('000)
19	Cross Cutting Issues	Various

The Transport Sector Monitoring and Evaluation Policy is a framework for strengthening the assessment of transport policies and investments in line with the provisions of the National Policy on Public Sector Monitoring and Evaluation. The policy embodies proposals for enhancement of capacities for MDAs in the Sector to handle statistics, monitoring and evaluation functions.

2.8.5 Sector coordination structure

The Ministry shoulders the overall responsibility for the coordination of the Sector with the Top Management Team headed by the Hon. Minister at the helm of this process. While the Works and Transport Sector Working Group (WTSWG) is mandated to lead and oversee the processes of planning, coordinating, monitoring and reviewing the performance of the sector. The Policy and Planning department coordinates policy formulation, planning, budgeting, reporting and annual joint monitoring and is the secretariat for the WTSWG.

2.8.6 Sector Management Information System

The Ministry of Works and Transport is charged with the responsibility of monitoring and evaluating the implementation of sector policies, plans and programs for efficient Works, Public Transport, Physical infrastructure and services as well as performance of transport Agencies.

To perform these functions effectively, the Ministry established a comprehensive Transport Sector Data Management System (TSDMS) which is used for performance Monitoring and evaluation. The TSDMS is a key component of the sector M&E system. The TSDMS was developed using DevInfo technology and provides online access to information using web-based technology.

The Sector also has a Sector M &E Committee which reports to the Sector Working Group on a regular basis. However, technical capacity building of M &E staff will be required to accommodate emerging M&E needs including implementation of project level Monitoring dashboards using di-monitoring tools and improving data exchange between TSDMS and sector subsystems to improve data accuracy and timelines.

2.9 SECTOR POLICIES, LAWS, STRATEGIC PLANS AND LEGISLATION

The Sector is governed by a number of policies, laws, strategic plans, protocols and bilateral agreements. In addition to the overall country legal and policy framework, these documents provide, among others, the legal framework within which sector should operate, the strategic direction of the sector and the various avenues for solving national problems that are specific to the works and transport sector.

During the NDP I period, the Sector succeeded in its bid to have a law and policies on some specific transport issues of non motorized transport, road safety and promotion of the construction industry i.e. Building Control Act, 2013, Non Motorized Transport Policy 2012, Road Safety Policy, 2014 and The National Construction Industry (NCI) Policy 2010 respectively, approved by the relevant organs of Government.

In addition to these policies, the Ministry of Works & Transport Strategic Plan, 2011/12–2015/16 and Uganda 20-Year Civil Aviation Master Plan, June 2014 were both launched in the same period. The Sector also prepared and gazetted statutory instruments of Traffic and Road Safety i.e. The Traffic and Road Safety (reflectors) Regulations, 2012 and The Traffic and Road Safety (driving tests and special provisions for drivers of public service vehicles and goods vehicles) regulations, 2012.

In order to improve the performance of the sector, new policies and laws were drafted while the review process for some of the existing laws to suit the existing environment commenced. The degree of completion of the various processes is summarized below;

Policies drafted but not approved

- 1) Establishment of the National Road Safety Authority
- 2) Policy for the creation of DUCAR Agency
- 3) Formation of Multi-Sector Regulatory Authority (MTRA)

Process initiated but not completed

- 1) The amendment of the following Acts
 - a) Traffic and Road Safety Act 1998 – CAP 361
 - b) CAA Act 1991, CAP 354
 - c) The Roads Act, 1964 and Access to Roads Act, 1964.
 - d) Uganda Road Fund Act, 2008
 - e) UNRA Act, 2006
 - f) Engineers registration Act, 1969
- 2) Establishment of Metropolitan Area Transport Authority (MATA)
- 3) Boda-boda regulations
- 4) National transport Policy and Strategy

Despite meeting some of its intended targets with regards to the legal and policy framework, the Sector also faced numerous challenges in its quest to achieve the desired results which included delays in Cabinet and Parliament, procurement delays and wide consultations among others.

The above notwithstanding, the Sector has continued in its pursuit to improve its legal and policy framework in order to suit the existing environment both at national and international levels. Currently it is pursuing various initiatives ranging from drafting new policies and regulations, updating policies and amendment of existing laws. These initiatives include updating of the National Transport Policy and Strategy and Axle Load Control Policy; reviewing the National Transport Master Plan including the GKMA, preparation of the IWT Bill 2017, National Road Tolling Policy and Civil Aviation Policy, NMT regulations and Building Code and Regulations; domestication of the International Maritime Conventions and ICAO; and the amendment of the Acts mentioned in the section above including the amendment of the URC Act, 1992.

2.10 Potentials, Opportunities, Constraints and Challenges

The key findings from the situation analysis were subjected to the analysis of the Potentials, Opportunities, Constraints and Challenges (POCC) of the Sector with respect to the relevant broad objective areas of NDP II.

The key issues identified from the situation analysis and which the sector should focus on to improve performance include;

- i) Inadequate and imbalanced sector budget
- ii) Inadequate level of road maintenance
- iii) Poor axle load control
- iv) Traffic congestion within Greater Kampala Metropolitan
- v) Poor performance of railway sub-sector (declining market share)
- vi) Under- developed Inland Water Transport sub-sector
- vii) Growing trend of road, rail and marine accidents
- viii) Inadequate facilities at Entebbe International Airport and upcountry Aerodromes
- ix) Institutional challenges and human resource gaps
- x) Delayed finalization of Policies, plans and legislation
- xi) Weak local construction industry
- xii) Gaps in environmental compliance and social safeguards

The results of the POCC analysis which can be seen in table 1-19 below, heavily contributed to the processes of identifying the objectives and appropriate implementation-oriented strategies for the WTSDP as well as determining the viability of the prioritized issues.

Table 1-19: Summary of Potentials, Opportunities, Constraints and Challenges

Issue to be addressed	Potentials from the Baseline	Opportunities	Constraints	Challenges
Inadequate Sector Budget	-Growing sector budget. The sector budgetary allocation has grown from UGX 564bn in FY 2007/8 to UGX 3,489bn in FY 2016/17 -Uganda Road Fund in Place	-Government and , Development Partners support (priority sector) -Enactment of PPP Law -Growth in GDP	-Inadequate resource mobilization -Sector M & E systems not fully operationalized -Sector Plans and Budgets not fully adhered to -Governance issues	-Untimely releases - Budget cuts -Volatile input and service costs -High land acquisition costs -Non attainment of second generation Road Fund
Axle load control	-Modern weigh bridges in place -Axle load control unit in place -Axle load policy	The EAC has developed harmonized axle load limits, gross vehicle weights and vehicle dimensions to be adopted by member states.	-The existing law is weak and not deterrent -Inadequate enforcement	-Behavior of Transporters (not complying with the law) -Imbalance in Import-Export trade (low volume of exports) -Lengthy court processes.
Traffic congestion within Greater Kampala Metropolitan	-Pilot passenger train services -Design studies for BRT and LRTR -Bill for establishment of MATA -NMT Policy	-Potential for PPP financing -Support from Development Partners and Civil Society	-Inadequate funds for implementation -NMT not fully operationalised	-Lack of institutional framework for Public transport in GKMA -Delays in approval of MATA -High costs of land acquisition

Issue to be addressed	Potentials from the Baseline	Opportunities	Constraints	Challenges
Poor performance of railway sub-sector (declining market share)	-On-going interventions to develop SGR -Plans to rehabilitate the meter gauge railway line -On-going Concession Review	-Potential for market growth/ Geographical position of Uganda -Regional support -Emerging petroleum and gas resources	-Policy and legal framework not updated -Dilapidated/ ageing railway infrastructure and assets	-Poor public image -Poor performance of railway concession in the region -Non-harmonisation of railway legislation in the region -High costs of land acquisition -Land encroachment
Under- developed Inland Water Transport sub-sector	-On-going interventions to develop Bukasa, Port Bell and Jinja ports -On-going interventions to provide ferries and develop/ upgrade key landing sites -On-going review of IWT legislation	-Navigable lakes and rivers -Potential for market growth (cheapest mode of transport) -Potential for PPP financing -Regional support initiatives	-IWT legislation not updated -Dilapidated/ ageing IWT infrastructure and assets -Maritime Department not fully operationalized	-Climatic changes/ global warming -Regional interests
Growing trend of road, rail and marine accidents	-Institutional framework (dedicated institutions-NRSA, TLB, Maritime Dept, URC) -Road Safety Policy 2014	-Support from Development Partners, private Sector and Civil Society -Good Inter Agency working relationship	-weak enforcement -Inadequate budget for transport safety activities -Low staffing levels	-Weather changes/ Environment -Human behavior
Inadequate facilities at Entebbe International Airport and upcountry Aerodromes	-20 Year CAA Master Plan -5 Year CAA Business Plan -ICAO Certification of CAA, EIA and upcountry Aerodromes -On-going interventions in the sub-sector	-Growth of GDP and relevant sectors e.g tourism, oil, trade, etc -Growth in both domestic and international flights -Expansion of UN logistical centre at EIA	-Inadequate funding for upgrading upcountry Aerodromes -Lack of a strong home-based carrier -Staff turn over	-Global terrorism, natural disasters and epidemics -High costs of aviation fuel -Limited land for expansion at EIA

Issue to be addressed	Potentials from the Baseline	Opportunities	Constraints	Challenges
Institutional capacity and human Resource Gaps	-Availability of technical staff -Approved Ministry and Agency structures -Human Resource Training Plans -Performance evaluation and rewards systems	-Availability of Training institutions -Opportunities for Scholarships and Capacity building -Opportunities of national and International accreditation	-Staff turnover -Inadequate logistics	-Inadequate Wage bill -Poor remuneration
Weak local construction industry	- National Construction Policy in Place -National Building Review Board in Place	-Local content Policy	-Inadequate funding to operationalization NCI Policy and the Building Control Act	Weak local construction industry in terms of technical and financial capacity;
Gaps in compliance with and Environmental and social safeguards	-Policies and guidelines in place -Technical staff	-Support from Development Partners and Civil Society	-Inadequate budget -Inadequate knowledge about the concept and slow acceptance by staff	Inadequate sensitization of the general public

CHAPTER THREE

STRATEGIC DIRECTION OF THE SECTOR

3.1 Introduction

This section presents the Sector priority programmes/ interventions to achieve the SDP objectives. The interventions have been mapped according to sector strategic objectives, thematic areas, outcome and outcome indicators. The section also covers the alignment of the Sector Development Plan with the NDPII, NRM Manifesto (2016–2021) and SDGs, crosscutting priorities, costing and financing plan.

3.1.1. Sector Vision

The Vision of the Sector is “to provide reliable and safe works, transport infrastructure and services.”

3.1.2 Sector Mission Statement

To promote adequate, safe and well maintained Works and Transport Infrastructure and Services for Social Economic Development of Uganda.

3.1.3 Strategic Objectives

1. Develop adequate, reliable and efficient multimodal transport network in the Country
2. Improve the human resource and institutional capacity of the Sector to efficiently execute the planned interventions
3. Improve the National Construction Industry
4. Increase the safety of transport services and infrastructure

The above objectives are geared towards improving transport and logistics efficiency thereby reducing the cost of transportation, facilitating trade, improving business competitiveness and growing prosperity. However, attainment of these objectives will require critical inputs from the sector and support from other sectors and key stakeholders.

3.2 Strategic Interventions

In view of the sector strategic objectives and findings from the sector situational analysis, the Works and Transport sector has prioritized five major outcomes to be achieved over the plan period namely; improved transport efficiency, lower transport costs, improved transport safety, improved institutional capacity and lower construction costs.

Based on the objectives and outcomes, the sector has identified strategic interventions to be implemented over the plan period as presented below. These interventions have been presented at two levels: first, at a macro level under each strategic objective and, second, at project/activity level detailing the specific or tailored interventions to be implemented for each priority and strategic intervention. The following strategic interventions shall be pursued over the plan period;

Strategic Objective 1: Developing adequate, reliable and efficient multimodal transport network

Strategic interventions

- i. Construct and maintain strategic roads in oil and gas, tourism, mining, industrial and agriculture producing areas.
- ii. Upgrade, rehabilitate and maintain national, district, urban and community access roads
- iii. Enforce axle load control
- iv. Improve transport infrastructure and connectivity within GKMA
- v. Develop Standard Gauge railway and rehabilitate existing railway network
- vi. Improve marine transport infrastructure and increase navigable routes on inland water ways
- vii. Develop Uganda`s air transport network and increase the volume of passenger and cargo traffic.
- viii. Develop an efficient and competitive green Transport and Logistics Sector in Uganda
- ix. Improve public transport system and promote mass transit in GKMA

Strategic Objective 2: Improve the human resource and institutional capacity of the Sector to efficiently execute the planned interventions.

Strategic interventions

- i. Implement sector reforms and strengthen institutional linkages
- ii. Implement robust human resource and institutional development Programmes
- iii. Strengthen the policy, legal and regulatory framework of the sector to improve service delivery

Strategic Objective 3: Improve the National Construction Industry

Strategic interventions

- i. Operationalize the National Construction Industry Policy.
- ii. Operationalize the Building Control Act
- iii. Implement local content strategy
- iv. Promote research and development in transport and the construction industry

Strategic Objective 4: Increasing the safety of transport services and infrastructure

Strategic intervention

- i. Improve road, railway, marine and air transport safety and NMT.

The above interventions have been mapped according to sector strategic objectives, thematic areas, output outcome and outcome indicators. The results are presented in Table 1-15 and Table 1-16 below.

Table 1-20: Mapping of Sector Objectives, Thematic Area, Strategic Interventions and Outcomes

Strategic Objective	Thematic Area	Strategic intervention	Outcome	Outcome indicators
Develop adequate, reliable and efficient multimodal transport network in the Country	Intermodal infrastructural development	- i). Construct and maintain strategic roads in oil, tourism, mining and agriculture producing areas. - ii). Rehabilitate and maintain National, District, City and Community Access road network. - iii). Improvement, expansion and upgrading of Kampala City Road network - iv). Development of SGR and rehabilitate existing railway network - v). Develop port infrastructure and major landing sites - vi). Develop Uganda`s air transport network	Improved national transport system Reduced transport costs	- i). Proportion of road network in fair to good condition (%) - ii). Proportion of functional railway network (%) - iii). Volume of cargo transported by road, rail, air and water transport (thousand tones) - iv). Proportion of freight cargo transported by road, rail, air and water transport (% modal share) - v). Volume of passengers transported by road, rail, air and water transport (thousand tones)
	Sustainable transport services	- i). Develop an efficient and competitive green Transport and Logistics Sector in Uganda - ii). Improve public transport system and promote mass transit - iii). Promote research and development in transport and the construction industry		- vi). % reduction in travel time/ transit time - vii). % reduction in the cost of transport

Improve the human resource and institutional capacity of the Sector to efficiently execute her mandate	Human resource and institutional development	- i). Implement sector reforms and strengthen institutional linkages - ii). Develop and implement robust human resource and institutional development Programmes - iii). Develop, review, amend, update sector plans, policies, laws and regulations to improve delivery of services in the Sector	Improved sector capacity to implement planned interventions	i). Proportion of outcome indicators achieved (%)
Strategic Objective	Thematic Area	Strategic intervention	Outcome	Outcome indicators
Improve the National Construction Industry	Industrial Promotion and empowerment	- i). Operationalize the National Construction Industry Policy. - ii). Operationalize the Building Control Act	Vibrant national construction industry in place	i). Percentage and value of construction works executed by the local contractors
Increasing the safety of transport services and infrastructure	Safety of transport infrastructure and services	- i). Improve safety of road, railway, marine, air and NMT transport infrastructure - ii). Improve safety of road, railway, marine, air and NMT transport services (transport equipment and human factor)	Improved transport safety	i). Trend of road, rail, air and water accident occurrence

Table 1-21: Mapping of Strategic Interventions and Outputs

1. Construct and maintain strategic roads in oil, tourism, mining and agriculture producing areas.	
	Planned Outputs
i.	2205km of national roads including oil roads, tourism, mining areas Constructed
ii.	1120km of the existing paved roads reconstructed / rehabilitated
iii.	100Kms of city roads paved/ reconstructed; 22 traffic signal controlled junctions improved and expansion of street lighting undertaken
iv.	113No. new bridges constructed and old ones rehabilitated
v.	8No. new ferries procured and maintained and Ferry services provided
vi.	National roads maintained in fair to good condition
2. Rehabilitate and maintain National and DUCAR network.	
	Planned Outputs
i.	Selected bridges on DUCAR network constructed
ii.	DUCAR network rehabilitated and maintained
iii.	District road equipment procured and maintained
iv.	Regional mechanical workshops supported and new centers established
v.	Low cost sealing technology promoted
3. Construct new and rehabilitate existing railway network	
	Planned Outputs
i.	Standard Gauge Railway (Malaba-Kampala) developed
ii.	Meter gauge railway network (Tororo- Gulu, Kampala- Port Bell and Nalukolongo-Bujjuko) Rehabilitated and maintained
iii.	Railway siding at Namanve Vinci Coffee Limited constructed
iv.	Rail rolling stock rehabilitated & expanded (5Locomotives; 300wagons; 10 coaches)
v.	Logistics Hub constructed at Gulu Railway Station
vi.	Railway passenger services expanded to other parts of GKMA
	Uganda Railways Corporation supported (Post concession)
4. Develop port infrastructure and major landing sites	
	Planned Outputs
i.	Bukasa port, Port Bell and Jinja piers developed; Southern Route re-opened
ii.	Key landing sites: Gaba, Bule, Butebo, Nakiwogo and Lutoboka improved
iii.	Mv Kabaleega II constructed and Mv Pamba and Mv Mwanga refurbished
iv.	Ferry services for hard to reach areas-Kalangala provided
v.	Maritime Training Institute established at Busitema University
5. Develop Uganda`s air transport network	
	Planned Outputs
i.	National Airline revived
ii.	Kabaale International Airport in Hoima developed
iii.	Entebbe International Airport upgraded and expanded
iv.	Air Navigation services Infrastructure upgraded
v.	Runway at Kisoro aerodrome reconstructed
vi.	Arua, Gulu and Kasese aerodromes upgraded to regional airports
vii.	Re-equipping and revitalization of EACCA, Soroti undertaken
51	

6. Develop an efficient and competitive green Transport and Logistics Sector in Uganda	
	Planned Outputs
i.	Gulu Logistic Hubs developed
ii.	Logistics Master Plan for Northern Economic Corridor implemented
iii.	Recommendations of the National logistics skills assessment study report implemented
iv.	One Stop Border Posts developed
v.	Use of green transport including NMT Promoted
7. Improve public transport system and promote mass transit	
	Planned Outputs
i.	Preparatory works for development of Pilot BRT in GKMA undertaken
ii.	Preparatory works for development of Pilot LRT in GKMA undertaken
iii.	Railway passenger services expanded in GKMA
iv.	National transport survey conducted
v.	Management of public transport system in GKMA streamlined
8. Promote research and development in transport and the construction industry	
	Planned Outputs
i.	Mechanisms for the development of climate change resilient transport infrastructure developed and implemented
ii.	Research in efficient vehicle / equipment technologies promoted
iii.	Use of new and appropriate technology-LBT, LCS, etc promoted
iv.	MELTC supported
v.	Research in new technology and local construction materials undertaken
9. Implement sector reforms and improve institutional Linkages	
	Planned Outputs
i.	Second Generation Road Fund Created
ii.	New Ministry structure implemented
iii.	Restructuring of sector Agencies concluded and new structures implemented
iv.	Creation of MATA fast-tracked
10. Develop and implement robust human resource & institutional development Progs	
	Planned Outputs
i.	Training and capacity building of sector staff undertaken
ii.	critical skills in the sector developed and mechanisms for their retention
iii.	Sector Policy and Planning department strengthened for better institutional planning, budgeting, monitoring and evaluation
11. Develop, review, amend, update Sector Plans, Policies, Laws, Regulations and Standards to improve delivery of services in the Sector	
	Planned Outputs
i.	Sector standards and design manuals developed/ updated
ii.	Multi-modal National Transport Master Plan prepared
iii.	National Transport Policy and Strategy finalized
iv.	The Roads Act, 1964 and Access to Roads Act, 1964 reviewed and updated
v.	International Civil Aviation Protocols domesticated
vi.	National Road Tolling Policy finalized
vii.	Inland Water Transport Policy formulated

viii.	SDGs integrated into the transport planning function
ix.	National Civil Aviation Policy formulated
x.	Civil Aviation Authority Act (CAP 354), 1991 reviewed
xi.	Railway Policy formulated
xii.	Rural Transport Policy finalized
xiii.	Building Control Act operationalized
xiv.	Inland Water Transport Legislation reviewed and updated
xv.	Axle Load Control Policy review
xvi.	Uganda Railways Act Amended
xvii.	Engineers registration (Amendment) Act, 2015 reviewed
xviii.	Standard performance measurements for road equipment developed
xix.	Traffic and Road Safety Act 1998 amended
xx.	Railway safety standards reviewed and updated
12. Develop the National Construction Industry	
	Planned Outputs
i	National Construction Industry Policy operationalized
	-UCICO established and operational
	-Government materials testing Laboratory strengthened and operational
	-Stake holders in the Construction Industry supported
	-Labor-based technology-MELTC promoted
	-Road construction designs and standards reviewed
	-Standards and Manuals for low cost Sealing Technology developed
	-Research in new technology and local construction materials undertaken
ii	Building Control Act operationalized
	-National Building Review Board established and operational
	-National Building Regulations, Codes and Guidelines approved and disseminated
	-Certification and adherence to building regulations promoted and monitored
	-General Construction and Rehabilitation works undertaken
13. Improve Safety of Road, Railway, Marine, Air and NMT Transport Services	
	Planned Outputs
i.	National Road Safety Council and Transport Licensing Board strengthened
ii.	Road Crash Database System established
iii.	Vehicle Registration System established
iv.	Automated and Intelligent Driver Testing system installed and operational
v.	Mandatory Motor Vehicle Inspection scheme Implemented.
vi.	Driver Standards and other relevant laws enforced
vii.	Computerized driving permits project supported
viii.	Construction of flyovers and pedestrian safety bridge-Nsambya- Rosebury
ix.	Maritime Department operationalized
x.	Boat building standards developed
xi.	Navigation aids and charts installed on major lakes
xii.	Search and Rescue facilities established on major lakes
xiii.	Compliance of Building Standards Monitored
xiv.	Compliance of construction sites monitored
xv.	Testing of structures in earthquake prone areas undertaken

3.3 Alignment of SDP interventions to National Planning Framework and International Commitments

Priority interventions in the Sector Development Plan symmetrically feed into the second National Development Plan and the NRM Manifesto 2016-2021. Key interventions in the SDP have been derived from the NDP II and NRM Manifesto. The flagship projects /priority interventions for the sector in the SDP, NDPII and NRM Manifesto 2016-2021 are:

- i. Development of the Standard Gauge Rail (SGR) together with Kenya, Rwanda and South Sudan to provide fast, reliable, efficient and high capacity railway transport services to reduce the cost of doing business, increase the region`s competitiveness and expedite economic growth and development; and rehabilitation of the meter gauge;
- ii. Revival of the National Carrier to enhance the Country`s competitiveness by reducing the cost of air transport and easing connectivity to and from Uganda, promote tourism industry and contribute to the development of Uganda as a regional hub;
- iii. Construction of 2,025km of new tarmac roads including strategic roads to support exploitation of minerals, oil and gas, as well as, tourism activities to ease provision of social and administrative services and also improve all weather accessibility in the country`s hinterland;
- iv. Construction of Express ways and flyovers in the Metropolitan Area to reduce traffic congestion and ease movement of transit traffic through GKMA
- v. Construction of 112No. bridges and rehabilitation of old ones to remove bottlenecks on the national network and improve all weather accessibility
- vi. Procurement of 8No. Ferries for effective and safe continuation of national road network and provision of transport services to islands and other hard to reach areas
- vii. Procurement of road equipment from Japan including heavy duty graders, rollers, excavators, etc to districts to enable them carry out effective road maintenance on their respective DUCAR network;
- viii. Construction of a new Kampala port at Bukasa to develop an alternative route (Central Corridor) from Kampala, across Lake Victoria to the Indian Ocean and reduce over-dependence on the Northern Corridor.
- ix. Expansion of Entebbe International Airport to provide adequate infrastructure and facilities in order to accommodate current and future air traffic and promote service excellence; and upgrading of Arua, Gulu and Kasese aerodromes
- x. Construction of Kabaale International Airport in Hoima to facilitate the development of the oil refinery.

Details regarding priority interventions, projects and programmes are provided in the annualized cost implementation matrix in **Annex 3**.

The SDP is also aligned to regional and international commitments including Sustainable Development Goals (SDGs) and Africa Agenda 2063 as demonstrated in Table 12 below.

Table 1-22: Alignment of the WTSDP to the SDGs

No	Sector Strategic objective under WTSDP	Sample of Priority interventions under WTSDP	UN Sustainable Development Goal related to the WTSDP
1	Develop adequate, reliable and efficient multimodal transport network in the Country	-Fast-track establishment of MATA -Implement BRT and LRT in GKMA -Promote use of NTM	Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable
		Developing Climate change resilient transport infrastructure	Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
2	Increase the safety of transport services	-Strengthening of National Road Safety Council and TLB -Enforcing driver standards through introduction of intelligent driver testing system -Introduction of modern speed cameras for speed surveillance	Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable
3	Improve the National Construction Industry	-Operationalizing the Building Control Act -Reviewing the National Construction Standards -Strengthening enforcement of building regulations and Quality Assurance.	Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable
		-Operationalizing the National Construction Industry Policy - Promote use of new and appropriate technology - Promote research and development	Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

3.4 Crosscutting Priorities

Mainstreaming of crosscutting issues in infrastructure development and usage projects must be observed. These include:

i. Gender and equity

The overall goal of the national gender policy is to mainstream gender into the national development process and reduce inequality in decision making and economic activities. In the road sub-sector the potential direct effect of road works on gender is greatest in construction and maintenance works, where there is an opportunity to increase the number of women employed. This is particularly important in the rural road sub-sector, where labour-based work methods are an effective driver for local employment, especially for women.

The indirect effect on gender in the road sub-sector is through improvements in accessibility and mobility, particularly at the local level where women spend a considerable time walking long distances for domestic purposes and where poor access and lack of a means of transport can impact significantly on maternal health. Improving access and mobility, however, involves a number of dimensions around transport infrastructure, availability and affordability of safe transport services.

ii. Environment

The Environmental Management Act provides for systematic Environmental Impact Assessment (EIA) studies for all major infrastructure projects. Accordingly, the ministry is implementing its environmental management framework and has also disseminated EIA guidelines for the road sub sector.

UNRA mainstreamed environment management in all its operations from the project design stage, through implementation and during maintenance operations. The implementation of mitigation measures and monitoring of environmental compliance is spearheaded by a Safeguards Unit.

The formal adoption of the UNRA Environmental and Social Management System will greatly improve the performance and consistency of the approach of service providers. The system ensures that: social and environmental aspects are considered in alternative alignment analysis; infrastructure designs address impacts; appropriate conditions of contract, specifications, measurement and payment methods are incorporated into works contracts; resettlement action plans are developed and followed for all involuntary resettlement and compensation and; monitoring of construction activities is undertaken.

iii. Occupation health and Safety

The Ministry of Works and Transport as a sector lead agency shall undertake to ensure that awareness on Occupational Health and Safety (OHS) is raised, and its activities are coordinated through the entire sector and that all stakeholders are well sensitized to follow OHS policies.

There are many people who have access to the road sub-sector and their safety and health has to be assured while they access the roads and carry out their various activities. These people who have access include those who play an active part in building, maintaining and rehabilitating roads as well as the communities along the roads.

The Ministry will put in place a number of regulations to ensure that all stakeholders in the roads sub-sector observe OHS. These regulations include:

- i. All organized stakeholders in the roads sub-sector at all levels will be required to have a written OHS policy which can be referred to by any other stakeholder any time;
- ii. All written policies will be backed by a written operationalization manual or guidelines which will be available to all stakeholders; and
- iii. No contractor, constructor or consultant will be eligible to bid for a contract in the roads sub-sector if they do not have an OHS.

iv. HIV and Aids

The transport sector is considered to be one of the most vulnerable sectors to the AIDS epidemic being a sector that facilitates mobility and is characterized by a highly mobile working population, cross border operations, transport service providers and contractors.

The HIV policy and strategy for MoWT was approved and launched in November 2011. It comprises the road, rail, water and air transport sub-sectors, and includes key affected populations in the sector, the agencies and companies that build, maintain and provide services to the sector, such as; construction companies, fuel stations, truck, bus and taxi stops, border crossings, port areas, train stations and airports.

The policy is built around three main pillars, namely: prevention; treatment, care and support programmes, and; mitigation of the impact of the epidemic. The aim of the policy is to provide guidelines for the coordination, implementation, monitoring and evaluation of the individual workplace programmes in the works and transport programmes. It builds on a variety of policy and strategy statements including the roads sub-sector HIV/AIDS policy statement of January 2008.

An immediate challenge is the formulation of key performance indicators and tracking them on a regular basis during implementation. This must include funds spent as an important indicator of resources made available. Currently HIV/AIDS activities are underfunded. Arrangements for costing the strategy are being made.

The Ministry has finalized developing a Strategic framework for Combination HIV/AIDS Prevention Services (CHIPS) for Hotspots along Transport corridors in Uganda. This is to be funded by IOM.

v. Climate change

Recent weather events including heavy rainfall, storms, floods and droughts have amply illustrated the vulnerability of Uganda's transport sector to severe weather. Climate change is projected to bring increasingly severe weather, including more heat waves, heavy rainfall and floods. Because of earlier GHG emissions, further climate change is unavoidable, whatever the outcome of global negotiations on curbing GHG emissions.

Integrating climate change in transport planning has triple benefits: resilience, reputation and efficiency i.e. (i) strengthen the resilience and reliability of local transport now and in the future-studies regularly reveal that transport networks are the sector most vulnerable to disruption from severe weather; (ii) maintain the government's reputation and avoid adverse publicity-media articles on the impacts of severe weather on transport; (iii) save money in the long term, by reducing the need for expensive maintenance and recovery operations.

Consequently, it is appropriate for transport planners and decision makers to consider the climate change risks that are essential to the transport sector. In particular, transportation plans and designs should be carefully considered and well informed by a range of factors, including consideration of climate variability and change so that climate change information can be incorporated in transport decision making to ensure a reliable and robust future transportation network.

vi. Human Rights and Democracy

The promotion of human rights, democracy and good governance are core challenges for poverty eradication recognized in key national policies. Decentralization, which is developed in the public administration, is reflected within the transport sector where the district and sub-district levels have full responsibility for district and community access roads, while the Ministry is playing a supporting role. Implementation of Ministry activities will be coordinated and monitored by monitoring committees comprising of key local stakeholders. Participatory planning and monitoring is already routinely used for district, urban and community access road improvements. Good governance is foreseen to be pursued by the Ministry and Local Governments through increased transparency and accountability.

Therefore, the WTSDP shall address the following key priority human right issues;

- i. Hazards to the local population caused by increased traffic
- ii. Poor transport network which affects the livelihoods of the population
- iii. Limited means of transport for the disadvantaged groups such as the elderly, children and PWDs

- iv. Forced eviction as a result of transport infrastructure development and
- v. Violation of labour and occupational health and safety standards during construction works

3.5 Cost and Financial Plan

This section presents the funding requirements of the Works and Transport Sector Development Plan. It gives a summary on the methodology used in the selection of priority projects and programmes under the various strategic interventions and their indicative costs over the plan period. While costing the plan, more emphasis has been put on priority interventions to be implemented in the remaining plan period i.e. 2017/18-2021/19.

3.5.1 Costing of the SDP and Methodology

A substantial number of priority projects and programmes which are included in the WTSDP (over 90%) were appraised, costed and prioritized in the SIP-NTMP/GKMA report of July 2015. The prioritization in the SIP was based on the following criteria;

- Category 1: Prioritisation by class where Projects were prioritised according to their transport network classifications i.e. National corridor projects were given the highest priority; urban corridors were considered the next highest and urban connectors the third level of priority.
- Category 2: Prioritisation by status where projects are already “committed” or where irreversible decisions have been made on their implementation.
- Category 3: Prioritisation by net financial benefit where most productive projects with lowest investment costs were prioritized.

It should be noted that most projects in the WTSDP belong to category 2 above where majority of the prioritized projects are already committed and their costs established. For new projects not in the SIP, their costs have been derived from their feasibility and design study reports. Where feasibility studies have not been done yet, project costs have been estimated using unit costs from previous and on-going similar projects. The resultant WTSDP costs are summarized below;

Table 1-23: Cost and financial Plan of the SDP

Financial Year	Annualized Cost of the SDP (UGX Bn)	Annualized MTEF Budget (UGX Bn)
2015/16	2,656.91	3,193.74
2016/17	3,869.91	3,823.82
2017/18	7,516.39	4,631.20
2018/19	7,646.40	5,072.39
2019/20	6,370.58	5,118.17
Total	28,060.19	21,839.32

The total cost of the Works and Transport Sector Development Plan (WTSDP) for the period 2015/16-2019/20 is UGX 28,060.19Bn against the total MTEF budget of UGX 21,839.32Bn.

Table 1-24: Summary of WTSDP Costs by sub-sector

Sub-sector	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	Total
Road	2,480.66	3,482.77	6,571.71	5,406.90	3,729.45	21,671.49
Railway	79.00	117.23	231.61	831.7	1,423.44	2,682.98
Inland Water	35.38	64.73	153.54	317.32	304.13	875.10
Aviation	4.40	95.40	333.38	770.43	588.44	1,792.05
Policy and Strategy/ Institutional	57.47	109.78	226.15	320.05	325.12	1,038.57
Total	2,656.91	3,869.91	7,516.39	7,646.40	6,370.58	28,060.19

A detailed list of prioritized and costed sector projects/ interventions is attached in Annex-3 and the following high level observations can be made;

- i. Rail projects: Priority is given to the construction of the Malaba-Kampala SGR and rehabilitation of Tororo-Pakwach and Kampala-Port Bell lines.
- ii. Road projects: Priority is given to the construction of oil roads, expressways and fly-overs in GKMA. This is followed by a mixture of junction improvements, surface upgrade, and capacity improvement projects.
- iii. Airport projects: The expansion of Entebbe International Airport, construction of the new Kabaale Airport and revival of the National Career received the highest priority, ahead of the proposed developments of upcountry airports of Gulu, Arua, Kasese and others.
- iv. Inland water projects: Key priority projects relate to opening of the southern route namely development of Bukasa port, Port Bell and Jinja pier.

CHAPTER FOUR

WTSDP IMPLEMENTATION FRAMEWORK

4.1 Introduction

The WTSDP shall be implemented through a sector-wide approach to attain its objectives. The Ministry and its Agencies, Development Partners and sector Stakeholders are cardinal in the implementation of this Plan. The Ministry shall play its key role of providing strategic guidance and direction of the Sector through policy formulation/review, strategic planning, monitoring and evaluation, and sector coordination. The Sector Agencies namely UNRA, CAA, and URC will implement the projects under national roads, air, railways and inland water transport respectively. Interventions on the DUCAR network will be undertaken by Local Governments and the Ministry.

4.2 Structure of the Works and Transport Sector

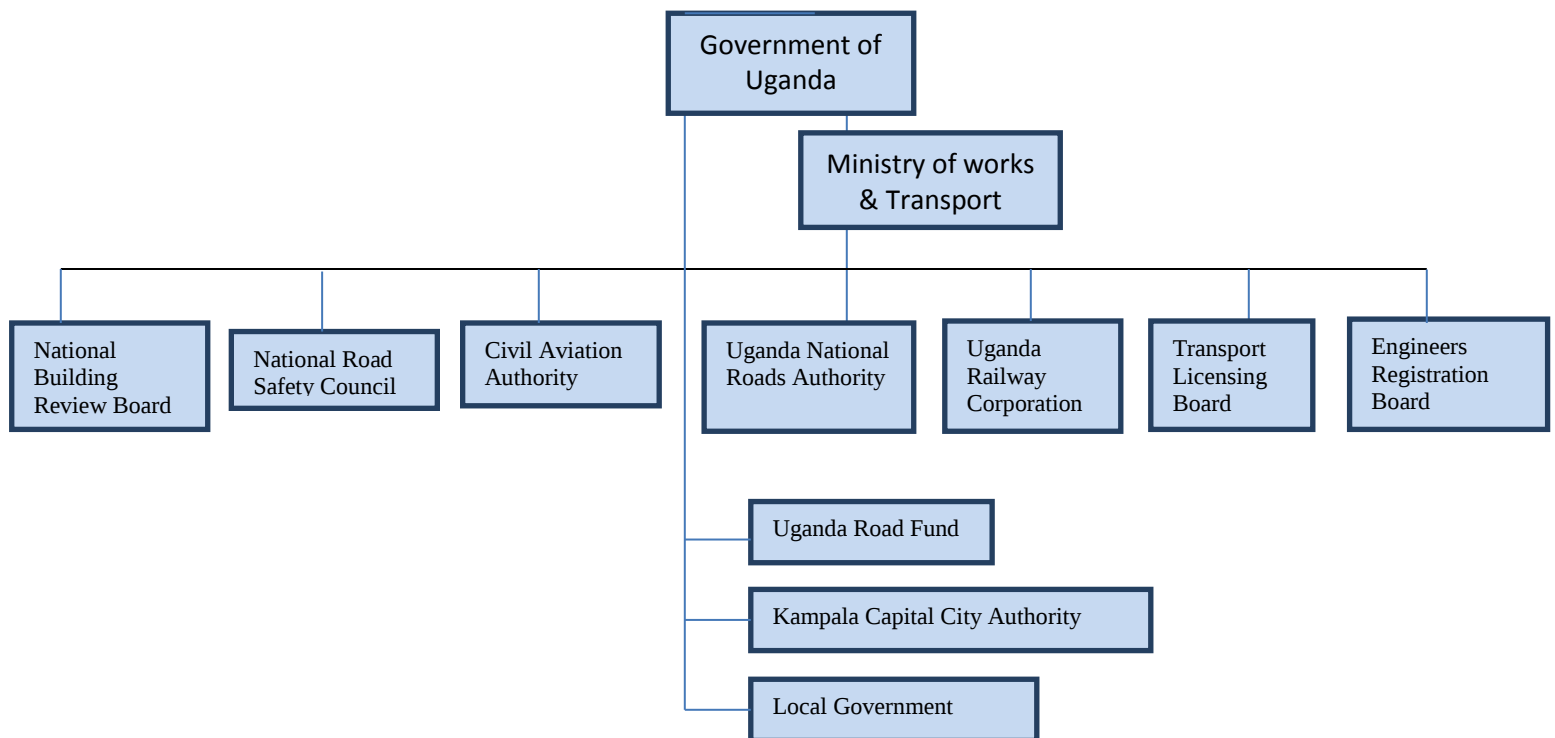


Chart 1 - Transport Sector-Macro Institutional Structure

Table 1-25: Responsibilities of MoWT, its Agencies and Key Stakeholders

No	Institution	Responsibility
1.	Ministry of Works and Transport (MoWT)	Lead Agency in the implementation of the WTSDP. Shall be responsible for Policy formulation, legislation, regulation, standard setting, strategic planning, monitoring and evaluation.
2.	Uganda National Roads Authority (UNRA)	Develop, maintain and operate the national roads network; and axle load control.
3.	Civil Aviation Authority (CAA)	Plan, Develop and maintain airports and regulate the air transport sub-sector.
4.	Uganda Railways Corporation (URC)	Plan, Develop and Manage Rail and Marine transport, and regulate the rail transport sub-sector.
5.	Uganda Road Fund (URF)	Collect and manage road user charges (RUCs) to finance road maintenance programmes.
6.	National Road Safety Council (NRSC)	Oversee road safety activities including planning, coordination, advocacy and resource mobilization; education, publicity, conduct road safety research, monitoring and evaluation.
7.	Transport Licensing Board (TLB)	Regulate the use of public transport vehicles; private omnibuses and goods transport vehicles throughout Uganda and inspection and licensing Inland Water Transport Vessels.
8.	Engineers Registration Board (ERB)	Regulate and control Engineers and their activities within Uganda and advise the Government in relation to the engineering profession.
9.	National Building Review Board (NBRB)	To monitor building developments and operations of Urban and District Building Committees.
10.	Kampala Capital City Authority (KCCA)	Plan, Develop and maintain transport infrastructure in Kampala city and traffic management.
11.	Local Governments (LGs)	Plan, Develop and maintain transport networks under their areas of jurisdiction.
12.	Ministry of Finance, Planning and Economic Development (MoFPED)	Provision of adequate financial resources for implementation of WTSDP, and creating enabling environment for the implementation NDP II
13.	Development Partners	Co-financing of WTSDP; Contributing towards policy development, planning, monitoring and evaluation and provision of specialized technical assistance

No	Institution	Responsibility
14.	Private Sector	Provision of services; Resource mobilization; Contributing towards policy development, planning, monitoring and evaluation
15.	Ministry of Water and Environment/ NEMA	Approval of Environmental Studies for infrastructure projects/ interventions under SDP
16.	Ministry of Lands, Housing and Urban Development	Joint planning for transport infrastructure and land use; approval of RAPs, and amendment of Land Act to ease acquisition of land by Government
17.	Ministry of Internal Affairs (Uganda Police)	Enforcement of Traffic and Road Safety Act and Regulations
18.	Ministry of Gender; Equal Opportunities Commission; Human Rights Commission; Uganda Aids Commission	Technical guidance and Monitoring implementation of cross-cutting issues under SDP
19.	National Planning Authority (NPA)	Provide technical guidance, Monitoring and Evaluation of the Plan
20.	Civil Society	Monitoring and advocacy
21.	Technical Working Group	Oversee implementation of the WTSDP

4.3 Programme Sustainability

The WTSDP shall inform the annual budgeting process and projects included in the Ministerial Policy Statement should originate from the Sector Development Plan. This process will ensure that the planned projects in the WTSDP are executed. The Transport Sector Working Group shall provide a platform for joint infrastructure planning in order to achieve the objectives of the WTSDP.

4.3.1 National roads development and maintenance programme

The national roads development programme is financed by both Government and Development Partners. The Sector is keen to balance financing for road development and road maintenance so as to save the investment and sustain the stock of roads developed. The Sector is therefore pushing for increased funding for road maintenance through creation of 2nd generation Road Fund.

In addition, the Sector is building internal capacity in terms of staff and equipment to undertake road maintenance using force account. The Ministry is also developing a National Road Tolling Policy so that users can begin to pay for utilization of infrastructure.

4.3.2 DUCAR network rehabilitation and maintenance

Government is procuring heavy road equipment from Japan to supplement the light work equipment procured from China in Local Governments. This will strengthen and sustain road maintenance interventions using force account. Part of this equipment will be stationed at Ministry Force Account Units at regional level to supplement the equipment in Local Governments and undertake rehabilitation of selected roads. Strengthening the institutional and financial capacity of Regional Mechanical Workshops will be key ingredient in this process.

There is a challenge of funding rehabilitation of the DUCAR network, and this has led to deterioration of some network to a level beyond maintenance. Presently there is no dedicated budget allocation for development and rehabilitation of the DUCAR network in the Sector. Efforts by the Ministry through the District Roads Rehabilitation and the Inter Connectivity projects should be enhanced to address road rehabilitation.

4.3.3 Railways maintenance and development programme

The railways development programme under WTSDP mainly focuses on development of Standard Gauge Railway to provide fast, reliable, efficient and high capacity railway transport services as well as repair of the meter gauge railway line and refurbishment of locomotives. This will improve railway efficiency and reliability, reduce transport costs and subsequently the cost of doing business in Uganda, increase the country's competitiveness and spur economic growth and development. The increase in intra and regional trade will sustain the planned investments in this sub-sector.

4.3.4 Inland water transport development programme

Government will invest in the development of ports and lake transport infrastructure including landing sites, jetties, navigation, communication aids and Aids to Navigation (AToN's). This will attract the private sector to operate passenger and cargo marine services on commercial routes, attract light and service industries and generate revenue for government. For non-commercial routes, Government will continue to provide transport services in form of road bridges.

4.3.5 Air transport development programme

The main projects in the air transport development programme include expansion of Entebbe International Airport, construction and upgrade of upcountry aerodromes, revival of the national airline and construction of an international airport at Kabaale. The first three interventions will boost the passenger numbers including tourists and volume of cargo; the investments will be sustained by the increased volume of business. Construction of Kabaale airport in the Albertine Graben region will aid exploration, extraction and processing of oil and gas. The growing business to accrue in the oil industry will sustain this investment.

4.4 Implementation Risks and Mitigation Measures

The main risks that may influence the attainment of the WTSD objectives have been identified and mitigation measures suggested in order to create an enabling environment as shown in Table 1-26 below.

Table 1-26: WTSDP Implementation Risks and Mitigation Measures

No	Nature of Risk	Probability of occurrence	Impact	Mitigation Measure
1	Inadequate funding by Govt due to competing priorities and budget cuts due to economic slowdown or Donor pull-out or emergencies in other sectors	Medium	Medium	-Ensure efficient use of the available resources -Resource mobilization including Promoting PPP
2	Budget distortions due to new / emerging priorities in the sector	Medium	Low	-Do further prioritization of SDP interventions
3	Shortage of technical staff due to inadequate wage bill coupled with Staff turn-over due to low pay especially for specialized skills in the sector	Medium	Medium	-Pursue Government to increase wage bill -Establish salary enhancement scheme for specialized skills; -Design robust capacity building programmes.
4	Eemergencies in the sector e.g. heavy rains/eltnino	Medium	Low	-Develop designs for climate resilient infrastructure -Develop an emergency response plan to manage emergency situations.
5	Governance and accountability Issues	Medium	Medium	-Strict adherence to sector core values, -Strict adherence to Public Finance Management Act and other relevant laws -Undertake regular financial checks/audits -Strengthen sector M&E Framework, and quality assurance systems -Strengthen collaboration with Governance and accountability sector

4.5 Communication Strategy

The success of the WTSDP will require better communication and networking strategy aimed at increasing public awareness about the sector and its mandate and improving collaboration and networking amongst sector institutions and key stakeholders. Key strategies to be pursued will aim at strengthening the sector's communication capacities for intra and inter-sectoral collaborations, partnerships and networks between the sector, other Government institutions, development partners, private sector, CSOs, and the Media as illustrated in the table below.

Table 1-27: Communication strategies, activities and target audience

No.	Strategy	Activity	Target Audience
1.	Strengthening Internal communication to skill and empower staff to share information	Staff meetings; training retreats; tournaments	TMT; Technical staff; Sector Working Group
2.	Partnerships & Networking to harness synergies and sharing of information	Regular stakeholders meetings; Study tours and benchmarking visits; Joint sector reviews	MDAs; Local Governments; Parliament; Development Partners; Private sector; CSOs; Media
3.	Social Mobilization to empower citizens with information	Sensitization workshops; Public information programs; Corporate Social Responsibility (CSR)	Parliament; Local Governments; Citizenry; Academia ; Opinion leaders; CSOs, NGOs, CBOs and FBOs; Media; Schools
4	Media and Public Relations to ensure regular flow of information to the public	News conferences; Media Boardroom Sessions; Talk shows; Media skills training; Media tours	Media Reporters; Owners; Editors; Technical staff; SWG
5.	Branding to build public image and sector recognition	Develop a sector logo; brand colour and IEC materials	MDAs; Local Governments; Parliament; Development Partners; Private sector; CSOs; Media

CHAPTER FIVE FINANCING STRATEGY

5.1 Introduction

The chapter details the indicative financial plan including the resource mobilization and expenditure strategies of the Works and Transport Sector Development Plan.

5.2 Financing Strategy

5.2.1 Financing Mechanisms

Priority programs in the SDP will be financed mainly from the following sources:

- i. Government of Uganda through the MTEF
- ii. Development Partners contributions
- iii. Non-conventional financing using public private partnership
- iv. Non-concessional loans

5.2.2 Funding/ Resource Gaps and strategies

This section highlights the unmet funding needs and strategies to be undertaken by the sector to mobilize resources to close these gaps

The total cost of Works and Transport Sector Development Plan (WTSDP) for the period 2015/16-2019/20 is UGX 28,060.19BN. However, the total sector budget under MTEF for the same period is UGX 21,839.32 BN, and hence a funding gap of UGX 6,220.87BN as summarized below.

Table 1-28: Comparison of NDP2, MTEF and WTSDP Budget Estimates

	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	Total
NDPII(Public)	3,328.80	5,044.80	5,019.70	4,856.30	2,996.90	21,246.50
NDPII (Private)	7,317.50	6,584.10	7,409.40	-	-	21,311.10
Total NDPII	10,646.30	11,628.90	12,429.10	4,856.30	2,996.90	42,557.60
MTEF	3,193.74	3,823.82	4,631.20	5,072.39	5,118.17	21,839.32
WTSDP	2,656.91	3,869.91	7,516.39	7,646.40	6,370.58	28,060.19
NDPII (Public) – WTSDP	671.89	1,174.89	-2,496.69	-2,790.10	-3,373.68	-6,813.69
MTEF-WTSDP	536.83	-46.09	-2,885.19	-2,574.01	-1,252.41	-6,220.87

A Comparison of the WTSDP cost and MTEF, indicates a funding gap of UGX 6,220.87Bn for the former over the plan period. The funding gap in the WTSDP is largely a result of the following;

- i). Inadequate GOU funding provided in the MTEF for infrastructure projects. For instance, according to the WTSDP, the MTEF budget for national roads development and maintenance programme for the period FY2017/18-2018/19 is less by about UGX 2,000.00BN, as current funding from URF only meets 40% of road maintenance needs. Also, other sub-sectors namely rail, inland water, and air transport are grossly under-funded;
- ii). Lack of proper estimates for donor project support to the sector in the MTEF for each of the next three years to 2019/20. The breakdown of the total committed donor project support to the sector is scanty, so the MTEF does not fully capture donor project support estimates over the remaining three years of the Plan. Also, some interventions will be financed through grants yet some of the grant money is off-budget and therefore not covered under MTEF projections.

For instance, a number of interventions aimed at revamping inland water transport will be financed under the Lake Victoria Transport Programme (SOP1) which is currently in final stages of appraisal, and are planned to commence during FY 2017/18. However, funding for these interventions is not reflected in the sector MTEF, leading to a funding gap in the WTSDP; and

- iii). Private sector financing not included in the MTEF. According to the NDP II, private sector financing to the sector for the period 2015/16-2019/20 is estimated at UGX 21,311.10BN. However, this is not reflected in the MTEF and yet a number of projects/ programmes under the Plan will be implemented using PPP arrangement.

5.2.3 Strategies for Financial Sustainability

The Works and Transport sector Top Management supported by the Sector Working Group and the Secretariat will continue to aggressively mobilise resources for the implementation of the WTSDP, and the NDP II. The sector shall implement the following strategies to close the funding gap of the WTSDP;

- i). Advocating for an increase in the sector MTEF/budget. The current MTEF is inadequate to finance sector commitments in the NDPII and is skewed towards national roads development. Road maintenance and other sub-sectors namely rail, inland water, and air transport are grossly under-funded. The sector will continue advocating for an increase in its MTEF to close the funding gap in the Plan.
- ii). Mobilizing resources from Development Partners. The sector shall continue harnessing and leveraging on the already existing good relationships with Development Partners namely EU, World Bank, AfDB, Exim Bank of China, Islamic Development Bank, JICA, KOICA,

TradeMark East Africa, BADEA, and DANIDA to mobilize more resources for implementing the Plan. The sector will develop bankable projects and funding proposals for the unfunded areas to bridge the funding gap.

- iii). Increasing own generated resources and used at source by its institutions such as URC, CAA, EACAA, TLB, etc. The sector will continue to develop and enhance strategies for cost recovery from users of transport infrastructure through payments of Road User Charges (RUCs) and PSV licensing fees among others in order to bridge the funding gap.
- iv). Mobilizing resources from the private sector under the PPP.
- v). Improving sector governance and accountability.
- vi). Strengthening M & E function including conducting regular audits and quality checks.
- vii). Generating efficiency gains through minimizing resource waste and investing in high impact areas.
- viii). Implementing key sector reforms.
- ix). Strict adherence to PFMA Act, 2015

CHAPTER SIX

MONITORING AND EVALUATION

6.1 Introduction

The Works and Transport Sector has a Monitoring and Evaluation Policy and M&E Framework. The framework was set up to monitor the Sector performance. Monitoring will be part of the annual cycle, and the results will be reported to the Joint Transport Sector Review (JTSR), as part of the Sector Performance Report. This framework contains a number of key indicators by which the sector is to be measured. The indicators are related to the mandates and functions of the Ministry and line agencies, and the objectives of the National Development Plan II.

This M&E Framework was designed to measure the overall performance of the works and transport sector at all levels i.e. input, output, outcomes and impact. It comprises a set of 'Golden' Indicators, which, taken together, provide a robust assessment of high-level performance of the individual sub-sectors, and hence the Sector as a whole. The chosen indicators serve to highlight progress against quantitative targets, and against qualitative objectives. The chosen indicators measure a mixture of inputs, outcomes and impacts. Details regarding sector indicators are presented in Annex 5.

However, the M&E system will be updated and aligned to sector policy and planning reporting requirements. This will involve addressing M&E capacity challenges including scaling up statistical interventions to close data gaps, updating the M&E framework, integrating sector data systems, strengthening sector working group as well as prioritizing periodic evaluations for key flagship projects in the sector.

The specific results matrix aligned to SDP objectives and interventions for the different MDAs in the sector are presented in Annex 4.

6.2 Monitoring and evaluation framework

Implementation of the WTSDP will be monitored and evaluated by Top Management, SWG, OPM, NPA, OP and Parliament of Uganda. The Top Management and SWG meetings will be held on a monthly basis i.e. every second Friday and last Wednesday of the month respectively.

Sector annual and mid-term reviews with all the relevant stakeholders will be held to assess the implementation of the WTSDP. The reviews will also be part of the Annual and Half-Year Sector Performance Reports. Annually, as per the tentative schedule in table 1-25, the Sector will specifically hold the Joint Transport Sector Review (JTSR) to:

- i. discuss the Annual Sector Performance Report (ASPR) for the previous Financial Year; the ASPR feeds into the Government Annual Performance Report (GAPR) discussed during the Cabinet Retreat;
- ii. review the implementation progress of the agreed actions in the JTSR Action Plan Matrix; and

- iii. prepare an Aide Memoire including a matrix of agreed actions for the next implementation period(yearly)between the Sector and Development Partners.

The Midterm Review of the WTSDP will be undertaken during the 13th Joint Transport Sector Review in March 2018 while the final review and evaluation will be done during 16th Joint Transport Sector Review scheduled for 20th – 21st September 2020.

Table 1-29: Schedule of Annual Reviews

No	Annual Review	Planned Date
1	12 th JTSR for FY 2015/16	01 st - 02 nd September 2016
2	13 th JTSR for FY 2016/17	24 th – 25 th August 2017
3	14 th JTSR for FY 2017/18	23 rd – 24 th August 2018
4	15 th JTSR for FY 2018/19	22 nd – 23 rd August 2019
5	16 th JTSR for FY 2019/20	20 th – 21 st August 2020

6.3 Management of the M&E Framework:

A number of different organizations will produce the data necessary for measuring WTSDP results at impact, outcome and output level. The Data Bank which is under the Policy and Planning Department, MoWT, will be responsible for collecting this data from the producing agencies, and processing it in order to prepare consolidated quarterly, semi-annual and annual monitoring reports for the SWG and JTSR.

The quarterly progress reports will contain data on inputs and outputs. The semi-annual and annual reports will contain a broader range of information, including data on outcome and impact indicators, data analysis and summaries of studies. The semi-annual and annual reports will be tabled to the JTSR meetings held annually. MoWT will also hold semi-annual meetings with the budget support donors prior to the JTSR to review progress in implementation of the Action Plan Matrix as outlined in the reports, and agree on the areas for further prioritization.

6.4 Investment Opportunities in the Works and Transport Sector

This section highlights projects which can attract private sector financing and conventional development financing to Government through budget support or direct project funding.

i). Kampala Bus Rapid Transit

A Bus Rapid Transit (BRT) system is a high quality mass public transport system based on buses using dedicated road lanes so that public transport is fast, reliable, frequent and comfortable.

A detailed engineering design for the Kampala BRT Pilot Phase was completed in 2014. The design provides for 25kms comprising three arms that converge at the junction of Entebbe and Kampala roads in the Central Business District with a total of 27 stations.

The initial capacity of the system is rated at 9,000 passengers per hour in each direction. This capacity can be increased to 12,000 passengers per hour in each direction. Once the BRT system is operational, it will carry over 130 million passengers per year, and pick up about 20% of the public transport demand in the Greater Kampala Metropolitan Area. The estimated cost for the Kampala Pilot BRT system is USD 620 million.

ii). Re-Establishment of the National Airline

Uganda is a land-locked country and in the absence of a strong national airline, the country's economy depends heavily on the coastline of the neighboring countries for transportation of goods in and out of the country. The Country is always disadvantaged at the Bilateral Air Services Agreements (BASA) negotiations due to lack of a home-based national airline which can be used for reciprocity purposes.

At present, Government is undertaking rehabilitation and expansion of Entebbe International Airport; this needs to be complemented by revival of the national airline. Uganda's location makes it a natural regional hub for trade, transit and air travel. Additionally, Uganda produces high value and perishable products namely: fresh water fish, flowers, fruits and vegetables which require reliable and timely air transport for export. Government requires a private investor to team up with to undertake this project; the estimated cost of the project is USD 550m.

iii). Development of Kasese Airport

Kasese airport is one of the 13 upcountry aerodromes in Uganda. It is located in the south western part of Uganda, approximately 400km from Kampala. The airport has a high potential to promote tourism in the region.

Government intends to upgrade the Airport from a code 2b airport to an international airport of code 4c fully equipped with a paved runway, associated taxiways, aprons and other necessary

facilities. The Master Plan for the facility was completed and construction of the Airport is estimated at a cost of USD 168m.

iv). Support to East African Civil Aviation Academy

The East African Civil Aviation Academy trains Pilots, Aircraft Maintenance Engineers, Flight Instructors and Flight/Airport Operation Officers.

The Academy is in dire need of an Investor to revamp its infrastructure and uplift the training courses conducted by the Academy to the international standards acceptable by the International Civil Aviation Organization.

The Academy needs support towards upgrading or revamping of its facilities as follows:

- a) Procure a second twin engine beech craft baron B58 aircraft;
- b) Mobile ground lighting system to support night training;
- c) Reconstruction of the runway; and
- d) Construct a dormitory with a capacity of 200 students.

v). Construction of Tororo – Gulu – Nimule SGR line (474 km)

The project will facilitate transportation of goods to and from South Sudan. The project is estimated to cost USD 3,270m, with a branch line to Gulu – Pakwach (118km) which is estimated at USD 601m.

vi). Construction of Kampala – Bihanga – Mirama Hills SGR line (412km)

The project will facilitate transportation of goods to and from Rwanda. The project is estimated to cost USD 2,842m, with a branch to Bihanga – Kasese (75km) which is estimated at USD 517mn.

vii). Development of Inland Container Depots and Multi-Modal Hubs

It is proposed to construct inland container depots and multi-modal hubs in Tororo, Jinja, Gulu, Pakwach and Kasese at an estimated cost of USD 25m per location. The project aims at improving the management of freight and cargo in the country.

viii). Construction of National Roads

The following expressways are being packaged for implementation under PPP arrangements.

- a) Kampala – Jinja (7km) and Southern Bypass (18km)
- b) Kibuye – Busega (6km);
- c) Kampala – Busunju (50km);
- d) Kampala – Bombo (30km);
- e) Kampala Outer Beltway (120km); and
- f) Northern Bypass – Nakasero (5km).

The expressways have high a potential for collection of tolling revenues, which can be used to recoup the PPP investments.

In addition to the above there are over 3,000km of national roads that are critical to oil development, tourism and other economic activities but lack funding. Their estimated cost is USD 3.6 billion.

ix). Improvement of Rural Roads using Low Cost Seals

Government plans to improve 1,000km of rural district and community access roads with low cost bituminous seals. This is aimed at removing bottlenecks on rural roads such as steep slopes and swampy areas, which become slippery and impassable during the wet seasons. Improvement of 300km of rural roads with low cost seals in the North and North Eastern Uganda is ongoing. An estimated USD 100m is required to improve 700km of selected sections of rural roads all over the country.

x). Construction of a Suspended Bridge between Buwaya and Nakiwogo, Entebbe

In an effort to reduce traffic congestion in Kampala City, Government has identified key roads that would help divert traffic from the City Centre. One of such roads would be a suspended bridge across Lake Victoria, connecting Entebbe and Buwaya (3km). Traffic from Buwaya is planned to connect through Kasanje to Kampala – Masaka road.

The bridge is proposed for construction using a Public Private Partnership approach and would be a toll road. Reconnaissance survey for the bridge is underway.

xi). Construction of One Stop Border Posts (OSBPs)

Construction of One Stop Boarder Posts at:

- a) Ishasha between Uganda and DRC;
- b) Lamia between Uganda and DRC;
- c) Yei between Uganda and South Sudan;
- d) Musingo between Uganda and Sudan; and
- e) New Site between Uganda and Sudan.
- f) Bunagana between Uganda and DRC
- g) Mpondwe between Uganda and DRC
- h) Goli between Uganda and DRC

The one stop border post approach is essential in reducing the time and cost of clearing goods at border crossings, thereby facilitating cross border trade. The estimated cost is USD 25m per border post.

xii). Improvement of Water Transport on Lake Victoria

Government plans to re-open the southern route from Dar es Salam to Portbell via Mwanza by rehabilitating MV Kabalega and other old marine vessels and also procuring a new ship to ply the southern route.

There are also plans to construct or rehabilitate ports and landing sites on Lake Victoria, such as Bukasa, Portbell, Jinja, Kiyindi, Bule, Gaba, Nakiwogo, Butebo, Lutoboka and Lambu.

There are investment opportunities for the private sector to procure and operate water vessels on Lake Victoria to improve transportation of cargo to Kisumu, Kenya and Mwanza, Tanzania. The water vessels would also help in improving tourism activities and transport services on the islands in Lake Victoria.

xiii). Large Scale Production of Construction Materials

In a bid to reduce the cost of road construction and also ensure availability of adequate quantities of high quality construction materials on the market, Government plans to go into partnership with a private sector firm so as to produce construction materials on a large scale. The materials planned for large scale production are aggregates, road chippings, asphalt concrete, precast concrete products etc. Producing materials on a large scale will be cheaper than the current practice of project based production that is associated with high set up costs for production limited to one project.

xiv). Bridges on the DUCAR Network

Uganda still has overwhelming bridging needs on the district, urban and community access roads (DUCAR) network. Accordingly, Government plans to construct about 100 bridges at priority locations on the DUCAR network all over the country by 2021. The project is planned for implementation using contractor facilitated financing and is already generating interest among British and American firms.

References

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9. Uganda Road Fund 5-Year Strategic Plan 2014/15-2018/19
10. Uganda Railways Corporation Strategic Plan 2016/17-2020/21
11. Kampala City council Authority Strategic plan 2014/15- 2018/19.
12. Uganda National Roads Authority 5-Year Strategic Plan 2012/13-2016/17
- 13.

Annex-1: Old paved roads rehabilitated between July 2010 and October 2016

Project	Km
Kawempe Luwero –Kafu road	166
Tororo – Mbale road	49
Mbale – Soroti road	103
Jinja – Kamuli road	57
Busega – Masaka road Phase 2	58
Mbarara – Ntungamo road	59
Ntungwa –Kabale - Katuna	65
Mukono – Jinja road	52
Malaba/Busia – Bugiri road	82
Kafu – Kiryandongo road	43
Kiryandongo – Kamdini	59
Kamdini – Gulu	62.5
Pakwach – Nebbi road	55
Kampala - Masaka (Package C)	58
Mukono Kayunga-Njeru	92.5
Koboko + Maracha Town Roads	6.9
Nakalama - Tirinyi - Mbale	100.2
Namunsi - Sironko - Muyembe - Kapchorwa	65
Nansana - Busunju	47.6
Iganga - Kaliro	32
Fort Portal - Kyenjojo	50
TOTAL	1362.7

On-going Upgrading and Re- construction/Rehabilitation Projects as at end March 2017

Road Name	KMS	Progress
1 Atiak-Nimule	35	Substantially Completed
2 Fort Por tal-Kyenjojo	50	On-going (10.4 %)
3 Iganga (Nakalama)-Tirinyi-Mbale	97	Ongoing (25 %)
4 Iganga-Kaliro	32	Ongoing (98%)
5 Mubende-Kagadi-Ndaiga(140km)	140	Ongoing 11.7 %
6 Kafu-Kir yandongo	43	Substantially Completed
7 Kamdini-Gulu	62	Substantially Completed
11 Kir yandongo-Karuma-Kamdini	59	Substantially Completed
12 Lira-Akia and Lira town roads	21.4	Substantially Completed
13 Mbarara By-pass	40	Ongoing (87% progress)
14 Moroto-Nakapiripirit	93	Substantially Completed
15 Mpigi-Kabulasoke-Maddu-Sembabule	135	Ongoing (58 %)
16 Mukono-Kayunga-Njeru	94	ongoing (68 %)

Road Name	KMS	Progress
18 Musita-Lumino-Busia/Majanji	104	Ongoing (12%)
19 Namunsi-Sironko-Muyembe-Kapchorwa	65	Ongoing (45.8 %)
20 Nansana-Busunju	47	Ongoing (98%)
21 Kamwenge-For t Portal	65	ongoing (93%)
22 Ntungamo-Kagitumba-Mirama Hills/Ishaka-Kagamba	72	Ongoing (87%)
23 Olwiyo-Gulu-Kitgum-Musingo	233	Ongoing (63%)
24 Pakwach-Nebbi	54	Ongoing (96%)
25 Villa Maria-Sembabule	38	Ongoing (58 %)
26 Mukono-Kyetume-Katosi/Kisoga-Nyenga	74	Ongoing (91.9 %)
27 Kampala-Entebbe Express Highway	51	Ongoing (78.5% progress)
28 Kampala-Nor thern Bypass Phase II	17	ongoing (45% progress)

On-going rehabilitation projects as at end March 2017

Project	Km	Status
Packwach-Nebbi Road	54	96%
Namunsi – Sironko – Muyembe / Kapchorwa	65	45%
Nansana – Busunju road	47	98%
Fortportal-Kyenjonjo	50	10%
Mukono-Kayunga-Njeru	94	68%
Iganga (Nakalama)-Tirinyi-Mbale	97	25
Musita-Lumino-Busia/Majanji	104	12%
Olwiyo-Gulu-Kitgum-Musingo	233	63%
Mpigi-Kabulasoke-Maddu-Sembabule	135	58%
Villa Maria-Sembabule	38	58%

List of Oil Roads to be constructed during the period FY 2016/17-2019/20

No	Road name	Length(Km)
1	Hoima-Butiaba-Wanseko	111
2	Masindi-Biiso	54
3	Masindi-Bugungu via Murchison Falls National Park	80
4	Kaseeta-Lwera Via Bugoma Forest	15.5
5	Wanseko –Bugungu	23
6	Buhimba-Nalweyo-Bulamagi-Igayaza-Kakumiro	93
7	Lusalira-Nkongge-Lumegere-Ssembabule	97
8	Kyotera-Rakai	20
9	Kabale-Kiziranfumbi	25.7
10	Hohwa-Nyairongo-Kyarushesha	25
11	Kabwoya-Buhuka	43
12	Karugutu-Ntoroko (Via Semiliki National Park)	55
13	Bugungu-Buliisa	29
14	Pakwach-Para (incl. Emmi and Tangi Gate Bridges)-Buliisa	23

List of Priority Tourism Roads to be constructed during the period FY 2015/16-2019/20

Tourist Site/Protected Area	Road Link
Bwindi Impenetrable National Park and Mgahinga Gorilla National Park	Kisoro – Ntebeko
	Kisoro - Mgahinga National Park Headquarters
	Kisoro – Nkuringo
	Kabale - Lake Bunyonyi
	Kisoro – Rubuguri
	Mukatoja – Rubuguri
	Rukungiri – Kihiki – Ishasha
	Kabale - Ruhija – Buhoma
Queen Elizabeth National Park	Katunguru – Ishasha - Kihiki
Rwenzori National Park	Mubuku – Bugoye - Mihunga
	Karugutu - Ntoroko
Murchison Falls National Park, Ajai Wildlife Reserve, East Madi Wildlife Reserve	Kyenjojo – Kagadi - Kabwoya
	Hoima - Biiso
	Kabwoya – Hoima - Masindi
	Hoima – Butyaba - Wanseko
	Masindi - Kiryandongo
	Kiryandongo – Kicumbanyobo Gate – Kaniyo Pabidi
	Kicumbanyobo Gate – Para – Purongo/Tangi Gate

Tourist Site/Protected Area	Road Link
Kidepo National Park	Gulu - Kitgum
	Kitgum – Kalenga - Apoka
	Apoka – Kotido - Moroto
	Nakapiripirit - Sironko
	Soroti - Moroto
Elgon National Park	Kapchorwa - Suam
	Mbale - Budadiri
	Mbale - Bubulo

Annex-2: Completed Bridge Projects on National road network

New Construction

- i. Aswa Bridge along Gulu – Kitgum road
- ii. Nsongi Bridge in Kabarole district
- iii. Muzizi Bridge along Kyenjojo – Hoima road
- iv. Kaichumu Bridge in Kirahura
- v. Nyungu Bridge in Kirahura
- vi. Awoja Bridge along Mbale – Soroti road
- vii. Bulyamusenyu Bridge Linking Nakaseke to Masindi district
- viii. Ayugi Bridge along Atiak – Moyo road
- ix. Erei Bridge along Atiak – Moyo road
- x. Daga, Uzungu, Ure and Eventre Bridges long Wandu – Yumbe road
- xi. Alla (20m) and Enyau (15m) Bridges in Arua
- xii. Birara Bridge (32m)
- xiii. Kyanzuki Bridge on Kasese Kilembe road (39.2km)
- xiv. Pakwala (15m) and Nyacara (15m) Bridges in Nebbi
- xv. Goli (20m) and Nyagak Bridges in Nebbi
- xvi. Leresi Bridge (Butaleja) Butaleja – Leresi – Budaka road
- xvii. Ndaiga bridge (40m) along Bugiri-Malaba road section
- xviii. Mitaano (60m) Bridge in Kanungu & Ntungwe (69m) Bridge in Kasese (Ishasha-Katunguru)

Bridges which have been rehabilitated

- i. Mobuku Bridge on Kasese – Rwimi road
- ii. Kilembe Bridge on Kasese – Kilembe road
- iii. Kazinga Channel, Nyamweru, Rwempunu and Kaizi Bridges on Ishasha – Katunguru road
- iv. Mpanga Bridge on Fort Portal – Kyenjojo road
- v. Nalubale Bridge along Kampala – Jinja road
- vi. Karuma and Kafu Bridges along Kampala – Gulu highway

DUCAR Bridges

Construction of the following bridges on DUCAR network has been completed or substantially completed;

Table 5: Completed/ substantially completed Projects

No.	Name of Bridge	District
i)	Alla-2	Arua
ii)	Lukale , Mwikaye, Mayenze Bridges	Manafwa
iii)	Nyagak	Zombo
iv)	SimuPondo	Sironko
v)	Kabuceera Swamp	Mitoma
vi)	Mahoma Bridge	Kabarole
vii)	Nyanga Swamp Crossing	Isingiro
viii)	Kabundaire Bridge	Kabarole
ix)	Rushaaya Bridge	Mitoma
x)	Kabuhunna Swamp	Kibale
xi)	Lot 1 under IDB funded project - Balla, Abalang-3, Agali and Enget in Lira	Lira/Dokolo
xii)	Lot 2 - Nyawa completed. Kochi-2 in Yumbe and Moyo Districts	Yumbe
xiii)	Lot 3 - Olyanai, Abalang, Alipa, Aakol and Airogo in Soroti, Bukedea, Kaberamaido & Kumi Districts	Soroti/Kumi/ Kaberamaido/ Bukedea
xiv)	Orom Bridge	Kitgum
xv)	Kaguta Bridge	Lira
xvi)	Agwa Pier	Lira
xvii)	Saaka swamp crossing	Kaliro

ANNEX 3 - ANNUALIZED COST IMPLEMENTATION MATRIX (PROJECT / PROGRAMME / INTERVENTION)

Intervention	Output	Budget (UGX Bn)					Total	Lead Agency
		2015/16	2016/17	2017/18	2018/19	2019/20		
Sector Objective 1 - Develop adequate, reliable and efficient multimodal transport network in the Country								
Construction and rehabilitation of national roads <i>(List of projects attached)</i>	National roads constructed and rehabilitated	1,613.97	2,395.02	5,107.97	3,910.77	2,259.39	15,287.12	UNRA
Construction and rehabilitation of bridges on national road network	Bridges constructed/ rehabilitated	113.22	180.33	346.88	263.18	156.74	1,060.35	UNRA
Construction of Flyovers in GKMA	Flyovers in GKMA constructed	27.65	28.77	114.00	137.76	75.00	383.18	UNRA
Improvement/ upgrading of Kampala’s Road network	City road network, junctions and street lighting improved	-	-	26.7	33.9	42.3	102.9	KCCA
Procurement and maintenance/ improvement of road ferries	Road ferries procured and maintained	21.94	29.01	18.00	21.05	23.14	113.14	UNRA
Finance maintenance of national roads and DUCAR network	National roads and DUCAR maintained	637.71	669.64	703.13	738.20	800.40	3,549.08	URF
Implement pilot Bus Rapid Transit	Pilot Bus Rapid Transit implemented	-	-	20.00	50.00	100.00	170.00	MoWT
Improvement of public transport system in Kampala	Public transport system in Kampala improved	-	-	100.00	100.00	100.00	300.00	KCCA
Development of OSBPs	OSBPs developed	17.58	20.60	32.10	32.80	40.00	143.08	MoWT
Interconnectivity Project	District and community access roads and bridges rehabilitated and opened	4.00	6.00	15.00	16.50	17.50	59.00	MoWT

Intervention	Output	Budget (UGX Bn)					Total	Lead
		2015/16	2016/17	2017/18	2018/19	2019/20		
Rehabilitation of District roads	District Roads rehabilitated	5.10	4.80	4.20	5.00	5.60	24.70	MoWT
Construction of selected bridges on DUCAR	DUCAR Bridges constructed	3.00	4.60	8.50	10.00	10.00	36.10	MoWT
Urban roads resealing	Urban roads resealed/paved and maintained	4.0	4.1	3.35	6.00	6.50	23.95	MoWT
Preparatory survey for improvement of Gulu MC Roads	Gulu Municipal council roads reconstructed	1.09	0.3	4.9	6.0	10.0	22.29	MoWT
Construction, Maintenance and rehabilitation of DUCAR	Roads and bridges management systems established	-	-	1.75	1.00	1.00	3.75	MoWT
	DUCAR Rehabilitation/ construction using low cost seals undertaken-RTI	20.40	22.85	22.85	25.14	30.10	121.34	MoWT
Procurement and maintenance of district road equipment	District road equipment procured and maintained	5.89	107.95	22.18	24.40	25.68	186.10	MoWT
Support Regional/ Zonal Mechanical Workshops and Establishment of 6No. others	District Zonal and force account equipment maintained and new centres established	1.72	8.20	18.40	19.20	21.10	68.62	MoWT
Establishment of a government vehicle/ equipment inspection and testing facility	Pre- and post-repair inspection and testing govt vehicles/ equipment done	-	-	0.30	1.50	0.50	2.30	MoWT
Promote research in efficient vehicle / equipment technologies	research in efficient vehicle / equipment technologies promoted	-	-	-	1.0	1.0	2.0	MoWT
Promote use of NMT	NMT promoted	0.1	0.1	0.5	1.0	1.0	2.7	MoWT

Intervention	Output	Budget (UGX Bn)					Total	Lead
		2015/16	2016/17	2017/18	2018/19	2019/20		
Develop and implement mechanisms to ensure that the existing and future transport infrastructure is climate change resilient	Climate change resilient transport infrastructure	-	-	0.3	0.50	0.50	1.30	MoWT
Development of Standard Gauge Railway	Standard Gauge Railway developed	77.50	113.50	113.50	681.72	1,302.20	2,288.42	MoWT
Rehabilitation and maintenance of the meter gauge railway network	Malaba - Kampala railway line rehabilitated	-	-	6.75	11.75	3.04	21.53	URC
	Tororo – Pakwach railway line rehabilitated	-	-	-	77.50	113.50	113.50	MoWT
	Repairs on rail lines between Kampala-PortBell, Kampala-Mukono, and Kampala-Bujuko done	-	-	17.50	30.50	40.00	88.00	URC
Operation and expansion of railway passenger services	railway passenger services expanded and operational	0.50	2.46	5.00	8.50	17.00	33.46	URC
Design and construction of railway siding at Namanve Vinci Coffee Limited	Railway siding at Namanve Vinci Coffee Limited constructed	-	-	6.00	-	-	6.00	URC
Post concession support to URC	Southern route operational	1.00	1.00	26.86	36.44	56.64	119.94	URC
Support to development of green transport and logistics sector	Gulu Logistics Hub developed	-	0.27	6.35	17.74	7.60	31.96	MoWT
	Master Plan for the Northern Economic Corridor developed and implemented	3.29	0.5	0.7	2.00	2.00	8.49	MoWT
Develop inland water transport with special emphasis on hard to reach island areas- Provision of	MV Kabalega – II procured	2.0	0.10	10.00	40.00	60.00	112.10	MoWT
	MV Kalangala operational	2.95	3.65	3.65	4.00	4.50	18.75	MoWT
	2 nd ferry for Kalangala	-	-	-	15.00	5.00	20.00	MoWT

Intervention	Output	Budget (UGX Bn)					Total	Lead
		2015/16	2016/17	2017/18	2018/19	2019/20		
ferry services	procured							
	KIS Ferry Services provided	28.78	28.78	28.78	28.78	28.78	143.90	MoWT
	Vegetable Oil Development Project and National Oil Palm Programme supported	-	-	-	11.00	13.00	24.00	MoWT
Development of Bukasa Port	Bukasa port developed	1.00	31.00	79.06	100.54	31.25	242.85	MoWT
Improve key landing sites	Landing sites at Ggaba, Lutembe, Butebo Nakiwogo and Lutoboka designed and constructed	0.65	1.20	3.05	5.50	2.10	12.50	MoWT
Improvement of Portbell and Jinja Pier, and other infrastructure	Portbell and Jinja Pier, and other infrastructure improved	-	-	25.0	105.0	150.0	280.00	MoWT
Rehabilitation of MV Pamba and MV Mwanga	MV Pamba and Mv Mwanga rehabilitated	-	-	4.00	7.50	9.50	21.00	MoWT
Re-opening of the Southern route	Southern route operational	-	-	1.86	9.24	9.24	20.34	URC
Upgrading and expansion of Entebbe International Airport	Entebbe International Airport upgraded and expanded	-	86.40	153.38	153.38	198.04	591.20	CAA
Revival of the National Airline (Preparatory activities)	National Airline in place	-	-	1.5	5.8	8.14	15.44	MoWT
Development of Kabaale international airport in Hoima	Kabaale airport developed	-	1.00	170.5	491.25	167.26	830.01	MoWT

Intervention	Output	Budget (UGX Bn)					Total	Lead
		2015/16	2016/17	2017/18	2018/19	2019/20		
Develop and upgrade selected upcountry aerodromes (Arua, Gulu, Jinja, Kasese, Soroti Airfields)	Upcountry aerodromes developed to regional airports	-	-	-	100.00	200.00	300.00	CAA
Reconstruction of the runway at Kisoro aerodrome	Kisoro aerodrome runway reconstructed	-	-	-	10.00	-	10.00	CAA
Re-equipping of EACAA, Soroti	Soroti Flying School re-equipped and operational	4.40	8.00	8.00	10.00	15.00	45.40	MoWT
Sector Objective 2- Improve the human resource and institutional capacity of the Sector to efficiently execute the planned interventions								
Implement sector reforms	Sector reforms implemented and new structures Operationalized	39.22	82.63	132.80	134.20	135.40	524.25	MoWT
Improve institutional planning, budgeting, monitoring and evaluation	Institutional planning, budgeting, monitoring and evaluation improved	-	-	5.00	8.00	12.00	25.00	MoWT
	National Transport Survey undertaken and Multi-modal National Transport Master Plan prepared	-	-	4.00	6.00	5.00	15.00	MoWT
Establish the Maritime Administration Department	Maritime Administration Department established	-	-	0.58	0.80	1.00	2.38	MoWT
Establishment of MATA	MATA established and operational	-	-	1.00	5.00	10.00	16.00	MoWT

Intervention	Output	Budget (UGX Bn)					Total	Lead
		2015/16	2016/17	2017/18	2018/19	2019/20		
Human resource development/ Training and capacity building	Critical skills in the sector developed	2.00	2.50	3.50	5.00	5.00	18.00	MoWT
Support establishment of a Maritime Training Institute at Busitema University	Maritime Training Institute at Busitema University established and supported	-	0.5	1.0	1.0	1.0	3.50	MoWT
Mobilize resources to implement sector programmes/ projects	Partner with MoFPED to establish a sector PPP unit	-	-	1.00	1.50	2.00	4.50	MoWT
Develop, review, and amend sector policies, laws and guidelines	Sector policies, laws and guidelines developed/ reviewed/ amended	0.50	1.20	9.67	7.65	4.42	23.44	MoWT
Construction of MoWT , UNRA, URF and URC office premises	Office premises for MoWT and its Agencies constructed	-	2.00	4.00	50.00	60.00	116.00	
Monitoring and Evaluation of the WTSDP including		2.00	5.00	10.00	10.00	10.00	37.00	MoWT
Cross cutting issues-recurrent		1.00	1.00	1.50	1.50	2.00	7.00	MoWT
Communication strategy for SDP		0.50	0.50	1.00	1.00	1.00	4.00	MoWT
Sector Objective 3 - Improve the National Construction Industry								
Operationalise the National Construction Industry Policy	National Construction Industry Policy operationalized	5.15	6.35	10.50	23.50	26.00	71.50	MoWT
Establishment and operationalization of UCICO	UCICO established and operational	0.10	0.250	2.00	10.00	10.00	22.35	MoWT
Support Government	Government materials	0.80	1.00	1.00	2.00	3.00	7.80	MoWT

Intervention	Output	Budget (UGX Bn)					Total	Lead
		2015/16	2016/17	2017/18	2018/19	2019/20		
materials testing Laboratory	testing Laboratory operational							
Support stakeholders in the Construction Industry	Stakeholders in Construction Industry supported	0.05	0.10	01.0	0.50	0.50	2.15	MoWT
Promote Labor-based technology-MELTC	Labor-based technology-MELTC promoted	4.20	5.00	5.00	8.00	10.00	32.20	MoWT
Review road construction designs and standards	Road construction designs and standards reviewed	-	-	0.50	1.00	1.0	2.50	MoWT
Develop Standards and Manuals for low cost Sealing Technology	Standards and Manuals for low cost Sealing Technology developed	-	-	0.50	1.00	0.500	2.00	MoWT
Promote research in new technology and local materials	Research in new technology and local materials undertaken	-	-	0.50	1.00	1.00	2.50	MoWT
Operationalisation of the Building Control Act	Building Control Act operationalized	2.50	3.20	5.50	9.50	9.50	30.20	
Establish National Building Review Board	National Building Review Board established	0.10	0.20	1.00	2.00	2.00	5.30	MoWT
Review and disseminate the National Construction Standards and monitor compliance	National Construction Standards reviewed and disseminated	0.20	0.50	1.00	0.50	0.50	2.70	MoWT
Formulate and disseminate the National building code	Building control code formulated and disseminated	0.20	0.50	0.50	0.50	0.50	2.20	MoWT
Strengthen enforcement mechanisms for approval of plans and quality assurance and inspection of buildings	Enforcement mechanisms for approval of plans and quality assurance and inspection of buildings strengthened	-	-	0.50	1.00	1.00	2.50	MoWT

Intervention	Output	Budget (UGX Bn)					Total	Lead
		2015/16	2016/17	2017/18	2018/19	2019/20		
Promote certification and adherence to building regulations	Certification and adherence to building regulations promoted	-	-	0.50	0.50	0.50	1.50	MoWT
Support to the NBRB/ General Construction and Rehabilitation works	NBRB supported and General Construction and Rehabilitation works undertaken	2.0	2.0	2.0	5.0	5.0	16.00	MoWT
Sector Objective 4 - Increase the safety of transport services								
Strengthen the National Road Safety Council for coordination and leadership capacity on road safety	National Road Safety Council strengthened	0.700	1.00	3.00	6.00	6.00	16.70	MoWT
Strengthen the Transport Licensing Board to enhance regulation of Road Transport	Transport Licensing Board strengthened	1.00	1.00	4.50	6.00	6.00	18.50	MoWT
Establishment of the Road Crash Database System to enhance research and evidence based interventions	Road Crash Database System established and operational	1.00	1.00	2.50	0.60	0.60	5.70	MoWT
Establishment of a Vehicle Registration System	Vehicle Registration System established	-	-	8.00	2.00	2.00	12.00	MoWT
Introduce Automated and Intelligent Driver Testing system	Automated and Intelligent Driver Testing system installed and operational	-	-	4.00	8.00	8.00	20.00	MoWT
Enhance advocacy and influence on road user behaviour through increased awareness, education and enforcement	Advocacy and increased awareness, and education on transport safety enhanced	0.40	0.40	0.60	2.00	2.00	5.40	MoWT

Intervention	Output	Budget (UGX Bn)					Total	Lead
		2015/16	2016/17	2017/18	2018/19	2019/20		
Acquire Modern Speed Cameras to improve road use surveillance to curb over speeding	Modern Speed Cameras acquired	-	-	1.00	0.50	0.20	1.70	MoWT
Construction of flyover pedestrian safety bridge at Nsambya- Rosebury	Pedestrian safety bridge at Nsambya- Rosebury constructed	-	-	-	-	35.0	35.0	KCCA
Implement mandatory Motor Vehicle Inspection scheme.	mandatory Motor Vehicle Inspection scheme implemented	0.50	0.50	5.00	5.00	5.00	16.0	MoWT
Enforce Driver Standards	Driver Standards enforced	-	-	2.0	20.0	5.0	27.0	MoWT
Support to Computerized Driving Permits project	Computerized driving permits project supported	1.0	1.0	4.5	5.3	6.0	17.80	MoWT
Implement Lake Victoria Maritime Safety Project	Lake Victoria Maritime Safety Project implemented	-	-	12.03	32.12	12.17	56.32	MoWT
TOTAL		2,656.91	3,869.91	7,516.39	7,646.40	6,370.58	28,060.19	

Annex-4: WTSDP Results and Annualized Targets

OBJECTIVE	STRATEGIC INTERVENTION	OUTCOME/ OUTPUT	INDICATORS	Baseline 2012/13	Target 2015/16	Target 2016/17	Target 2017/18	Target 2018/19	Target 2019/20
OUTCOME LEVEL INDICATORS									
OBJECTIVES		OUTCOME	OUTCOME INDICATORS	Baseline 201 2/13	Target 2015/16	Target 2016/17	Target 2017/18	Target 2018/19	Target 2019/20
1. Develop adequate, reliable and efficient multi modal transport network in the country		Improved transportation system	Proportion of freight cargo by rail (%)	4%	8%	8%	8%	10%	10%
			Proportion of functional railway network (%)	51	51	55.2	59.2	67.2	79
			Proportion of passenger traffic by rail (%)	0	3	4	6	7	8
			Volume of cargo transported by railway (thousand tonnes)	124.40	128.13	131.98	135.94	140.01	144.21
			Condition of Unpaved National Road Network (%)	66	66	66	66	66	66
			Condition of Paved National Road Network (%)	77	78	79	80	81	82
			Travel time in GKMA(min/km)	2.5	2.6	2.7	2.8	2.7	2.6
			Travel Time on National Roads(min/km)	1.15	1.14	1.12	1.11	1.10	1.10
			Proportion of paved national roads to the total national road network (%)	16.6	19.5	20.93	22.36	23.79	25
			Total paved national road network (km)	3,759	4095	4536	4977	5559	6000
			*Proportion of paved	38.36	40.02	41.67	43.33	44.99	46.64

			KCCA roads to total KCCA roads.						
			% of Unpaved District Road Network in fair to good condition.	65.3	57.8	60	63	65	68
			% of Paved District Road Network in fair to good condition.						
			International Air Passenger traffic	1,342,112	1,476,323	1,623,956	1,786,351	1,964,986	2,161,485
			Domestic Air Passenger traffic	13,780	15,158	16,674	18,341	20,175	22,193
			Freight air Cargo Traffic (tonnes)-loaded	33,784	36,487	39,408	42,558	45,963	49,640
			Freight air Cargo Traffic (tonnes)-unloaded	22,123	23,229	24,391	25,610	26,891	28,235
2. Improve the human resource and institutional capacity of the Sector to efficiently execute the planned interventions		Enhanced sector implementation capacity	Percentage of outcome indicators achieved against target1	64	66	68	70	72	74
3. Improve the National Construction Industry		Vibrant and operational national construction industry	Percentage of construction works executed by local contractors						
4. Increase safety of transport services		Improved safety of transport services	Number of reported road fatalities ²		2750	2600	2400	2200	2000
			Number of fatalities (Railway transport)		0	0	0	0	0
			Number of lives lost (Water accidents)		0	0	0	0	0

OUTPUT LEVEL INDICATORS									
OBJECTIVE	INTERVENTION	OUTPUT	OUTPUT INDICATORS	Baseline 2012/13	Target 2015/16	Target 2016/17	Target 2017/18	Target 2018/19	Target 2019/20
1.Develop adequate, reliable and efficient multi modal transport network in the country.	i. Conduct a national study on multi-modal transport system.	National Study on multi modal transport system conducted	Study report in place by 2017/18	N/A	N/A	N/A	Study report in place	N/A	N/A
	ii. Establish a Maritime Regulatory Authority	Maritime Regulatory Authority established	Maritime department in place by 2018/19	N/A	N/A	N/A	N/A	Maritime department in place	N/A
	iii. Rehabilitate and maintain the District, Urban, and Community Access (DUCA) road network.	DUCAR road network rehabilitated and maintained	No of kms of DUCAR Network maintained (Periodic)	1830	2516	2570	2600	2640	2700
			No. of kms of DUCAR Network maintained (Routine Manual)	16,289	044	100	200	29,300	29,500
			No. of kms of DUCAR Network maintained (Routine Mechanised)	5,947	9,097	9,100	9,200	9,300	9,400
	iv. Construct new and rehabilitate old bridges	New bridges constructed	No of bridges/swamp crossings constructed /rehabilitated	N/A	N/A	N/A	N/A	N/A	25
		Bridges rehabilitated	No compact bridges procured and installed	N/A	N/A	N/A	N/A	N/A	10
			Number of bridges constructed under national roads	N/A	N/A	N/A	N/A	N/A	12
	v. Undertake periodic inspection of the pavement condition. (%)	pavement condition inspected	Condition of Paved National Road Network	77	78	79	80	81	82
	vi. Standard gauge rail development (Uganda Section).	Standard gauge rail developed	No of kms of the standard gauge rail laid	0 kms	N/A	N/A	N/A	N/A	250kms
	vii.Develop inland water transport with special	Inland physical infrastructure	Number of piers re-modelled		N/A	N/A	N/A	N/A	2

	emphasis on hard-to-reach island areas.	constructed							
			Number of ferries built.		N/A	N/A	N/A	N/A	1
			No of Ports constructed	N/A	2	N/A	N/A	N/A	N/A
	viii. Upgrade and expand Entebbe International Airport.	Entebbe international airport expanded	International Air Passenger traffic	1,342,112	1,476,323	1,623,956	1,786,351	1,964,986	2,161,485
			Check-In queuing time(mins)	32	30	30	30	30	25
			Fast Bag In (Reclaim Belt) (mins)	28	25	25	25	25	30
			Last Bag In(mins)	45	45	45	45	45	40
			Security queuing time (mins)	12	10	10	10	10	5
		Entebbe Airport expanded and Upgraded	Upgraded Airport		Mobilization completed, camp site and new fence constructed	Runway 12/30 and Apron 2 rehabilitated, Apron 1 strengthened	Cargo Center complex established	Runway 17/35 rehabilitated and strengthened, Apron 4 rehabilitated	New Passenger terminal complex established
	Upgrade Air Navigation Services Infrastructure to achieve a globally interoperable air navigation system to provide a seamless service.	A globally interoperable air navigation system	Aviation System Block Upgrade (Blocks)	0	0	0	0	1	1
	x. Develop a Master Plan and Engineering Designs for Arua Airport.	Master Plan and Engineering Designs for Arua Airport in place	Report for Master Plan and Engineering Designs for Arua Airport in place by 2015/16		Report for Master Plan and Engineering Designs for Arua Airport	N/A	N/A	N/A	N/A

					in place				
	xi. Explore development and management concessions (PPP arrangements) for Arua, Kasese and Gulu airports.	PPPs developed	No, of operational PPPs	N/A	N/A	N/A	N/A	N/A	N/A
	xii.Revive the National Airline to facilitate the development of Entebbe International Airport into a hub.	National Airline in place	Functional National Airline						Operational Airline in place
		National Aviation Policy developed	Policy developed by 2016/17		N/A	Policy developed	N/A	N/A	N/A
		CAA Act amended	Act amended and passed by parliament by 2016/17		N/A	Act amended	N/A	N/A	N/A
		BASA's negotiated, initiate & reviewed	No of BASA's initiate , reviewed & negotiated		2	2	3	3	3
	xiii. Establish Second Generation Road Fund to effectively control the revenue from Road User Charges for road maintenance.	Second generation road fund established	Section 14 of the URA Act amended by 2015/16		2G Road Fund in place	N/A	N/A	N/A	N/A
	xiv. Develop and maintain the roads to tourism, mining and agriculture producing areas.	Roads to tourism, mining and agriculture producing areas maintained	No Kms of community access roads constructed annually to foster local economic development		305	300	310	305	310km
			No of kms of roads constructed		55	60	60	55	56km
			No of kms of Oil and Gas roads constructed		40	45	40	40	40
	xv.Develop and implement mechanisms to ensure that the existing and future transport infrastructure	Climate change resilient transport infrastructure	Report for reviewed specifications for roads and bridge works in place by 2019/20	2005 report for specifications of	N/A	N/A	N/A	N/A	Report for reviewed specifications for roads and

	is climate change resilient.			roads and bridge works.					bridge works in place
	xvi. Promote vehicle efficiency and technologies to reduce transport emissions.	Reduced incidence of accidents	Incidence of accidents						
	xvii. Construct and rehabilitate national roads	National roads constructed and rehabilitated	Total paved national road network (km)	3795	4095	4536	4977	5559	6000
	xviii. Review the Roads Construction Designs and Standards to provide for public places of convenience and utilities	Existence of roads constructed with public places Road construction designs and standards reviewed	Number of roads constructed with public places	No. of road construction designs and standards reviewed					
2.Improve the human resource and institutional capacity of the Sector to efficiently execute the planned interventions.	Review UNRA staff structure to increase staffing levels to match the financial resources	UNRA structural review undertaken	Implementation of the structural review recommendation	N/A	UNRA staff structure reviewed to increase staffing levels	N/A	N/A	N/A	N/A
	ii. Improve institutional planning, monitoring and performance evaluation including developing an MIS for the sector	Transport sector MIS developed	A functional transport sector information management system	N/A	TSDMS launched	Operational TSDMS in place	Operational TSDMS in place	Operational TSDMS in place	Operational TSDMS in place
	iii. Strengthen the transport planning function of the ministry of works and transport	National Transport Model (NTM) developed	National Transport Model (NTM) in place	N/A	N/A	N/A	N/A	N/A	National Transport Model developed
	iv. Train staff in professional courses	Professional staff	No of staff trained in maritime affairs	1	2	2	2	2	2

			No of staff trained in aviation management and regulation	1	1	1	1	1	1
			No of staff trained in railways management and regulations.	1	1	2	2	1	1
3. Improve the National Construction Industry	i. Operationalize the National Construction Industry Policy	National Construction Industry Policy operationalized	% of public buildings with approved plan	37%					
	ii. Review the National Construction Standards and disseminate them effectively	National Construction standards reviewed and disseminated	Number of dissemination workshops organized						
	iii. Expedite the commencement and operationalization of the building Control Act	Building control act operationalized	Building control act in place	N/A	N/A	N/A	N/A	N/A	National Building Code operational
	iv. Formulate and disseminate the Building Control Code	Building Control Code formulated	Building Control Code in place						
	v. Strengthen the enforcement mechanisms for approval of plans and quality assurance and inspection of buildings	Enforcement mechanisms for approval of plans and quality assurance and inspection of buildings done	% of public buildings with approved plan	37	38	38	39	39	40
	vi. Promote Certification and Adherence to building regulations	Building regulations adhered to	% of public buildings with approved plan	37	38	38	39	39	40
4. Increase safety of transport services.	i. Strengthen NRSC and TLB	NRSC and TLB strengthened							
	ii. Implement the Private Motor Vehicle Inspection scheme	Motor Vehicles inspected annually	Number of vehicles inspected annually	200,000	300,000	400,000	600,000	700,000	200,000
	iii. Review the Road Safety Act 1998 and	Reviewed Road Safety Act	Amended Traffic and Road Safety Act 1998	Traffic and	Principles for	Bill for amendm	Bill presente	Implementation	Full implement

	Road Transport Services Act and formulate relevant regulations		with provisions for better Axle Load Control and Road transport services	Road Safety Act 1998	amendment submitted	ent drafted	d before parliament	commenced	tation undertaken
	iv. Formulate and implement the Inland Water Transport Policy and regulation for inland ports.	Inland water transport policy formulated	Inland water transport policy in place by 2016/17	N/A	N/A	Inland water transport policy in place	N/A	N/A	N/A
	v. Review and update inland water transport legislation and railway safety standards.	Inland water transport legislation and railway safety standards updated	URC Act 1992 amended and passed by 2016/17	N/A	N/A	Amended URC act passed	N/A	N/A	N/A
	vi. Survey, Map and Install Navigation Aids on Inland Waterways.	Navigational charts and aids installed	No of accidents	15	5	4	2	2	0
			No of charts produced	1	N/A	1	1	1	3
	vii. Increase awareness and advocacy in Safety of Inland Water and Rail Transport.	Increase awareness on Safety of Inland Water and Rail Transport	No of lives lost on IWT	139	0	0	0	0	0
			No of people involved in IWT accidents		0	0	0	0	0
			No of accidents at level crossings		0	0	0	0	0
			No of lives lost on rail		0	0	0	0	0

Annex Annex-5: The Golden Indicators

	Indicator	Unit
	Road network Condition	
	National roads (paved) – fair to good	%
	National roads (unpaved) – fair to good	%
	District roads – fair to good	%
	Urban roads (paved) – fair to good	%
	Urban roads (unpaved) – fair to good	%
	Paved road network	
	National roads	Km
	Urban roads	Km
	Road safety	
	Fatalities per 10,000 vehicles	No.
	Total fatalities	No.
	Total registered vehicles	No.
	Road service level – travel time	
	On national roads	Minutes/ km
	On district roads	Minutes/ km
	In Kampala	Minutes/ km
	Road construction/ maintenance cost	
	National roads – New construction	USD/km
	National roads – Re-construction	USD/km
	National roads – Rehabilitation	USD/km
	National roads – Periodic maintenance	USD/km
	National roads – Mechanized routine maintenance	USD/km
	District roads – Rehabilitation	USD/km
	District roads - Periodic maintenance	USD/km

	Indicator	Unit
	District roads - Routine maintenance	USD/km
	Urban roads – Rehabilitation	USD/km
	Urban roads - Periodic maintenance	USD/km
	Urban roads - Routine maintenance	USD/km
	Community Access Roads - Routine maintenance	USD/km
	Rural accessibility	
	Rural population living within 2 km of all-weather road	%
	All year motorable Community Access Road network	km

	Road maintenance needs met	
	Maintenance budget relative to requirement	
	National roads	%
	District roads	%
	Urban roads	%
	Maintenance spending relative to release	
	National roads	%
	District roads	%
	Urban roads	%
	Community Access Roads	%
	Compliance with axle load regulation	
	Overloaded vehicles	%
	Average overload per axle	Tons
	Number of weighed vehicles	No.
	Number of overloaded vehicles	No.
	Rail freight volume	
	Total freight carried	Tonne - km
	Rail modal share at Malaba and Port Bell border points	
	Total freight crossing the two borders	Million tones
	% freight that crosses the two borders by rail	%
	Rail modal share on Lake Victoria ferries	
	% freight transported on ferries by rail, registered at Port Bell border post. (For total freight registered at Port Bell refer Indicator 16)	%
	Rail efficiency	
	Locomotive productivity	Km/ loco/ day
	Wagon utilization	
	Wagon transit time	Days
	Wagon turn-round time	Days
	International aircraft movements	
	Commercial	No.
	Non commercial	No.
	Passenger traffic	
	International passengers	
	Embarking	No. ('000)
	Disembarking	No. ('000)
	Transit	No. ('000)
	Domestic passengers	
	Embarking	No. ('000)
	Disembarking	No. ('000)

	Freight on Lake Victoria	
	Total freight on ferries (as registered at Port Bell border post)	Million tones
	Passenger traffic	
	Entebbe – Kalangala	No, ('000)
	Port Bell – Mwanza	No. ('000)
	Jinja-Muzoma	No. ('000)
	Cross Cutting Issues	
	Environment	
	Emissions	
	CO ₂ ppm	Air Pollution or Air Quality Index
	CO ppm	
	SO ₂ pphm	
	NO _x pphm	
	No. of Projects requiring EIA against number accepted by NEMA	
	UNRA	%
	DUCAR	
	Rail	
	Air	
	Maritime	
	Gender	
	Availability of gender focal persons	
	UNRA	Yes / No
	DUCAR	
	Rail	
	Air	
	Maritime	
	Women in Employment at	
	Manager Level	% by sub sector
	Senior Level	
	Overall	
	HIV / Aids Interventions	
	Interventions by sub sector	
	Awareness programmes	Number by sub sector
	Condom Issue	
	Counseling Programmes	
	Support Treatment Programmes	
	Occupational Health & Safety	
	Accidents at the work place	
	Fatalities	Number by sub sector
	Serious Injuries	
	Minor Injuries	

